

The Conversation Analysis of Iranian EFL Learners' Interaction via Telegram Application

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Abstract: *The use of computer-mediate communication (CMC) and social networking services have become an integral part of people's daily lives. Due to the potentials that CMC and social networking services have for providing more interaction opportunity, they have been widely discussed in language learning and language teaching. Since the interactional features of CMC and social networking services seem to be quite different from face-to-face interaction, the present study aimed to investigate some of the interactional features of EFL learners' communication via Telegram application, focusing on turn-taking system and repairing. Using the frameworks of conversation analysis, 1581 messages were collected from three Telegram groups owned by Iranian EFL learners. The findings of the study revealed that although the medium imposed some restrictions on participants' access to communicative recourses, the participants could develop a meaningful interaction by adopting some turn allocation strategies and providing clues for each other. Each posted message was considered to be a turn constructional unit (TCU) and self-initiated self-repair was the most common type of repairing. The findings of the study can give insights to EFL teachers into integrating CMC and social networking applications in language courses.*

Keywords: *Computer-mediated communication (CMC), social networking service, turn taking, repair, turn allocating, turn constructional unit (TCU)*

Introduction

Over the past twenty years, the Internet has greatly influenced the researches on human behavior. Every day, more and more people are engaged in computer-mediate communication, using computer software, and social networking applications. This has made the researchers and educators in different fields to look at people's behavior in an effort to understand the nature of computer-mediated communication (CMC) and how it can be optimized in specific contexts of use.

CMC is defined as any human communication that occurs through the use of two or more electronic devices. The opportunities that CMC provides for interaction among learners had made the teachers and researchers investigate the advantages that CMC can bring to educational setting. CMC can provide learners with access to meaningful interactions and interactions with more competent members of the target language community (Kitade, 2005). It can give more opportunity to language learners to engage with other speakers of the language. As Thorne (2006) stated "the use of Internet technologies to encourage dialogue between individuals and partner classes proposes a compelling shift in second and foreign language education, one that ideally moves towards actual interaction with expert speakers of the language they are studying" (p. 3). In addition, CMC can also be helpful for those who might not be willing to participate in communication due to factors like character or disabilities and allow a person to have communication with minimal stress (Tudini, 2003). It would also facilitate comprehensible and contextualized interaction, learners' self-correction, and collaborative learning environment (Vinagre & Munoz, 2011).

Due to the lack of nonverbal cues and a different turn-taking system, CMC and face-to-face interaction become interactionally distinguishable (Kitade, 2005). In the absence of physical bodies in the virtual world, online interaction vigorously takes place by means of discourse. The communication produced when human beings interact with one another by social networking applications or computer software is termed computer-mediated discourse. Computer-mediated discourse analysis (CMDA) provides theoretical bases and methodological frameworks for observing and researching different levels of language, such as structure, meaning, interaction, social behavior, and participation patterns, in online behaviors and interpreting the results (Herring, 2004).

The interactional level of online communication including turn-taking, repairing, sequentiality, topic development, and other means of negotiating interactive exchanges can be studies in the realm of conversation analysis. Conversation analysis of CMC is mostly concerned with discovering similarities and differences between computer-mediated and face-to-face interaction. Physical, cognitive, and linguistic resources that are available for interactors in face-to-face interaction contribute to the emergence of turn-taking and repairing conventions that participants develop in interaction while these features are absent in online interaction. Therefore, the present

study aimed to investigate turn-taking and repairing strategies that interactors develop in the absence of these features in online interaction.

Review of Literature

Turn-taking refers to the process by which people in a conversation decide who is to speak next. According to CA, the turn-taking system consists of two distinct components, the turn constructional component and the turn allocational component. The turn constructional component refers to TCU that is the minimal unit out of which a turn can be formed (Hyland & Paltridge, 2011). These units can be single word or a complete sentence. Each turn has a possible completion point which is recognized as a good point for speakers to switch. Sacks et al. (1974) proposed four types of TCU categorized by the roles they play in the utterance. These units can be lexical, phrasal, clausal, and sentential.

The other component is the turn allocation component. It refers to options for allocating turns among participants. There are three groups of turn allocational techniques: (a) those in which the next turn is allocated by the current speaker's selecting the next speaker, (b) those in which the next turn is allocated by self-selection, and (c) the cases the speaker continues his speech (Sacks et al., 1974).

The successful virtual collaboration depends on the interlocutors' ability to understand each other. Shared understanding has to be achieved through the interaction (Markman, 2010). One important property of talk is that it serves as a primary mechanism for interlocutors in interaction to show their understanding, identify the problems, and repair them.

Sometimes, synchronous qualities of interactions lead to errors and mistakes because the participants are not able to plan what they want to say and consequently people make repairs and corrections. Repair refers to the processes by which speakers deal with troubles which arise in speaking, hearing or understanding talks and involves actual correcting of factual errors or faults in the contents (Schegloff, 2007).

Repair organization describes how interlocutors deal with problems in conversation. Repair segments are classified by the initiator of the repair, by the corrector of the error, and by how it is developed within a turn or a sequence of turns. Therefore, there are four varieties of repair sequences, self-initiated self-repair, other-initiated self-repair, self-initiated other-repair and

other-initiated other-repair. Self repair initiations can be placed in three locations in relation to the trouble source, in a first turn, a transition space or in a third turn (Flowerdew, 2013).

There are a number of works dealing with turn-taking and repairing in CMC. The results of some experimental studies showed that the turn-taking system in CMC is quite different from any face-to-face turn-taking system (Panyametheekul & Herring, 2003; Schonfeldt & Golato, 2003; Thorne, 2006).

Herring (2001) believed that computer based communication is incoherent, and the processes of turn-taking and topic maintenance are disrupted in such contexts. Panyametheekul and Herring (2003) analyzed turn-taking and response patterns in chat and face-to-face conversation, and found that in most of the cases the current speaker selected the next speaker. The study also revealed that the participants preferred to address one another rather than self-selecting to speak; therefore, turn allocation in the chat room was found to be similar to that in face-to-face interaction.

Most of the research studies claimed that the concept of TCU is irrelevant to CMC because the interlocutors can't show overlaps, recycled turn beginnings, collaborative completions, interruptions, continuers, and so forth (Garcia & Jacobs, 1999; Negretti, 1999; Schönfeldt & Golato, 2003). Garcia and Jacobs (1999) compared the turn-taking systems in CMC and oral conversation. They discovered that the turn-taking system was substantially different from the turn-taking system of oral conversation. They concluded that participants regard completed and posted messages as transition-relevance places, and consequently, transitions of turns occur after completed message is posted.

Gonzalez-Lloret (2011) held the idea that although the interaction in CMC did not allow the interactors to use the same resources as in oral conversation, the participants had meaningful and organized interaction, coping with the lack of nonverbal resources and restrictions of the medium by using new resources, such as splitting messages, using emoticons, and verbalizing sounds such as laughter.

Schonfeldt and Golato (2003) investigated the turns, turn-transition space, turn taking, the organization of repair, and sequence organization, in German chat rooms. They also confirmed the medium restrictions and argued that chat program is more restricted than ordinary conversation in a way that interlocutors have to rely on written messages and sequential ordering

alone to repair. This study suggested that just like face-to-face interaction self-repair is more preferred in CMC and the most frequent type of repair was other-initiated self-repair.

Jepson's (2005) compared repair moves in text-based and audio chat rooms and showed that speakers in voice chat seemed to repair their utterances more often than speakers in text chat, resulting in greater incorporation of negotiation of meaning. Self-repetition was used fairly often in voice chats, but not at all in text chats. The absence of self-repetition in text chats was explained by the fact that text chat interlocutors could read one another's previous post while they are chatting, thus reducing or eliminating the need for self-repetition.

In a qualitative case study of conversation in computer chat-based virtual team meetings, Markman (2006) found that self-repair is the dominant type of repair. He also reported that repair in chat could serve social functions for the group, by serving as a resource for participants to determine norms for spelling and other typing conventions in their chat meetings.

Markman (2010) analyzed the interaction in computer-mediated group meetings. It was described how self-initiated self-repair were used as a vehicle for group norm development. The study showed that the main function of the repair attempts was not to clarify meaning, but rather to help team members to work out a set of typing conventions for their interactions. The researcher discovered that the most common repair strategy used by the team members in this case study was self-initiated self-repair which mostly occurred in the speaker's immediately next turn.

Zaferanieh (2012) examined the discourse strategies chatters used to maintain conversation and manage turn-taking, repair and adjacency pairs. The study showed how interaction was affected by the problematic nature of the medium and absence of extra linguistic features. The study revealed that some cases of self-repair related to misspelling and mistyping was due to rapid change of topics and fast typing. The errors were sometimes corrected by the same interlocutor immediately and sometimes errors were tolerated. However, for some mistakes interlocutors gave the person a little time for self-repair, then if they observed no correction, they began to correct the mistake. Sometimes, other interlocutors preferred to ask some questions about what they thought to be wrong.

All these studies suggested that CMC does not follow the turn-taking sequence as proposed by Sacks et al. (1974) because it is not a purely oral conversation and its sequential principles are

tightly related to the medium. Therefore, it is needed to examine the ways in which participants achieve different sequence types in the new medium.

Furthermore, a few studies have investigated interactional features of online interaction in the context of Iran. It is needed to investigate CMC in different contexts because cultural issues could be relevant to how participants construct interactional patterns and norms and how their identities are shaped (Shin, 2006). Although several studies took conversation analysis approaches to investigate characteristics of CMCD, a few CA studies have been conducted so far to investigate language learners' CMC data (González-Lloret, 2008, 2011; Kitade, 2000, Thorne, 2006).

Computer-mediated discourse is somehow affected by the technological features of the medium of the conversation but the question is whether all the software and applications can affect the conversation to the same degree. The related studies mostly analyzed the data retrieved from chat rooms and video conferences while new and emerging media have not been subjected to the same extent (Jenks & Firth, 2013). A few, if any, study has analyzed CMC interactions via cell phone new applications. One of the social networking applications that has got lots users in Iran and around the world is Telegram application. Telegram is an instant messaging service. Users can send messages and exchange photos, videos, stickers and files of any type via telegram. Lomas (2015) reported that in September 2015, the application had 60 million active users and delivered 12 billion daily messages.

Considering the gaps in the literature related to CMC the present study aimed to investigate the following research questions.

1. What is the turn-taking system of EFL learners' online interactions via Telegram application?
2. How repairing is taking place in online interactions of EFL learners via Telegram application?

Method

Participants

The participants of the study were 42 BA university students. 29 students were majoring at English Language Translation at Payam Noor University, Arak, Iran and 13 students were studying English Language Teaching at Islamic Azad University, Mahallat, Iran.

The Data

The data analyzed for this research was collected from three Telegram groups of 42 university students. These groups were formed a few months prior to the study and all of the participants in each group were classmates. The data was collected in December 2015. Summary of information about the data is presented in Table 1.

Table: 1
Summary of the Data

Groups	Number of Participants	Number of Messages
Translation A	17	823
Translation B	12	346
ELT	13	412
Total	42	1581

Reliability and Validity Issues

In order to satisfy the requirements of reliability and validity, the transcript must include as much information as possible about the conversation. Providing a reliable transcript was easy in the case of this study since it was possible to record the conversations exactly as they developed on the screen and as they were seen by the interlocutors.

The researchers tried to consider the criteria for controlling validity of the data including representativeness and retrievability. The data was randomly selected for the analysis. The data was also retrievable because the transcripts were obtained by taking screen captures of cell phone screen which makes the data easily available in the original form for further investigations.

Data Collection and Analysis Procedures

As it was mentioned above, the data was randomly collected from three Telegram groups. Since the researcher didn't want to miss the paralinguistic features of the chat, the screen captures were taken from cell screen and they were printed later.

In order to investigate turn allocation techniques in the data Sacks et al.'s (1974) turn-taking model was adopted. The model suggests three possibilities (a) Current speaker selects next speaker. (b) Next speaker self-selects. (c) Current speaker continues. Three basic strategies were coded in the data and analyzed. Sacks et al. (1974) proposed four types of TCU categorized by the roles they play in the utterance, lexical, phrasal, clausal, and sentential. These four units of turn construction were taken into consideration during the analysis of turn TCU of the data.

The repairing components of the data were analyzed by Schegloff et al.'s (1977) method. The data was coded and classified in four different groups, self-initiated self-repair, other-initiated self-repair, self-initiated other-repair and other-initiated other-repair.

Findings

Turn-Taking System

After the analysis of TCUs of the data, it was observed that sentences and phrases, which can be transition-relevance places in oral conversation, were not transition-relevance places in online interaction mostly because the process of developing the talk was not observable for the interlocutors. Instead, posted messages were taken as transition-relevance places.

Even in the case that an interlocutor posted an uncompleted message the other participants started posting after that without waiting for the second part of the message. The users of Telegram application can see who is typing a message on top of the chat window; therefore, we can say that in Extract 1 the second interlocutor is aware that her participant is going to continue her message but she posted her own message in between.

Extract: 1

- 1) Nazanin: First u need to print the form then
- 2) F♥V: I did
- 3) Nazanin: U can go to Mr Amiri to sign it

In order to analyze turn allocations in the data, each initiation was coded according to the three basic categories of turn allocation technique. Table 2 shows that the most frequent type of turn allocation in the data was self-selecting.

Table: 2

Distribution of Different Turn Allocation Techniques

	Number	Frequency
Current Speaker Selects	215	17.6
Next Speaker Self-selects	667	54.7
Current Speaker Continues	336	27.5
Total	1218	

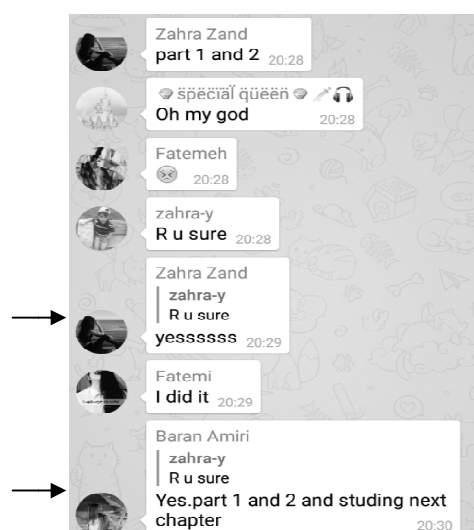
In the process of analysis, it was also observed that when a lot of participants were involved it was not possible for the participants to control the place of their post in the talk. Consequently, different unrelated turns appeared next to each other. In such cases the participants tried to orient themselves to different ways of putting related turns together. Sometimes the current interlocutors identified the next interlocutors by addressing their post to them. Extract 2 provides an example.

Extract: 2

- 1) P. Rezaei: Yes its very good.
- 2) M. Kh: Better than anything
- 3) hasti nuri: But I don't like. Go out is better.
- 4) Yas: Same here
- 5) P. Rezaei: Hasti where do u like to go?

Telegram provides an opportunity for the users to reply a message in a way that a part of the first message is shown and the user can write under that. Replying in this way was another technique adopted by the participants to choose the next participant. Figure 1 shows the application of this technique.

Figure: 1



Screen capture of replying technique.

In most of the cases when there was a distance between the first post and its answer the participants used replying technique. We can say the participants tried to preserve the coherence of the conversation by replying technique an addressing their post to a specific person.

A sudden change of topic was so common in the data. Sometimes, it was observed that 2 or 3 different topics were being discussed at the same time and a number of participants were engaged in developing each topic.

Extract: 3

- | | | | |
|----|--------------|--------------------------------|---|
| 1) | Miss TT: | Its too long. Im tired | ← |
| 2) | H. Mansouri: | Snow here I cant come | ← |
| 3) | H Rst: | yes me too | ← |
| 4) | H Rst: | 🤔 | ← |
| 5) | @aRaB@: | Snowwwwwwwww 🍷🍷🍷 r lucky | ← |
| 6) | Ali. A: | Don't worry. Tomorrow is fine. | ← |

In such cases the talk seemed disordered because at some points there was no relationship between the turns that appeared next to each other. However, a closer look at longer stretch of talk showed that the participants could continue the talk without any observable problem.

Repair

Using the framework of conversation analysis, instances of repair were identified in the data and analyzed. Total number of repairs observed in the data was 218. The repairs were classified in four groups, self-initiated self-repair, self-initiated other-repair, other-initiated self-repair, and other-initiated other-repair.

In textual computer chat, the turn appears all at once therefore it is not observable for other participants if the interlocutor has been involved in self-initiated self-repair while typing. In the present study it was observed that all four different types of repair were used by the participants but self-initiated self repair was the most frequent one; that is, the interlocutor notices an error in his/her production and then he/she tries to correct it. Sometimes, the errors were identified by other participants. In these cases, either the first interlocutor or other interlocutors had the chance to remove the problem. However, the number of errors observed was much more than the number of repairs which shows they were ignored by the participants. Table 3 shows the distribution of different types of repair.

Table: 3

Distribution of Different Types of Repair

	Number	Frequency
Self-initiated Self-repair	114	52.2
Self-initiated Other-repair	12	0.05
Other-initiated Self-repair	69	31.6
Other-initiated Other-repair	23	10.5
Total	218	

Discussion

The conversation analysis of turn-taking system in social networking applications revealed that TCU that are applicable to oral communication were not applicable in online interactions. TCU of online interaction seemed to the completed posted message. The findings of the study confirmed the results of other studies in this area (Garcia & Jacobs, 1999; Negretti, 1999; Schönfeldt & Golato, 2003). Even in the cases that the other interlocutors could realize the first

interlocutor's turn was going to be continued they posted their own message. It doesn't mean that the interlocutors were not aware that the turn is not complete; rather, the researcher believes that since typing is much slower than talking the interlocutors interrupt each other to save the time. In other words, when the second interlocutor sees that the first interlocutor is typing the next part of his/her message the second participant saves time by posting his/her own message. Although this can be taken as an interruption, it can be considered as a strategy for expressing more in a limited period of time.

The literature on turn-taking in CMC showed that turn allocation is highly constrained by the characteristics of the computer as a medium of interaction. The lack of visual and audio clues limits the strategies that the participants can use for turn allocation. The analysis of the turn allocation components in the present study revealed that in most of the cases the interlocutors are self-selected which is contradictory with the results of other studies. The kind of the relationship between the group members that are involved in the interaction and the topic being discussed can affect the results. In most of the previous studies the data was driven from public chatrooms where most of the people didn't know each other or formal online group meetings. But the present study analyzed the data from classmates' online interaction who knew each other and the topics that were related to their studying carrier. Culture specific norms can also be another issue that would affect the results and is subject to further investigations. The technique that the participants used for selecting the next speaker was found to be addressing the post to a specific person. The previous studies found high use of address terms in CMC too (Gonzalez-Lloret, (2008); Kitade, 2000; Panyametheekul & Herring, 2003; Schönfeldt & Golato, 2003). Furthermore, the participants used replying technique which was specific to Telegram application. This technique seemed to be quite helpful for learners. Wherever there was a long distance between two adjacency pairs the participants used replying to join the two pieces together.

Previous studies claimed that the chaotic order of turn in CMC makes it highly disrupted (Garcia & Jacobs, 1999; Kitade, 2000; Negretti, 1999; Schönfeldt & Golato, 2003; Zaferanieh, 2012); however, the study of longer stretch of talk in the present study showed that although the turns that appeared next to each other were irrelevant at many cases and sometimes more than one topic was being discussed, the participants could successfully follow and continue the interaction.

The participants of the study were engaged in meaningful and organized interaction, and tried to overcome the lack of nonverbal resources and restrictions of the medium by using new resources, such as addressing each other, using emoticons, and using replying technique. In this respect the finding proved the results of Gonzalez-Lloret's (2008).

Self-initiation self-repair was the most type of repairing in the data which is confirmed by other studies in this area (Markman, 2006, 2010; Schönfeldt & Golato, 2003; Zaferanieh, 2012). The number of errors the participants had in their interaction were much more than the number of repairs which is also observable in other studies (Jepson, 2005; Zaferanieh, 2012). The participants of the study were not all quite fluent in English; therefore, some one of them had grammatical and dictation mistakes in their messages. Most of such errors were tolerated by the other interlocutors unless they hindered communication. In other words, when the errors were not noticed by the first interlocutor the other participants didn't mention them unless they couldn't understand the message. It may be due to the fact that participants were less likely to scroll back and find the trouble in communication when a lot of participants are involved and new messages are being posted one after another.

Conclusion

The present study adopted the frameworks of conversation analysis to investigate the interactional features of online communications via Telegram application. The focus of the research was on identifying different strategies the participants used for turn-taking and repairing. The results of the study revealed that although the medium imposed some restrictions on participants' access to communicative recourses, the participants could develop a meaningful interaction by providing clues for each other to make the talk more understandable. The typing errors and errors resulted from lack of proficiency in English were mostly ignored by the participants and accuracy didn't seem to be very important. The present study calls teachers attention to this important issue. If the learners ignore grammatical and dictation errors in interaction, there will be a threat for error fossilization. Teachers who suggest such applications for developing learners' interaction hoping for developing more fluent learners should be able to somehow supervise the process.

Suggestions and Recommendations

The present study took an etic view in studying participants' interactions. There is a need to check participants' idea about the issue to see how they perceive online interaction, what difficulties they encounter, and why the errors are tolerated. The participants of the study were university classmates. Conducting studies with different participants from different social groups may lead to different findings.

Reference

- Flowerdew, J. (2013). *Discourse in English language education*. London, England: Routledge.
- Garcia, A. C., & Jacobs, J. B. (1999). The eyes of the beholder: Understanding the turn-taking system in quasi-synchronous computer-mediated communication. *Research on Language and Social Interaction*, 32, 337-367.
- Gonzalez-Lloret, M. (2008). Computer-mediated learning of L2 pragmatics. In E. A. Soler & A. Martinez- Flor (Eds.), *Investigating pragmatics in foreign language learning, teaching and testing* (pp. 114-132). Clevedon, UK: Multilingual Matters.
- Gonzalez-Lloret, M. (2011). Conversation analysis of computer-mediated communication. *CALICO Journal*, 28(2), 308-325.
- He, A. W. (2004). CA for SLA: arguments from the Chinese language classroom. *The Modern Language Journal*, 88(4), 568-582.
- Herring, S. C. (2004). Computer-mediated discourse analysis: An approach to researching online behavior. In S. A. Barab, R. Kling, & J. H. Gray (Eds.), *Designing for virtual communities in the service of learning* (pp. 338-376). New York: Cambridge University Press.
- Hyland, K & Paltridge, B. (Eds.). (2011). *Continuum companion to discourse analysis*. London: Continuum.
- Jenks, C. J., & Firth, A. (2013). Interaction in synchronous voice-based computer-mediated communication. In S. C. Herring, D. Stein, & T. Virtanen (Eds.), *Handbook of pragmatics of computer--mediated communication* (pp. 209-234). Berlin: Moutond Gruyter.
- Jepson, K. (2005). Conversations and negotiated interaction in text and voice chat rooms. *Language Learning & Technology*, 9(3), 79-98.

Kasper & H. Nguyen (Eds.), *Conversation analytic studies of L1 and L2 interaction, learning, and education* (pp. 281-316). Honolulu, HI: NFLRC and University of Hawaii Press.

Kitade, K. (2000). L2 learners' discourse and SLA theories in CMC: Collaborative interaction in internet chat. *Computer Assisted Language Learning*, 13, 143-166.

Kitade, K. (2005). *Interactional features of asynchronous computer-mediated communication for language learning: From cognitive and sociocultural perspectives*. Unpublished doctoral dissertation, University of Hawai'i-Manoa, Honolulu.

Markman, K. M. (2006). *Computer-mediated conversation: The organization of talk in chat based virtual team meetings*. Unpublished doctoral dissertation, University of Texas-Austin.

Markman, K. M. (2010). Learning to work virtually: Conversational repair as a resource for norm development in computer-mediated team meetings. In J. R. Park & E. Abels, *Interpersonal Relations and Social Patterns in Communication Technologies: Discourse Norms, Language Structures and Cultural Variables* (pp. 220-236). Hershey, PA: Information Science Reference.

Negretti, R. (1999). Web-based activities and SLA: A conversational analysis approach. *Language Learning & Technology*, 3(1), 75-87.

Paltridge, B (2006). *Discourse Analysis: An introduction*. New York: Continuum.

Panyametheekul, S., & Herring, S. C. (2003). Gender and turn allocation in a Thai chat room. *Journal of Computer-Mediated Communication*, 9(1), 48-62.

Sacks, H. E., Schegloff, E., & Jefferson, G. (1974). A simplest systematic for the organization of turn taking for conversation. *Language Awareness*, 50, 696-735.

Schegloff, E. A. (1996). Turn organization: One intersection of grammar and interaction. In E. Ochs, E. A. Schegloff, & S. Thompson (Eds.), *Interaction and grammar* (pp. 52-133). Cambridge: Cambridge University Press.

Schegloff, E. A. (2007). *Sequence organization in interaction: A primer in conversation analysis*. Cambridge, UK: Cambridge University Press.

Schönfeldt, J., & Golato, A. (2003). Repair in chats: A conversation analytic approach. *Research on Language and Social Interaction*, 36, 241-284.

Schouten, A., Valkenburg, P., & Peter, J. (2009). An experimental test of processes underlying self-disclosure in CMC. *Cyber psychology: Journal of psychosocial research on cyberspace*, 3(2), article 3.

Ten Have, P. (2007). *Doing conversation analysis: A practical guide* (2nd ed.). Publisher: Sage Publications Ltd.

Thorne, S. L. (2006). Pedagogical and praxiological lessons from internet-mediated intercultural foreign language education research. In J. A. Belz & S. Thorne (Eds.), *Internet-mediated intercultural foreign language education* (pp. 2-30). Boston: Heinle and Heinle.

Tudini, V. (2003). Using native speakers in chat. *Language Learning & Technology*, 7(3), 141-159.

Vinagre, M. & Munoz, B. (2011). Computer-mediated corrective feedback and language accuracy in telecollaborative exchanges. *Language Learning & Technology*, 15(1), 72–103.

Zaferanieh, E. (2012). *Conversation Analysis of Online Chat*. Paper presented at the first conference on language learning & teaching: An interdisciplinary approach, October 30 – 31, Mashhad, Iran.