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THE FUNCTIONS OF NEGOTIATION OF MEANING IN TEXT BASED
SYNCHRONOUS COMPUTER MEDIATED COMMUNICATION

In Partial Fulfillment of the Requirements for the Degree of
MASTER OF ARTS IN ENGLISH LANGUAGE TEACHING

by
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APPROVAL**TO THE INSTITUTES OF SOCIAL SCIENCES**

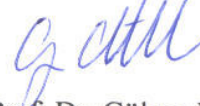
This thesis titled as “**The Functions of Negotiation of Meaning in Text Based Synchronous Computer Mediated Communication**” and presented by Sedat AKAYOĞLU has been approved as a thesis of Master of Arts in English Language Teaching.

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ABSTRACT**THE FUNCTIONS OF NEGOTIATION OF MEANING IN TEXT BASED
SYNCHRONOUS COMPUTER MEDIATED COMMUNICATION**

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This study is an ethnographic study with discourse analysis describing the patterns of negotiation of meaning functions in text-based synchronous computer mediated communication. Two research questions were determined in this study: (a) what types of negotiation of meaning are seen; (b) is there any difference between Native Speakers (NSs) and Non-Native Speakers (NNSs) of English in using the negotiation of meaning functions. Thirty third-year students in the Department of Foreign Languages Education at Abant İzzet Baysal University and eight native speakers of English participated in this study.

Each student joined two discussion sessions with at least two native speakers to discuss two short stories which they read beforehand. Semi-structured questions were used in these discussions and the observer did not join the sessions actively lest he should influence the results. The transcripts of the chat logs were sent via e-mail message to all participants.

Discourse analysis was applied to the data obtained and Patterson and Trabeldo's (2006) taxonomy was adapted and compared.

At the end of this study it was observed that two categories, titled as comprehension check and reply comprehension, had not been observed in the data. Moreover, four categories were added to Patterson and Trabeldo's (2006) taxonomy.

These were confirmation, vocabulary check, elaboration request and reply elaboration. Some similar and different points in native speakers and non-native speakers' data appeared in using negotiation of meaning functions. The most frequently used ones were found to be different, but the least frequently used ones were found to be similar. These results were parallel with the literature.

The findings of this study give insights to researchers, educators and teachers of English Language in terms of patterns of negotiation of meaning functions in text-based synchronous computer mediated communication. Researchers and educators might benefit from the results of this study while programming online courses and teachers might have an idea of the patterns involved in this kind of environment before directing their students there.

Key Words: Computer Mediated Communication, Negotiation of Meaning, Discourse Analysis.

ÖZ

METİN YOLUYLA BİLGİSAYAR DESTEKLİ EŞ ZAMANLI İLETİŞİMDE ANLAM SÖYLEŞMESİ İŞLEVLERİ

Akayoğlu, Sedat

Bu çalışma, metin yoluyla bilgisayar destekli eş zamanlı iletişimde anlam söyleşmesi işlevleri açısından kalıpları tanımlayan söylem analizi yöntemi ile yürütülmüş etnografik bir çalışmadır. Bu çalışmada iki soru belirlenmiştir: (a) hangi çeşit anlam söyleşmesi görülüyor; (b) anlam söyleşmesi işlevlerini kullanmada anadili İngilizce olanlar ile anadili İngilizce olmayanlar arasında anlamlı bir fark var mıdır? Çalışmaya, Abant İzzet Baysal Üniversitesi Yabancı Diller Eğitimi Bölümü üçüncü sınıf öğrencilerinden 30 kişi ve anadili İngilizce olan 8 kişi katılmıştır.

Her öğrenci en az iki anadili İngilizce olan katılımcının katıldığı iki oturuma katılmıştır ve öncesinden belirlenmiş iki kısa hikayeyi tartışmışlardır. Bu tartışmalarda, yarı yapılandırılmış sorular kullanılmış ve gözlemci sonuçları etkiler diye oturumlara aktif olarak katılmamıştır. Sohbet konuşmaları, tüm katılımcılara elektronik mesaj olarak gönderilmiştir.

Toplanan veriler için söylem analizi uygulanmış ve Patterson ve Trabeldo'nun (2006) sınıflandırılması kullanılmıştır ve çalışmanın sonucu olarak da ortak ve farklı yönler belirlenmiştir.

Çalışmanın sonunda, “anladığını kontrol etme” ve “anladığını kontrol etmeye yanıt verme” olarak adlandırılan iki kategorinin verilerde görülmediği bulunmuştur. Buna ek olarak, Patterson ve Trabeldo'nun (2006) sınıflandırmasına dört kategori eklenmiştir. Bunlar “onaylama”, “kelime bilgisini kontrol etme”, “detaylandırma isteği”

ve “detaylandırma isteğine yanıt” kategorileridir. Verilerde, anlam söyleşmesi işlevlerini kullanma konusunda, ana dili İngilizce olanlar ile anadili İngilizce olmayanlar arasında benzer ve farklı yönler görülmüştür. En çok kullanılan işlevlerin farklı olduğu, ancak en az kullanılan işlevlerin benzer olduğu bulunmuştur. Bu sonuçlar alan yazını ile örtüşmektedir.

Bu çalışmanın sonuçları İngiliz dili konusundaki araştırmacılara, eğitimcilere ve öğretmenlere, metin yoluyla bilgisayar destekli eş zamanlı iletişimde anlam söyleşmesi işlevlerinin kalıpları konusunda bilgi verecektir. Araştırmacılar ve eğitimciler bu çalışmanın sonuçlarından çevrimiçi dersler programlarken faydalanabilirler, öğretmenler ise bu tarzda ortamlara öğrencilerini yönlentmeden önce bu ortamlardaki kalıplar hakkında fikir sahibi olabilirler.

Anahtar Kelimeler: Bilgisayar Destekli İletişim, Anlam Söyleşmesi, Söylem Analizi.

To My Family

I wish my father was here to see me finish.

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INDEX

APPROVAL.....	Error! Bookmark not defined.
ABSTRACT	iii
ÖZ	v
ACKNOWLEDGEMENTS	viii
INDEX	ix
LIST OF TABLES	xiii
THE LIST OF FIGURES.....	xiv
CURRICULUM VITAE	xv
CHAPTER I	1
Introduction	1
1.1. Introduction	1
1.2. Background of the study	1
1.3. Statement of Purpose.....	5
1.4. Research Questions	5
1.5. Significance of the Study	6
1.6. Definitions of Terms	6
1.8. Conclusion	7
CHAPTER II	8
Literature Review	8
2.1. Introduction	8
2.2. Theoretical Framework: Social Constructivism.....	8
2.3. CALL: A Historical Perspective	12
2.3.1. Pre-Internet Era	12
2.3.2. The Internet Era.....	19
2.4. CALL and CMC.....	21
2.4.1. Computer Mediated Communication (CMC)	21

2.4.2. CMC Tools in CALL	22
2.4.2.1. Synchronous CMC Tools.....	22
2.4.2.2. Asynchronous CMC Tools.....	26
2.4.3. Research in Social Interaction and CMC	28
2.4.4. Research in Negotiation of Meaning and CMC.....	36
2.4.5. Research in Communities of Practice and CMC	43
2.5. Conclusion	50
CHAPTER III	51
Methodology	51
3.1. Introduction.....	51
3.2. Research Design.....	51
3.3. Participants.....	53
3.3.1. Native Speakers.....	53
3.3.2. Non-Native Speakers	54
3.4. Instruments.....	55
3.4.1. Reading Materials	55
3.4.2. Semi-structured Questions	56
3.5. Data Collection Procedures.....	56
3.5.1. Discussion Sessions	56
3.5.2 Data File Organization.....	58
3.6. Data Analysis	59
3.6.1. Coding Procedure.....	60
3.6.2. Intercoder Agreement Method	62
3.7. Conclusion	62
CHAPTER IV	63
Findings.....	63
4.1. Introduction.....	63
4.2. Negotiation of Meaning in CMC Environment	63
4.2.1. Types of Negotiation of Meaning	63

4.2.1.1. Clarification request	64
4.2.1.2. Comprehension check	65
4.2.1.3. Confirmation	65
4.2.1.4. Confirmation check	66
4.2.1.5. Correction	67
4.2.1.6. Elaboration	68
4.2.1.7. Elaboration request	68
4.2.1.8. Reply clarification	69
4.2.1.9. Reply comprehension	70
4.2.1.10. Reply confirmation	71
4.2.1.11. Reply elaboration	71
4.2.1.12. Reply vocabulary	72
4.2.1.13. Vocabulary check	74
4.2.1.14. Vocabulary request	74
4.2.2. The Frequency of Negotiation of Meaning in CMC Environment	75
4.3. The Difference between NSs and NNSs of English in Using the Negotiation of Meaning Functions	78
4.3.1. NS of English	78
4.3.2. NNS of English	80
4.4. Conclusion	82
CHAPTER V	83
Conclusion	83
5.1. Overview of the Study	83
5.2. Discussion of the Findings	84
5.2.1 Negotiation of Meaning in CMC Environment	84
5.2.1.1 Types of Negotiation of Meaning	84
5.2.1.2. The Frequency of Negotiation of Meaning in CMC Environment	86
5.2.2 The Difference Between NSs and NNSs of English In Using the Negotiation of Meaning Functions	91

5.3. Implications for Findings	92
5.4. Suggestions	94
5.4.1. Suggestions for Researchers	94
5.4.2. Suggestions for Teachers	95
5.4.3. Suggestions for Further Research	95
5.5. Conclusion	97
REFERENCES.....	98
APPENDICES	105

LIST OF TABLES

Table 1: Main Frame and Mini Computers (1950s-1970s).....	14
Table 2: Personal Computers (PC) (1980s)	16
Table 3: Multimedia CD-ROM (1980s-1990s).....	18
Table 4: Computer-Mediated Communication (Internet) (1990s)	20
Table 5: Functions of Negotiation of Meaning Prepared by Patterson and Trabeldo (2006, Appendix I)	37
Table 6: Principal Descriptors of the four types of Virtual Communities (Henri and Pudelko, 2003, 485)	47
Table 7: Characteristics of Discourse Analysis, Conversational Analysis and Interaction Analysis.....	52
Table 8: Detailed Information About the Data	58
Table 9: The Taxonomy Prepared by Patterson and Trabeldo (2006)	61
Table 10: The list of negotiation of meaning functions	64
Table 11: The Frequencies and Percentages of the Negotiation of Meaning Functions..	76
Table 12: The Frequency of Negotiation of Meaning Function Used by NS	79
Table 13: The Frequency of Negotiation of Meaning Function Used by NNS	81
Table 14: The Percentages of Negotiation of Meaning Functions in the Entire Data	87

THE LIST OF FIGURES

Figure 1: A sample interface of Hotmail while sending an e-mail	27
Figure 2: The Interface of Qualitative Research Data Analysis Computer Software, Hyper Research 2.6.1.	59

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CHAPTER I

Introduction

1.1. Introduction

The purpose of this study is to analyze the discourse patterns in the text based dialogues among the undergraduate students from Abant Izzet Baysal University Department of Foreign Languages Education and native speakers in the Internet environment. A result of the discourse analysis is aimed at finding out the patterns of negotiation of meaning functions in the dialogues. These patterns are thought to provide insights about how the learners and their interlocutors modify and reconstruct interaction when they experience difficulty in comprehensibility in a synchronous text-based CMC environment.

1.2. Background of the study

In recent years with the substantial development in technology most people have the opportunity to use computers and the Internet; this makes “the world flattened”. As Tom Friedman (2005) claimed “The world is being leveled” and this leveling process is continuing every minute. No matter where they are, in Turkey, in New Zealand, in India or elsewhere, people have the opportunity to be in contact with people around the world without time constraints; this communication typically occurs through computers and the Internet.

As this technology develops increasingly faster, educators and researchers are interested in integrating technology into the learning and teaching process. They are searching for an answer to the question of how this technology can be used in education more effectively. CDs and software programs were used before the Internet came on the scene. However, in that case, the interaction was between a computer and human beings.

This was distant from real interaction. In real life interaction is between humans and this was accomplished with the invention of the Internet. Educators and researchers have since attempted to create different contexts for learners.

The idea of creating new environments is grounded on the theory of social constructivism. According to social constructivism theory learners should take part in different contexts; they should interact with different people around them to apply what they have learned at school. (Vygotsky and Bruner cited in William and Burden, 1997; Doolittle, 1999; Salter, 2000, Johnson, 2001) The Internet provides these contexts, these environments, for the learners. When an individual connects to the Internet through his/her computer, s/he has the chance to meet someone by means of computer mediated communication tools.

Moreover, learners construct their knowledge by combining their prior knowledge with new information, according to the social constructivists. In other words, it can be claimed that when learners enter a different context they combine their knowledge which they received at school and at home with that which they come across in this new context. They have new experiences and during this learning process these experiences are crucial for the learners.

Until recently researchers have been interested in the outcome of this interaction as to whether the interaction leads to learning or not (Johnson, 1991; Vygotsky and Bruner cited in William and Burden, 1997; Doolittle, 1999; Salter, 2000). They aimed at finding the results of instruction using computers and the Internet after the learners interact in new contexts with new events, objects, and people. However, there are only a few studies attempting to find an answer to the questions: “How does this learning process take place?” and “How do learners get and give information?” In this study how the interaction takes place is more important than what happens as the result of this interaction in the environments on the Internet.

The necessity of this dimension of the studies in the framework of social constructivism was mentioned by Chappelle (2004, p.595) as “a sociocultural perspective toward interaction research emphasizes the need for teachers and researchers to better understand the context of interaction of second language learners and accordingly there is a need for ‘ethnographic and discourse-analytic methods’ with their emphasis on the broader context in which the learning takes place...”, so there is a need to study this field to find the patterns on the net. As Chappelle states, it is certain that learning takes place in the environments found on the net. There is an interaction here and if there is an interaction, learning is inevitable, but the context of these environments should be analyzed for teachers and researchers in order to provide them with a better understanding.

Research about the linguistic perspective of Internet environments (Crystal, 2001; Jepson, 2005) can be found and it can be said that it continues to be searched for by researchers. Crystal (2001) studied the linguistic features of the Internet, chat groups, e-mail groups, virtual worlds, and the linguistic future of the Internet in detail. He claimed that according to some it is said to be the death of other languages since the dominant language of the Internet is English; according to some it is a totally new language with abbreviations replacing words and avatars, not only English.

In a recent study, Jepson (2005) studied the negotiation of meaning functions in chat rooms on both text and voice chat. He studied the types of repair moves that occur in text and voice chats and the differences, if any, between the repair moves in text and voice chats when time is held constant.

In addition to these studies related to the linguistic features of Internet environments, some researchers (Hiltz, Johnson & Rabke, 1980; Chou, 2002; Stevens & Altun, 2002; Mercer, Littleton, Wegerif, 2004) were interested in the content of the CMC environments in both synchronous and asynchronous areas. They tried to find out

what the learners were talking about and they attempted to categorize the outcomes of these CMC environments in terms of their content.

In this study a discourse analysis of a chat room, provided by the online community of Tapped In, was made between users who were learners of English as a foreign language and native speakers. The purpose of this study is to discover patterns in the chat logs from the perspective of negotiation of meaning, which is defined by Pica (1994, cited in Toyoda and Harrison, 2002, p.82) as a “modification and reconstructing of interaction that occurs when learners and their interlocutors anticipate, perceive, or experience difficulties in message comprehensibility”. For the analysis of chat logs from this point of view, the categorization made by Patterson and Trabeldo (2006) was used to analyze the negotiation of meaning. They categorized the functions of negotiation of meaning as: comprehension check, clarification request, vocabulary request, comprehension check, reply confirmation, reply clarification / definition, reply vocabulary, reply comprehension, elaboration, and correction / self correction. The content of the chat logs is, however, beyond the scope of this study. The purpose of this study is mainly focused on finding out the patterns of a CMC environment in terms of its linguistic characteristics; that is negotiation of meaning.

Discourse analysis has been applied to any written or spoken materials until recently and it is still being done for various texts. The main purpose of this type of analysis is to discover the patterns and characteristics of texts in order to better understand the context. Nowadays, since CMC is very often used, the patterns of these environments on the Internet should be clarified if teachers of English would like to direct their students to these online environments so that they are aware of the unwritten rules of these places and can make their students aware of the rules. Since CMC is still thought to be a new area and a new tool for education, discourse patterns of CMC have still not been discovered in detail.

1.3. Statement of Purpose

Interaction is an inevitable process in any CMC environment. The purpose of this study is to find out the negotiation of meaning in chat environments and also to find out if there are any differences between a NS and NNS in using negotiation of meaning functions. This will help to see the patterns of meaning in these contexts and to understand what is happening in an online environment in terms of negotiation of meaning. Since this study is concerned with the process and not the product of the learning, the interaction among the users of chat rooms, how the students ask questions to get information and how they give more information concerning anything unclear will be analyzed by means of discourse analysis.

1.4. Research Questions

The following research questions are sought answers in this study:

1. How do NSs and NNSs negotiate the meaning in CMC environment?
 - a. What types of negotiation of meaning functions exist in chat communication?
 - b. How often and to what degree do the functions of negotiation of meaning occur during the chat communication?
2. Is there any difference between NSs and NNSs of English in using the negotiation of meaning functions?

1.5. Significance of the Study

The Internet, especially CMC, is a recent technological tool for an individual for getting information, interacting with people around the world, and expressing one's self to these people. It is also an important device to practice the target language in if one is not living in a country in which the target language is widely used.

Teachers may want to direct their students to the Internet not only to obtain information and to prepare their assignments, but also to practice their target language on the net, particularly in chat rooms which are really common on the Internet. In these environments someone can always be found to chat with about any subject. Before directing their students to these places, teachers should know the features of these environments and Chapelle (2004) claims there is a need for teachers and researchers to better understand the context of interaction of second language learners. Moreover, there is a need for discourse analysis to be made of the new contexts in which the learners interact with other people around the world and construct their new knowledge. Therefore, this study is significant in that it provides detailed information about the use of negotiation of meaning when the users are NS and NNS.

1.6. Definitions of Terms

CALL: Computer Assisted Language Learning. Using the Internet, software programs and computers for language teaching.

CMC: Computer Mediated Communication in which computers are used as a tool.

Synchronous CMC: It is a part of CMC in which the users are online at the same time. In order to communicate with each other users should be available on the net. Chat and instant messaging programs are examples of synchronous CMC.

Asynchronous CMC: It is another kind of CMC, however, the users are not necessarily online at the same time. E-mails, message boards, and blogs are some examples.

NS: Native speakers. In this study it is used to denote native speakers of English.

NNS: Non-native speakers. In this study it is used to denote speakers of English as a foreign language.

Negotiation of Meaning: It was defined by Pica (1994, cited in Toyoda and Harrison, 2002, p.82) as modification and reconstructing of interaction that occurs when learners and their interlocutors anticipate, perceive, or experience difficulties in message comprehensibility.

1.8. Conclusion

In this chapter the background of the study, the statement of purpose, research questions, significance of the study, and definition of terms have been described. In the next chapter, the literature related to this study will be reviewed. In the third chapter, Methodology, detailed information about the research design, participants, instruments and the data collection procedure will be described. In the fourth chapter the results will be presented and, the fifth chapter will conclude the study.

CHAPTER II

Literature Review

2.1. Introduction

In this chapter, firstly, the theoretical framework of this study is introduced and the application of CALL in the framework of social constructivism is discussed. Secondly, the history of CALL beginning from the pre-Internet to the Internet era is introduced. The technological developments and approaches to language learning and CALL are given in a chronological order. Thirdly, related terms, such as social interaction, communities of practice, and CMC are described. Fourthly, the CMC tools, both synchronous and asynchronous, are introduced. Finally, studies related to the field of CALL are synthesized.

2.2. Theoretical Framework: Social Constructivism

Constructivism is a learning theory which emphasizes the construction of new ideas through negotiation and interaction among students. Piaget (cited in William & Burden, 1997) emphasized the constructive nature of the learning process and mentioned the importance of the association of prior knowledge with new information in personally constructing the new knowledge. According to Piaget, learning is a constructive process in which students associate the newly learned material interacting with their prior knowledge. The following quotation summarizes Piaget views on constructive nature of the learning process:

In contrast to more traditional views which see learning as the accumulation of facts or the development of skills, the main underlying assumption of constructivism is that individuals are actively involved right from birth in constructing personal meaning, that is their own personal understanding, from their experiences. In other words, everyone makes their own sense of the world and the experiences that surround

them. In this way, the learner is brought into central focus in learning theory. (Williams and Burden, 1997, p.21)

Vygotsky added the term “Zone of Proximal Development (ZPD)” to this theory and ZPD is the “term used to refer to the layer of skill or knowledge which is beyond that which the learner is currently capable of coping” (Williams and Burden, 1997, p.40). According to Vygotsky, working together with a partner, such as an adult or a more competent peer, at a level that is just above a learner’s present capabilities is the best way for the learner to move onto the next level.

Influenced by Vygotsky’s ZPD, Bruner introduced a new term called “instructional scaffolding” which is nearly the same as the definition of ZPD. There is a slight difference between two terms. In ZPD the peer or instructor is just above the learner’s capabilities whereas in instructional scaffolding peer or instructors support the learner and there is no need to be above the learner’s capabilities. Bruner’s studies are based upon the study of cognition and his ideas are usually focused on mathematics, science education and language learning of young learners. He summarized the principles of constructivism with the following three items:

1. Instruction must be concerned with the experiences and contexts that make the student willing and able to learn (readiness).
2. Instruction must be structured so that it can be easily grasped by the student (spiral organization).
3. Instruction should be designed to facilitate extrapolation and or fill in the gaps (going beyond the information given).

Individuals should be ready to learn with their prior knowledge. The instruction should be organized with the aim of teaching a particular topic and during the organization of the instruction it should be taken into consideration that the instruction

should facilitate in seeing the missing parts of their knowledge and how to construct new knowledge.

Doolittle (1999, p.1) mentioned four epistemological tenets of constructivism which are listed as:

1. Knowledge is not passively accumulated, but rather, is the result of active cognizing by the individual;
2. Cognition is an adaptive process that functions to make an individual's behavior more viable given a particular environment;
3. Cognition organizes and makes sense of one's experience, and is not a process to render an accurate representation of reality; and
4. Knowing has roots in both biological/neurological construction, and social, cultural, and language based interactions (Dewey, 1916/1980; Gergen, 1995;).

It can be inferred that the most important thing is that interaction should take place in the learning process and it “is the result of active cognizing by the individual” (Doolittle, 1999). The context is also very important and the language taught in the classroom setting does not necessarily mean that it is appropriate for all situations in real life. Individuals should take part in different contexts and should see the discourse of the contexts and this cannot be given in courses; individuals should interact in different contexts. The experiences are also crucial in acquiring and learning new knowledge. Individuals perceive the realities not as they are but as they perceive them. Knowing takes place in different environments as social, cultural and language based interactions.

In addition to Doolittle’s tenets, Johnson (2001, p.47) explained the roots of constructivism with five principles as well. These are as follows:

a. Constructivist learning environments seek to replicate a realistic problem situation, so learners can develop skills in complex and messy problem-solving.

b. Learning in the social and physical context of real-world problems, including group activities, collaboration, and teamwork. Realistic problem-solving is often carried out in teams in which the different members bring different skills, experience, and backgrounds to help solve complex and ill-structured problems.

c. Shared goals which are negotiated between both instructors, learners, and between learners. This negotiated process helps to establish learner ownership over process and problems thus increasing both interest and learning.

d. Cognitive tools which aid in helping learners organize knowledge, such as, methods of categorization, organization, and planning (Knowles et al., 1998) are crucial. These cognitive tools can be aided by processes, procedures, and technology (Wenger, 1998).

e. An instructor's role as facilitator or coach. The instructor's role changes to one that guides learners in attaining their goals by helping them develop cognitive and metacognitive learning strategies.

There are three streams of constructivism which are *cognitive constructivism*, *radical constructivism* and *social constructivism*. In this study, the theoretical framework is social constructivism. Therefore, the first two types of constructivism are beyond the scope of this study.

In recent years constructivist theorists have focused on social constructivism and have searched for ways to apply this theory to the field of education. Social constructivism is a philosophy of learning which emphasizes the importance of culture and context in understanding what occurs in society and constructing knowledge based on this understanding. It can be inferred that the social context and the culture are

important to understand what is happening in a society and without knowing the culture of a society, for example, the gestures, the language, and the feelings it will make no sense to the foreigner. As Salter (2000, p.5) pointed out “in this model, learning is viewed as the result of mental construction”. Students combine the objects and events around them with what they already know and construct new information.

Since, the Internet is new social milieu for students to come together in order to share their learning experiences and build upon their existing knowledge, social construction is an appropriate framework to better understand how negotiation of meaning occurs in this new setting.

2.3. CALL: A Historical Perspective

Warschauer (1996) focused on the history of CALL in three phases, which are *behavioristic CALL*, *communicative CALL*, and *integrative CALL*. He categorized these phases according to the technological development, the approaches to language learning, and the approaches to CALL during those years.

2.3.1. Pre-Internet Era

According to Warschauer (1996), the first phase is *behavioristic CALL* and the main approach is behaviorism and the English Language learning theories based upon the behaviorist approach. Repetitive drills, drill and practice were thought to be the essential parts of language learning. This phase began in the 1950s and went on until the late 1970s. The following table created by Torat (2001) summarizes the behavioristic phase of CALL. As it can be inferred from the table, in language teaching approaches such as empiricist theory, behaviorism, audiolingualism, and structural linguistics were dominant and the characteristics of these approaches focused on stimulus response,

reinforcement, repetition drills, and giving immediate feedback. In the field of CALL computers were like a tutor in learning and learning practices focused on receptive skills like listening and reading. The behavioristic approach was rejected by the researchers of language learning and microcomputers led to new developments and opportunities towards the end of the 1970s. As a result, the behavioristic phase of CALL came to an end and a new stage was set.

In the late 1970s and early 1980s, behavioristic CALL was undermined by two important factors. First, behavioristic approaches to language learning had been rejected at both the theoretical and the pedagogical level. Secondly, the introduction of the microcomputer allowed a whole new range of possibilities. The stage was set for a new phase of CALL. (Warschauer, 1996, p.4).

Table 1: Main Frame and Mini Computers (1950s-1970s)

Main-frame and Mini Computers (1950s-1970s)		
Technological Development by Year	Approaches to Language Teaching	Approaches to CALL & Examples
1950 - Mathematician and computer pioneer Alan Turing predicted that one day there would be a machine that could duplicate human intelligence in every way. 1951- Whirlwind, the first real-time computer was built. 1957- FORTRAN language was developed. 1959-COBOL (Common Business-Orientated Language) was developed. 1960-Tandy Corporation founded. 1964-DEC Mini Computer was built. 1965-BASIC language was developed. 1967-Development on PASCAL 1968-LOGO language was developed. 1970-Development of UNIX operating system. 1971-First Microprocessor-4004 was invented. 1972-C language was developed. 1972-8008 Processor was released by Intel. 1972-The first international connections to ARPANET are established. ARPANET became the basis for the internet. 1974-Introduction of 8080. An 8 Bit Microprocessor from Intel. 1975-Formation of Microsoft by Bill Gates and Paul Allen. 1976-Apple Computer, Inc. founded, releasing the Apple II, first mass-market of PC. 1979-Introduction of 8088 processor.	- Empiricist theory - Behaviorism - Audiolingualism - Structural Linguistics Principles of Language Learning: - Focus on stimulus, response, reinforcement. - Language learning is a process of habit-formation. - Focus on drill and practice. - Learn through imitation and repetition. - Give immediate feedback. Individualized instruction was included to serve the pace of the learner.	Behavioristic CALL (eg. PLATO project: Aims at providing interactive, self-paced learning using mainframe computers.) Main characteristics of behavioristic CALL: - Based on behaviorist theory of learning. - Focus on receptive drills. - Mainly drill and practice type software. - Computer as tutor. - Learning activities promote language accuracy rather than fluency. - Designed to be implemented on mainframe and mini computers. Criticism of Behavioristic CALL: The Behaviorism and Audiolingualism were rejected theoretically and pedagogically by theorists and practitioners

The second phase was the years of the 1970s and 1980s and it was *communicative CALL*. During that period the main approach thought to be followed in language learning was a communicative approach and CALL was reshaped by the principles of this approach. According to educators, repetition and drill & practice were not authentic enough to learn a foreign language. In this phase, the cognitive approach and communicative language teaching were the main approaches in the language teaching field. Communicative skills were the main aim in teaching instead of teaching the grammar structure. Grammar structures were given implicitly and the new forms and vocabulary were taught in a contextualized way. Underwood (1984, cited in Warschauer, 1996), proposed the principles of communicative CALL as below:

- focuses more on using forms rather than on the forms themselves;
- teaches grammar implicitly rather than explicitly;
- allows and encourages students to generate original utterances rather than just manipulate prefabricated language;
- does not judge and evaluate everything the students do nor reward them with congratulatory messages, lights, or bells;
- avoids telling students they are wrong and is flexible to a variety of student responses;
- uses the target language exclusively and creates an environment in which using the target language feels natural, both on and off the screen; and
- will never try to do anything that a book can do just as well.

In the following table created by Torat (2001) the technological development approaches to language teaching and approaches to CALL in those years can be seen in detail.

Personal Computers (PC) (1980s)		
Technological Development by Year	Approaches to Language Teaching	Approaches to CALL & Examples
1980-Development of MS-DOS/PC-DOS began by Microsoft 1981-The first WIMP (Windows, Icons, Menus and Pointing Devices) by The Xerox Palo Alto Research Lab. 1982-The TCP/IP Protocol established, and the "Internet" is formed. 1982-80286 processor was released. - Compaq released their IBM PC compatible 1983-MS-DOS 2.0 was released. - Hewlett-Packard released LaserJet printer - AT was released. - Apple Macintosh was released. 1984- MS-DOS 3.0 was released. 80386 DX was released. 1985- Microsoft Windows was launched. 1985- EGA was released. 1985 - 80386 DX was released - VGA was released 1988 - MS-DOS 4. The development of word processing such as: - WordMaster - WordStar WordPerfect	Cognitive Psychology Communicative Language Teaching Transformational Grammar Principles of Language Learning: - Learning is process of discovery, expression, and development. - Focus on functions of the language. - Emphasis on language use rather than usage. - Contextualization is important. - Communicative competence is the desired goal. - Focus on using language forms rather than forms themselves. - Teach grammar implicitly. Encourage students to produce language rather than manipulate the language, (Brown, 1994).	Communicative CALL: (e.g. Storyboard, Text reconstruction, Cloze exercises) - Serious educational applications appeared. - A boom of CALL due to the introduction of Personal Computer Main Characteristics: - View that drill and practice exercises did not yield enough genuine communication. - Computer-based activities - Focus on using the language in context. - Non-Drill Practice format Type - Text reconstruction - Paced reading - Cloze exercises Criticism of Communicative CALL: Computers were not fully well integrated into the curriculum. The greater contribution is on marginal rather than the central educational elements.

Table 2: Personal Computers (PC) (1980s)

The last phase of CALL is *integrative CALL* according to Warschauer (1996). In this period, “no longer satisfied with teaching compartmentalized skills or structures (even if taught in a communicative manner), a number of educators were seeking ways to teach in a more integrative manner, for example using task- or project-based approaches” (Warschauer, 1996). Using computers even in a communicative way was not enough and there was a need for novelty in the CALL field and with two important technological developments, the new phase began. These technological developments were multimedia computers and the Internet. Multimedia computers (CD-ROM, for example) helped to create more authentic materials and the skills were more integrated. For example, while a student was reading a text he could listen to the passage as well. This phase began in the 1980s and is still going on. The following table, again created by Torat (2001), summarizes the technological developments, approaches to language learning, and the approaches to CALL during the phase of integrated CALL with multimedia computers.

Multimedia CD-ROM (1980s-1990s)		
Technological Development by Year	Approaches to Language Teaching	Approaches to CALL & Examples
• 1982 Audio CDs was introduced • 1982 Book on Audio CDs was introduced by Sony and Phillips--beginning of the Compact Disk • 1982 MIDI, Musical Instrument Digital Interface was introduced. • CD-ROM, invented by Phillips, produced by Sony • 1989 CD-I released by Phillips and Sony. • 1989 Release of Sound Blaster Card, by Creative Labs • 1990 Introduction of Windows 3.0 by Bill Gates & Microsoft. • 1990 - MPC (Multimedia PC) was introduced. • 1991 - 80486 DX was released. A sound card and triple speed CD-ROM were added. • 1992 Introduction of CD-I launched by Phillips. • 1993 Pentium released 1993 a CD-ROM drive capable of 300KB/sec (double speed) was introduced.	Humanistic Approach • Focus on Communicative Language Teaching: • Focus on meaning. • Use of authentic, meaningful and contextualized materials. • Fluency in language is a primary goal. • Focus on interactive language learning. • Consider learners' factors such as age, interest, learning styles, motivation. • Tasks relevant to students' real life interests and experiences (Felix, 1998) • Shift away from language usage to language use (Felix, 1998) The teacher became a facilitator rather than the person who gives out information.	Integrative CALL: Multimedia CD- ROM (eg.Toolbook, Authorware, Planet English, Real English, Wiser Educator) Main Characteristics Use advantages of multimedia CD-ROM in teaching language for communicative purposes. • Allow computer to incorporate a variety of media (text, graphics, sound, animation, and video) by Hypermedia. • Emerge of friendly-user, powerful authoring software such as ToolBook, Authorware, and Director. • Based on communicative language teaching approach • Built on student's intrinsic motivation • Foster the interactivity between the learner and the learner, and learner and computer. • Multimedia resources are linked together. • Learners can navigate their own path and set their own pace by pointing and clicking mouse. • More authentic language learning environment is created. • The four language skills are integrated. • Focus on content and language skills. Allow learners to link to a variety of sources such as grammatical explanations, glossaries, pronunciation, exercises, etc.

Table 3: Multimedia CD-ROM (1980s-1990s)

However, the latter technological development, the Internet, was more important. It changed the field of CALL considerably. That period will be described in the following part.

2.3.2. The Internet Era

This part is taken under a separate title since the Internet brought new applications to language learning and the CALL field and new uses of the Internet continue to be searched for by the researchers in this field. In Warschauer's (1996) article this part was under the title of integrated CALL phase and the Internet was mentioned as one of the two most important developments of CALL with multimedia. In this study, the Internet Era will be told separately since the changes that came with the Internet are worth being told under a separate title.

The most important change is the change of interaction type. Before the Internet interaction was between a computer and the student. A student would sit in front of a computer and the computer would give feedback to the student. However, in the Internet era, the interaction is again human to human as it should be in real life. The computer is not a tutor but a tool in the learning process and the role of the teacher has also changed. The teacher is a facilitator in this period. He does not teach the language but shows how to use the Internet and computers efficiently in language learning.

The main characteristics of this era is that learning is based upon a communicative language teaching approach and this communication takes place not with a computer and a human but human to human. Learners have the chance to practice their skills with native speakers of the target language. Learners can reach the invaluable resources on the Internet by simply downloading files to their hard drive or clicking on a hyperlink. With this kind of learning the focus is on a variety of content and multi-cultures. In the following table, Torat's, the characteristics in the field of CALL after the development of the Internet are summarized item by item.

Table 4: Computer-Mediated Communication (Internet) (1990s)

Computer-Mediated Communication (Internet) (1990s)		
Technological Development by Year	Approaches to Language Teaching	Approaches to CALL & Examples
1969-Computer-mediated communication (CMC) but serious applications appeared in early 1990s. 1960s-Hypertext was invented by Ted Nelson. 1989- World Wide Web--the integration of hypertext and the Internet- was invented by Tim Berners-Lee. 1990- Internet applications became popular such as E-mail, FTP, Talk (UNIX system) 1992- Gopher was released. - The release of CERN (WWW), a hypertext based system for finding and accessing internet resources. 1993- Mosaic (Web browser) was released.) 1994- Netscape 1.0 was released. 1995- Windows '95 was launched with Internet Explorer by Bill Gates & Microsoft. 1995 - JavaScript was introduced by Netscape. 1998 – Windows'98 was released. 1995-1999 - Development of: - QuickTime - Real Audio - Real Movie - Shockwave - Web-based E-mail - Web-based Chat - Voice Chat - Internet Phone - Emergence of web authoring software such as Hot Potatoes, Authorware, and Director. - Desktop Conferencing	Communicative Language Teaching Focus on using the internet applications for communicative language teaching: - Foreign language learning will be an acquisition of language content through purposeful and reflective participation. - The curriculum is dynamic. - The role of the teacher is a facilitator, an inseminator of ideas, who draws student's motivation. - The learner is responsible, reflective and creative. - Textbook is a resource along with electronic resources. - Classroom becomes a reconfigurable space with electronic facilities. (Debski (1997:47-48))	Integrative CALL: Internet Applications (eg. E-mail communication, FTP, World Wide Web, Chat, Gopher sites, MOO servers, CU-SeeMe, Desktop Video Conferencing) - Aim at integrating computer-mediated communication applications for communicative language teaching as follows: E-mail - Allow learners to have direct communication around the globe. FTP - Allow learners and teachers to download documents, graphics, sounds, videos, and animation. WWW - Learners search and share different kinds of files on the internet (documents, graphics, sounds, video, animation). Chat: - Allow learners to have real time communication. Main Characteristics: - Allow computer to incorporate a variety of media from the internet such as text, graphics, sound, animation, and video. - Internet resources are linked together by Hypermedia. - Based on communicative. language teaching approach. - Built on student's intrinsic motivation for authentic communication. - Encourage interactivity between the learner and internet users around the world. - More authentic language learning environments are created. - The four language skills are integrated (listening, speaking, reading, and writing). Focus on a variety of content and multi-cultures.

2.4. CALL and CMC

2.4.1. Computer Mediated Communication (CMC)

Computer Mediated Communication (CMC) is any form of communication between two or more individual people who interact and/or influence each other via separate computers through the Internet or a network connection - using social software. The computer is the medium for the communication and people around the world communicate with each other regardless of the time and place. Kiesler, Zubrow and Moses (1985) mentioned the importance of computers as a medium of communication twenty years ago and stated that it would become a very important development in communication as follows:

Just as the telephone and the automobile did, modern computing technologies seem likely to have major effects on patterns of social contact. People are using computer networks for communicating through electronic mail, computer bulletin boards, asynchronous computer conferencing, instantaneous document facsimile production, and on-line simultaneous conversations. Computers used for communication will be a significant technological development over the coming decades, and it seems sensible to study the underlying psychological and social implications of this development (Kiesler, Zubrow and Moses, 1985, pp. 78-79)

As Olaniran (1996) states, computer-mediated communication gains more popularity among organizations to promote group communication through available communication tools, such as electronic mail, voice mail, video conferencing. Moreover, Olaniran (1996) goes further to add that teleconferencing, which enable synchronous communication, is increasingly a demanded feature by organizations.

In this study, CMC research is categorized under three sections: social interaction, online communities of practice, and negotiation of meaning – which will be explained in the next part of the literature review. Before discussing the research

findings it is better to describe the CMC tools. CMC is divided into two types according to the time in which communication takes place. The first one is “asynchronous communication” and the other one is “synchronous communication”. These types of CMC are briefly explained below.

2.4.2. CMC Tools in CALL

2.4.2.1. Synchronous CMC Tools

If the CMC is synchronous it means that both sides of the communication, sender and the recipient, are connected and they are sending and receiving information at the same time. For synchronous communication individuals use software programs and they connect at the same time. If the recipient is not connected the sender can see that s/he is not online. Among synchronous CMC tools are MSN Messenger, Yahoo Messenger, Tapped In and ICQ. In the following section, these tools are introduced.

2.4.2.1.1. MSN Messenger

MSN is an Internet Service Provider. In order to use this program, the MSN Messenger program has to be downloaded from www.messenger.msn.com website and then installed on your computer. Then contacts are added with their e-mail addresses. In order to add a contact, the contact person also has to install this program on his/her computer. Then, when a contact on the list is connected, a notification is received and it is possible to talk with the contact person. MSN Messenger program also has some advantages. Besides sending text-based messages, visual and voice chat is available as well by means of a webcam and a microphone. This is one of the advantages of MSN over IRC (Internet Relay Chat), which is only text-based.

2.4.2.1.2 Yahoo Messenger

Yahoo Messenger is another software program which is used by means of an e-mail account. The difference between MSN Messenger and the Yahoo Messenger is that a yahoo account, which ends with “@yahoo.com”, should be used for the Yahoo Messenger program. Then the instructions are the same as with MSN Messenger. First, the program is downloaded from the <http://messenger.yahoo.com> address and then this downloaded program is installed and it is possible to use this program with a yahoo account. Voice chat, visual chat and text-based chat are also available for Yahoo Messenger users.

2.4.2.1.3. Tapped In

Tapped In is an online community environment in which people, particularly teachers, educators, and university students share their experiences, give lectures, and discuss their ideas through chat sessions. Tapped In is described on its own site as “the online workplace of an international community of education professionals. K-12 teachers, librarians, administrators, and professional development staff, as well as university faculty, students, and researchers gather here to learn, collaborate, share, and support one another” (www.tappedin.org/tappedin).

Tapped In will be explained in more detail compared to the other software programs and environments since Tapped In is used as the instrument for this study. Tapped In is described under the heading of synchronous communication, however, it can also be considered as an asynchronous communication tool because of its features. In order to use Tapped In there is no need to download any setup file or installation. The only download initially is the javascript for the text chat which does not take too much time. Then a form is filled out and an office is created and the final step is to become a member of this environment.

There are seven links on the left hand side of the main page. These are Welcome, Notes, Files, Links, Discussion, Whiteboard and Passageways. “Welcome” is the first page when a visitor enters a room. For example, photos and welcome messages can be placed here for visitors or students. In the second section, Notes, notes, such as announcements and news can be created. In the “Files” section, files, such as documents, lecture notes, syllabi and photos can be uploaded and the visitors can download the files. As for the “Links” page, the favorite web sites that may interest visitors can be listed. These websites can be personal websites and other links for useful information. In the “Discussion” section, a message is posted and visitors can write their comments and replies to this message. Visitors can also post new topics and this part of Tapped In is asynchronous since it works as a message board, or threaded discussions, i.e. people who write their comments do not have to be online at the same time and at the same place. “Whiteboard” is also another useful feature of Tapped In. While discussing a topic in the text chat window below additional material to what is being discussed can be pasted on the whiteboard and people can see the message and continue the discussion. It can be erased and replaced with a new message whenever necessary. This feature is usually used in connection with a discussion or to leave a message. Finally, in the “Passageways” section connections to rooms and places that may interest visitors are found. It is similar to the links page; however, in this section visitors are directed to places in Tapped In, not to other web sites.

In Tapped In reception there is a help desk and volunteers to help people with the Tapped In interface between 8 a.m. and 8 p.m. (PST). They give instructions on using this program. There is a calendar under the Tapped In tab at the top which shows the schedule of live events for the month such as conferences and topical discussions.

In Tapped In educators, students, teachers, and people who are interested in different topics come together and share their experiences. It is not only a space for ELT

members, but also for art, history, math, science and so on. Moreover, some students and educators come here to improve their English proficiency.

2.4.2.1.4. ICQ

ICQ is used for the phrase “I seek you”. The ICQ software program should be downloaded from www.icq.com and then it should be installed on the computer. If it is used for the first time it requires a free membership. After signing up for the program an ICQ number is received and the user uses this number for signing in. Once signed in, users search for people using the “whitepages”, which is a characteristic of ICQ which enables users to find people around the world according to some clues, such as gender, age, interests, etc. If the user finds someone according to his/her interests, s/he can add his/her name to his/her list and s/he can see if that user is online or not.

It reached its peak between 1999 and 2003; after this time MSN Messenger and Yahoo Messenger took its place. Nowadays, ICQ numbers are replaced with the MSN and Yahoo Messenger addresses of people. They have many colourful avatars and interface thus it is popular with young users of the Internet. On the website <http://en.wikipedia.org/wiki/ICQ>, the features and the reason for the fact that the other programs such as AOL Instant Messenger, MSN Messenger and Yahoo Messenger are preferred by young users are stated below.

ICQ allows the sending of text message with offline support, URLs, multi-user character-by-character chats, resumable file transfers, SMSes, greeting cards and more. Other features included a searchable user directory and POP3 email support. Even though such features were made available since around 2000, many of the main competitors such as AOL Instant Messenger, MSN Messenger and Yahoo! Messenger have failed to implement such power-user oriented features even to this day. Instead, they have gone towards the route of targeting the younger users by overloading with colours, avatars and animations (<http://en.wikipedia.org/wiki/ICQ>).

2.4.2.2. Asynchronous CMC Tools

In asynchronous communication, individuals on both sides of the communication should not necessarily be connected at the same time. A sender sends a message and the recipient gets the message at some time after the sending process. Both the sender and the recipients do not have to be ready in front of their computers. Among asynchronous communication tools are electronic mail, blogs and message boards.

2.4.2.2.1. Electronic mail (E-mail)

E-mail is the abbreviation for “electronic mail” and there are some companies for providing free e-mail accounts, such as Hotmail, Yahoo, Mynet, and Gmail. Before starting to use e-mails an account should be opened from one of these e-mail account providers or an Internet provider. The given address is like yourname@companyname.com and this e-mail address is used when sending messages to one of your recipients.

A valid e-mail address has the following characteristics: It contains an e-mail name and a domain (the part of an e-mail address that follows the @ sign). For example, the address *someone@example.com* consists of an e-mail name (*someone*) and a domain (*example.com*). It contains only letters (a-z, A-Z), numbers (0-9), the underscore character (_), or a combination of letters, number, or underscores (www.help.msn.com).

There is a picture below showing the hotmail interface. There are some spaces on this interface. A message is written in the space which is seen as the whiteboard. In the space “To” at least one e-mail address is written, in the space “subject”, the subject of the e-mail is written in a few words such as “an article, bad news or happy birthday”. Finally the “send” button is clicked to send the e-mail. The recipient can get his/her e-mail when s/he is connected to the internet.

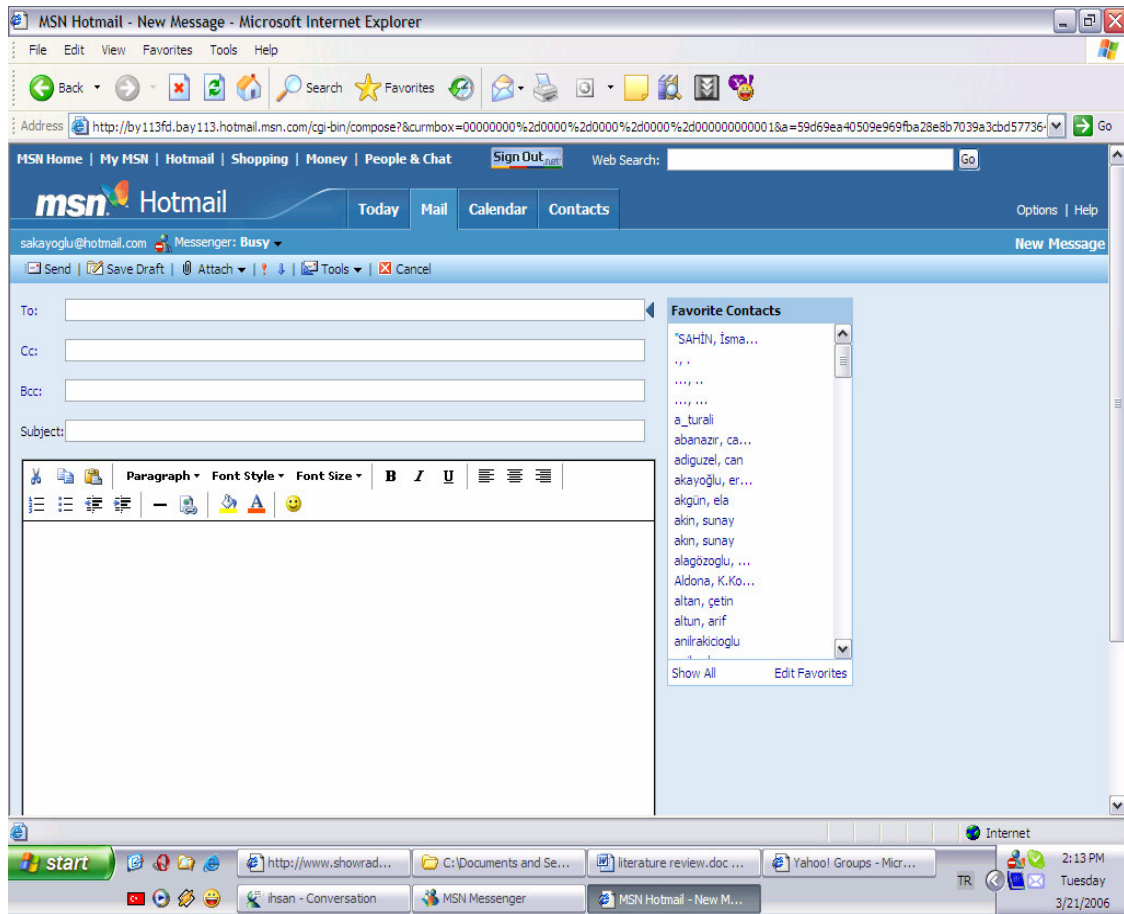


Figure 1: A sample interface of Hotmail while sending an e-mail

When CMC is thought of as a field of study the most commonly used tool is the e-mail. It is easier to create a group of people who exchange e-mails for communication. There is no need to arrange the time zone between two groups of people. People come online at any time they want and then they reply to their e-mails.

2.4.2.2.2. Blogs

Blogs (weblogs) are a type of website, but in terms of interactivity it has many advantages. First of all, an account from a blog service provider is taken and they are free of charge as many e-mail accounts are. The service providers give a space on the web and blogs are created with the simple directions in this space. Files like photographs, documents, and presentations can be uploaded to blogs and message boards and topics are created to discuss on which the users can send their comments. Users can also create new topics and all of these activities are under the control of the owner of that blog. Messages can be deleted or edited when necessary. In terms of interactivity and being user-friendly, blogs are preferred by educators. Teachers can then discuss the topics related to their courses.

2.4.2.2.3. Message Boards

It is really easy to create message boards on the net. Discussion topics are sent to the message board and other people who can reach this topic have the chance to reply to the question or they write comments on a statement. This is another asynchronous communication tool and the owner of the message on a message board can see the replies to his/her own message once s/he is connected. There is no need to be connected at the time in which another person is replying to the question or writing comments on the statement made.

2.4.3. Research in Social Interaction and CMC

Social interaction is the term used for the social actions between individuals or groups who modify their actions and reactions according to the actions of their interaction partner(s). The actions of the partners are taken into consideration and individuals regulate or modify their actions as a reaction to their partners' actions.

In educational systems interaction is one of the most important concepts. As Gunawardena (1997, p.397) states, “No interaction, no education.” Without an interaction among the teacher, student, and the content of the course, education cannot be thought to be efficient.

In a classroom setting there should be social interaction between the student and teacher, and student and student. The interaction among the teachers themselves and teachers and parents is inevitable, but it is beyond the scope of this study. In this study the interaction which takes place in a classroom setting will be discussed. The interaction among the teachers and the teachers and parents can be thought for further research.

In the field of Computer Assisted Language Learning researchers focused on comparing the social interaction in a classroom setting (face-to-face [f2f]) with the social interaction in computer mediated environments (Warschauer, 1995; Olaniran, 1996; Sassenberg, Boos and Rabung, 2005) and analyzing the learners’ interaction patterns in CMC environments. (Soukup, 1999; Chou, 2002; Hakkinen, 2003; Kheine, Yeap and Lok, 2003; Sibley and Heath, 2004; Paulus, 2005)

In a comparison study Warschauer (1995) compared two groups in order to find the advantages and disadvantages of face-to-face interaction and computer-based interaction. His subjects were 16 out of 20 students enrolled in an advanced ESL composition class at a community college in Hawaii. The students included five Filipinos, five Japanese, four Chinese and two Vietnamese. Two of the students were male and 14 female. The students ranged from 19 to 44 years of age. An interchange computer program was used as the tool in this study.

The study was conducted during a normal 75-minute class period. The 16 students present were randomly assigned to four groups of four students each. Two groups were brought together around separated tables for a face-to-face discussion. Two

groups were seated around the room at personal computers for an electronic discussion. Students were given 15 minutes for each discussion. An outside observer with a tape recorder sat in on each face-to-face discussion and made notes as to who said what. The data analyzed by means of Computerized Language Analysis (CLAN) program and Child Language Data Exchange System (CHILDES), which count the numbers of the words per participant.

Warschauer (1996) found that the most important advantage of computer-based interaction is that it provides an opportunity for equal participation in the classroom. This advantage is particularly important for shy students and the students who hesitate to ask a question or to express their ideas in front of a community. It was found that the cultural differences affected communication in online environments and in face-to-face communications. When Japanese students are compared to Filipinos students Japanese students are found to be more silent. The other difference between face-to-face and computer-based interaction is that in the latter students used a more complex and formal language in a computer-based environment. Since they have the chance to think twice or more, students are able to review what they write and as a result more formal language occurs in this kind of interaction.

The other study about the comparison of face-to-face interaction and computer-based interaction is Olaniran's (1996) study. He examined group satisfaction in computer-mediated communication and face-to-face communication. This study provides a general model of satisfaction in the decision-making process for both F2F (face to face) and CMC environments. The participants of this study are composed of 116 undergraduate volunteer students in the United States who are enrolled in a communication class. They were offered extra credits for their participation and this helped make the students volunteer. All students participated using both CMC and face-to-face mediums and completed the given tasks. Each group met for two sessions of two 3-hour meetings to address a specified task.

Participants received training on the CMC technology and were provided ample opportunity to practice prior to the experiment. To ensure that participants did practice using the CMC system some of the class assignments were done through this medium. Since, many technical problems occur during the data collection procedure of these studies, this application is sometimes necessary and a crucial factor in these kinds of studies.

Findings of this study can be summarized as three variables – ease of use, participation and decision confidence – which were good correlates of member satisfaction with the group process. While these variables were good determinants of satisfaction, the degree to which they predict member satisfaction was influenced by the communication medium. To enhance participant satisfaction attention must be focused on how a communication medium facilitates users' ease of use, participation, and decision confidence. Users' attitudes toward a medium should be of concern to those charged with the responsibility of choosing the medium for a group decision process. However, it must be recognized that using CMC is not a very easy task that can be acquired overnight. Exercises, practices and trainings are necessary for students to use this medium effectively. If they can use CMC as a medium effectively, their attitudes towards using it will be affected positively.

Finally, the last example of studies which are about the comparison of face-to-face interaction and computer-based interaction is a joint study of Sassenberg, Boos and Rabung (2005). In this study three conditions – CMC, face-to-face, and controlled – were set up. 36 female and 18 male undergraduate students participated in this study. Their mean age is 23 with age ranges from 19 to 42. The participants were given a task and they discussed this task using the medium of CMC and face-to-face and then in a controlled group the participants listened to a relaxation tape and then they discussed for 5 minutes. As a result of this study, it has been found that CMC strengthens the private self-awareness of the communication partners compared to face-to-face communication

and CMC requires less attention since the written communication is available. Since, this study was merely on text-based CMC, it is limited to only written communication. However, CMC is not limited to text-based but also includes voice-based communication.

The advantages and disadvantages of both computer-mediated and face-to-face communication can be summarized as below:

- a. In CMC, students feel comfortable because the language anxiety level decreases.
- b. In CMC, the language is more formal and complex when compared to face-to-face interaction because they have the chance to review what they wrote before sending the message.
- c. In CMC, students have the opportunity to see what they wrote before scrolling with the bar. All the messages are seen on the screen, therefore they do not have to remember what they talked about before.
- d. In face-to-face interaction, a turn-taking system can clearly be observed, however in CMC, there is another type of turn-taking system. A partner in an interaction writes and then clicks the send button and then raises his/her head and looks at the message s/he receives.
- e. In face-to-face communication partners have the opportunity to use their body language, i.e. hands, gestures, and eye contact; however, in CMC they do not have the same opportunity. The only media they use are text and voice-based communication. These can lead to misunderstandings in communication.

The other research domain exploring the social interaction in CMC focuses on determining the patterns and types of interaction on the Internet. These studies aim at

analyzing the online environments to find out what type of interaction occurs in an online environment. In his study Soukup (1999) analyzed chat rooms to see the patterns of discourse in terms of gender and to clarify the characteristics of females and males in a chat room. He observed two chat rooms; one of which was sports-based and the other female-based. There were 20-25 participants on average and the researcher was also one of the participants. This study lasted for nearly eight months and as a result the researcher found out some characteristics of males and females. Masculine participants were found to be aggressive, argumentative and power-oriented whereas the females sought relationships and intimacy and were often dominated and overpowered by the aggressive discourse of the masculine members.

Another study for the analysis of interaction is Chou's (2002) study on the content analysis of student interaction in synchronous and asynchronous learning networks. He compares the interaction patterns of synchronous and asynchronous CMC using Bales' Interaction Process Analysis method. The course for this research is an upper level undergraduate course titled "Theories and Applications of Computer-Mediated Communication Systems" offered at the University of Hawaii. He attempted to find an answer to the following questions: (a) is there a significant difference in social-emotional-oriented content and task-oriented content between asynchronous and synchronous communication modes? (b) is there a significant association between the moderators and the participants in the online discussions? (c) is there a significant difference in the SE-oriented versus task-oriented contents between female and male participants?

He categorized his findings under three interaction factors: (a) learner activity, (b) technology attributes and (c) learner differences. Under the learner activity heading the findings were: there were more SE-oriented interactions in the synchronous communication mode; asynchronous peer review provided the opportunity for collaboration on building the knowledge base and sharing information; a student-

moderated conference based on the SCD Model allowed learners to take the initiative for their learning and become efficient in computer-mediated communication as well as various CMC systems; there was more one-way communication in the asynchronous mode. Under the second heading, technology attributes, the findings were: student perceptions of the communication characteristics of technologies may have affected their initial interaction online; the selection of synchronous or asynchronous technologies contributed to the different interaction patterns. Finally, under the last heading, female students contributed more to SE-oriented interaction than the males in both communication modes and female students sent an overall higher number of messages than the male participants in synchronous communication mode.

Kheine, Yeap and Lok (2003) analyzed the asynchronous CMC environments to examine the quality of message ideas, thinking and interaction in a teacher-training institution. This study was conducted with 42 participants who are adult trainee teachers in Singapore. As a result of this study it was found that although the medium had changed from traditional classroom setting to online discussion forums, the teachers' habit of not actively participating and interacting remained the same. The trainee teachers could not 'keep the thread' of a prolonged asynchronous discussion. They were not questioning. They preferred information acquisition to constructivism. They were not gathering or sourcing out information to generate personal interpretations and decisions. Interaction could not be sustained. This study showed that as the tools change, some of the teachers' habits and attitudes towards the use of these tools should be changed with the exposure of these tools, in-service trainings and adoption of blended learning.

Hakkinen (2003) also investigates the interaction and knowledge construction in learning environments on the net. His data was composed of three components (a) computer-generated usage of statistics that illuminate the time, nature and volume of participation, (b) survey data on subjects' background information, and (c) transcript

data. As a result of this study, it was found that computers can be seen as essential elements in re-structuring social interaction and knowledge building. However, it is not enough just to provide a forum for students to collaborate, but their constructions of shared understanding and meanings have to be supported. As it can be inferred from this study, computers and provision of the Internet is not merely enough for knowledge construction, support for making thinking processes is also essential. This study aimed at having a better understanding of the nature and quality of successful online learning environments.

Sibley and Heath (2004) investigated the requests for interaction in an Internet Relay Chat (IRC) environment and as a result of this study they categorized the forms used in this environment into four groups: (a) a target specifier, e.g., “any girls”; (b) the communication request itself, e.g., “wanna chat”; (c) a self-identifier, e.g., “to a guy”; and (d) a communication directive, e.g., “msg me!” These forms are used to start an interaction and the aim of the study was to see the patterns of a synchronous CMC environment in terms of private requests. In order to create this taxonomy, seven IRC channel logs on the Ausnet IRC network were logged simultaneously for 96 hours (#3040’s, #frankston, #sydney, #adelaide_singles, #Teen, #asianmelb and #canberra). In the selection of these channels researchers gave importance to the large channels with general topics. A corpus of 691,180 words used posted by 6867 unique users.

Paulus (2005) studied computer-mediated discourse analysis and he investigated how the interaction occurs in a CMC environment. He had three participants, Sally, John and Pam aged 41, 52 and 27 respectively. He asked two questions for the discourse analysis: (a) What topics do small group members discuss as they work on a task? Are they on task? (b) How do group members interact to complete the task? The first question is related to the content of the chat logs and the second question has four sub-questions: “(1) Does the group take a cooperative or collaborative approach to the task? (2) Do they demonstrate mutual respect? (3) Are the group members participating

equally in the conversation? (4) Is there evidence of negotiation, challenge and explanation, or other cycles of interaction? He determined three categories for the first question. He divided the topics under four headings: social, logistical, technical and conceptual topics. The answer to the first question can be summarized as the group members were focused on the task at hand and were not using chat mainly for social interactions. As for the second question, functional moves such as agreeing, suggesting, eliciting opinions and offering to act were found.

The interaction is categorized under two headings: the ones which aim at comparing the interaction in the classroom and the interaction in online environments and the ones which aim at describing the characteristics of the interaction in online environments.

2.4.4. Research in Negotiation of Meaning and CMC

Pica (1994, cited in Toyoda and Harrison, 2002, p.82) describes negotiation of meaning as “the modification and restructuring of interaction that occurs when learners and their interlocutors anticipate, perceive, or experience difficulties in message comprehensibility.” To elaborate on this quotation, it can be said that in an interaction the sender and the receiver of the message may have some difficulties in understanding each other because of their social background, their age, their prior knowledge, even of their gender, and in these situations either side of the communication will use some utterances to repair, elaborate, and clarify themselves. Patterson and Trabeldo (2006) defines these utterances as the comprehension check, clarification request, vocabulary request, comprehension check, reply confirmation, reply clarification / definition, reply vocabulary, reply comprehension, elaboration, and correction / self correction. In the following table, the functions of negotiation of meaning are defined and explained with an example.

Table 5: Functions of Negotiation of Meaning Prepared by Patterson and Trabeldo (2006, Appendix I)

FUNCTION	EXPLANATION AND DESCRIPTION OF FUNCTION
Confirmation check	The speaker asks for confirmation of a previously made statement to be sure s/he has understood correctly. The speaker may make the statement and then ask if it is right or not, using a tag question such as <i>Yes?</i> , <i>Right?</i> or <i>Isn't it?</i> (<i>¿sí?</i> <i>¿no?</i> or <i>¿verdad?</i>).
Clarification request	Requesting clarification or meaning of a previous statement. Requesting a definition of a word or phrase in the target language (TL).
Vocabulary request	Requesting a vocabulary word or phrase in the TL.
Comprehension check	The speaker asks if the other person understood what was said or written and generally expects the person to acknowledge that he has understood.
Reply confirmation	Realized by “yes” (<i>sí</i>), OK (<i>está bien</i>) “you are right” (<i>tienes razón</i>) or a similar phrase. Used to confirm a statement when someone requests confirmation.
Reply clarification/ definition	Rewording or repeating a previous statement for clarification, or explaining a statement in response to elicitation. Giving a definition of a word or phrase in the target language in response to an elicitation of meaning. Giving an English translation of a word as a response to request for the meaning of a word.
Reply vocabulary	Providing a vocabulary word in TL in response to elicitation.
Reply comprehension	Replying to comprehension check or indicating that the statement was understood.
Elaboration	Statement clarifying the meaning of a previous statement. This clarification is not solicited by someone else but rather is volunteered. (For example: explaining acronyms or proper names i.e. UTN: Universidad Tecnológica Nacional.)
Correction/self correction	Correcting an error made by another speaker or self-correction of one's own error.

In the field of CALL, in terms of negotiation of meaning, the studies attempt to find the interaction patterns in a CMC environment and to see what kind of negotiation of meaning functions occurs in an online environment (Amuchastegui, 1999; Sotillo, 2000; Oliver, 2002; Bitchener, 2004; Rapaport, 2003; Schwienhorst, 2004; Jepson, 2005; Warschauer, 1998; Leahy, 2001). The aim of the studies related to negotiation of meaning is to determine the characteristics of interaction.

Rapaport (2003) explained how negotiation of meaning fixes the misunderstandings in a conversation; discussed the nature of communication, miscommunication and the negotiation of meaning; and explored some of Jerome Bruner's ideas about the negotiation of meaning. In terms of negotiation of meaning, he mentions that the negotiation is the key to understanding. It can also correct misunderstandings and facilitate us in changing our minds. In this study Bruner's views on negotiation are also found. According to Bruner, in first language acquisition, interpretation and negotiation are two important factors and these elements are discussed in Rapaport's (2003) study in detail.

Leahy (2001) conducted a project using e-mail exchange and analyzed the content of the e-mail messages. There were two objectives of this study: to acquire (a) language and (b) content through meaningful negotiation within a subject-specific task. Participants were 24 students studying law. There are two groups, one is in Germany and the other one is in Great Britain. They are e-mail partners and the average age of the participants was 20 in GB and 23 in Germany. All British students are English native speakers and all German students are German native speakers. Students collected material about a topic of their choice from the Internet and through e-mail exchanges. Then the assessed group (British only) wrote a report on their findings and finally, the written report served as a basis for a short oral, which was videotaped, in which the questions were asked by the tutor. The students were to send an e-mail message to his/her partner at least once per week and they corrected their partners' messages and the

researcher analyzed how the correction occurred, what type of negotiation of meaning they used in the correction process. The collected data is based on two questionnaires, a C-test, the e-mail exchanges between students and students, students and tutor, tutor and students, and the written reports and oral assessments at the end of the project. Furthermore, some face-to-face meetings between the tutor and students informed them about the students' attitudes towards the project.

As the results of this study, the effectiveness of an e-mail exchange with native speakers in language learning and peer tutoring, were mentioned. The cultural differences between German and British students were determined, such as the British students tended to view collaborative construction of knowledge rather than as an accumulation of facts.

Developing or improving electronic literacy skills, increasing vocabulary range and the reading of subject-specific material in the target language were successfully achieved by participating students. Improved time management, improved autonomous learning via computer-mediated communication, and improvement of negotiation skills were not always achieved.

Several advantages of e-mail exchanges with native speakers became transparent, which can rarely be found in a traditional language class with tutor and students: This type of e-mail exchange allows students to communicate on different levels and to help each other through peer-tutoring, that is, language corrections, exchanges of idioms, personal conversations, which allow for changes of register and use of slang expressions

Another study about analyzing the negotiation of meaning in conversation belongs to Warschauer (1998). In this paper, three perspectives on the significance of interaction and negotiation for language learning – input perspectives, output perspectives, and sociocultural perspectives – are examined and then the potential

relationships of these perspectives to computer-mediated learning was discussed. He claimed that comprehension is necessary for acquisition to take place, negotiation of meaning leads to interactional modifications that benefit acquisition and noticing is beneficial to acquisition.

Sotillo (2000) compared two modes of communication – synchronous and asynchronous – in terms of negotiation of meaning and formed a list of utterances for the analysis of the data. Two instructors and 25 students from two advanced ESL writing classes participated in her study. Her research questions were about the comparison of synchronous and asynchronous communication modes from the point of differences of discourse functions related to the negotiation of meaning. She claimed that communication in asynchronous mode had more complex syntax when compared to synchronous. However, in synchronous mode, the syntax was similar to face-to-face talk. Sentences are composed of a few words or phrases and simpler.

Oliver (2002) examined conversational interactions between children aged eight to 13 years. The number of participants was 192, 96 of which were native and the remaining 96 which were non-native speakers. The pairs worked together on two communication tasks, a one-way and a two-way task. Transcripts were made from the recordings of these conversations and examined to determine the effects of native/non-nativeness, language proficiency, age, and gender on the negotiation for meaning strategies used by the children. As a result of this study, it was found that in child-child interactions, the nativeness and proficiency of pairings influence the amount of negotiation for meaning that occurs. In NNS-NNS pairs, the negotiation for meaning is used more often than in the NNS-NS pairs and the least negotiation for meaning is used in NS-NS pairs.

Bitchener (2004) investigated the extent to which successfully negotiated linguistic features were retained over a period of 12 weeks. The 30 pre-intermediate ESL learners who participated in the study were asked to repeat two different communication

tasks (information gap and decision making) one week and 12 weeks after their first performance. As a result of this study it was found that vocabulary items, particularly concrete nouns in the information gap task, were negotiated more often than pronunciation and grammar items. Noticing the gap between their problematic utterances and the feedback they received from their conversational partners, the participants immediately modified close to two-thirds of these utterances, indicating that learning may have occurred. This study was on the type of negotiation for meaning functions in a classroom setting, not in an online environment.

Schwienhorst (2004), like Leahy (2001), examined two groups of students, one of which was from Germany and the other from Ireland. He compared these two groups of students and attempted to provide a detailed description of topic initiation and negotiation in a MOO environment and to examine whether the MOO environment can provide more equal and more NS-NS-like patterns of topic negotiation than reported research from face-to-face topic negotiation. Both groups met once a week for an hour in a text-based synchronous environment. The results of this study are:

- a. In both groups, the amount of topic initiations was far more balanced between NSs-NNSs than could have been expected by the previous research.
- b. The more proficient L2 group, the German learners, used far fewer questions than the less proficient L2 group, the Irish learners.
- c. Wh- questions were found to be much more dominant than yes/no and other questions.
- d. The more proficient L2 displayed features which are more often encountered in NS-NS than in NS-NNS conversations.
- e. There was almost no clearly identifiable change over the 8-week period of the project.

One of the studies upon the negotiation of meaning is Jepson's (2005) study which compared the text-based and voice-based chat rooms describing the types of negotiation of meaning. His research questions were: (a) which types of repair moves occurred in text and voice chats and (b) what the differences, if any, were between the repair moves in text chats and voice chats when time is held constant. He found that both voice and text chats contained repair moves. However, the data showed no evidence of certain types of repair moves, namely comprehension checks, questions, and self corrections. The other result was that repair work in voice chats was often pronunciation related.

As for the last study of this group, Patterson and Trabaldo (2006) conducted a research comparing the synchronous and asynchronous communication modes. The participants of their study were composed of 50 Spanish students at a University in the USA and 50 university students at a university in Argentina. They compared these two groups in terms negotiation of meaning and as a result of their study they found that a variety of functions for negotiation were seen. When these two modes were compared they found that functions of negotiation of meaning were found in synchronous communication much more than in asynchronous communication. They applied a questionnaire at the end of the study and they saw that students preferred synchronous chat to asynchronous communication. They mentioned the disadvantages of synchronous communication as well and these disadvantages were issues such as the need for both participants to be online at the same time and to have Internet access available at times which may be difficult for some learners. They formed the taxonomy for the analysis of the data and in this study, that taxonomy was adapted.

The research on negotiation of meaning mostly focused on the description of the conversations, both in online and face-to-face setting as well as finding an answer to the question of how and how often these repair moves occur in a typical conversation.

2.4.5. Research in Communities of Practice and CMC

There are many communities around us, however, before giving examples of these communities, it is necessary to start by defining what a community is, what the criteria of being a community is and what the roles of its members are.

Community of practice is defined on wikipedia as “a collection of living things that share an environment. The individual living beings can be plant or animal; any species; any size. What characterizes a community is sharing interaction in many ways. In human communities, intent, belief, resources, preferences, needs and a multitude of other conditions may be present and common, affecting the degree of adhesion within the mixture, but the definitive driver of community is that all individual subjects in the mix have something in common” (<http://en.wikipedia.org/wiki/Community>). The main criterion is sharing an environment. This can be a city, a town, a software program on the net or a virtual environment, like Tapped In, which is used for the data collection of this thesis. The definitions of community are nearly the same in many resources. However, in this study, the main focus is on communities of practice.

Lave and Wenger (1991) describe a community of practice as a group of individuals who share a repertoire of knowledge about and ways of addressing similar (often shared) problems and purposes.

Wenger defines the communities of practice as “groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (<http://www.ewenger.com/theory/index.htm>). As it can be inferred, sharing a common environment by the individuals is not enough for being a community of practice. They should have a common concern or passion for something they do and they should interact with each other regularly. Therefore, the people in Bolu can be called a community, but they are not a community of practice. Yet, students taking the “Short Story Analysis and Teaching” Course this semester can be called a community of

practice. Their objective is the same and they come together regularly and there is an interaction among the members of these students on the topic of short stories.

Johnson (2001) asked some questions related to communities of practice and the first one of these questions is “what the definition of community of practice is and what the main concepts that comprise a community of practice are.” In addition to the definition of the term, he also explained the essences as “communities of practice comprise social arrangements in which individuals learn by participating in activities. They include the members, which consist of both experts and novices. In addition, communities of practice also include the artifacts, which are the products, technology, media, and processes that are created by its members. Constructivist techniques (e.g., collaboration, facilitation, and ill-structured problems) enable learning to take place in communities of practice. Communities of practice differ from traditional learning environments because the learning takes place in the actual situation, including the social environment.”

Wenger also determined the characteristics of communities of practice as (a) the domain, (b) the community and (c) the practice. The domain is explained as the members of the groups who should share common interests and objectives. The members of the groups should have a common goal; however, that is not enough. There should also be an interaction among the members; they should interact with each other. They should perform activities related to their goals and the last characteristic of communities of practice is that the members of these groups are not merely a group of people who share the same ideas, interests and goals, but they also should be practitioners. They should produce as a result of their interaction.

Barab and Duffy (2000) stated the requisite of communities as (1) a common cultural and historical heritage, including shared goals, negotiated meanings and practices; (2) an interdependent system, in that individuals are becoming a part of

something larger than themselves; and (3) a reproduction cycle, through which “new comers” can become “old timers” and through which the community maintains itself.

As for the role of communities of practice (CoP) in education, the metaphor of the background of the schools can be used. The students have the chance to practice in these communities what they learn in school. The students learn by doing and participate in these communities and as a member of these communities they take responsibility of the learning process.

As mentioned by Barab and Duffy (2000, p.15),

her [Resnick’s] criticism that in schools there is frequently an isolated learner engaged in unaided thought using symbols that frequently have no connection to any real-world particulars. In contrast, while working in practice fields and in communities of practice students are usually working collaboratively and with concrete referentials (signifieds) so that they may address contextualized problems. Further, central to both these learning context is the opportunity for students to actively engage in negotiating meanings through practice.

At schools, subjects are taught as disconnected from the real world. Therefore, the subjects are usually abstract for the students and they do not think that these subjects are really necessary for them in their real life. These kinds of communities of practice provide the opportunity for the students with an application field for what they have learned in school.

As stated in Barab and Duffy’s (2000) article, Dewey (1897) argued that education should not be thought as a preparation for future living but as a process of living. In other words, education is not something unrelated to life but it is the life itself. People learn by experience and interaction in their social environment.

The studies about communities of practice aim at describing the characteristics of current online communities both in content and form, (Johnson, 2001; Stevens & Altun, 2002; Henri and Pudelko, 2003; Simpson, 2003; Marra, Moore and Klimczak, 2004;)

and the guidelines for creating an online community to support learning (Palincsar, Magnusson, Marano, Ford and Brown, 1998; Fottland, 2002; Putz and Arnold, 2001; Sim, 2006).

In the first group of studies related to online communities of practice, the researchers aim at determining the characteristics of online groups both in form and content. One of the examples of these studies is Johnson's (2001) study. He attempted to define communities of practice, characteristics of an online community of practice and he discussed the differences between a community and an online community. His findings are crucial in terms of characteristics of an online community of practice and they are summarized as (1) different levels of expertise that are simultaneously present in the community of practice; (2) fluid peripheral to center movement that symbolizes the progression from being a novice to an expert; and (3) completely authentic tasks and communication. The supporting ideas of constructivist approach such as collaboration, scaffolding, and interaction can be applied to these kinds of online communities. He mentioned the introverted students as well. In online communities, introverted students are reinforced to take part in activities and this is the most important advantage of online communities when compared to other communities.

Another example study of this dimension is Stevens and Altun's (2002) study on the perceptions of 12 EFL undergraduate students, eight girls and four males, on participating in an online community from a distance. The communication tools they used for this study are ICQ, MSN Messenger, Yahoo Messenger, Tapped In, and Net Meeting. At the end of the study, the researchers found that the students had positive attitudes towards joining an online community. In addition to the perceptions of the students, they also made a discourse analysis of the conversations in this community. As for the discourse analysis, they categorized the topics into seven areas: raising interest, hometowns, interpersonal exchanges, language skill development, audio visual

excitement, leave taking and unmet expectations. The researchers are mostly interested in the content of these conversation logs, not the structure.

In Henri and Pudelko's (2003) study, the online communities are divided into four groups and the negotiation of meaning types are analyzed in these groups and they are compared according to these terms. The types of online communities for them are community of interest, goal-oriented community of interest, learners' community and community of practice. The results of this study are demonstrated by means of the table below:

Table 6: Principal Descriptors of the four types of Virtual Communities (Henri and Pudelko, 2003, 485)

	Community of interest	Goal-oriented community of interest	Learners' community	Community of practice
Social context of emergence	Gathering around a common topic of interest.	Created to carry out a specific mandate.	Pedagogical activity proposed by the instructor.	Stems from an existing, real community of practice.
Activity	Information exchange.	Sharing of diverse perspectives and production of objects commissioned by the mandate.	Participation to the realization of a collective project.	Professional practice development through sharing knowledge among members.
Learning	Knowledge construction for individual use.	Knowledge construction from diverse knowledge systems towards collective use.	Knowledge construction by carrying out social situated activities.	Appropriation of new practices and development of involvement.

Simpson (2003) attempted to define how language in use is affected when the medium of communication is computers in his PhD dissertation. There were two questions in his dissertation: what the linguistic and discourse resources were which individuals need for successful interaction within the community and how the character and purpose of the community affects the linguistic and discourse patterns of use. The data was composed of online sources which are associated with the Webheads group. Simpson was a participant researcher of this study and he analyzed the discourse of text-based CMC environments and his findings are all related to the characteristics of online communities which are also mentioned as are the results of other studies.

Marra, Moore and Klimczak (2004) conducted content analysis of an online group as well. Their participants were 21 students enrolled in a graduate online course and of these students, there were 9 men and 14 women; 18 were pursuing master's degrees and 3 were doctoral students. The data was obtained from the discussion board these students used. Two content analysis protocols were applied for the one-week led discussion board. The main aim was to compare two content analysis methods – Interaction Analysis Model (IAM) and Newman, Webb and Cochrane model.

The second dimension which was researched about the online communities aims at suggesting guidelines for creating effective online communities.

Palincsar, Magnusson, Marano, Ford and Brown (1998) define the online communities of practice and they discuss whether their community called GIsML (Guided Inquiry Supporting Multiple Literacies) is an actual online community of practice or not. They listed the characteristics of an online community of practice and critiqued their own group as to whether it was an online community of practice. At the end of their study, they claimed that they were in the process of being an online community of practice. They state that an online community of practice depends upon the negotiation of meaning; a community of practice is drawn together by a force that is

both social and professional; communities of practice are typically characterized as emerging of their own accord and are not subject to creation.

Putz and Arnold (2001) focused on the community of practice concept and they suggest a guideline for creating a community of practice in higher education. The main aim of the researchers in this study is to develop design guidelines for an online seminar that are explicitly based on a community approach towards learning as opposed to the delivery view. This study was conducted at Johannes Kepler University Linz, Austria and asynchronous communication was used for 10-week course. They determined five dimensions for evaluating an online community – participation and reification, identity and anonymity, local and extended community, designed and emergent structures and grading and alignment. They implement these dimensions onto an online university seminar and as a result they found that the online seminar was proven to be useful and by means of online communities, learning was the consumption of knowledge instead of knowledge delivery; the grading system was found to be the biggest challenge and to be totally different from the traditional classroom setting. The student assessment was based upon the clearly described requirements and combined with individual feedback to improve their performance. The assessment is more transparent and fair according to the students.

Fottland (2002) focused on creating a community of learners online and offline in teacher education. The participants of this study were four students, although it gives attention to a larger group of 35 students, during their six-week intensive project work. A group of four students was chosen because its participants stood out as the most active in the online exchanges. The data for the study are transcripts of students' Internet exchanges related to task, the students' assessment reports, and an interview with one subgroup. The findings revealed five phases in creating an effective online community of practice for the learning process: a situation definition of the learning environment, writing to learn, from written interaction to conversation (online and offline), developing

critical and constructive awareness, and dissemination of understanding. The findings showed that each phase scaffolds the learning progress and the students felt it necessary to cope with and handle challenges connected to one phase level before moving on to a higher stage.

To summarize, the communities of practice still draw researchers' attention in order to describe its characteristics to create an online community of practice which scaffolds the learning process.

2.5. Conclusion

In this chapter, social interaction, communities of practice and CMC are described and then explained within the frame of social constructivism. Secondly, the research studies are discussed in detail. In the next chapter, methodology, the setting, the tools, the participants, data collection procedures and the data analysis of this study will be explained in detail.

CHAPTER III

Methodology

3.1. Introduction

The purpose of the study is to find out the patterns of negotiation of meaning in an online CMC environment and a discourse analysis is made to find out how the language works in terms of negotiation of meaning. This study aims at determining how often the types of negotiation of meaning occur and which type of negotiation of meaning is used the least and more often in chat sessions in which the participants are native and non-native speakers. Since the participants are not only native or non-native, it is aimed at finding if there is a difference between these participants in the use of negotiation of meaning.

This chapter will provide information about the research design, study participants, instruments to obtain the data, the data collection procedures, and the data analysis strategies.

3.2. Research Design

The method of this study is an ethnographic study with discourse analysis. Nunan (2005) explained the aim of ethnographic studies as finding about behavior when there is need to investigate it in the natural contexts in which it occurs, rather than in an experimental laboratory. In ethnographic studies, researchers make no attempt to isolate or manipulate the phenomena under investigation and insights and generalizations emerge from close contact with the data rather than from a theory of language learning and use. A natural setting was used for the data collection and the researcher did not have any effect on the students' outcomes. The non-native participants interact with native speakers in a natural setting not in a laboratory-like setting.

This particular study also investigates the frequency of the occurrences in participants' functions of negotiation of meaning. Erickson (1992) states one of the aims of ethnographic studies as establishing the typicality and atypicality (relative frequency of occurrence) of various event types and modes of interactional organization (and of particular instances of these) across the full range of diversity in social relations to be found in the setting, network, or community.

The research design also includes discourse analysis in order to observe the patterns in the discourse of communication. Before defining discourse analysis it should be clarified why conversation analysis or interaction analysis was not used for the analysis. There are some slight differences among these terms and in some studies these terms are used in appropriately. According to Nunan (2005) there are four factors determining the use of interaction analysis, conversation analysis or discourse analysis. Firstly, the means whereby the data has been collected; secondly, the mode of language which is admitted into the analysis; thirdly, whether the researcher brings to the analysis a predetermined set of analytical categories; and finally, whether the focus of attention is essentially linguistic or non-linguistic. The differences among these are shown clearly on the table below.

Table 7: Characteristics of Discourse Analysis, Conversational Analysis and Interaction Analysis

	Discourse analysis	Conversation analysis	Interaction analysis
Method of generating data	Invented Elicited Naturalistic	Naturalistic	Elicited Naturalistic
Mode	Spoken Written	Spoken	Spoken
Type of analysis	Categorical	Interpretive	Interpretive
Units of analysis	Linguistic	Non-linguistic	Both linguistic and non-linguistic

McCarthy and Carter (1994) determine the objective of discourse analysis as exploring how language is used across stretches of language each in their own way as the disciplines of discourse analysis. In discourse analysis, the examination of language in naturally occurring contexts is the main idea and this analysis involves the study of the complete texts.

When applying discourse analysis, several taxonomies were reviewed. In data analysis, it is kept in mind that a closed set of language functions is not applied equally to all languages (Schriffin, 1994). Therefore, this assumption of diversity let the researcher explore the limits of diversity.

3.3. Participants

The participants of this study are composed of 30 undergraduate students at the Department of Foreign Languages Education, Abant Izzet Baysal University and 8 native speakers cordially invited to the sessions for the data collection.

3.3.1. Native Speakers

One group of participants to this study includes native speakers from the Webheads In Action (WIA) group. WIA is an online community composed of 515 members. This particular group was chosen because, first, the researcher is a part of this community and familiar to their activities. Second, WIA forms a community of practice in which members of this group use various synchronous and asynchronous web tools for learning and teaching EFL/ESL, reflect on ways of applying those tools to their teaching, either online or face to face, interact through e-mail, text chat, voice chat, voice e-mail, forums and distribution lists, among others, create web pages, surveys, online worksheets, interactive exercises and rubrics related to their own contexts, and, use weblogs as a means for reflective writing.

In order to invite volunteer participants to join this study, an e-mail message was sent to the group e-mail list (See Appendix A). 10 members from WIA accepted to join the study; however, eight of these were actually present throughout the sessions. The number of the NS participants ranged from 1 to 4 for each session.

In the e-mail sent to the group the procedure of the data collection was described in detail, except for the issue that it was going to be observed – negotiation of meaning. It could have affected the findings if it had been mentioned that the negotiation of meaning structures during the chat sessions were observed. Besides this, the time schedule, the aim of this study, the stories to talk about, the place and the data collection procedure were explained in detail.

3.3.2. Non-Native Speakers

The students enrolled in these sessions were all third year students at the Department of Foreign Languages Education at Abant İzzet Baysal University, in Bolu, Turkey. The reason for choosing third year students is the fact that they were taking a “Short Story Analysis and Teaching” course. The topics they chatted about for the data collection were two stories: *The Gift of Magi* by O. Henry and *The Necklace* by Guy de Maupassant which were discussed in classroom setting as well.

The students were divided into four groups and each group was composed of a number of students ranging from 5-10. The reason for dividing these students is the fact that the whole class for a chat session would be too crowded and if there were more than 10 people approximately in a chat room it usually leads to chaos. The questions cannot be answered exactly and people cannot express their ideas clearly.

One student could not join giving no reason and one other due to technical problems; however, the latter one later joined another group. The rest of the class had no problems using the Internet or the Tapped In page.

3.4. Instruments

In the data collection procedure of this study reading materials and semi-structured questions were used. The students came to the online environment having read the short stories and they discussed some questions related to these stories.

3.4.1. Reading Materials

The reading materials which were to be read before the discussions were *The Gift of Magi* by O. Henry (See Appendix B1), and *The Necklace* by Guy de Maupassant (See Appendix B2). Both of these stories were discussed face-to-face in a classroom setting for the “Short Story Analysis and Teaching” course with the same students. There are some reasons for choosing these stories. The first one is that since they read it beforehand so the students were familiar with these stories. The second one is that the length of these stories is not too long and it was thought to be easier to read for the native speakers. The native speakers would have changed their minds perhaps to attend the session otherwise if they had seen the pages of stories. Moreover, if the students would like to read it once again, it would not be a challenge for them to read it in a short time. The last reason is the topics of these stories. The themes of these stories are love, marriage and being envious of friends which are very easy to talk about for students of that age.

3.4.2. Semi-structured Questions

Semi-structured questions (See Appendix D) were prepared beforehand for collecting data. The purpose of these questions was to initiate the topics for discussions. These questions were directed by the researcher, and then, the participants discussed using these questions as a starting point. In addition to semi-structured questions, participants were let free to ask questions during the sessions. In cases of pauses or delays in conversations, some follow up questions were prepared, however, no such instance was observed.

3.5. Data Collection Procedures

3.5.1. Discussion Sessions

It was planned to involve both native and non-native speakers of English in this study. Therefore, first of all, the participants were invited to join the discussions. As to the non-native speakers, third year students of Abant Izzet Baysal University Department of Foreign Languages Education were told about the study. Since these students joined the Mini-Expo (which was organized two months before the days on which data was collected) at Tapped In, they were familiar with this environment so training on the features of Tapped In and how to use Tapped In was not applied to these students.

As to the native speakers, an invitation letter (see Appendix A) was sent to Webheads yahoo group using their e-mail address which is evonline2002_webheads@yahooogroups.com. The members were interested in these sessions. Some of the members could not join because of the time zone they were in. In spite of this fact eight of them were able to join. As the researcher in this study I did not want to take part very often in the sessions because I knew the research questions and

this might have affected the findings of the study. Moreover, an instructor from Muğla University Foreign Languages School was asked to join the sessions as an instructor to lead the discussions with the students.

There were two short stories to discuss; one was *The Gift of Magi* by O. Henry (See Appendix B1), and the other one was *The Necklace* by Guy de Maupassant (See Appendix B2). These stories were uploaded to the virtual office of the researcher as a Word document and available two weeks before the discussions. In addition to these files, an announcement which was the same as the letter sent to the WIA yahoo group was also pasted on the home page of the researcher's virtual office at Tapped In. All participants read the stories before participating in the chat sessions. In the first four sessions *The Gift of Magi* was discussed, and in the next four sessions the topic was *The Necklace*.

During the sessions the participants were unaware of the research questions of this study because it might have affected the findings of the thesis.

In order to provide ample opportunity for student participation there were eight sessions. There are 30 students enrolled in the "Short Story Analysis and Teaching" course. Each student participated in two sessions and the number of the students joining the sessions ranged from 5 to 10. Students chose the time they could join. The characters, plots, settings in the stories, and how these stories could be used in an English Language Teaching setting were the topics discussed in the sessions.

There were no connection problems with the students and all of them could join the sessions except one student who had experienced technical problem. With some help, her computer was adjusted to enable her join the sessions.

3.5.2 Data File Organization

After the sessions the transcribed chat logs were sent to the all participants automatically, which is a built-in feature of Tapped In. These messages were in HTML format in the e-mail so they were copied and pasted to a word processing document. Each session was numbered as Session 1, Session 2 and so on and each turn was given a number in the sessions. The data was organized by this way to facilitate the analysis. The chat logs were including preparation and ending parts. Therefore, they were omitted and the discussion parts were taken for the analysis. In other words, data was grouped to see the characteristics of the data. This grouping is as follows:

Table 8: Detailed Information About the Data

Number of the Session	Number of Turns		Analyzed Data		Number of Turns		Total Number of Turns
	Analyzed	Ignored	Beginning	Ending	Native	Non-Native	
1	470	411	362	831	80	390	881
2	761	350	203	963	79	682	1111
3	619	87	54	672	146	473	706
4	476	216	158	633	49	427	692
5	452	118	66	517	156	296	570
6	615	133	81	695	66	549	748
7	524	52	21	544	150	374	576
8	547	208	165	711	46	501	755
Total	4464	1575	-----	-----	772	3692	6039

Then, the turns were marked as NS and NNS since one of the research questions of this study was related to the difference between NSs and NNSs of English.

Finally, the collected data was entered a Qualitative Research Data Analysis Computer Software, Hyper Research 2.6.1. Firstly, the codes were determined and the codes were applied to the chat logs. If any diversity between the previous taxonomies and the collected data was observed, it was also added to the list.

In Figure 2, there are three windows as the interface of Hyper Research Software: analysis, code list editor, and source file. Firstly, the codes are determined in code list editor window. Secondly, the source file is pasted on the source file window, and finally, the codes are applied to the text manually.

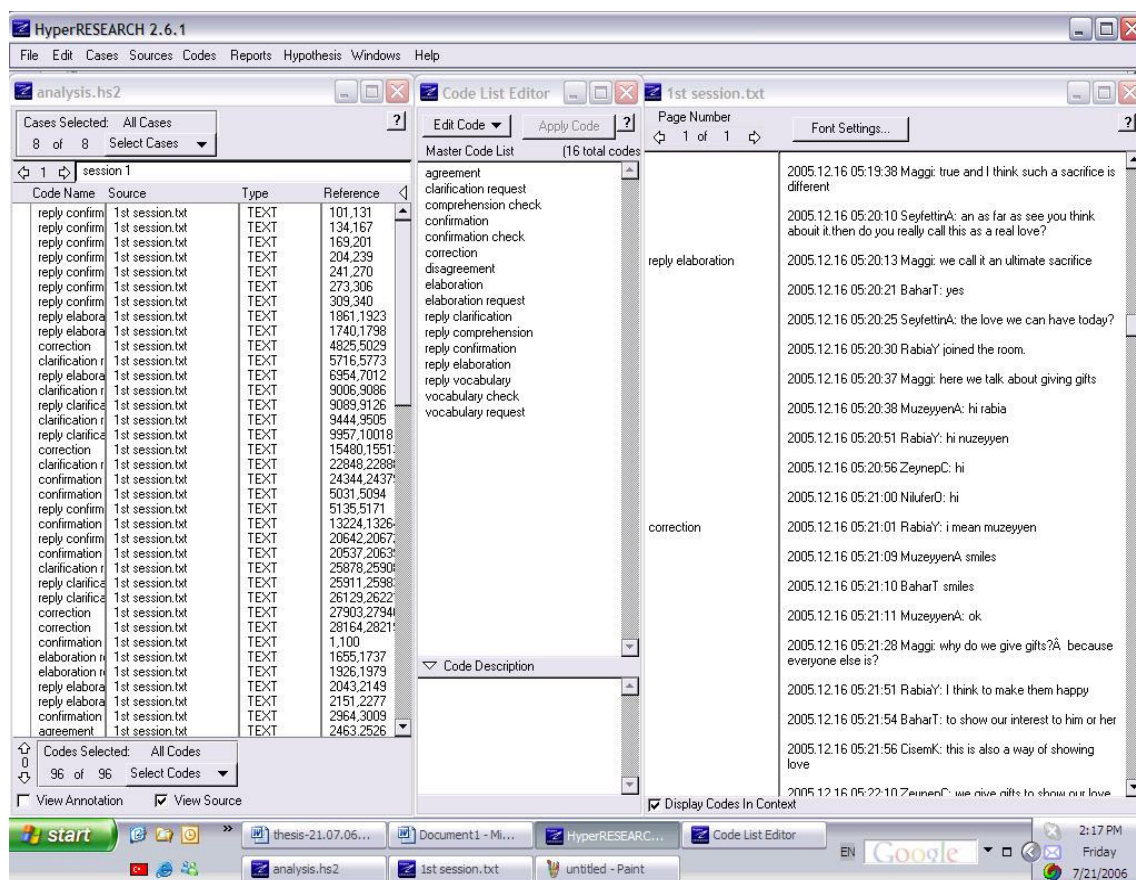


Figure 2: The Interface of Qualitative Research Data Analysis Computer Software, Hyper Research 2.6.1.

3.6. Data Analysis

The analysis is made by means of discourse analysis when the following features are taken as the main criteria. The method of generating data is naturalistic; the mode of

the data is written text; the type of analysis is categorical, that is there is a categorization for the analysis and this categorization was used during the analysis process; and the units of analysis is linguistic one – the types of negotiation of meaning are determined and studied for their frequencies in detail.

3.6.1. Coding Procedure

During the discourse analysis process a set of predetermined categories (namely taxonomy) for negotiation of meaning was adapted from various sources. These taxonomies included Sotillo's (2000), Oliver's (2002), Jepson's (2005), Patterson's (2000), and Trabeldo and Patterson's (2006) taxonomies (See Appendix C1, C2, C3, C4, C5).

Sotillo (2000) compared the interaction types in synchronous and asynchronous CMC environments and then determined the coding categories and she explained all the categories with an example. In Sotillo's (2000) categorization all the discourse markers for interaction took place. She did not separate the negotiation of meaning from the interaction types such as greetings, opening move, topic suggesting, and imperatives. She categorized the types of negotiation of meaning in different groups. For example, clarification requests, comprehension checks, explanation requests under the title of questions and requests; explanation, clarification under the title of responses.

There are 14 categories in her list and they were greetings, topic initiation moves (starter), assertions (statement/opinion), imperatives (directive), requests (elicit), responses (reply), adversarial moves, off topic moves (aside), topic shifts (marker), humor, requests for information (elicit/information), clarification requests (elicit/clarification), comprehension checks (elicit/confirmation), corrective feedback (statement/correction), reprimands (statement/correction), and closings (greetings).

Patterson (2001) prepared a taxonomy based upon Sinclair and Coulthard (1975, cited in Patterson, 2001). They categorized the interaction types produced by pupils and

teachers in a classroom setting. She also adapted the taxonomy prepared by Sotillo (2000). It was more detailed and the list was entitled functions of the language and it included many functions of the language.

Oliver (2002) used a simple taxonomy for the analysis of child interactions and it includes only clarification requests, confirmation checks, comprehension checks, self repetitions, and other repetitions.

Jepson (2005) compared text-based and voice-based chat rooms to see what kinds of negotiation of meaning are used in either of them. His taxonomy was not too detailed either and it includes clarification requests, confirmation checks, comprehension checks, self repetition and paraphrase, and incorporations (speaker repairs utterance based on interlocutor cues). The only difference between Oliver's (2002) and Jepson's (2005) was the last item, incorporations.

Finally, after Patterson submitted her dissertation and she wrote an article in 2006 with Trabaldo, they modified the taxonomy and used comprehension check, confirmation check and clarification request instead of elicit confirmation and the final taxonomy is as follows:

Table 9: The Taxonomy Prepared by Patterson and Trabaldo (2006)

Negotiation of Meaning Functions
Confirmation check
Clarification request
Vocabulary request
Comprehension check
Reply confirmation
Reply clarification/ definition
Reply vocabulary
Reply comprehension
Elaboration
Correction/self correction

Patterson and Trabeldo's (2006) taxonomy was taken as taxonomy for coding the data and if diversities were observed, they were noted as well.

3.6.2. Intercoder Agreement Method

In order to ensure the reliability of coding and intercoder reliability Cohen's Kappa was calculated over randomly selected 127 functions samples and 470 turns out of 665 functions and 4464 turns. The coders were asked to code these data according to the given taxonomy. The results showed that the Kappa value is .75, and according to Landis and Koch (1977) kappa values greater than .75 indicate excellent agreement. Cohen's Kappa values indicated that the two coders used 77% of the 127 codes in exactly the same way across all 470 turns.

3.7. Conclusion

In this chapter, the characteristics of the participants, instruments were presented. Then, research design, data collection procedures, data analysis and the taxonomy used for the analysis were described in detail. In the following chapter, the findings as a result of analysis of the data will be presented.

CHAPTER IV

Findings

4.1. Introduction

The research questions of this study were (a) how NNSs and NSs negotiate the meaning in CMC environment, and (b) if there is any difference between NSs and NNSs of English in using negotiation of meaning functions. The findings of the study will be presented in this chapter.

4.2. Negotiation of Meaning in CMC Environment

The first research question of this study was about how NSs and NNSs of English use the negotiation of meaning functions. This section includes two parts. First one is about the types of negotiation of meaning and the second part is related to the frequencies of these functions. After the frequencies of the functions were determined, the more often and least used ones were determined as well.

4.2.1. Types of Negotiation of Meaning

At the end of the analysis of the data it was found that the percentage of the turns related to negotiation of meaning functions is 14.90. In addition to this, during the analysis of the data the types of negotiation of meaning listed below were analyzed; however, not all of them were observed. As a result of this study, 12 types of negotiation of meaning were observed and the two categories titled as comprehension check and reply comprehension were not observed. In order to better understand the categories, the categories were explained briefly and exemplified with one or two examples preferably with the excerpts from the data of this study.

Table 10: The list of negotiation of meaning functions

The name of the function	Observed
Clarification request	Yes
Confirmation check	Yes
Correction	Yes
Elaboration	Yes
Reply clarification	Yes
Reply confirmation	Yes
Reply vocabulary	Yes
Vocabulary request	Yes
Comprehension check	No
Reply comprehension	No
Elaboration request	Yes
Reply elaboration	Yes
Vocabulary check	Yes
Confirmation	Yes

4.2.1.1. Clarification request

It is defined as requesting clarification for an ambiguous statement which may cause misunderstanding.

e.g.

2005.12.24 05:14:21 NNS7: then she deserved it?

2005.12.24 05:14:31 NNS29: yes

2005.12.24 05:14:32 NNS24: deserving what?

2005.12.24 05:14:35 NNS4: but these lies didn't give harm to her friend

2005.12.24 05:14:48 NS7: 10 years of hard work might be a little harsh

2005.12.24 05:14:51 NNS24: but it gave to her husband!

2005.12.24 05:14:55 NS7: exactly!

2005.12.24 05:15:03 NNS7: ten years of life in difficulties (7th Session; 67-74)

Here, NNS7 asked whether she deserved it or not and in order not to cause a misunderstanding NNS24 asked what NNS7 was thinking while he was asking “then she deserved it?” and NNS7 replied with “ten years of life in difficulties”. Here, NNS24 requested for clarification for NNS7’s first statement.

4.2.1.2. Comprehension check

The speaker asks if the other person understood what was said or written and generally expects the person to acknowledge that he has understood. This utterance was not seen in the data of this study.

e.g.

Speaker A: Here, UFO stands for Unidentified Flying Objects, do you understand?

Speaker B: Yes, I see.

In this example, Speaker A asked a question to understand whether Speaker B has understood what he said or not.

4.2.1.3. Confirmation

Confirmation is a new item in this taxonomy added in this study. After discussing with Dr. Patterson, the owner of the previous taxonomy, it was understood that confirmation utterances are categorized as reply confirmation in previous taxonomy. However, confirmation check is required in order to categorize an utterance as reply confirmation. There were some confirmation utterances which did not occur as a result of confirmation check. Some participants confirmed the previous statement with statements like “That’s right”, “Exactly”.

e.g.

2005.12.16 05:11:39 NS6: do you need to buy a gift to show love?

2005.12.16 05:11:39 NNS30: today, tomorrow, and forever

2005.12.16 05:11:49 NNS3: sometimes

2005.12.16 05:11:55 NNS3: not money business

2005.12.16 05:12:06 NNS3: but some sacrifice may be needed

2005.12.16 05:12:14 NS5: good point cistem

2005.12.16 05:12:16 NNS17: $\ddot{A}$ ± agree with $\ddot{A}$ şistem

2005.12.16 05:12:17 NS6: why

2005.12.16 05:12:39 NNS3: sacrifices r are ways of showing love

2005.12.16 05:12:53 NNS31: right, $\ddot{A}$ şistem (1st Session; 409-418)

In this example, NS5 and NNS31 confirmed what NNS3 explained with utterances like “good point cistem” and “right $\ddot{C}$ istem”. NNS3 did not utter a confirmation check utterance; however, these two participants felt the need to confirm to show they were in agreement with NNS3.

4.2.1.4. Confirmation check

The speaker asks for confirmation of a previously made statement to be sure s/he has understood correctly. The speaker may make the statement and then ask if it is right or not using a tag question such as “*Yes?*”, “*Right?*” or “*Isn't it?*” The speaker feels the necessity to be confirmed by the participants by means of questions which require an answer beginning with “*Yes*” or “*No*”.

e.g.

2005.12.16 05:34:31 NS6: tha they were willing to sacrifice for each other?

2005.12.16 05:34:33 NNS3: just for him

2005.12.16 05:34:50 NNS30: of course not the only way Rabia

2005.12.16 05:35:02 NNS3: yes

2005.12.16 05:35:15 NNS10: yes maggi

2005.12.16 05:35:28 NNS20: so personally I would not do the same thing with della

2005.12.16 05:35:37 NNS30: without doubt they wre willing to sacrifice (1st Session; 599-605)

In this example, NS6 did not ask a question but by means of a question mark, she requested confirmation from the participants, and NNS3, NNS10 and NNS30 replied to this request and confirmed what NS6 said.

4.2.1.5. Correction

Correcting an error made by another speaker or self-correction of one's own error. In this category, the main correction is about spelling mistakes. These corrections were made either by the other participants or the speaker himself/herself.

e.g.

2005.12.23 05:21:39 NNS2: he bought new clothes for his wife to meka her happy

2005.12.23 05:21:44 NNS32: the money for the dress?

2005.12.23 05:21:48 NNS2: make (5th Session; 125-127)

Here, NNS2 corrected her own spelling mistake soon after she had sent her message. In fact, there was no need to correct her mistake, her previous message was also understandable but she felt the necessity to correct her spelling mistake.

4.2.1.6. Elaboration

It was defined as a statement clarifying the meaning of a previous statement. This clarification is not solicited by someone else but rather is volunteered. (For example: explaining acronyms or proper names, i.e. UTN: Universidad Tecnológica Nacional.) This type of negotiation of meaning does not occur as a result of a request. The speaker wants to elaborate what s/he said before.

e.g.

2005.12.23 05:48:09 NS6: atilde paid that price

2005.12.23 05:48:37 NNS30: not only Mathilde but also her husband

2005.12.23 05:48:45 NNS2: and also her husband even if he was not responsible
(5th Session; 308-310)

Here NNS30 elaborates on what NS6 said. NS6 claimed that “[M]athilde paid that price” and NNS30 added extra information with 309th utterance and NNS2 added another point in line 310. Although there was no request for elaboration they added new information to the previous utterance.

4.2.1.7. Elaboration request

This category is another category added to the taxonomy in this study. In the previous taxonomy prepared by Patterson and Trabeldo (2006) they did not determine a category entitled elaboration request, but in the data of this study it was seen that there were some utterances which requested elaboration from the participants. There is a slight difference between clarification request and elaboration request. In some cases it was

really difficult to decide categorization of an utterance as clarification request or elaboration request. In clarification request participants understand but they do not want to misunderstand and so they ask for clarification, however, in elaboration request, the participants requesting elaboration do not have an idea about the speaker's utterance and request extra information.

e.g.

2005.12.24 05:10:40 NS6: did she lie?

2005.12.24 05:10:50 NS7: She wasn't honest about the necklace

2005.12.24 05:11:00 NS6: how?

2005.12.24 05:11:02 NS7: She replaced it without telling the true story to her friend (7th Session; 46-49)

Here in this excerpt NS6 asked NS7 how she was not honest about the necklace. NS6 wanted to learn what NS7 was thinking about her honesty and NS7 elaborated on her utterance as a result of a request by NS6.

4.2.1.8. Reply clarification

The utterances in reply clarification category come after clarification request utterances and it aims at clarifying the previous statement or explaining a statement in response to elicitation. The same example with the one given for clarification request can be given here as well.

e.g.

2005.12.24 05:14:21 NNS7: then she deserved it?

2005.12.24 05:14:31 NNS29: yes

2005.12.24 05:14:32 NNS24: deserving what?

2005.12.24 05:14:35 NNS4: but these lies didn't give harm to her friend

2005.12.24 05:14:48 NS7: 10 years of hard work might be a little harsh

2005.12.24 05:14:51 NNS24: but it gave to her husband!

2005.12.24 05:14:55 NS7: exactly!

2005.12.24 05:15:03 NNS7: ten years of life in difficulties (7th Session; 67-74)

Here, NNS7's clarification is the result of NNS24's request and NNS7's utterance can be categorized as reply clarification.

4.2.1.9. Reply comprehension

It was defined as replying to a comprehension check or indicating that the statement was understood. Since comprehension check was not seen in this study it is not surprising that reply comprehension was not observed in the data. The same fictitious example, which was given as an example for comprehension check, can be given as reply comprehension.

e.g.

Speaker A: Here, UFO stands for Unidentified Flying Objects, do you understand?

Speaker B: Yes, I see.

Here, Speaker B replies Speaker A's comprehension check with an utterance like "Yes, I see" to show that s/he has understood what Speaker A has said.

4.2.1.10. Reply confirmation

This is realized by “yes”, OK “you are right” or a similar phrase and used to confirm a statement when someone requests confirmation. The difference between reply confirmation and confirmation statements is that reply confirmation comes after confirmation check.

e.g.

2005.12.16 05:34:31 NS6: tha they were willing to sacrifice for each other?

2005.12.16 05:34:33 NNS3: just for him

2005.12.16 05:34:50 NNS30: of course not the only way Rabia

2005.12.16 05:35:02 NNS3: yes

2005.12.16 05:35:15 NNS10: yes NS6

2005.12.16 05:35:28 NNS20: so personally I would not do the same thing with della

2005.12.16 05:35:37 NNS30: without doubt they wre willing to sacrifice (1st Session; 599-605)

In this example, NNS3, NNS10 and NNS30’s utterances were categorized as reply confirmation because they occur as a result of NS6’s request for confirmation.

4.2.1.11. Reply elaboration

This category is another category added in this study. These utterances occur as a result of elaboration request. Participant or participants request more information and the other participant elaborate her/his own statement to make it clear.

e.g.

2005.12.24 05:10:40 NS6: did she lie?

2005.12.24 05:10:50 NS7: She wasn't honest about the necklace

2005.12.24 05:11:00 NS6: how?

2005.12.24 05:11:02 NS7: She replaced it without telling the true story to her friend (7th Session; 46-49)

Here, NS7 replied to NS6's elaboration request and gave more information about her utterance in line 49 and explained why she said "she wasn't honest about the necklace".

4.2.1.12. Reply vocabulary

In this category utterances occur when a participant asks for vocabulary or the definition of a word. The utterances related to vocabulary were really the least used functions in this study.

e.g.

2005.12.24 06:07:20 NNS28: "I want to remind you a Turkish proverb

2005.12.24 06:07:26 NNS4: ?

2005.12.24 06:07:44 NS7: sure, what's the Turkish proverb?

2005.12.24 06:07:47 NNS28: "yalancanın mumu yatsıya kadar yanar"

2005.12.24 06:07:53 NNS24 smiles

2005.12.24 06:07:55 NS7: and in English? ;)

2005.12.24 06:08:00 NNS4 smiles

2005.12.24 06:08:05 NS6: translate please

2005.12.24 06:08:27 NNS32: yes, is there a volunteer to translate?

2005.12.24 06:08:29 NNS4: a liar doesn't live forever

2005.12.24 06:08:41 NNS4: I think

2005.12.24 06:08:42 NNS4 smiles

2005.12.24 06:08:49 NNS24: the end for a liar is not so far!

2005.12.24 06:09:03 NNS28: people will understand that you are lying at the end

2005.12.24 06:09:06 NS7: your lies catch up with you

2005.12.24 06:09:06 NNS4: what do you think Sedat teacher?

2005.12.24 06:09:23 NNS32: sooner or later, it reveals (7th Session; 513-529)

In this excerpt NNS28 is reminded of a Turkish proverb related to the topic in line 513, and NS7 and NS6 wanted this Turkish proverb to be translated into English. As a result of this request, NNS4, NNS24, and NNS32 tried to translate this proverb into English. In this excerpt, NNS4, NNS24, and NNS32's utterances are categorized as reply vocabulary.

4.2.1.13. Vocabulary check

Vocabulary check is last category added in this study. It aims at checking whether the other participants know the meaning of a vocabulary or not.

e.g.

2005.12.23 10:47:32 NNS32: invaluable?

2005.12.23 10:47:38 NNS32: what does it mean?

2005.12.23 10:47:44 NNS19: cheap?

2005.12.23 10:47:48 NNS22: not precious isn't it ?

2005.12.23 10:47:49 NNS32: no (6th Session; 381-385)

Here NNS32 asked whether the participants knew the meaning of “invaluable” or not and lines 381 and 382 are categorized as vocabulary check.

4.2.1.14. Vocabulary request

It was not found very often in this study but there were some statements for vocabulary request. This statement aims at requesting a definition of an unknown word in the target language.

e.g.

2005.12.24 06:07:20 NNS28: Ą± want to remind you a turkish proverb

2005.12.24 06:07:26 NNS4: ?

2005.12.24 06:07:44 NS7: sure, what's the turkish proverb?

2005.12.24 06:07:47 NNS28: "yalancÄ±nÄ±n mumu yatsÄ±ya kadar yanar"

2005.12.24 06:07:53 NNS24 smiles

2005.12.24 06:07:55 NS7: and in english? ;)

2005.12.24 06:08:00 NNS4 smiles

2005.12.24 06:08:05 NS6: translate please (7th Session; 513-520)

This example is the same with the example given for reply vocabulary and here NS7 and NS6's utterances in lines 518 and 520 are categorized as vocabulary request respectively. They wanted the other participants to translate the Turkish proverb.

4.2.2. The Frequency of Negotiation of Meaning in CMC Environment

The second sub-question of the first research question of this study was related to the frequencies of the negotiation of meaning utterances and their degrees of occurrences. The following table illustrates the frequencies of the functions with percentages and numbers.

Table 11: The Frequencies and Percentages of the Negotiation of Meaning Functions

	Sessions																Total	
	1		2		3		4		5		6		7		8			
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Clarification request	5	0.75	11	1.65	13	1.95	10	1.50	5	0.75	9	1.35	17	2.56	11	1.65	81	12.18
Comprehension check	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Confirmation	14	2.11	10	1.50	8	1.20	7	1.05	11	1.65	11	1.65	16	2.41	16	2.41	93	13.99
Confirmation check	8	1.20	5	0.75	9	1.35	8	1.20	5	0.75	9	1.35	14	2.11	14	2.11	72	10.83
Correction	8	1.20	3	0.45	3	0.45	2	0.30	1	0.15	3	0.45	6	0.90	3	0.45	29	4.36
Elaboration	9	1.35	7	1.05	3	0.45	4	0.60	3	0.45	2	0.30	2	0.30	4	0.60	34	5.11
Elaboration request	11	1.65	10	1.50	17	2.56	9	1.35	5	0.75	5	0.75	15	2.26	8	1.20	80	12.03
Reply clarification	5	0.75	8	1.20	10	1.50	14	2.11	8	1.20	8	1.20	12	1.81	7	1.05	72	10.83
Reply comprehension	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Reply confirmation	15	2.26	9	1.35	20	3.01	17	2.56	5	0.75	13	1.96	15	2.26	15	2.26	109	16.39
Reply elaboration	13	1.96	12	1.81	15	2.26	10	1.50	14	2.11	5	0.75	7	1.05	7	1.05	83	12.48
Reply vocabulary	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	0.15	5	0.75	0	0.00	6	0.90
Vocabulary check	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	0.30	0	0.00	0	0.00	2	0.30
Vocabulary request	0	0.00	1	0.15	0	0.00	0	0.00	0	0.00	1	0.15	2	0.30	0	0.00	4	0.60
Total	88	13.23	76	11.43	98	14.74	81	12.18	57	8.57	69	10.38	111	16.69	85	12.78	665	100.00

The percentages of the negotiation of meaning are for clarification requests, 12.18; comprehension check, 0; confirmation, 13.99; confirmation check, 10.83; correction, 4.36; elaboration, 5.11; elaboration request, 12.03; reply clarification, 10.83; reply comprehension, 0; reply confirmation, 16.39; reply elaboration, 12.48; reply vocabulary, 0.90; vocabulary check, 0.30; vocabulary request, 0.60. In total 665 utterances are categorized as negotiation of meaning types.

As a result of the data analysis reply confirmation was seen as the most frequent type of negotiation of meaning with a percentage of 16.39. Confirmation is the second most frequent one. This shows that confirmation and reply confirmation are the two most used utterances in this study. Finally, the third most used type is elaboration request. Reply elaboration utterances are followed by elaboration requests and the percentages of these are very close to each other: 12.48 and 12.03 respectively.

The least used types are comprehension check and reply comprehension. They are not seen in the data of this study. Since there are no comprehension check or reply comprehension utterances, the other least used categories are given here as the least used ones. They are the types of negotiation of meaning related to vocabulary.

The percentages for the categories related to vocabulary are 0.30 for vocabulary check; 0.60 for vocabulary request; and 0.90 for reply vocabulary. The least seen category after these vocabulary related categories is the correction.

To sum up, the most frequently used categories are about confirmation – reply confirmation and confirmation - , and the less frequently used categories are related to vocabulary – vocabulary check, reply vocabulary, and vocabulary request. Moreover, comprehension check and reply comprehension are not used even once.

4.3. The Difference between NSs and NNSs of English in Using the Negotiation of Meaning Functions

The second research question of this study was the difference between NS and NNS of English in using negotiation of meaning. After the data analysis, the results are categorized according to the participants' being NS or NNS. Then the number of the turns of NS and NNS were determined separately.

4.3.1. NS of English

When the data of NS of English is examined it can clearly be seen that three categories at the top are clarification request, confirmation check, and elaboration request with percentages of 17.82, 16.67, and 16.09 respectively. The difference between these three categories is not too high. They are very close to each other. In the last three categories comprehension check and reply comprehension are not counted and vocabulary check, reply vocabulary and vocabulary request with percentages of 0, 0.58, and 1.15 respectively.

Table 12: The Frequency of Negotiation of Meaning Function Used by NS

	Sessions																Total	
	1		2		3		4		5		6		7		8			
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Clarification request	3	1.72	4	2.30	6	3.45	7	4.02	2	1.15	0	0.00	5	2.87	4	2.30	31	17.82
Comprehension check	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Confirmation	2	1.15	1	0.58	2	1.15	1	0.58	6	3.45	0	0.00	4	2.30	0	0.00	16	9.20
Confirmation check	5	2.87	1	0.58	3	1.72	1	0.58	3	1.72	2	1.15	5	2.87	9	5.17	29	16.67
Correction	3	1.72	0	0.00	2	1.15	1	0.58	0	0.00	1	0.58	1	0.58	2	1.15	10	5.75
Elaboration	4	2.30	1	0.58	1	0.58	0	0.00	1	0.58	0	0.00	0	0.00	0	0.00	7	4.02
Elaboration request	8	4.60	4	2.30	4	2.30	1	0.58	2	1.15	3	1.72	5	2.87	1	0.58	28	16.09
Reply clarification	0	0.00	1	0.58	3	1.72	0	0.00	3	1.72	3	1.72	6	3.45	0	0.00	16	9.20
Reply comprehension	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Reply confirmation	2	1.15	1	0.58	7	4.02	1	0.58	1	0.58	1	0.58	2	1.15	0	0.00	15	8.62
Reply elaboration	1	0.58	1	0.58	4	2.30	2	1.15	6	3.45	0	0.00	3	1.72	0	0.00	17	9.77
Reply vocabulary	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	0.58	0	0.00	1	0.58
Vocabulary check	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Vocabulary request	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	1.15	0	0.00	2	1.15
Total	28	16.09	14	8.05	32	18.39	14	8.05	24	13.79	12	6.90	34	19.54	16	9.20	174	100.00

4.3.2. NNS of English

When the data of the NNS of English is examined it can be observed that the most frequently used categories are reply confirmation, confirmation and reply elaboration and the least used three groups, when comprehension check and reply comprehension are not counted, are vocabulary request, vocabulary check and reply vocabulary.

The difference between these two groups of participants is that they are similar in the least used three categories and these categories are all related to vocabulary. This result is similar to the result of the analysis as a whole. However, when the most used three categories are taken into consideration, it can be seen that they are totally different. NSs of English use clarification request, confirmation check, and elaboration request the most. This is different from the results of the data analysis as a whole and NNS of English use reply confirmation, confirmation and reply elaboration most frequently. This result is similar to the results of the data analysis as a whole.

Table 13: The Frequency of Negotiation of Meaning Function Used by NNS

	Sessions																Total	
	1		2		3		4		5		6		7		8			
	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Clarification request	2	0.41	7	1.42	7	1.42	3	0.61	3	0.61	9	1.83	12	2.43	7	1.42	50	10.14
Comprehension check	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Confirmation	12	2.43	9	1.83	6	1.22	6	1.22	5	1.01	11	2.23	12	2.43	16	3.25	77	15.62
Confirmation check	3	0.61	4	0.81	6	1.22	7	1.42	2	0.41	7	1.42	9	1.83	5	1.01	43	8.72
Correction	5	1.01	3	0.61	1	0.20	1	0.20	1	0.20	2	0.41	5	1.01	1	0.20	19	3.85
Elaboration	5	1.01	6	1.22	2	0.41	4	0.81	2	0.41	2	0.41	2	0.41	4	0.81	27	5.48
Elaboration request	3	0.61	6	1.22	13	2.64	8	1.62	3	0.61	2	0.41	10	2.03	7	1.42	52	10.55
Reply clarification	5	1.01	7	1.42	7	1.42	14	2.84	5	1.01	5	1.01	6	1.22	7	1.42	56	11.36
Reply comprehension	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Reply confirmation	13	2.64	8	1.62	13	2.64	16	3.25	4	0.81	12	2.43	13	2.64	15	3.04	94	19.07
Reply elaboration	12	2.43	11	2.23	11	2.23	8	1.62	8	1.62	5	1.01	6	1.22	7	1.42	68	13.79
Reply vocabulary	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	1	0.20	4	0.81	0	0.00	5	1.01
Vocabulary check	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	2	0.41	0	0.00	0	0.00	2	0.41
Vocabulary request	0	0.00	1	0.20	0	0.00	0	0.00	0	0.00	1	0.20	0	0.00	0	0.00	2	0.41
Total	60	12.17	62	12.58	66	13.39	67	13.59	33	6.69	57	11.56	79	16.02	69	14.00	493	100.00

4.4. Conclusion

In this chapter the findings of the data analysis were presented in the order of the research questions of this study and the findings were converted into tables. As the findings of this study, it can be summarized that 12 categories of negotiation of meaning functions were observed and two categories – comprehension check and reply comprehension – were not observed in the data. The most and the least used negotiation of meaning functions were determined and the differences between NNSs and NSs were explained. In the next chapter the discussion and implications of the study will be presented in the light of what the findings revealed. The next chapter includes a conclusion of the study and suggestions for further studies as well.

CHAPTER V

Conclusion

5.1. Overview of the Study

This study aimed at determining the patterns of synchronous CMC environments in terms of negotiation of meaning. In addition to this, the differences between NS and NNS of English in using negotiation of meaning functions were determined.

Firstly, the environment for data collection chosen was Tapped In. The reasons for choosing Tapped In as a meeting place were the fact that the students and the invited Webheads members were both familiar with this environment and one of the features of Tapped In – sending transcripts automatically of the conversation transpired via e-mail – was very important for the data collection. Since the participants were familiar with this environment instruction was not required for both groups. Secondly, two stories, *The Gift of Magi* by O. Henry and *The Necklace* by Guy de Maupassant, were chosen as the topic of the conversations. The reason for choosing these stories was that the students had read and discussed these stories in a classroom setting and they are seven or eight pages long making it easier for the invited participants to read before the discussion.

Thirdly, some semi-structured questions were prepared by the researcher which aimed at preventing the chat from wandering off topic. Then the students were divided into four groups and these four groups discussed these two stories at different times. After the discussion a transcript of the chat log was sent to all the participants. The researcher joined the sessions but he did not join the discussion very often only directing the conversation with prepared semi-structured questions.

Lastly, the chat logs were pasted onto a Word processor and analyzed by means of Hyper Research Software. The results were categorized using Patterson and Trabeldo's (2006) taxonomy. As the novelty of this study, new types of negotiation of

meaning – confirmation, elaboration request and elaboration reply – were added to this taxonomy. The types called comprehension check and reply comprehension were not observed at the end of the analysis.

In this chapter the findings of this study will be discussed in the order of research questions of this study. The results will be associated with the literature and the parallel and conflicted points will be presented in the discussion section. Then, suggestions for further research will be given and the major findings of the study will be summarized in the conclusion.

5.2. Discussion of the Findings

5.2.1 Negotiation of Meaning in CMC Environment

The first research question was about how NSs and NNSs of English negotiate the meaning in CMC environment and this question had two sub problems. The first one was the types of negotiation of meaning and the second one was related to frequency and the degree of negotiation of meaning types.

5.2.1.1 Types of Negotiation of Meaning

As a result of this study, 12 types were seen in the data and these are clarification request, confirmation, confirmation check, correction, elaboration, reply clarification, reply confirmation, reply vocabulary, vocabulary request, elaboration request, reply elaboration, and vocabulary check.

In the literature, Leahy's (2001) study was about the types of negotiation of meaning, however, it was not synchronous but asynchronous and therefore his categorizations were different. In his study he mentioned "language correction",

“exchange of idioms” and “personal conversations” as types of negotiation of meaning. It is not surprising that the categorizations of this study are not parallel to the one of Leahy’s (2001) study because the medium of communication is different. In his study, he used e-mails as the medium; however, in this study text-based chat was used.

Oliver (2002) attempted to find out the influence of being native and non-native, language proficiency, age, and gender on the frequency of negotiation of meaning. His categorization includes clarification request, confirmation checks, comprehension checks, self-repetitions, and other repetitions. The difference between the categorization of this study and Oliver’s (2002) is that he did not include the replies of these utterances. For example, as a result of requesting clarification, reply clarification comes; however, in his study this was ignored. The other difference is that he added self-repetitions and other repetitions. These utterances were not seen in the data of this study so they are not included.

Schweinhorst’s (2004) categorization was also different from the categorization of this study. His data analysis was composed of three components and they were (a) topic initiations, (b) questions, statements and imperatives, and (c) wh- questions, yes/no questions, and tag questions. These utterances were analyzed and as a result his categorization is totally different from the one of this study.

Jepson (2005) compared text-based chat and voice chat in terms of negotiation of meaning and his first research question was similar to the first research question of this study, that is, which types of repair moves occurred in text-based chat and voice-chat. His categorization was divided into two groups: interlocutors and speakers. Groups of interlocutors include clarification requests and comprehension checks, and the group of speakers includes comprehension checks, self-repetitions or paraphrase, and incorporations (speaker repairs utterance based on interlocutor cues). The analyzed data was composed of these categories and except for self-repetitions or paraphrases, all of them are included in this study.

The last study related to the types of negotiation of meaning is Patterson and Trabaldo's (2006). Their taxonomy was adapted in order to form taxonomy for this study. In this study, comprehension checks and reply comprehension utterances were not found so they are excluded in this study and 3 new utterances – elaboration request, reply elaboration and vocabulary check – were added.

To sum up, in terms of the first research question, there are some similar and different types of negotiation of meaning with the research in this field. This study covers all the types and only the types related to comprehension are excluded in this study.

5.2.1.2. The Frequency of Negotiation of Meaning in CMC Environment

The second sub-problem of the first research question was related to the frequencies of the functions of negotiation of meaning and particularly the ones used most and least often. At the end of the analysis of the data it was found that when the number of the turns related to negotiation of meaning was compared to the whole number of analyzed turns, the percentage of the turns related to negotiation of meaning is 14.90. The following list shows the number of each type in the data of this study.

Table 14: The Percentages of Negotiation of Meaning Functions in the Entire Data

Utterance	Number of the Utterances	%*	%**
Clarification request	81	12.18	1.81
Comprehension check	0	0	0.00
Confirmation	93	13.98	2.08
Confirmation check	72	10.82	1.61
Correction	29	4.36	0.65
Elaboration	34	5.11	0.76
Elaboration request	80	12.03	1.79
Reply clarification	72	10.82	1.61
Reply comprehension	0	0	0.00
Reply confirmation	109	16.39	2.44
Reply elaboration	83	12.48	1.86
Reply vocabulary	6	0.9	0.13
Vocabulary check	2	0.3	0.04
Vocabulary request	4	0.6	0.09
Total	665	100	14.90

* Percentage of utterances

** Percentage of the entire data

The number of turns in the entire data is 4464 and the number of the turns related to negotiation of meaning is 665.

When these numbers are compared with the research in literature, only in Patterson and Trabeldo's (2006) study is the number of the functions related to negotiation of meaning compared to the entire data but they take the words as criteria. However, in this study the number of turns was taken into consideration.

Patterson and Trabeldo (2006) calculated the ratio of negotiation functions per 100 words. In their study they counted the numbers, however, in this study the number of the turns was taken into consideration. The percentage of the negotiation of meaning per 100 words is 2.28. Their study was a comparison of chat to e-mail messages. As a

result of that study they found the ratio of negotiation of meaning per 100 words in e-mail messages as 0.51. This means that there were twice as many negotiation functions in chat.

Since there is no research about this research question it cannot be said whether the results are consistent with the literature or not.

As a result of this study it was seen that the most used function of negotiation of meaning is related to confirmation. The percentage of the reply confirmation is 16.39, confirmation is 13.98, and clarification request is 12.18. The reason for this result is that the function of confirmation and reply confirmation are two most frequently used functions for NNS of English and since the number of NNS of English was dominant in this study, this result was inevitable. The reason why these types are those most seen can be that confirmation and reply confirmation functions show that participants listen to the conversation and they are aware of the flowing dialogue. Moreover, these utterances are very short statements such as “Yes”, “No”, “That’s right”, “Good point” and if the NNS of English were hesitating to form a full sentence they confirm the previous statement or reply confirmation check utterances. The differences between NSs and NNSs in using this function will be discussed in the next session. Therefore, it was not touched upon here.

The less used functions of negotiation of meaning are all related to vocabulary, that is, vocabulary checks, vocabulary requests, and reply vocabulary. The percentages of these functions are 0.30, 0.60, and 0.90 respectively. The reasons for this result can be that the participants were NSs and advanced NNSs of English and the topics were two stories which had been discussed in the classroom beforehand. Therefore, NNSs were familiar with the vocabulary. The other reason can be that they had the chance to check online dictionaries while they were talking. This is only an assumption about this result. Moreover, these functions were used mostly for the meaning of a Turkish proverb so this was not related to English vocabulary. If we do not count these functions since they

were really rare, the other three least used functions after these vocabulary related functions was correction. This correction was all related to the spelling mistakes. If participants believed that the spelling mistake would cause a misunderstanding, they corrected their mistake. Otherwise, they ignored the spelling mistake while they were talking.

In literature this kind of research questions were studied and one of these studies belongs to Sotillo (2000). She categorized not only functions of negotiation of meaning but also the interaction function in CMC. However, she made a list for the most used functions and she pointed out that those most used were comprehension questions, requests for explanation and clarification. The results of her study are not parallel to the results of this study. However, when only NSs' utterances were taken into consideration it could be seen that the three most used functions were clarification request, confirmation check, and elaboration request. This is somehow parallel to the results of Sotillo (2000). In her study requests for explanation and clarification were also seen as the most used functions. She did not mention the least used functions in her study.

Jepson's (2005) study has some similarities with this study. He did not make a list of negotiation of meaning functions according to their frequencies. Some results of his study are:

- a. Comprehension checks, questions and self-correction repair moves were not seen.
- b. Perhaps comprehension checks and questions are primarily pedagogical by nature (Long & Sato, 1983), and are thus scarce in NNS electronic conversation.
- c. "Self-corrections" may be rare because speakers do not notice their errors, and thus would not see the need to correct them.

d. Clarification requests were the most prominent repair move in both chat types [text based and voice chat].

His findings are totally consistent with the results of this study except for the last finding. However, the last finding is consistent with the results of NSs' results of this study. In NSs' results, clarification request was the most used function.

Finally, the last study which is related to the frequency of negotiation of meaning functions is Patterson and Trabeldo's (2006) study. They did not make a list of most used and least used functions either. However, they gave the list of functions and their frequencies. As a result of their study, confirmation check, elicit clarification, state elaboration are the most often used functions and comprehension check, elicit vocabulary and reply comprehension were the least used ones. These results are consistent with this study. Comprehension checks and reply comprehension were not seen in this study and functions related to vocabulary were really rare. These three functions were the least used ones in their study. When the results are compared in terms of those most used, the first one was related to confirmation in their study; it was the same in this study. Moreover, when the least used ones are taken into consideration, Patterson and Trabeldo (2006) found that the least used ones were comprehension checks which were never seen in this study and the others were related to vocabulary, which is the same as the results of this study. Briefly, it can be inferred that the results of Patterson and Trabeldo's (2006) study and the results of this study were consistent and parallel to each other.

To sum up, there are some parallel and conflicting points in the results of this study and the research in literature. The functions which were used most were usually about confirmation and clarification request. This is also the same in literature and the results of this study are parallel with the literature. As for the least used functions they were mostly about vocabulary and comprehension in the research, except for Sotillo's

(2000) study. Jepson (2005) claimed that comprehension checks are rare in NNS in electronic conversation and the results of this study proved this statement.

5.2.2 The Difference Between NSs and NNSs of English In Using the Negotiation of Meaning Functions

The last research question of this study was related to the difference between NSs and NNSs of English in terms of their using negotiation of meaning in synchronous CMC. The analysis of the data showed that there are some similarities and differences between these two groups. The difference was about the most used functions of negotiation of meaning. In NSs' data it was seen that the most used ones were clarification request, confirmation check and elaboration request with the percentages 17.82, 16.67, and 16.09 respectively. However, the most used functions in NNSs' data these functions changed to reply confirmation, confirmation and reply elaboration with the percentages of 19.07, 15.62, and 13.79. The reason for this result was mostly about participants' being NS or NNS. Confirmation and reply confirmation utterances are short answers and it shows that participants are aware of the discussion and instead of forming a full sentence NNSs would rather confirm the previous statements with short utterances like "Yes", "No", "You are right". As a result, these kinds of utterances were seen mostly in NNSs' data.

The most used function used by NS was clarification request and this result is consistent with the literature (Sotillo, 2000; Jepson, 2005). In Patterson and Trabeldo's (2006) study it was the second. They also found that clarification request is the prominent function used by the participants of electronic conversation. The most used utterances by NNSs of English were related to confirmation and this result was also consistent with the literature. Patterson and Trabeldo (2006) stated that confirmation check is the most used category. However, it was not the first utterance in Sotillo (2000),

it was the second most used, but there was a slight difference between the first and the second category in her study.

As for the similarities between the two groups it is about the least used functions which are related to vocabulary. In both groups comprehension check and reply comprehension were not seen and the least used functions were all about the vocabulary. In NSs' data they were vocabulary check, reply vocabulary, and vocabulary request with the percentages of 0; 0.58; and 1.15 respectively. In NNSs' data they were vocabulary check, vocabulary request, and reply vocabulary with the percentages of 0.41, 0.41, and 1.01 respectively.

In the literature Sotillo (2000) and Jepson (2005) did not make a list of least used functions, but Patterson and Trabeldo (2006) made a list and these results here were consistent with the results of their study. The last three categories in their study were comprehension check, elicit vocabulary and reply vocabulary. Comprehension check was a category which was not seen in both groups. This group was the least used category in their study and the other two least used categories were related to vocabulary which is the same with the results of this study.

To sum up, the differences between two groups of participants were about the most used functions of negotiation of meaning. The results were mostly consistent with the literature, but they are not similar with each other. The similarities about the least used ones and the results about the least used functions were consistent with the literature as well.

5.3. Implications for Findings

This study aimed at determining the patterns of a synchronous CMC environment provided by Tapped In in terms of negotiation of meaning. As NNSs of

English were third year students of Foreign Languages Education Department, Abant Izzet Baysal University enrolled in “Short Story Analysis and Teaching” course in 2005-2006 Fall Term and as NSs of English were some Webheads members who participated in this study.

It was found that there was a variety of functions related to negotiation of meaning in synchronous CMC environments. The prominent function was found to be related to confirmation and clarification. These functions were categorized as NNS and NS produced and it was found that there are some similarities and differences between these two groups.

The necessity of this study was mentioned before by Chappelle (2004) as “a sociocultural perspective toward interaction research emphasizes the need for teachers and researchers to better understand the context of interaction of second language learners and accordingly there is a need for ‘ethnographic and discourse-analytic methods’ with their emphasis on the broader context in which the learning takes place...”. In order to understand the context of interaction in synchronous CMC environments research was to be conducted. This would enable teachers of English as a Second Language and researchers in the field of English Language Teaching to better understand these environments.

For most teachers these environments provide authentic environments instead of artificial ones. English is more than a language for students in these environments. They use English as a tool and it is not a course anymore. Therefore, teachers and researchers should be aware of the linguistic characteristics and the style of interaction in CMC environments. This study provides information about the characteristics of a text-based synchronous CMC environment in terms of negotiation of meaning. How the participants negotiate meaning was the concern of this study and as a result of the study the pattern was determined.

Patterson and Trabeldo (2006) studied the same topic with Spanish and English, however, there are some differences in categorization in this study. Three new categories were added and two categories were ignored since they were not seen in the data of the study.

The results of this study will provide researchers with new insights on this topic and this study will be helpful for them for further research. Moreover, this study will provide teachers with information about CMC environments.

5.4. Suggestions

This section includes suggestions for researchers, teachers, and further research. In this section how researchers and teachers can benefit from the results of this study will be briefly mentioned.

5.4.1. Suggestions for Researchers

The Internet is being newly explored by researchers in the field of education. Therefore, patterns should be determined in order to create environments which provide students with authentic materials and places to develop themselves. This study provides information about the patterns of a text-based synchronous CMC environment so researchers can use the results of this study in order to see how interaction occurs in this kind of environment.

Researchers can create new environments on the net based upon the results of this study and they can test the effectiveness of these environments in second language acquisition.

5.4.2. Suggestions for Teachers

Teachers may direct their students to use the Internet for their development in the target language. Before directing them to these places they should be aware of the characteristics of these environments. Therefore, the findings of this study will provide detailed information about the patterns of a text-based synchronous CMC environment. They will know that a student who is advised to use an online environment will be exposed to functions related to negotiation of meaning such as being asked for clarification or confirmation.

In their courses teachers should then place importance on how to ask for clarification, elaboration, confirmation and how to clarify, elaborate or confirm a statement. If students knew what to expect to use in these environments they would be more confident and they will use these functions as scaffolding for their learning process.

5.4.3. Suggestions for Further Research

This study was mostly about the use of negotiation of meaning functions and the differences between NSs and NNSs of English in text-based synchronous CMC environment. This will provide some information about the kinds of patterns found in these environments. As for further research there are still some points to be studied and explored.

First of all, text-based synchronous CMC was used for collecting data. However, there are voice-chat environments and video-chat environments as well which should be studied in terms of negotiation of meaning. After determining the patterns of those environments the results can be compared with the results of this study to see the differences and similarities.

As for the participants of this study, NSs and NSSs joined the sessions and they discussed the topics. Since there was an interaction among the participants it was inevitable that they influenced each other. For example, in the NSs data, clarification request was really high in frequency and as a result the other participants replied to these clarification requests. Therefore, the results of NSSs' data were affected by the NSs' negotiation of meaning functions. For further research these two groups can be separated and they discuss a topic in an online environment and then they discuss together. At the end the results can be compared once more and this will show how they affect each other.

The other point which can be studied is on which topic the participants use negotiation of meaning functions. They negotiate about the vocabulary, grammar, and topic. In this study this was not determined and beyond the scope of the study. Bitchener (2004) studied this dimension, but the participants were NSSs of English. NSs can participate as well and the results can be compared.

The same study can be conducted both in a classroom setting and in an online environment and the results can reveal the effects of gestures and bodily movements on the types of negotiation of meaning. This study was conducted in an online environment.

Finally, the last research to suggest is about the proficiency levels of the non-native participants. In this study, they were the third year students of the Foreign Languages Education Department and advanced learners of English. The results can differentiate when the participants are at an elementary or intermediate level of proficiency. Three groups can be chosen as the participants, their results can be compared to see if there is a difference based upon the proficiency levels.

Further research suggestions can be elaborated with the development of technology. It is improving very fast and a new invention is being presented every day.

Therefore, with the integration of new devices, new technology in English Language Teaching can be suggested for further research.

5.5. Conclusion

The results of this study revealed that there is a variety of functions for negotiating meaning. Some of them were prominent such as clarification request, confirmation, and confirmation check and some of them were not seen or too rare, such as comprehension check, reply comprehension, vocabulary check, and reply vocabulary. The most frequently used functions of negotiation of meaning changed according to the participants' being NS or NNS. In the NSs' data the most used one was clarification request, but in NNSs' it was confirmation whereas, the least used ones were parallel to each other and related to vocabulary. If the participants' being NS or NNS was ignored, the results were influenced by NNSs' data and reply confirmation was the most used one in general.

Another result was that there was no function related to comprehension in both groups. This result was consistent with the results of studies in literature (Jepson, 2005; Patterson and Trabaldo, 2006). This was explained by Jepson as "perhaps comprehension checks and questions are primarily pedagogical by nature (Long & Sato, 1983), and are thus scarce in NNS electronic conversation".

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APPENDICES

APPENDIX A: Invitation Letter for Native Speakers of English which was sent to the Webheads group.

Greetings Webheads!

Some of the members of this group may already know me, but for those of you who don't I'd like to introduce myself in a few words. I am a Research Assistant and Literature Instructor at the Department of English Language Teaching at Abant İzzet Baysal University, Bolu, Turkey. I am in the process of preparing my thesis and my research topic is related to the discourse analysis of English chat environments. I am writing to request your kind participation in the data collection stage of my research.

I plan to use Tapped In as the setting for several student-led discussions of two short stories in English. The transcripts of these sessions will serve as data for my thesis. I hesitate to write the research questions in detail since it may affect the results of the study; however I can give you some information about the data collection process.

First of all, the setting will be Tapped In and the schedule will be as follows:

***The Gift of Magi* by O.Henry**

Friday, December 16

1 pm – 2 pm (GMT)

6 pm – 7 pm (GMT)

– Saturday, December 17

1 pm – 2 pm (GMT)

6 pm – 7 pm (GMT)

***The Necklace* by Guy de Maupassant**

Friday, December 23

1pm –2 pm(GMT)

6pm –7 pm (GMT)

Saturday, December 24

1pm –2 pm (GMT)

6pm –7 pm (GMT)

As you can see there will be two short stories to discuss ; one is *The Gift of Magi* and the other one is *The Necklace*. All participants should read the stories before participating in the chat sessions. The first two days (December 16th and 17th), we will talk about "The Gift of Magi" by O.Henry, and the next two days (December 23rd and 24th) we will talk about "The Necklace" by Guy de Maupassant.

In order to provide ample opportunity for student participation, there will be eight sessions. There are 28 students in my Short Story course. Each student will participate in 2 sessions and each session will be limited to 7 students. . We will discuss the story characters, plots, settings, and how we can use these stories in an English Language Teaching setting.

Webheads, what I would like to request from you is your participation in two of these Tapped In sessions. If you are willing and able, please check out these short stories (only 3 pages each), and choose two Tapped In sessions in which to participate one for the first story and the other for the second story. Then, join our discussions at the given dates and times at Tapped In. . It would be most helpful to have additional native speakers join our discussions. I hope to balance out the ratio of non-native speakers to native speakers with your participation.

If you are able to join us , please contact me by e-mail, MSN Messenger, or Yahoo Messenger by Wednesday (December 14th). My MSN is sakayoglu@hotmail.com and my Yahoo ID is sakayoglu@yahoo.co.uk. You can download the short stories at http://www.ibu.edu.tr/akademik/sakayoglu/III_Year.htm. Please feel free to add me to your contact list in order to ask any further questions about the data collection.

With your participation, I'm sure that this study will be useful for the field of CALL.
Thank you in advance for your contributions.

Best regards,

Sedat Akayoglu
Research Assistant
Abant Izzet Baysal University
Faculty of Education
Department of English Language Teaching
Bolu, Turkey
www.elt.ibu.edu.tr

APPENDIX B: Short Stories discussed in chat sessions. First story is *The Gift of Magi* by O. Henry and the second story is *The Necklace* by Guy de Maupassant.

1.

**THE GIFT OF THE MAGI
by O. Henry**

One dollar and eighty-seven cents. That was all. And sixty cents of it was in pennies. Pennies saved one and two at a time by bulldozing the grocer and the vegetable man and the butcher until one's cheeks burned with the silent imputation of parsimony that such close dealing implied. Three times Della counted it. One dollar and eighty-seven cents. And the next day would be Christmas.

There was clearly nothing to do but flop down on the shabby little couch and howl. So Della did it. Which instigates the moral reflection that life is made up of sobs, sniffles, and smiles, with sniffles predominating.

While the mistress of the home is gradually subsiding from the first stage to the second, take a look at the home. A furnished flat at \$8 per week. It did not exactly beggar description, but it certainly had that word on the lookout for the mendicancy squad.

In the vestibule below was a letter-box into which no letter would go, and an electric button from which no mortal finger could coax a ring. Also appertaining thereunto was a card bearing the name "Mr. James Dillingham Young."

The "Dillingham" had been flung to the breeze during a former period of prosperity when its possessor was being paid \$30 per week. Now, when the income was shrunk to \$20, though, they were thinking seriously of contracting to a modest and unassuming D. But whenever Mr. James Dillingham Young came home and reached his flat above he was called "Jim" and greatly hugged by Mrs. James Dillingham Young, already introduced to you as Della. Which is all very good.

Della finished her cry and attended to her cheeks with the powder rag. She stood by the window and looked out dully at a gray cat walking a gray fence in a gray

backyard. Tomorrow would be Christmas Day, and she had only \$1.87 with which to buy Jim a present. She had been saving every penny she could for months, with this result. Twenty dollars a week doesn't go far. Expenses had been greater than she had calculated. They always are. Only \$1.87 to buy a present for Jim. Her Jim. Many a happy hour she had spent planning for something nice for him. Something fine and rare and sterling--something just a little bit near to being worthy of the honor of being owned by Jim.

There was a pier-glass between the windows of the room. Perhaps you have seen a pier-glass in an \$8 flat. A very thin and very agile person may, by observing his reflection in a rapid sequence of longitudinal strips, obtain a fairly accurate conception of his looks. Della, being slender, had mastered the art.

Suddenly she whirled from the window and stood before the glass. her eyes were shining brilliantly, but her face had lost its color within twenty seconds. Rapidly she pulled down her hair and let it fall to its full length.

Now, there were two possessions of the James Dillingham Youngs in which they both took a mighty pride. One was Jim's gold watch that had been his father's and his grandfather's. The other was Della's hair. Had the queen of Sheba lived in the flat across the airshaft, Della would have let her hair hang out the window some day to dry just to depreciate Her Majesty's jewels and gifts. Had King Solomon been the janitor, with all his treasures piled up in the basement, Jim would have pulled out his watch every time he passed, just to see him pluck at his beard from envy.

So now Della's beautiful hair fell about her rippling and shining like a cascade of brown waters. It reached below her knee and made itself almost a garment for her. And then she did it up again nervously and quickly. Once she faltered for a minute and stood still while a tear or two splashed on the worn red carpet.

On went her old brown jacket; on went her old brown hat. With a whirl of skirts and with the brilliant sparkle still in her eyes, she fluttered out the door and down the stairs to the street.

Where she stopped the sign read: "Mne. Sofronie. Hair Goods of All Kinds." One flight up Della ran, and collected herself, panting. Madame, large, too white, chilly, hardly looked the "Sofronie."

"Will you buy my hair?" asked Della.

"I buy hair," said Madame. "Take yer hat off and let's have a sight at the looks of it."

Down rippled the brown cascade.

"Twenty dollars," said Madame, lifting the mass with a practised hand.

"Give it to me quick," said Della.

Oh, and the next two hours tripped by on rosy wings. Forget the hashed metaphor. She was ransacking the stores for Jim's present.

She found it at last. It surely had been made for Jim and no one else. There was no other like it in any of the stores, and she had turned all of them inside out. It was a platinum fob chain simple and chaste in design, properly proclaiming its value by substance alone and not by meretricious ornamentation--as all good things should do. It was even worthy of The Watch. As soon as she saw it she knew that it must be Jim's. It was like him. Quietness and value--the description applied to both. Twenty-one dollars they took from her for it, and she hurried home with the 87 cents. With that chain on his watch Jim might be properly anxious about the time in any company. Grand as the watch was, he sometimes looked at it on the sly on account of the old leather strap that he used in place of a chain.

When Della reached home her intoxication gave way a little to prudence and reason. She got out her curling irons and lighted the gas and went to work repairing the ravages made by generosity added to love. Which is always a tremendous task, dear friends--a mammoth task.

Within forty minutes her head was covered with tiny, close-lying curls that made her look wonderfully like a truant schoolboy. She looked at her reflection in the mirror long, carefully, and critically.

"If Jim doesn't kill me," she said to herself, "before he takes a second look at me, he'll say I look like a Coney Island chorus girl. But what could I do--oh! what could I do with a dollar and eighty- seven cents?"

At 7 o'clock the coffee was made and the frying-pan was on the back of the stove hot and ready to cook the chops.

Jim was never late. Della doubled the fob chain in her hand and sat on the corner of the table near the door that he always entered. Then she heard his step on the stair away down on the first flight, and she turned white for just a moment. She had a habit for saying little silent prayer about the simplest everyday things, and now she whispered: "Please God, make him think I am still pretty."

The door opened and Jim stepped in and closed it. He looked thin and very serious. Poor fellow, he was only twenty-two--and to be burdened with a family! He needed a new overcoat and he was without gloves.

Jim stopped inside the door, as immovable as a setter at the scent of quail. His eyes were fixed upon Della, and there was an expression in them that she could not read, and it terrified her. It was not anger, nor surprise, nor disapproval, nor horror, nor any of the sentiments that she had been prepared for. He simply stared at her fixedly with that peculiar expression on his face.

Della wriggled off the table and went for him.

"Jim, darling," she cried, "don't look at me that way. I had my hair cut off and sold because I couldn't have lived through Christmas without giving you a present. It'll grow out again--you won't mind, will you? I just had to do it. My hair grows awfully fast. Say 'Merry Christmas!' Jim, and let's be happy. You don't know what a nice-- what a beautiful, nice gift I've got for you."

"You've cut off your hair?" asked Jim, laboriously, as if he had not arrived at that patent fact yet even after the hardest mental labor.

"Cut it off and sold it," said Della. "Don't you like me just as well, anyhow? I'm me without my hair, ain't I?"

Jim looked about the room curiously.

"You say your hair is gone?" he said, with an air almost of idiocy.

"You needn't look for it," said Della. "It's sold, I tell you--sold and gone, too. It's Christmas Eve, boy. Be good to me, for it went for you. Maybe the hairs of my head were numbered," she went on with sudden serious sweetness, "but nobody could ever count my love for you. Shall I put the chops on, Jim?"

Out of his trance Jim seemed quickly to wake. He enfolded his Della. For ten seconds let us regard with discreet scrutiny some inconsequential object in the other direction. Eight dollars a week or a million a year--what is the difference? A mathematician or a wit would give you the wrong answer. The magi brought valuable gifts, but that was not among them. This dark assertion will be illuminated later on.

Jim drew a package from his overcoat pocket and threw it upon the table.

"Don't make any mistake, Dell," he said, "about me. I don't think there's anything in the way of a haircut or a shave or a shampoo that could make me like my girl any less. But if you'll unwrap that package you may see why you had me going a while at first."

White fingers and nimble tore at the string and paper. And then an ecstatic scream of joy; and then, alas! a quick feminine change to hysterical tears and wails, necessitating the immediate employment of all the comforting powers of the lord of the flat.

For there lay The Combs--the set of combs, side and back, that Della had worshipped long in a Broadway window. Beautiful combs, pure tortoise shell, with jewelled rims--just the shade to wear in the beautiful vanished hair. They were expensive combs, she knew, and her heart had simply craved and yearned over them without the least hope of possession. And now, they were hers, but the tresses that should have adorned the coveted adornments were gone.

But she hugged them to her bosom, and at length she was able to look up with dim eyes and a smile and say: "My hair grows so fast, Jim!"

And then Della leaped up like a little singed cat and cried, "Oh, oh!"

Jim had not yet seen his beautiful present. She held it out to him eagerly upon her open palm. The dull precious metal seemed to flash with a reflection of her bright and ardent spirit.

"Isn't it a dandy, Jim? I hunted all over town to find it. You'll have to look at the time a hundred times a day now. Give me your watch. I want to see how it looks on it."

Instead of obeying, Jim tumbled down on the couch and put his hands under the back of his head and smiled.

"Dell," said he, "let's put our Christmas presents away and keep 'em a while. They're too nice to use just at present. I sold the watch to get the money to buy your combs. And now suppose you put the chops on."

The magi, as you know, were wise men--wonderfully wise men--who brought gifts to the Babe in the manger. They invented the art of giving Christmas presents. Being wise, their gifts were no doubt wise ones, possibly bearing the privilege of exchange in case of duplication. And here I have lamely related to you the uneventful chronicle of two foolish children in a flat who most unwisely sacrificed for each other the greatest treasures of their house. But in a last word to the wise of these days let it be said that of all who give gifts these two were the wisest. O all who give and receive gifts, such as they are wisest. Everywhere they are wisest. They are the magi.

2.

The Necklace
by Guy de Maupassant

SHE WAS ONE OF THOSE PRETTY AND CHARMING GIRLS BORN, as though fate had blundered over her, into a family of artisans. She had no marriage portion, no expectations, no means of getting known, understood, loved, and wedded by a man of wealth and distinction; and she let herself be married off to a little clerk in the Ministry of Education. Her tastes were simple because she had never been able to afford any other, but she was as unhappy as though she had married beneath her; for women have no caste or class, their beauty, grace, and charm serving them for birth or family. their natural delicacy, their instinctive elegance, their nimbleness of wit, are their only mark of rank, and put the slum girl on a level with the highest lady in the land.

She suffered endlessly, feeling herself born for every delicacy and luxury. She suffered from the poorness of her house, from its mean walls, worn chairs, and ugly curtains. All these things, of which other women of her class would not even have been aware, tormented and insulted her. The sight of the little Breton girl who came to do the work in her little house aroused heart-broken regrets and hopeless dreams in her mind. She imagined silent antechambers, heavy with Oriental tapestries, lit by torches in lofty bronze sockets, with two tall footmen in knee-breeches sleeping in large arm-chairs, overcome by the heavy warmth of the stove. She imagined vast saloons hung with antique silks, exquisite pieces of furniture supporting priceless ornaments, and small, charming, perfumed rooms, created just for little parties of intimate friends, men who were famous and sought after, whose homage roused every other woman's envious longings.

When she sat down for dinner at the round table covered with a three-days-old cloth, opposite her husband, who took the cover off the soup-tureen, exclaiming delightedly: "Aha! Scotch broth! What could be better?" she imagined delicate meals, gleaming silver, tapestries peopling the walls with folk of a past age and strange birds in

faery forests; she imagined delicate food served in marvellous dishes, murmured gallantries, listened to with an inscrutable smile as one trifled with the rosy flesh of trout or wings of asparagus chicken.

She had no clothes, no jewels, nothing. And these were the only things she loved; she felt that she was made for them. She had longed so eagerly to charm, to be desired, to be wildly attractive and sought after.

She had a rich friend, an old school friend whom she refused to visit, because she suffered so keenly when she returned home. She would weep whole days, with grief, regret, despair, and misery.

One evening her husband came home with an exultant air, holding a large envelope in his hand.

"Here's something for you," he said.

Swiftly she tore the paper and drew out a printed card on which were these words:

"The Minister of Education and Madame Ramponneau request the pleasure of the company of Monsieur and Madame Loisel at the Ministry on the evening of Monday, January the 18th."

Instead of being delighted, as her-husband hoped, she flung the invitation petulantly across the table, murmuring:

"What do you want me to do with this?"

"Why, darling, I thought you'd be pleased. You never go out, and this is a great occasion. I had tremendous trouble to get it. Every one wants one; it's very select, and very few go to the clerks. You'll see all the really big people there."

She looked at him out of furious eyes, and said impatiently: "And what do you suppose I am to wear at such an affair?"

He had not thought about it; he stammered:

"Why, the dress you go to the theatre in. It looks very nice, to me...."

He stopped, stupefied and utterly at a loss when he saw that his wife was beginning to cry. Two large tears ran slowly down from the corners of her eyes towards the corners of her mouth.

"What's the matter with you? What's the matter with you?" he faltered.

But with a violent effort she overcame her grief and replied in a calm voice, wiping her wet cheeks:

"Nothing. Only I haven't a dress and so I can't go to this party. Give your invitation to some friend of yours whose wife will be turned out better than I shall."

He was heart-broken.

"Look here, Mathilde," he persisted. "What would be the cost of a suitable dress, which you could use on other occasions as well, something very simple?"

She thought for several seconds, reckoning up prices and also wondering for how large a sum she could ask without bringing upon herself an immediate refusal and an exclamation of horror from the careful-minded clerk.

At last she replied with some hesitation:

"I don't know exactly, but I think I could do it on four hundred francs."

He grew slightly pale, for this was exactly the amount he had been saving for a gun, intending to get a little shooting next summer on the plain of Nanterre with some friends who went lark-shooting there on Sundays.

Nevertheless he said: "Very well. I'll give you four hundred francs. But try and get a really nice dress with the money."

The day of the party drew near, and Madame Loisel seemed sad, uneasy and anxious. Her dress was ready, however. One evening her husband said to her:

"What's the matter with you? You've been very odd for the last three days."

"I'm utterly miserable at not having any jewels, not a single stone, to wear," she replied. "I shall look absolutely no one. I would almost rather not go to the party."

"Wear flowers," he said. "They're very smart at this time of the year. For ten francs you could get two or three gorgeous roses."

She was not convinced.

"No . . . there's nothing so humiliating as looking poor in the middle of a lot of rich women."

"How stupid you are!" exclaimed her husband. "Go and see Madame Forestier and ask her to lend you some jewels. You know her quite well enough for that."

She uttered a cry of delight.

"That's true. I never thought of it."

Next day she went to see her friend and told her her trouble. Madame Forestier went to her dressing-table, took up a large box, brought it to Madame Loisel, opened it, and said:

"Choose, my dear."

First she saw some bracelets, then a pearl necklace, then a Venetian cross in gold and gems, of exquisite workmanship. She tried the effect of the jewels before the mirror, hesitating, unable to make up her mind to leave them, to give them up. She kept on asking:

"Haven't you anything else?"

"Yes. Look for yourself. I don't know what you would like best."

Suddenly she discovered, in a black satin case, a superb diamond necklace; her heart began to beat covetously. Her hands trembled as she lifted it. She fastened it round her neck, upon her high dress, and remained in ecstasy at sight of herself.

Then, with hesitation, she asked in anguish:

"Could you lend me this, just this alone?"

"Yes, of course."

She flung herself on her friend's breast, embraced her frenziedly, and went away with her treasure. The day of the party arrived. Madame Loisel was a success. She was the prettiest woman present, elegant, graceful, smiling, and quite above herself with happiness. All the men stared at her, inquired her name, and asked to be introduced to her. All the Under-Secretaries of State were eager to waltz with her. The Minister noticed her.

She danced madly, ecstatically, drunk with pleasure, with no thought for anything, in the triumph of her beauty, in the pride of her success, in a cloud of happiness made up of this universal homage and admiration, of the desires she had aroused, of the completeness of a victory so dear to her feminine heart.

She left about four o'clock in the morning. Since midnight her husband had been dozing in a deserted little room, in company with three other men whose wives were having a good time. He threw over her shoulders the garments he had brought for them to go home in, modest everyday clothes, whose poverty clashed with the beauty of the ball-dress. She was conscious of this and was anxious to hurry away, so that she should not be noticed by the other women putting on their costly furs.

Loisel restrained her.

"Wait a little. You'll catch cold in the open. I'm going to fetch a cab."

But she did not listen to him and rapidly descended the staircase. When they were out in the street they could not find a cab; they began to look for one, shouting at the drivers whom they saw passing in the distance.

They walked down towards the Seine, desperate and shivering. At last they found on the quay one of those old nightprowling carriages which are only to be seen in Paris after dark, as though they were ashamed of their shabbiness in the daylight.

It brought them to their door in the Rue des Martyrs, and sadly they walked up to their own apartment. It was the end, for her. As for him, he was thinking that he must be at the office at ten.

She took off the garments in which she had wrapped her shoulders, so as to see herself in all her glory before the mirror. But suddenly she uttered a cry. The necklace was no longer round her neck!

"What's the matter with you?" asked her husband, already half undressed.

She turned towards him in the utmost distress.

"I . . . I . . . I've no longer got Madame Forestier's necklace. . . ."

He started with astonishment.

"What! . . . Impossible!"

They searched in the folds of her dress, in the folds of the coat, in the pockets, everywhere. They could not find it.

"Are you sure that you still had it on when you came away from the ball?" he asked.

"Yes, I touched it in the hall at the Ministry."

"But if you had lost it in the street, we should have heard it fall."

"Yes. Probably we should. Did you take the number of the cab?"

"No. You didn't notice it, did you?"

"No."

They stared at one another, dumbfounded. At last Loisel put on his clothes again.

"I'll go over all the ground we walked," he said, "and see if I can't find it."

And he went out. She remained in her evening clothes, lacking strength to get into bed, huddled on a chair, without volition or power of thought.

Her husband returned about seven. He had found nothing.

He went to the police station, to the newspapers, to offer a reward, to the cab companies, everywhere that a ray of hope impelled him.

She waited all day long, in the same state of bewilderment at this fearful catastrophe.

Loisel came home at night, his face lined and pale; he had discovered nothing.

"You must write to your friend," he said, "and tell her that you've broken the clasp of her necklace and are getting it mended. That will give us time to look about us."

She wrote at his dictation.

By the end of a week they had lost all hope.

Loisel, who had aged five years, declared:

"We must see about replacing the diamonds."

Next day they took the box which had held the necklace and went to the jewellers whose name was inside. He consulted his books.

"It was not I who sold this necklace, Madame; I must have merely supplied the clasp."

Then they went from jeweller to jeweller, searching for another necklace like the first, consulting their memories, both ill with remorse and anguish of mind.

In a shop at the Palais-Royal they found a string of diamonds which seemed to them exactly like the one they were looking for. It was worth forty thousand francs. They were allowed to have it for thirty-six thousand.

They begged the jeweller not to sell it for three days. And they arranged matters on the understanding that it would be taken back for thirty-four thousand francs, if the first one were found before the end of February.

Loisel possessed eighteen thousand francs left to him by his father. He intended to borrow the rest.

He did borrow it, getting a thousand from one man, five hundred from another, five louis here, three louis there. He gave notes of hand, entered into ruinous agreements, did business with usurers and the whole tribe of money-lenders. He mortgaged the whole remaining years of his existence, risked his signature without even knowing it he could honour it, and, appalled at the agonising face of the future, at the black misery about to fall upon him, at the prospect of every possible physical privation and moral torture, he went to get the new necklace and put down upon the jeweller's counter thirty-six thousand francs.

When Madame Loisel took back the necklace to Madame Forestier, the latter said to her in a chilly voice:

"You ought to have brought it back sooner; I might have needed it."

She did not, as her friend had feared, open the case. If she had noticed the substitution, what would she have thought? What would she have said? Would she not have taken her for a thief?

Madame Loisel came to know the ghastly life of abject poverty. From the very first she played her part heroically. This fearful debt must be paid off. She would pay it. The servant was dismissed. They changed their flat; they took a garret under the roof.

She came to know the heavy work of the house, the hateful duties of the kitchen. She washed the plates, wearing out her pink nails on the coarse pottery and the bottoms of pans. She washed the dirty linen, the shirts and dish-cloths, and hung them out to dry on a string; every morning she took the dustbin down into the street and carried up the water, stopping on each landing to get her breath. And, clad like a poor woman, she went to the fruiterer, to the grocer, to the butcher, a basket on her arm, haggling, insulted, fighting for every wretched halfpenny of her money.

Every month notes had to be paid off, others renewed, time gained.

Her husband worked in the evenings at putting straight a merchant's accounts, and often at night he did copying at twopence-halfpenny a page.

And this life lasted ten years.

At the end of ten years everything was paid off, everything, the usurer's charges and the accumulation of superimposed interest.

Madame Loisel looked old now. She had become like all the other strong, hard, coarse women of poor households. Her hair was badly done, her skirts were awry, her hands were red. She spoke in a shrill voice, and the water slopped all over the floor when she scrubbed it. But sometimes, when her husband was at the office, she sat down by the window and thought of that evening long ago, of the ball at which she had been so beautiful and so much admired.

What would have happened if she had never lost those jewels. Who knows? Who knows? How strange life is, how fickle! How little is needed to ruin or to save!

One Sunday, as she had gone for a walk along the Champs-Elysees to freshen herself after the labours of the week, she caught sight suddenly of a woman who was taking a child out for a walk. It was Madame Forestier, still young, still beautiful, still attractive.

Madame Loisel was conscious of some emotion. Should she speak to her? Yes, certainly. And now that she had paid, she would tell her all. Why not?

She went up to her.

"Good morning, Jeanne."

The other did not recognise her, and was surprised at being thus familiarly addressed by a poor woman.

"But . . . Madame . . ." she stammered. "I don't know . . . you must be making a mistake."

"No . . . I am Mathilde Loisel."

Her friend uttered a cry.

"Oh! . . . my poor Mathilde, how you have changed! . . ."

"Yes, I've had some hard times since I saw you last; and many sorrows . . . and all on your account."

"On my account! . . . How was that?"

"You remember the diamond necklace you lent me for the ball at the Ministry?"

"Yes. Well?"

"Well, I lost it."

"How could you? Why, you brought it back."

"I brought you another one just like it. And for the last ten years we have been paying for it. You realise it wasn't easy for us; we had no money. . . . Well, it's paid for at last, and I'm glad indeed."

Madame Forestier had halted.

"You say you bought a diamond necklace to replace mine?"

"Yes. You hadn't noticed it? They were very much alike."

And she smiled in proud and innocent happiness.

Madame Forestier, deeply moved, took her two hands.

"Oh, my poor Mathilde! But mine was imitation. It was worth at the very most five hundred francs! . . ."

Appendix C: Taxonomies related to Negotiation of Meaning

1. Sotillo (2000)

1.	Greetings	Opening move in a synchronous discussion	"People talk to me!"
2.	Topic Initiation	Suggesting a topic in a synchronous discussion	"Let's talk about beach erosion."
3.	Assertions/ Imperatives	Declarative statements; commands	"This is really terrible, but it's the law..."
4.	Questions/ Requests	Specific electronic speech acts based on Long (1981): (a) clarification requests; (b) comprehension checks; (c) explanation requests	"Is that only the case with garment factories?" (4a); "Why did she feel that NASA was responsible for her loss?" (4c).
5.	Responses	(a) Elaboration; (b) explanation; (c) clarification; (d) apology; (e) agreement	Examples of elaboration and explanation, respectively: "I have been interested in classical music since I began to learn piano. I knew that music was not only for people to make happy, but also for patients who have emotional and physical handicaps," (5a) and "because her father was working in NASA," (5b).
6.	Adversarial moves/ challenges	Electronic speech acts where one participant challenges another	"Do you only read cheap magazines?"
7.	Off Topic	Electronic speech act that deviates from the topic under discussion	"You are crazy, boyfriend! You are crazy, boyfriend!"
8.	Topic shift moves		"I think we should now move on to your article."
9.	Humor		"Vietnamese movie is not good."

			It is very cheap...J .J "
10.	Request for information		"Where does one find the worst beach erosion in New Jersey?"
11.	Floor holding moves/ topic continuation	Electronic speech acts where one participant tries to keep the conversation going and is unwilling to relinquish his/her turn, as in the following sequence	<tm> My article is about the French guy named Daniel Jouvance. He believes the natural power of the ocean and the potential for its wealth of life sustaining elements <tm> Then he made skin and body care treatment and products. <Magie> Music sometimes awakes different feelings. How does therapist know what kind of music is good for his patient? <tm> He also made music that makes you relax. I think it is kind of music therapy. You can listen to that from computer if you access the home page. (floor holding move) <tm> Magie, I agree with you. <tm> I guess nobody knows about the importance of plankton in the ocean. (floor holding move) <Inanna> Ing, music helps when one is depressed. What type of music do therapists recommend for people who are depressed? <Ing> I believe that music is spiritual thing. Music reproduces the mood and spirit of the composer; of the moment he composed it. <Inanna> Yes, anyone can play an instrument, sing beautifully like the sopranos and tenors, or compose music if truly

			gifted...." (floor holding move) <futsuunonko> Music is a very trace that the composer made.
12.	Corrective moves	As in the following sequence	<Jellyman> In at home also you can take a tutor from teacher no need to be parents <Chinche> and what kind of education is that?? <Cucarron> it is just a fact of independent ideas, if people want to educate their children at home they can organize their lifes with a very strictic program in order to do the right thing <JCQH> Yeah! But don't you remember the nice time that you spent at school with children your edge?" <Jellyman> you can give this moral to your children also at home <Nita> School teaches history, geography, math, and science, biology, arts and some more subject. <Cucarron> I remember those days, at that AGE. NOT EDGE!
13.	Reprimands		"Margo, you are rude!!!"
14.	Closing moves		"Class, for next week, I want you to read the following articles..."

2. Patterson (2000)

<u>FUNCTION</u>	<u>EXPLANATION and DESCRIPTION of FUNCTION</u>
marker	Realized by a specific class of words or phrases--“well”, “OK”, “now”, “good”, etc. Its function is to mark boundaries in the discourse such as the beginning or end of a statement or a change in the topic of discussion.
starter	Realized by statement, question or command. Its function is to provide information about or direct attention or thought towards an area in order to make a correct response to the initiation more likely.
nominative	Realized by a closed class consisting of the names of learners, “you”, “yes”, or, in an oral discussion, a nod toward a person. Its function is to call on or give someone permission to contribute to the discussion.
vocative	Realized by stating the person’s name to whom you are directing the conversation.
greeting	Realized by a greeting or leave-taking: for example “hello”, “good day” or “good-bye”.
directive	Realized primarily by the imperative. Its function is often to request a non-linguistic response. Some examples are “sit down”, “listen”, “open your books”.
apology	Realized by a statement apologizing for an error or for a previous comment. In the OCD an apology may be used for interrupting another speaker, arriving late, or accidentally bumping someone as one walks by.
evaluate	Realized by statements and tag questions including words and phrases such as “good”, “okay” (<i>bien, está bien, ok</i>), or, if the information is not acceptable, “no”. The function is to determine the correctness or acceptance of a statement or action.
aside	Realized by statement, question, command, usually marked by lowering the tone of voice; it is not necessarily addressed to the entire class. Example: “I’m hungry”.
acknowledge/ information	Realized by “yes”, “OK”, “wow”, etc. or repetition of another person’s statement. Its function is to show the acceptance of the initiation as appropriate and that it has been understood. Also used to confirm when someone elicits confirmation or to acknowledge a statement with “thank you” or “you are welcome” (<i>gracias</i> or <i>de nada</i>). Acknowledge can be further subdivided into

	acknowledge/correction and acknowledge/vocabulary.
acknowledge/ correction	Realized by repetition of correction. Used to acknowledge or accept correction.
acknowledge/ vocabulary	Realized by repetition of vocabulary word. Used to acknowledge or accept vocabulary.
STATEMENT	A statement with various functions that is not a response or reply to a question. It is subdivided into the different functions below.
statement/ information	Realized by statement. Its function is to provide information related to current topic.
statement/ opinion	Stating one's opinion about a topic.
statement/agree	Agreeing with a previous opinion or statement.
statement/ disagree	Challenging or disagreeing with a previous statement.
statement/ vocabulary	Statement providing a vocabulary word when a speaker is stalled mid-sentence searching for the word or when English is used instead of TL.
statement/ correction	Correcting an error made by another speaker or self-correction of own error.
statement/ circumlocution	Talking around a word in the TL that the speaker does not know. To circumvent using the unknown word one must explain or describe the word using known vocabulary.
ELICIT	Realized by a question requesting various information. Its function is to request a linguistic response. Elicit is further subdivided.
elicit/information	Asking for information about a topic.
elicit/opinion	Asking for opinion of a topic.
elicit/definition	Asking for a definition of a word or phrase in the target language (TL).
elicit/vocabulary	Asking for a vocabulary word in the TL.
elicit/clarification	Asking for clarification or meaning of a previous statement.
elicit/ confirmation	Asking for confirmation of a previously made statement. The speaker may make the statement and then ask if it is right or not, using ¿sí? or ¿verdad?.
REPLY	Realized by statement or non-verbal response such as a nod. Its function is to provide a linguistic response that is appropriate to the elicitation. It is subdivided below.
reply/information	Answering a question with the required information.
reply/opinion	Answering a question with an opinion.
reply/definition	Giving a definition of a word or phrase in the target

	language in response to an elicitation of meaning.
reply/translation	Giving an English translation as a response to an elicitation of the meaning of a word.
reply/ vocabulary	Providing a vocabulary word in TL in response to elicitation.
reply/ clarification	Rewording or repeating a previous statement for clarification. Explaining a statement.

3. Oliver (2002)

a. Clarification Requests
b. Confirmation Checks
c. Comprehension Checks
d. Self Repetitions
e. Other Repetitions

4. Jenson (2005)

	Negotiation of Meaning	Negative Feedback
Interlocutors	Clarification Requests	Recasts
	Confirmation Checks	Explicit Correction Questions
Speakers	Comprehension Checks	Incorporations (speaker repairs utterance based on interlocutor feedback)
	Self Repetition or paraphrase	Self-corrections
	Incorporations (speaker repairs utterance based on interlocutor cues)	

5. Patterson and Trabeldo (2006)

FUNCTION
Confirmation check
Clarification request
Elicit vocabulary
Comprehension check
Reply clarification / definition
Reply confirmation
Reply vocabulary
Reply comprehension
Elaboration
State correction/self correction

Appendix D: Semi Structured Questions

About *The Gift of Magi* by O.Henry

- Did you like the story? Why or why not?
- What do you think about the story in general in a few words?
- What do you think about the characters in this story?
- Have you ever noticed such a love around you?
- What would you do if you were in their shoes?
- Could you please summarize the discussion?

About *The Necklace* by Guy de Maupassant

- Did you like the story? Why or why not?
- What do you know about the characters?
- Did the husband or the wife learn that there are more important values to a relationship?
- Do you think that the outcome was strongly influenced by the times in which the story took place?
- What would you do if you were one of those characters?
- Could you please summarize the discussion?