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## A Study of the Syntactic Categorization of Emojis in Social Media Communication

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### ABSTRACT

The aim of this study is to investigate the functions of emojis as syntactic categories such as nouns, verbs, adjectives, prepositions, conjunctions, phrases and sentences, etc. in social media communication. The rapid evolution in the field of social media communication urged the author to investigate emojis, used as a strategy to reconnoiter emojis as syntactically equivalent to words in social media communication (SMC). Computer-Mediated Discourse (CMDA) is an approach to research online behavior which is adopted as a framework for analyzing data, collected from a social media icon Twitter to find out the syntactic role of emojis in online text- based communication. This study follows a descriptive and qualitative research design in which the data will be analyzed and described thoroughly with a detailed description. According to CMDA, CMC users manipulate the grammatical rules to meet their communication needs which are analyzed in this study where various strategies such as omitting orthographic words to add graphic images, repeating the same emojis, mixing different emojis, etc. are used. The study showed that emojis performed different syntactic functions at both word and phrase level in text based social media communication. This study hopes to augment the knowledge in the field of SMC and CMC to persuade other researchers to conduct further studies in this area i.e., pragmatic use of emojis and use of emojis by social media users to convey intended meaning.

**Keywords:** social media communication, Computer-Mediated Discourse, Emojis, qualitative research

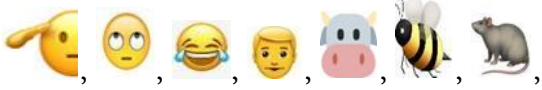

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### INTRODUCTION

The word emoji is a Japanese word that means „Picture letter“. It is derived

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from two Japanese words pronounced as „eh“ and „Moji“ and have the meaning of picture and character respectively. Emoji is like a small pictograph that makes communication so easy that it is impossible for people to not use emoji in their electronic communication. There are various emojis, including facial expressions, gestures, persons, characters, animals, birds, food, places, weather, signs and symbols,

dresses, country flags, common objects, etc.  ,  and many more.

Emojis make virtual communication complete and more meaningful as they provide suprasegmental features and it is convenient for participants to use these conventional nonverbal tools for smooth and successful communication. A gradual increase in the use of emojis in place of text-based slang and other written forms of texts has been noticed. The development of technology is also a reason for the extremely fast spread of emoji use. Linguists have begun to notice the functions of emojis in internet-based communication. Emojis serve as an efficient and useful virtual device used for communication. In comparison to 2012, emoji use dramatically increased by 40 % in 2015.

Emojis play a remarkable role in communication in different contexts. In online conversation the functions of emojis and text are different and they both have different uses.

### **Purpose of the Study**

The purpose of the study is to reconnoiter emojis as syntactically equivalent to words in computer-mediated communication (CMC). Emojis have become an **essential** part of each and every conversation virtually. The purpose is to explore a whole study of emoji use as a substitution of single words, compound words, phrases, and even sentences themselves. Even though the emojis will also be considered to take place the role of syntactic categories. The use of emojis as syntactic categories such as nouns, verbs, adjectives, adverbs, prepositions, conjunctions, words, phrases, clauses, sentences, etc.

### **Research Objectives**

This study has focused on the following objectives which are in complete consilience with the research questions:

- To identify the use of emojis as syntactic categories such as nouns, verbs, adjectives, prepositions, conjunctions, phrases and sentences, etc. in social media communication
- To find out the function of emojis as syntactic categories such as nouns, verbs, adjectives, prepositions, conjunctions, phrases, and sentences, etc. in social media communication.

### **Research Question**

Following are the questions that guided this research:

- 1: Do emojis play the role of syntactic categories in social media communication?
- 2: How emojis can replace the syntactic categories i.e. phrases and sentence in social media communication?

### **Significance of the Study**

Emojis play a significant role in online conversations nowadays. This study is a good contribution in the field of linguistics as it would help to understand the role of emojis as syntactic categories. It helps in making language experts cognizant about the communicative functions being performed by emojis. The study makes a great deal of contribution towards understanding the role played by emojis as significant properties of the language of social media.

### **LITERATURE REVIEW**

In this modern age of technology, communication is as important as it was a millennium ago. Social media is glaringly persuading the way we communicate. Evans & et al (2012) said that “A picture is worth a thousand words ... and so is an emoji”. Emojis are cues that highlight, tribute, and give extra meaning to words. Evans & et al (2012) called emojis unquestionably the world’s first truly universal form of communication and also compare English with Emojis in this respect as English is an extremely informative beginning. He stated that “Emoji is, today, incontrovertibly the world’s first truly universal form of communication.”

Evans claims that “Emoji is the world’s global form of communication: It’s important that it should be representative of the global population.”

Emojis are epitomized by Unicode characters which are the modern form of emoticons. FTF communication is a combination of linguistics, paralinguistic and suprasegmental features. The introduction of emojis and smileys is a large addition to online communication settings and they replaced the user-defined linguistic affordance with predefined graphical icons. The colorful, expressive, and nonstandard pictographs are taking over the standard orthographic to express pure emotions which were only possible in human faces now are being conveyed through images successfully. Emojis are proficient to strengthen the effect and meaning of an unwritten message throughout the formation and clarification of a specified message and similarity streamline written messages (Walther & D’Addario, 2001; Crystal, 2001; Rezabeck & Cochenour, 1998; Braumann, Preveden, Saleem, Xu, & Koeszegi, 2010). Therefore, emojis are used as a strategy to represent the tone of voice in text-based CMC (Herring, 2001), whereas, Park (2007) analyzed emojis as graphic demonstration of interactive and emotional features expressed through gestures and facial expressions in an FTF setting, in CMC. However, Walther and D’Addario, (2001) found CMC because of the bandwidth boundaries of the communication channel. This scantiness is met with emojis, which are small pictures that express our feelings and emotions. Emojis are frequently used on all social media platforms e.g., Twitter, Instagram, Facebook, WhatsApp, etc., to provide social and emotional cues in written form.

Previously, computer-mediated communication and computer-mediated

discourse have fascinated researchers from different disciplines for instance communication, linguistics, and psychology. Naomi Baron was the first among scholars to talk about computer-mediated communication from a linguistic perspective. Her article about the properties of “computer-mediated communication as a force in language change.” was published in 1984. The utmost common and broadly used term in the literature of language-focused research is “computer-mediated communication”. Though, the bygone days have perceived the emergence and hasty development of many new communication technologies because of which some scholars use terms other than “computer-mediated communication.” Baron (2004) suggests the term “Electronically mediated communication” (EMC), whereas Thurlow and Mroczek (2011) propose the term “Digital Discourse.” Though these terms are still too broad yet the distinction between language and other forms of communication is not made clear. For all the languages uses in the electronic medium, Crystal (2011) put forward the term “Internet Linguistics”. Jucker and Dürscheid (2012), instead, state the term “keyboard-to-screen communication,”. Herring, Stein, and Virtanen (2013) consider this term too narrow as it excludes communication done via other technologies such as audio and video calls. Herring and Androutsopoulos (2015) defined computer-mediated discourse (CMD) as “the communication produced when human beings interact with one another by transmitting messages via networked or mobile computers, where

„computers“ are defined broadly to include any digital communication device”. They stress that the study of “computer-mediated discourse” that focuses on WhatsApp interaction mediated by mobile phones, is distinguished from the general interdisciplinary study of “computer-mediated communication” (CMC) as “its focus is on language and language use.”

Talking about individual diversity the use of emojis is regulated by demographic features and individual psychological features. Above all, there are noteworthy gender differences. Males and females are both familiar with the purpose of emojis. Emojis are used more frequently and favorably by women. Males use more emojis than females. This tendency, however, varies depending on the communication scenario. Women are more likely to utilize emojis in public communication than males are in private conversation. Females view emojis as more familiar, straightforward, and significant in terms of cognition. To boost emotional expressiveness, male users prefer to utilize the same emoji. The recipients experience distinct feelings when men and women use the same emoji. Women who send messages with affectionate emoji are thought to be more appropriate and appealing than males, whereas men who send messages with less affectionate but friendly emoji are thought to be more acceptable and beautiful. (Herring and Dainas, 2018, Prada et al., 2018, Tossell et al., 2012, Chen Z. et al., 2018, Rodrigues ET AL., Chen Y. et al., 2018, Butterworth et al., 2019).

In the past research has been done from many perspectives regarding emojis. Chris Fullwood 2007 precisely investigated how the use of emoticons varies with gender. While Chen et al., (2017), investigate and observe the use of emojis in 183

countries. As a result of this research, he concluded that gender difference influences the use of emojis significantly. Females use emojis more often and frequently in their chats (Chen et al., 2017). Females and males prefer a different kinds of emojis. For example; male persons use heart and love-related emojis more frequently on the contrary females use face-related emojis more often. More to this, males prefer to use emojis in private conversations while females use emojis publicly in a regular fashion on social media (Chen et al., 2017). Wolf in his studies reveals that female users are more likely to use emojis (emoticons) humorously and entertainingly on the contrary male users use emojis(emoticons) in a teasing and sarcastic way.

Individual psychological variations have also influenced emoji usage. There is a positive association between the frequency of emoji usage among Facebook users and their extraversion and self-monitoring qualities and a negative correlation between positive emoji use and users' emotional discomfort. The similarity score between emoji and oneself was connected with emotional stability, extroversion, and agreeableness out of the Big-Five personality characteristics, but not with conscientiousness and openness, according to an emoji-based personality test. Negative emojis were shown to be adversely associated with emotional stability, whereas good emojis were found to be favorably associated with extraversion. Furthermore, emojis connected with flushing (for example, yes) were linked to agreeableness. (Hall and Pennington, 2013), (Settanni and Marengo, 2015). (Li et al., 2018).

Oxford English Dictionary acknowledges the role of emojis in CMC by defining them in these words; “emojis are used to convey the writer’s feelings or intended tone”. Emojis are extensively used in internet communication but their role adds complexity to what is expressed. Herring and Dainas (2017) explored the discursive use of emoticons and emojis and devised a combined title for both of them “graphicons” and investigated their two major functions in CMC i.e., “nonverbal signaling” and “punctuation or structural markers”, compensating for the deficiency of non-linguistics cues in CMC. Rezabek and Cochenour (1998, p. 201) defined them as “visual cues formed from ordinary typographical symbols that when read sideways represent feelings or emotions” since then, they often have been construed as “indicators of affective states, the purpose of which is to convey nonlinguistic information that is conveyed in FTF communication through facial expressions and other bodily indicators” (Dresner & Herring, 2010, p. 251) for instance, embedding a smiling emoji in an utterance would compensate for the unfeasibility to physically smile. The core purpose of emoticons and emojis is the “expression of emotion” (Herring & Dainas, 2017) which had already been illustrated by Rezabek & Cochenour (1998, p. 201) “the combination of symbols (: - ) conveys the sentiment and emotions that a person has intended to convey i.e., pleased, happy, agreeable, or in a similar state of mind”.

Earlier on, work has been done in this domain (emojis) in a variety of fields such as Computer science, Communication, Marketing, Behavioral science, Linguistics, linguistics, Medicine, and Education. In the field of Computer science,

research on emojis has been done from the perspective of analyzing emotional and semantic meanings of emojis against maximum data, shift among emojis and other modes of communication, and emotional analysis of online data using emoji. The number of publications for emojis in the field of Computer science is 51 and the percentage out of total publications Computer science made is 30.18%.

The main topics investigated in the Marketing field were marketing activities and consumers affected by emojis and the advantage of emojis to measure the emotions of users. As a result of this research, the conclusion made was quite useful. the engagement of marketing activities can be enhanced by the use of emojis, moreover, it can bring them closer to the young generation. Emojis can also boost purchase intention and change the perception of brands. The number of publications for emojis in the field of marketing is 25 and the proportion of publications out of total publications is 14.79%.

## **RESEARCH METHODOLOGY**

### **Research Design**

This study follows a descriptive and qualitative research design in which the data will be analyzed and described thoroughly with detailed description.

### **Theoretical Framework**

Computer-Mediated Discourse is an approach proposed by herring in 2004 to research online behavior which is adopted as a framework for analyzing data, collected from a social media icon; Twitter to find out the syntactic role of emojis in online text-based communication. CMDA is a research approach that is applied to the data collected from the „online environment“.

### **Target Population**

CMC is a new trend in a virtual community and the new generation is in the favor of internet so everyone is under the effect of this modern trend. This study is based on the material collected from Twitter posts on public profiles by the researcher itself. Social media has formed a virtual community where groups and profiles are formed on multiple ideas and common interests i.e., religious, political, social, etc., sharing no geographical boundaries. Educated, learned, profession-based, and highly skilled intellectual level youth of social media is taken as the population for this study from the virtual community. The population consists of accounts and profiles of organizations, factories, researchers, singers, artists, footballers, cricketers, etc.

### **Sampling**

The material for this study is collected from an authentic social media icon i.e., Twitter. Total number of 10 accounts is selected using convenient sampling method and, in this method, population is chosen on basis of whoever, whatever is available. The probability sampling method is used in which each and every member has equal chance to be selected. The data collection procedure from social media icon is random and data is collected manually in the form of images and screen shots from the tweets of users. Authentic data is collected for the analysis which is counter verified via self-assessment and google research.

## Data Analysis

The data from social media icon Twitter has been analyzed qualitatively. The presentation of data is in qualitative form i.e., textual analysis and detail description. These findings are presented in concrete forms qualitatively to justify the objectives and research questions.

According to CMDA data sample must form solidarity to the study and the nature and the size of the sample must cover all the queries asked in research questions. The analysis should follow coding and counting approach that defines the concepts unambiguously, it enables other researchers to examine the same data that may reproduce the identification of a given token as an exemplar of the concept equally or more importantly, it is necessary to define a concept in concrete, textual terms in order to be able to code it consistently.







## DATA ANALYSIS

The data is collected randomly from public profiles and public groups of two social media icons i.e., Twitter and Instagram. The analysis is conducted on image-to-image basis which are given in appendix (A). The analysis focuses on two perspectives: Syntactic functions of emojis i.e., the role of emojis as syntactic categories, or emoji substitution as syntactic categories. Moreover, the data will be analyzed to search the role of emojis as phrases and sentences.

## ANALYSIS OF THE DATA




Emojis are particular images that can substitute words, phrases, and sentences. In this sense, we can say that emojis play some of the roles of syntactic categories. These roles are of different types like nouns, verbs, prepositions, and adjectives.

### Image No. 1






Emojis replace the syntactic categories of words as shown in the image (1) and yet the sentence conveys its meaning and communication is successful. The word „read“ is replaced by the emoji  and functions as the syntactic category verb, the word „write“ is a verb that is replaced by the emoji  and this emoji act as a verb. The word „people“ is substituted by the emoji  that plays the role of syntactic category noun. The American flag emoji  substitutes the word „America“ and act as a noun. The globe emoji  fulfill the function of the word „world“ and act as a noun and the emoji „“ play the role of the word „graduation“ and fulfill the function of syntactic category „Noun“ in the tweet. The user is telling about her research she conducted on people across the globe about their view on graduating from America and she uses emojis instead of words to convey the message which was quite clear and understandable. These emojis successfully replace syntactic categories.

### Image No. 2






As shown in image (2) the emojis  and  collectively replaces the

number „40“, the emoji  substitutes the word trophies and function as a noun, the emoji  replaces the word „football“ and play the role of the syntactic category noun. The emoji  represents country name „Argentine“ that is a noun also and the emoji of flag play the function of syntactic category noun. The user shares the victories of football player Lionel Messi that he has won 40 trophies in his whole football carrier till now as the representative of the country Argentine and he uses emojis in replacement to many syntactic categories to share his views.







### Image No. 3



As shown in image (3) the person is sharing a view on the hottest topic of the time i.e., the increase in the prices of petrol globally. In this tweet, the emoji  represents the country „Russia“ and it plays the function of syntactic category noun. The emoji  represents the country „Ukraine“ which also functions as a noun. The emoji  also fulfill the role of a noun as it represents „the globe“ and substitutes the word „global“. The emoji  represents the idea of a petrol pump while replacing the word „petrol“ and act a category of noun. The word „inflation“ which is also a noun is substituted by the emoji „“ and this emoji plays the function of a noun.

### Image No.4

As shown in image (4) the researcher shares a view about his study on rats, the study has been done in the field human science i.e., Biology. The emoji „“ replaces the word „rat“ and plays the function of syntactic category noun. The word „alcohol“ substituted by the emojis „“ and „“ which plays the role of noun. The word „drug“ substituted by the emojis „“ and „“ which plays the role of a noun.

### Image No. 5

As shown in image (5) the user belongs to the field of Chemistry and shares his experiment and research and its results. In this tweet the user uses emoji „“ as a substitution for the root word „crystal“ in the word „crystallography“, the researcher substitutes the root word with emoji while using the suffix „-lography“ and made a new word consist of an **emoji and suffix** and the diamond emoji plays the role of syntactic category noun. The emoji „“ substitutes the word „search“ and fulfills the function of a syntactic category verb. The emoji  replaces the word „level“ and plays the function of syntactic category noun. The emojis  and  collectively used as a substitution for the word „weapon“ and function as a syntactic category noun. The emoji  is used as a replacement of the word „plant“

and fulfill the role of syntactic category noun. The emoji  is used three times and is used in place of the word „cost“ and act as a syntactic category verb. The emoji „“ is an emoji showing French fries which are made of potatoes and this emoji replaces the word „potato“ and play the function of a syntactic category „noun“. The

emoji „🍅” substitutes the word „tomato” and fulfill the role of a syntactic category „noun”. The emoji „🌍” is used in place of the word „globe” as it represents the Earth and plays the function of syntactic category „noun”.

#### Image No.6

In image (6) the 🇮🇹 replaces the name of a country „Italy” and the emoji 🇦🇷 replaces the name of country „Argentina” and both these flag emojis replace the syntactic category of

„Noun” and fulfill its function. The emoji ⚽ is used as a substitution of the word „football” and plays the role of syntactic category noun. The emoji 🏆 replaces the word „trophy” and act as a noun. The emoji 🏟️ replaces the word „stadium” which is a noun and the emoji functions as a noun. The user is sharing the memory of a football match that happened back in 2020 between Italy and Argentina in Wembley stadium.

#### Image No. 7

In the image (7) the handball player writes back-to-back and the emojis „🏆”, „🥇” and „😄” adds meaning to it as these emojis express victory. The emoji 🏆 expresses the world cup trophy. The emoji 🥇 expresses „Gold medal” which is also a sign of victory and the emoji 😄 expresses excitement. The player tells his fans about his back-to-back victories by using these emojis. Without these emojis he would be unable to convey the meaning and audience will be unable to understand his intended meaning. These emojis play the syntactic function as these emojis replace the idea of/the word „victory”.

#### Image No. 8

In image (8) the user shares a video of travel to the hill station with a caption in which he conveys message and communicates with his audience using emojis. The

emoji 📶 is used as a replacement of word “up” and fulfill the role of syntactic category preposition. The mountain

emoji 🏔️ is used as a substitution of word „Mountains” and function as a noun.

The plus sign emoji + fulfill the role of conjunction by successfully replacing the


word “and”. The national park emoji 🌲 replaces the word “valleys” and fulfill the

properties of a noun. The emojis ☁️ and 🙌 and are used to show modify the word peace.


#### Image No. 9

In image (9) the user shares a picture of Football player Cristiano Ronaldo working out with the caption „no days off for CR7 💪”. The emoji „💪” expresses the idea of strength, workout, and hard work.

### Image No. 10

In the image (10) the user shares the information of goals scored from 25+ yards out by two football players from two different teams. The user uses the flag emoji of a country Portugal „“

“ which shows that the first player scored 15 goals for Portugal and also uses the flag emoji of

Argentina „“ which shows that the second player scored 4 goals for Argentina. Both of the flag emojis function as a noun.

### CONCLUSION

Emojis are ubiquitous on social media platforms. In recent years, the use of emojis has become general and common. Emojis are used widely on social media platforms such as Facebook, Twitter, Instagram, WhatsApp, Tinder, Snapchat, etc. Though emojis have become an integral part of day-to-day communication, this study focuses on the syntactification of emojis. The study entailed an analysis of 10 screenshots comprised of posts and tweets of Twitter users. The data contain emojis in various placements which revealed that social media users have adopted emojis to fulfill the syntactic role of emojis. Syntactification of emojis is an important factor to consider and highlight because there is hardly a single text in computer-mediated communication that does not include emojis. In this study we find emojis at the subject place and object place in the syntactic category of a noun while they are also part of verb place so, they can be recognized as a part of the S, V, and O categories (Subject, Verb, Object). The function of emojis is not only limited to these categories but emojis also play the characteristics of phrases in the selected Computer-mediated data. The emojis replace different phrases which include noun phrases, verb phrases, prepositional phrases, etc. Furthermore, emojis are also characterized as adjectives, adverbs, prepositions, conjunctions, etc.

This study aimed to find out the use of emojis as syntactic categories in online text-based communication. This study specifies Twitter communication. According to CMDA, CMC users manipulate the grammatical rules to meet their communication needs which are analyzed in this study where various strategies such as omitting orthographic words to add graphic images, repeating the same emojis, mixing different emojis, emoji aspects, etc. are used. This study focuses on the functions and roles emojis play as syntactic categories. This study emphasizes the utilization of emojis to convey more meaning in phatic talks than orthographic words and that is why Twitter is used as a medium to collect data because Twitter has scanty space and limits the use of words for the users. Social media users adapt emojis to compensate for lack of space in terms of word limit and communicate more with less.

### REFERENCES

Al Rashdi, F. (2018). *Functions of emojis in WhatsApp interaction among Omanis*.

- Discourse, and future perspectives.* *Frontiers in psychology*, 10, 2221.
- Bai, Q., Dan, Q., Mu, Z., & Yang, M. (2019). *A systematic review of emoji: Current research and future perspectives.* *Frontiers in psychology*, 10, 2221.
- Baron, N. S. (1984). *Computer mediated communication as a force in language change.* *Visible language*, 18(2), 118.
- JIN, Y., DENG, C., WU, P., ZHENG, P., & AN, J. (2017). *Emoji image symbol's social function and application.* *Advances in Psychological Science*, 30(5), 1062.
- Crystal, D. (2011). *Internet linguistics: A student guide.* Routledge.
- Evans, M., Donelle, L., & Hume-Loveland, L. (2012). *Social support and online postpartum*
- EVANS, V. (2017). *Why You Need Emoji. Emojis are the body language of the digital*
- functions.* *ACM Transactions on Social Computing*, 3(2), 1-26.
- Herring, S. C., & Dainas, A. R. (2020). *Gender and age influences on interpretation of emoji functions.* *ACM Transactions on Social Computing*, 3(2), 1-26.
- Herring, S., & Dainas, A. (2017). *"Nice picture comment!" Graphics in Facebook interpretation in computer-mediated communication.* *Social science computer review*, 19(3), 324-347.
- Jucker, A. H., & Dürscheid, C. (2012). *The linguistics of keyboard-to-screen communication. A new terminological framework.* *Linguistik online*, 56(6/12), 1-26.
- Lupyan, G., & Dale, R. (2016). *Why are there different languages? The role of adaptation in linguistic diversity.* *Trends in cognitive sciences*, 20(9), 649-660
- Rezabek, L., & Cochenour, J. (1998). *Visual cues in computer-mediated communication: Supplementing text with emoticons.* *Journal of visual literacy*, 18(2), 201-215.
- Thurlow, C., & Mroczek, K. (2011). *Introduction: Fresh perspectives on new media*
- Thurlow, C., & Mroczek, K. (Eds.). (2011). *Digital discourse: Language in the new media.* Oxford University Press on Demand.
- Tossell, C. C., Kortum, P., Shepard, C., Barg-Walkow, L. H., Rahmati, A., & Zhong, L. (2012). *A longitudinal study of emoticon use in text messaging from smartphones.* *Computers in Human Behavior*, 28(2), 659-663.
- Walther, J. B., & D'addario, K. P. (2001). *The impacts of emoticons on message.* A new terminological framework. *Linguistik online*, 56(6/12), 1-26.
- Nautilus.