

HUMOR MARKERS IN COMPUTER MEDIATED COMMUNICATION: EMOTION PERCEPTION AND RESPONSE

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Abstract

This paper aimed at investigating humor in text-based computer mediated communication (CMC). To this end, 200 turns exchanged by a number of 50 English language teachers on Viber, a messaging application, were randomly selected and analyzed based on Adam's (2012) classification of humor to examine emoticons, punctuations (question mark, exclamation mark, and ellipsis), laughter (textual and acronym), formatting (spelling variations, capital/small letters, and elongation), and explicit markers in the corpus. The findings showed that emoticons outweighed other humor markers while laughter rated the least used marker in the corpus.

Keywords: Computer-Mediated Communication (CMC); emotion perception; humor; Viber; social networks

1. Introduction

Based on the manner, there are different forms of online interaction such as audio-based, video-based, and multimodal interactions (Hine, 2000). Obviously, in computer-mediated communication (henceforth, CMC), there are not as many sources of information as used in face-to-face communication since the communication is text-based. Although this is not a recent issue to investigate, CMC in the world of cyberspace has been of great significance in the era of technology in which interaction is growing fast day-by-day. According to Tudini and Liddicoat (2017), researchers used Conversation Analysis (henceforward, CA) methodology to examine the interaction patterns in CMC and its influence on language and learning. In other words, there has been a shift of topic in CA from studying naturally-occurred telephone and face-to-face conversations to study how communication is mediated by computers (Tudini & Liddicoat, 2017).

In fact, the community is one of the most important factors in cyberspace and especially social networks. A community is “a process that is fluid in nature” and evolves through

nurturing conditions; it is a supportive and empowering environment that is responsive to the members' actions, interactions, and reactions (Lock, 2007, p. 130). Currently, in the era of technology, a remarkable number of human-human interactions happen on the Internet, which gives evidence to the highly text-based nature of CMC. In fact, "interacting members of online groups constitute a speech community as they presumably share to some extent communicative practices, beliefs, and norms, since communication would be hindered otherwise" (Wilson & Peterson, 2002, p. 459).

As Hancock (2004) states, various linguistic features of CMC are the reflexes of those found in the spoken discourse which has led to fun interactions. Indeed, the lack of nonverbal cues is commonly compensated for by the use of emoticons, punctuations or formatting to convey the feeling of humor, as well as other feelings, more evidently. Therefore, the interpretation of feelings using markers may seem easier for the participants in interaction. Despite the fact that in the majority of face-to-face interactions humor is entirely conveyed between listeners and speakers, the spontaneous feedback is delayed in CMC (especially in asynchronous communications) or is even absent in some cases (Hancock, 2004). In contrast to the belief that humor is not well defined and presented in CMC, Hancock (2004) further claims that online communications are still "rife with humor, jocularity, irony, wordplay, puns, etc." (p. 57). For this purpose, the present study positions its research on how humor is exchanged in the CMC-based interactions of Iranian nonnative speakers of English in Viber. In the following sections, a review of CMC and humor in CMC is presented, followed by the methodology, results, discussion and conclusion of the study.

2. Review of literature

2.1. Computer-Mediated Communication

Originally, CMC examined how text-based messages are exchanged through the computer screen in different forms such as email, discussion forums, online chats, etc., whose linguistic properties differ depending the topics exchanged, the cultural contexts embedded and the people involved (Herring & Androutsopoulos, 2015). As an illustration, the lexical properties of CMC are called 'netspeak' (e.g. "DIY", "LOL"), and the socio-pragmatic conventions of CMC are referred to as 'netiquette'. Abbreviations and acronyms that belong to netspeak category are among the most common features used in CMC (Crystal, 2006; Doell, 2006). There are also other lexical features used in CMC quite often such as homophony where numbers or single letters substitute a syllable or morpheme (i.e. "b4" for before), letter

omission through which vowels are removed (e.g. “msg” for message), or clipping (i.e. “cer” for certainly). Besides, CMC contains spelling shifts where some words are replaced by others which are very different from the standard written English (e.g. “Becuz u r l8”). Colloquial language being inserted into CMC, contractions and spelling forms which stem in spoken language are often used in computer-mediated interactions (e.g. “wanna”, “donna”). According to Spitzberg (2006), a CMC user needs to have a specific skill in conveying suitable emotional information to his/her interlocutor. Hence, the speaker’s careful use of semantic language features as well as structural factors are of great importance in order to transfer the non-humorous intent in CMC. The skills and knowledge related to the issues of linguistic focus are pertinent to the relatively recent field of CMC.

There are two ways of interaction in online text-based communication; synchronous and asynchronous. As the names indicate, synchronous interaction refers to simultaneous participation of the people chatting, while in asynchronous CMC interaction is not synched up. Crystal (2006) best defines asynchronous CMC as a type of communication that “is stored in some format, and is made available to users upon demand so that they can catch up to or add to the discussion – even after an appreciable period has passed” (p. 12). Nevertheless, a synchronous text-based CMC is described in a way that “a user enters a chat room and joins an ongoing conversation in real time, sending named contributions which are inserted into a permanently scrolling screen along with the contributions of other participants” (Crystal, 2006, p. 12).

Clearly, the absence of contextual and non-verbal cues makes face-to-face interaction distinct from Computer-Mediated Communication, though it does not mean that CMC is not sufficient to express motifs such as emotional language as well as humorous functions (Daft & Lengel, 1986; Rice & Love, 1987). Although CMC was called “ill-suited” for social uses of language (Baron, 1984), it was later found that CMC facilitates social interactions in a way that communities grow through social processes.

The informal use of the language in CMC may occasionally be unsuitable; however, these features are utilized for the purpose of simplification, comfort, and speed in communication. Accordingly, Clark and Brennan (1991) best describe the process as ‘economy principle’, also known as ‘the least effort’, which refers to conversational language that contains optimum minimization without disturbing meaning. In fact, many of the CMC features can be explained by the same strategy such as deletion of subject pronouns or auxiliary verbs, which are common in face-to-face colloquial language. Although the two types of interaction share similarities, there are some minor variations. The rate of interaction in face-to-face

interaction is much faster than in CMC depending on the typing speed and the level of synchronicity (Hancock & Dunham, 2001). In an earlier study, Ko (1996) realized that language in CMC is oversimplified and includes a narrower range of vocabulary items, shorter phrases, and shorter utterances than colloquial interactions.

2.2. Humor in CMC

Hay (2001) defined humor as anything that an interlocutor produces to be perceived funny to the listeners, where context, nonverbal cues, and listeners' feedback are pivotal components in making humorous interaction effective. Obviously, humor occurs among all groups of people to a different extent. Indeed, it brings about more solidarity, sociability, and mutual support among group members for better teamwork, more innovations and creativity and causes finding better solution to problems (Romero & Cruthirds, 2006). Similarly, Wilson and Peterson (2002) found that "interacting members of online groups constitute a speech community as they presumably share to some extent communicative practices, beliefs, and norms, since communication would be hindered otherwise" (p. 459). In fact, humor is the "successful exchange of joking and laughter" (Kuipers, 2006, p.7), without which the function of funny messages is left unspecified. Veale (2004) maintains that this information added to the statement gives the recipients a chance to conceive several different interpretations of the message, to select their preferred explanation and to enjoy maximum amusement. This process highly depends on the context. The explanation, in fact, differs among individuals since each individual has his/her own perceptions, experiences, and expectations. Davies (2010) put it best by proposing that jokes with similar themes have various conceptions in different countries since the amusement of a joke is determined through the context in which it is delivered.

On the other hand, Attardo (2009) maintained that laughter is not the only way of identifying humor. Moreover, through different studies, Gunther (2003) and Vettin and Todt (2004) stated that it is insufficient to believe so since the response to humor might not be necessarily laughter. Similarly, there are many research studies that have considered conversational humor from corpora for naturally occurred humorous interactions (Archakis & Tsakona, 2005; Bell, 2009; Eisterhold, Attardo, & Boxer, 2006; Günther, 2003; Hancock, 2004; Holmes, 2006; Holmes & Marra, 2002; Hübler & Bell, 2003; Partington, 2006; Whalen, Pexman & Gill, 2009; Wimer & Beins, 2008), some of which are presented below.

In 2009, Whalen et al. studied the forms of non-literal language in asynchronous CMC as well as their frequencies. Through the research, they realized that over 94% of the participants applied one example of figurative language, the average of which was 2.9

statements per turns. They further concluded that jocularity in the CMC world is of low frequency. In a similar vein, in case of irony in CMC, Hancock (2004) found that the samples used ironically in face-to-face communication are more numerous than those in CMC. This difference perhaps lies in less frequent occurrences of humorous interactions because these forms are not easily recognizable by CMC users.

In another study, Hübler and Bell (2003) aimed at investigating constitutive laughter, which they define as the “interactions of co-constructed humor ranging across several turns, between both/multiple interlocutors, and identified by confirming laughter” (p. 280). According to the findings of the study, the authors concluded that laughter in CMC does not just include a simple “ha ha”, but “cyber laugh” is often implied through textual elements used for confirmation or appreciation of the humor (i.e. “that was great”) also by means of abbreviations showing the response to humor (i.e. “LOL”, “ROFL”).

In another study, Wimer and Beins (2008) asserted that humor ratings can be affected by previous messages, while the degree of simplicity in the messages is bound to limitations. Furthermore, their findings revealed that expectancy (in response) might influence the experience of humor so that humor is not solely derived from jocular content.

Despite the importance of text-based CMC in conveying humorous intention, there are still not enough studies in this field in the Iranian context. In recent years, few studies have paid attention to the importance of humor as a material in teaching and learning English in Iran (e.g., Baleghizadeh & Ghoreishi, 2014; Ghanei, Motallebzade & Fatemi, 2014; Rafiee, Kassaian & Vahid Dastjerdi, 2010), neither of which examined the humor in CMC. Therefore, the purpose of this study was to investigate the type and use of humor markers in the conversation turns exchanged in Viber as a medium of CMC in English by Iranian native speakers of Persian. Thus, the paper seeks to answer to the following research question: What types of humor markers are used in the conversation turns exchanged in English by Iranian nonnative speakers of English?

3. Methodology

3.1. Corpus

As the focus of this study is to explore humor in asynchronous interactions, the prevalent online software was used in groups which mostly share contextual and associational information about a particular subject, where humorous points are considered a suitable way of interaction among members. The participants of the present study were 120 young undergraduate and graduate

university students (66 women and 54 men aged 19 to 40) enrolled in different majors. They belonged to four different groups. As quite a natural setting, the participants were not given any information on the study. The sample was comprised of young (M age=30), single and married, and all Iranian subjects. All participants had access to web-based texting applications and were able to deal with online programs.

3.2. Procedure

To attain the purpose of the study, the data including asynchronous text-based CMC interactions from one of the most popular computer software programs and mobile phone applications i.e. Viber was used. This free and publicly accessible program seems reliable and suitable for group activities. Although there is no membership needed, each group member followed the ethical issues during chatting. The first 100 turns of interactions were collected with no changes, modifications, or corrections made. In case the interaction took more than 100 turns, but was linked to the past interactions, the rest of them were used for the data set. Totally, the data includes approximately 20000 words and 500 turns.

3.3. Data analysis

The data were collected via Viber. Having finished the coding for humor markers (see Table 1), data underwent analysis to investigate whether different forms of humor are effective on the frequency and form of markers and how the presence or absence of various markers affects humorous responses. Through an in-depth categorization of markers, all humor forms in any single turn being considered humorous were coded separately. To avoid misleading information, the units of humor were coded rather than full sentences or entire turns. The frequency of each category was then calculated as well as the responses to the humorous units via the Chi-square test.

Moreover, for the analysis of the responses, any humorous unit was coded as either getting or not getting a response. Therefore, the form of response was not part of this study, but the frequency was the main focus. Generally, descriptive inferential statistics was applied for both procedures in the study. The corpus was coded with the coding scheme developed by Adams (2012). Two raters, who were completely unaware of the research questions and the participants of the study, were asked to code all the markers. To make sure the coding system was proper, reliability was assessed by having a third independent rater check and score a randomly chosen sample of the data (15% of the total data). The reliability was then calculated

(Cohen's $\kappa = .81$). Table 1 depicts the model adopted in this study which was previously applied by Adams (2012).

Table 1. The contextual factors by Adams (2012)

Category	Definition	Examples
Emoticon	Graphic Textual	☺ o.O
Punctuation	Exclamation mark Quotation mark Ellipsis	"I will burry you!!!!!" "I can`t believe what you said" "I m waiting..."
Laughter	Textual Acronym	"Heh" "rotfl", "lol"
Formatting	Spelling variation Capital/small letters Elongation	"naowyergunna get it!" "WHAT ARE YOU WAITING FOR?" "I can`t belieeeeeeeve you!"
Explicit	Meta-awareness of humorous intent	"Wow" (where conveys sarcastic intent)

As Table 1 demonstrates, the contextual factors adopted from Adams (2012) were categorized in five classifications of emoticons, punctuation (exclamation mark, quotation mark, and ellipsis), laughter (textual and acronym), formatting (spelling variations, capital/small letters, and elongation), and explicit markers. For the emoticons, there are two forms of textual (e.g. :-*), and graphic (e.g. ☺). The instances below are taken from the corpus in order to demonstrate how the data was collected. Since the names are not mentioned and the examples mentioned here are chosen randomly, they are ordered alphabetically.

User A: Are you sure this is your score? o.O

User B: :D guess so!

The second group of punctuation involves the exclamation mark, quotation mark, and ellipsis. Regardless of the number of exclamation marks in the utterances, at the end of each statement they are counted as one occurrence.

User C: God, you must be someone else!!!!

User D: Sounds like a miracle!

User E: Him!!! Nice joke!

(A and B were counted as one marker; while C as two)

Quotation marks in their real use of quoted speech were not considered in the present study.

User D: "Physician", please set an appointment for us...

Similar to exclamation marks, ellipses of two or more periods in a row were counted as one occurrence.

User E: I am as hungry as a...

User F: Unbelievable..

The laughter category contains all types of laughter related to CMC (not including emoticons which belong to the first category). Accordingly, the textual form of laughter or the acronym form are two very common examples.

User G: Huh! I think I'll fail this course...

User H: Haaahaaahaaa..

User I: Lol, this is the end (laughing out loudly)

User J: Rotfl (rolling on the floor laughing)

The formatting classification deals with the information in the text which bears prosodic or emphatic meaning such as stress or increase in volume. The category mainly includes:

A. Caps lock; User K: TALKING OF THE DEVIL! she IS here

B. Elongation; User L: You are weeeeeelcome...

C. Alteration of spelling; User M: Litelwabbit!

(Capitalization does not count much in Persian because of the alphabets features.)

The last group is explicit markers which conveyed words or phrases that convey meta-awareness of humorous intention

A. By the speaker; User N: just a joke!

(Can also include sarcasm:

User O: Look! Who`s talking about discipline!!!

B. Or as a response; User P: can`t be serious...

This is the one and only category that cannot be considered outside humorous texts and messages. Notably, the markers may overlap and each of them was counted as one, regardless of overlap. For instance, this example is elongated, capitalized, with the use of exclamation mark:

User Q: NOOOOO WaaaaaY!!!!

For the response, there have been four categories chosen by Adams (2012), where each humorous message may carry one of the following responses:

- 1) laughter (Textual or acronym form),
- 2) amusement conveyed through emoticons,
- 3) explicit confirmation of humor appreciation or conveying recognition appreciation,
- 4) a continuation of humor based on the previous humorous message.

To identify humorous intent of the speakers and the response to interlocutors, all tokens were coded according to one of the five categories above. As the purpose of this study is to find the occurrence of humorous messages, non-humorous messages were also taken into account.

3.4. Results

The study aimed to investigate the frequency of the humorous types in interactions between the members of the four English-speaking Iranian groups using Viber. The quantitative analysis assessed whether or not the frequency of categories differed significantly. Table 2 demonstrated the frequency of occurrences of the humorous categories.

Table 2. The frequency of occurrences of the humor categories

Total Data		
Category	No.	Percentage
Emoticon	238	50.10
Punctuation	83	17.50
Laughter	30	6.30
Formatting	28	5.90
Explicit	96	20.20
Total	475	100

As Table 2 depicts, the first column reveals the number of occurrences for each category of humorous marker and the second one shows the relative frequency of the markers out of the total number of markers occurred in the corpora. The third and fourth columns represent the mean and standard deviation of the number of marker occurrences per turn.

The whole data set included a total number of 100 turns and 475 humor markers. Among the five categories of humorous types, emoticons carry the highest number and frequency of occurrence, involving 50% (N=238) of all the markers in the corpora. The second most frequent marker is the explicit one, including 20% (N=96) of the markers. In addition, punctuation was the third most-frequently used marker, which was very close to explicit markers in case of frequency of occurrence, 17% (N=83). On the other hand, the two last markers which had a significantly lower number of occurrences were formatting and laughter rating 5.8 (N=28) and 6.3 (N=30) respectively. The second phase of the analysis included investigation of humorous turns vs. non-humorous ones to consider how differently had have occurred. Table 3 demonstrates the frequency of occurrences of the non-humorous interactions.

Table 3. The frequency of occurrences of the non-humorous categories

Total Data		
Category	No.	Percentage
Emoticon	89	67.95
Punctuation	23	17.55

Laughter	9	6.90
Formatting	10	7.60
Explicit	0	0
Total	131	100

Since the explicit markers can only occur in humorous interactions, it should be noted that they are not considered in the non-humorous category. The four remaining categories underwent inferential statistics to investigate their frequency of occurrences as well. The sum of non-humorous occurrences was 131, which is significantly different from the total humorous occurrences. It is quite interesting to note that similar to humorous tokens, in non-humorous corpora emoticons rated the highest percentage of 67% (N=89). As Table 3 indicates, punctuation is the second frequent non-humorous category with 17% (N=23) of occurrence. Accordingly, laughter and formatting rate very similar as well with 6.8% (N=9) and 7.6% (N=10) respectively.

4. Discussion

In reference to the research question, the findings of the current study indicate that when participants are exposed to humor in CMC interactions, an individual's perception of the emotion is quite relevant to responsiveness. The frequency of humor markers and measures of emotion perception were obtained during data collection along with the responses to the humorous stimuli. Except for the explicit markers, which were absent in non-humorous responses, the four categories of punctuation, formatting, emoticon, and laughter were deployed significantly higher in humorous interactions by the users. The findings were in line with the findings of Adams (2012), who found the five categories in humorous conversations overweighed their non-humorous counterparts. This supports the Channel Expansion Theory (refer to Carlson & Zmud, 1994) indicating that mediated communication continually evolves and creates new ways of conveying required elements for successful interpersonal communication.

Humor is one of the main sources of solidarity and intimacy among social group members. The members are brought together by social trends and current phenomena. Indeed, humor can make the interactions more enjoyable and attractive. The social bonds can increase in this way so that misunderstandings and miscommunications do not harm the relationships. As the literature reveals, utilizing humor in social interactions facilitates the relationship among different people (Martin, 2010; Samson & Gross, 2012; Kuiper, 2012).

Humor is regarded as the socio-cultural manifestation of the society, which can indicate how the members of the society convey themselves. In fact, the subject matter differs in various cultures since the community's or nation's norms define what is considered humorous vs. serious. That might be the reason why many foreign language learners who are not familiar with the culture of the language they know find it difficult to understand or realize the jokes of the target language. Therefore, watching a comedy or reading a comic book might not help language learners understand the details and might not be so pleasant and funny as well. However, while exposed to humorous materials in language learning, the details of the pertinent cultural jokes, and familiarity with the actual exchange of jokes can assist learners to completely realize the reality and joke. As DiDomenico (2015) maintains, "The nuances of humor use complicate the assessment of humor's impact on relational quality" (p. 4).

Based on the findings of this study, emoticons were most frequently used marker in CMC interactions (50%), whereas in the study of Eisterhold et al. (2006) laughter was found as the most commonly used marker. In addition, according to Hancock (2004), the highest frequency was related to punctuation where exclamation marks and ellipses rated the most among other markers. Derks, Bos, and Grumbkow (2007) and DiDomenico (2015) also asserted that emoticons, i.e., smiling and laughing, are more often used in informal communication. Accordingly, Dresner and Herring (2010) believe that emoticons are more often used "perhaps because of their resemblance to whimsical line drawings, emoticons have expressive, playful, and informal connotations" (p.13). Conversely, the use of emoticons in the present study greatly differs from that of Hancock since in the latter the least frequent of all markers were around 1% of the whole humorous markers, while it ranks the first marker in this study involving 50% of all the markers. In this regard, Hancock (2004) asserted that emoticons are not efficient enough to convey humorous intent. However, the greater use of emoticons in the current study revealed that the users find it very effective to convey their intentions. In addition, users' demographics and situational factors, discussion topics, and communication settings have an impact on the use of emoticon (Herring, 2007). Therefore, the distinction into the use of emoticons can also mention the differences in cultures and norms of the societies.

Tamblyn (2003) believes that the real humor is openness, optimism and a kind of yes-saying to life. Humor is creativity and a have-all play. More importantly, humor occurs in particular situations or moments and due to variations in social interactions there might be incidental or spontaneous culture-specific humor. The humor that arises naturally encourages people in their relationships as well as provides intimacy rather than splitting them into different social, racial, religious, and sexual groups. The use of humor in fact can be enjoyable

for all members of the society if they keep values of one another. In other words, humor is “an integral part of culture and that can be a major conceptual and methodological tool for gaining insights into cultural system” (Apte, 1985; cited in Souhaila, 2012, p. 86). However, some studies, such as Hall (2013), found that the use of destructive or maladaptive humor has less impact on building relationships. Since language is the inseparable part of culture, the significance of both lies in their integrity.

The ability to realize and use humor in an EFL classroom can be of great importance so that the learner can tell jokes, improve storytelling, enhance listening skills, and totally accomplish his/her language skills in the second/foreign language. According to Powell and Andresen (1985), “humor, provided it is not used to excess, can increase attention and interest and help to illustrate and reinforce what is being taught (p.79)”. Moreover, another study by Saltman (1995) indicated that positive humor relevant to the material being taught could foster learning, release stress, provide retention of information, improve cohesion, and remove learning barriers such as affective filter in ESL/EFL context.

5. Conclusion

The present study aimed at assessing humorous markers in Computer-Mediated Communication through which humorous intents of the participants were analyzed to see how they statistically correlated with humor production and to demonstrate the role of humor in CMC. A great deal of markers were used by participants which revealed that the five categories of humor markers (emoticon, laughter, explicit, formatting, punctuation) prove to be effective at conveying their humorous intentions. Finally, it can be inferred from the findings of this study that CMC can be a successful medium for delivering humorous intents among different users of social media. This last point can lead to a significant direction for future research into humor’s impact on gender differences or vice versa, various humor strategies between siblings, friends, relatives, or effects of humor on building romantic relationships. The function of humor categories in the context of communication, an analysis on the speech act theory and illocutionary force, or even a longitudinal study on the different five categories mentioned in this study can shed more light on the issue under investigation.

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