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EMOJIS IN NEW MEDIA RHETORIC AND THEIR HISTORICAL ANTECEDENTS

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Emojis In New Media Rhetoric And Their Historical Antecedents

Yeni medya Söyleminde Tarihsel Öncülleriyle Emojiler

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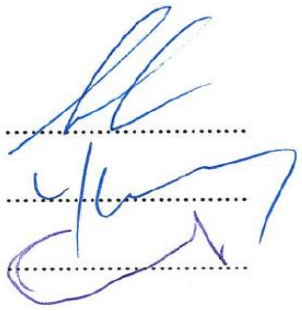

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ÖZET

Teknolojik gelişmeler hayatın her alanında hızla artarken, insanın doğası aynı kalmaktadır. İnsanların davranışları, değişen teknolojiyle birlikte yeniden şekillenir. Elektriğin icadı ile, elektrik sadece yaşam alanlarını aydınlatmak için kullanılmadı, aynı zamanda iletişimi kolaylaştırmak için kullanıldı.

Bu değişen davranışlarla uyumlu olarak, günümüzde, dijital iletişimin ortaya çıkmasıyla, iletişim cihazları da değişiklik gösterdi. Temel insan ihtiyaçlarını yeni sistemlere uyarlamak için yeni iletişim araçları icat edildi. İnsanlar birbirleriyle elektronik cihazların ekranları ardından iletişim kuruyor ve bu iletişimlerini emoji ile renklendiriyorlar. Emoji kullanımı iletişim dilinin kullanım şeklini de etkiliyor. Bu durum, emoji yapısının, dil olup olmadığı gibi çeşitli tartışmalara da konu olmasına neden oluyor.

Emoji protokolü ve standartlarını belirleyen Unicode, emojinin gerçek bir dil özelliği göstermesini kısıtlamaktadır. Ancak, aynı zamanda bu kısıtlama, emojiyi, başka hiç bir dilin olamayacağı kadar küresel kullanıma eriştirerek, diller üstü bir yapıya evrilmesine de yardımcı olmaktadır.

Dil, olup olmadığı tartışmalarının yanı sıra, emoji sıfırdan yaratılmış değildir, Insanların duygularını ve düşüncelerini iletme ihtiyacının bir parçası olarak, geçmiş tüm iletişim deneyimlerinin toplamı olarak ortaya çıkmıştır. Görsel yapısı, kullanıcının bir duygu veya tepkiyi kolayca anlamasına yardımcı olur. Ancak Emoji'yi iyi anlamak için, atalarını da iyi anlamak gerekir.

Anahtar Kelimeler: Emoji, hiyeroglif, emoticon, görsel yazım sistemleri, CMC, EMC

ABSTRACT

Technological developments are rapidly growing for nearly every area of human life while the nature of human being remains the same. And the behaviors of people have been shaped by these technological changes. With the invention of electricity people were not adapt it for only their living spaces but they also used it to ease their communication.

Today, concordantly with these adaptive behaviors, with emerge of the digital communication, the communication devices has also changed. And new communication tools have been invented for adapting the basic human needs into new systems. Individuals are now communicating with each other behind the screens and enjoying emojis to express their emotions. The use of emoji is affected the usage way of the languages, which caused lots of controversial arguments such as if its structure, language like or not.

The emoji protocol, Unicode Consortium limits the Emoji to become a true language by itself. However, these restrictions helped the emoji become above languages. It can be accepted as a universal extension which reached global usage that no other language could be.

Besides being language like or not, emoji was not come up from ex nihilo, it emerged as a sum up of the all experience of human being to transmit our feelings. The visual structure helps the user understand a feeling or a response easily. To understand emoji well, it is needed to understand its ancestors.

Keywords: Emoji, hieroglyphs, emoticon, visual communication systems, CMC, EMC

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INTRODUCTION

Before the electronic mediated communication systems emerged, people have written letters to communicate with each other's. Letters are not just a communication tool, but also a literary writing process as being able to reflect the writers' thoughts and feelings in a subjective way which is also accepted as a genre of literature. In that era, people had more time to make something slowly compared with today. So, they had got enough time to write letters to express their thoughts and feelings accurately with selected words carefully. Moreover, receivers had time to read the letters several times to internalize the message of it. The delivery time of the letters was generally taking long times. Having sufficient time, supported to the long letters writing and large vocabulary inventory usage which also has been prevented to giving cursory or instant reactions.

As the history shows, different cultures, tried different solutions on different media to express themselves in such as from the earliest writing forms cuneiform, hieroglyphs to rebus writing systems to alphabets of Kanji, Hangul, Hiragana, Katakana and Chinese to constructed systems, and from Isotypes, Pitman's shorthand, Textese, Leibhiz's or Blissymbolics to Esperanto, Hobo sign language and the yellow smiley face, ASCII, typewriter art, Kaomoji, emoticon and finally emoji.

With emerge of EMC, distance problem has solved, people able to commutate with each other instantly as in face-to-face communication. At the beginning of, digital written communications were lack of emotional expressions, mimicry, appraisal, pragmatics, and intention which was the main reason of the emoticon invention. People managed to close the gap for expression limitation of written communication with the graphic icons.

Computer mediated communication (CMC) increased enormously over the last two decades, people get used to communicate via CMC systems through chat

programs, email systems, social media platforms and so on. These electronic interactions become essential part of our daily lives not only in professional area but also in personal area. It helps to us maintain our relationships with others (colleagues or friends and family members) who are in different locations.

Tiny colorful pictographic icons which are called as emoji have been nearly sine qua non of our daily electronic communication. While Shigetaka Kurita who is the employee of DoCoMo, one of the Japanese cell phone manufacturers, designed emojis at the end of the 1990s, it is hard to say that if he expected such a spread, but these symbols have become incredibly popular. In 2015, Instagram reported that 40% of all messages posted on Instagram consist of emoji and SwiftKey Keyboard application also reported that 6 billion messages per day contain emoji in mobile communication. Based on the report of Emojitacker who collected to Twitter data between 2013 and 2016 and analyzed 1% of them, over 15.6 billion tweets contain emoji.

As the numbers shown, usage penetration of emoji is increased amazingly day by day! And of course, this is not surprising, communicating and expressing ourselves are the basic need of human being. Compared to the face to face interaction, computer / electronic mediated communication (CMC / EMC) criticized mostly for being lack of presence of the gestures, facial expressions, intonation or body languages which are present in face-to-face communication.

We have lots of opportunities for virtual interaction in digital society and emoji is the most popular way for clarifying online communication. These pictographic icons fulfil our expression need in a not only cute but also practical way in CMC.

Emoji function in CMC is, mainly helping to successfully convey our messages in the absence of the features of face to face communication. According to a socio-linguist, Lauren Collister, emojis can be considered as discourse particles which they can use for eliminating potential misunderstandings (L. Collister 2015).

Emoji function as communication is not limited to substituting non-verbal cues. But also, Emoji has a function that is above all languages, it can be used with all known languages without any alphabet restriction. It behaves like an extension that can be applied to any language on digital media.

Emojis are in the making of a universal language. Considering that Oxford dictionary accepting the “face with tears of joy” emoji as the word of the year in 2015, we can assume that an emoji by itself can be considered as a word, while it is just an image.

Is emoji a new language or a new form of communication method that already exists? Is it a technological advancement or a unification of history and technology? Are these small icons that are designed to transmit the feelings, capable of doing what they are designed to? Can they express the seven primary feelings that Ekman has propounded? Are there any solutions within emoji for the rest of the feelings?

Discussing emoji only with its usage or its feeling-transmitting perspective would not be enough to answer these questions. For this reason, I wanted to find answers starting from the beginning of the new media. I wanted to find out the similarities and the differences between the usages of language structures, and conveying emotions, and get a perspective from these differences.

For this I did my search from present to the past. With the construct that the history is not linear and with the help of archival research methods, I tried to understand today’s Emoji and tried to reveal the pioneers of it. I looked for the similarities between Emoticons, old pictographic and ideographic communication and writing systems. I examined the works and researches about these subjects and discussed the comparative findings.

The emoji also tries to undertake some functions of all previous visual and graphical communication systems as a modern version of them. The precursors of emoji were not defined from only a historical perspective, but also assessed by

considering the similarities of structural similarity, purpose of use and pragmatically. The roots of emoji searched in a wide variety. And the possible ancestors are defined step by step from the starting point of emoji which are kanji, manga and isotypes.

1.1. LITERATURE REVIEW

Like previous works and researches on the subject which examined not only emoji perspective but also emoticons related works considered together and merged in the same pod at the same time, in this thesis I do the same due to their similarity in use. Other researchers also adopt this perspective; they mostly address these two different terminologies in the same concept. Moreover I consider the emojis as a successor of emoticons as Novak et al. described in their work. (Novak et al. 2015)

I classified the previous works into their working areas; even emoji is a new concept there are several works conducted in last years, most of them examine the emoji or emoticons in usage perspective as an expression of nonverbal cues, sentimental means, interpretations and language.

Despite the popularity of emoji, they are still poorly researched compared the other researchers about media & communication topics. The existing literature on a processor of emoji and language aspect is limited whereas a significant amount of research exists in the fields of analysis of emoji usage.

1.1.1. EMOJI AS A NONVERBAL CUE

Emojis play an essential role in digital media for maintaining the personal relationships. As their name inform very clearly emoji and emoticons can be considered as the indicators of emotions which are directly onto facial expressions.

From starting with Ekman (1977) who has searched the emotions worldwide and found that the underlying emotions of human being like “disgust, fear, anger, contempt, sadness, surprise, happiness” triggers the same expression patterns globally based on several factors such as age, location or nationality and they are statistically predictable. So facial emojis could be taken as a representation of facial expressions in CMC.

Regarding to a survey which is conducted by Derks, Fischer and Bos (2008) emoticons largely function as non-verbal cues do in face-to-face communication in CMC. Based on a compilation of works about the emoticons and their effect on the facial expression from Fridlund, Ekman and Oster, the emoticons express spontaneous and vivid emotional attitude.

Kelly and Watts (2015) explored that emojis more than only shown emotional expressions in digital media; they are also used for transmitting and modify the meaning and emotions of the selected words.

Stark and Crawford (2015) believed that emojis acted as enthusiastic forms of social expressions when the practical use of emojis focused on the normalization, capitalization and focus of the effect of the online interaction of human social relations.

Zhu (2015) said that emojis used for expressing the emotions in text-based communication which is changed the attitude toward how people perceived the message in emotional and attention level in new media.

Lu et al. (2016) believe that the emojis reduces the input effort with their compactness and they can convey the ideas and emotions more vividly with their rich semantics.

Chairunnisa and Benedictus (2017) said that people believe and hope that while not communicating face-to-face the other person still understands their feelings, thoughts and impressions. This is something that emojis make possible, it helps to understand and improves communication.

Kyle, Malone, and Wall (2017) believe that emojis have become popular for clarifying online communication. They say the use of emojis bring out certain psychological concepts such as emotional expression, mimicry, appraisal, pragmatics and intention.

Linda Kaye, Helen Wall, and Stephanie Malone conducted several studies on

different platforms including SMS, social media and email with young people to understand how and why people use emoticons and emoji along with their impressions.

In “Expressive Signals in Social Media Languages to Improve Polarity Detection” Federico Pozzi, Vincenzina Messina, and Elisabetta Fersini try to describe expressive forms in text-based communication in sentimentally. They also consider emojis as a part of this. According to authors, emojis are considered as a pragmatic particle of “facial expressions in speech,”

Bavelas and Chovil worked on nonverbal behavior to describe visible acts of meaning. According to them, visible acts have four criteria; being sensitive to a sender-receiver relationship acts symbolic, has a contextual meaning, and always integrated with the accompanying words.

Burleson & MacGeorge (2002) studied the social support needs of young people in online interpersonal communication. They found out that social support can help in assisting students to deal with stress.

Regarding Bliss-Carroll (2016) taking emojis from only one dimension is basically underestimation of their ability. They believe that emojis can serve as emotion signifier, intention clarifier and self-identify mediator. They also convey a series of personal emotional expressions in a more attractive way and are ready to be accepted by many as a "new universal language".

1.1.2. LANGUAGE LIKE

There is an ongoing discussion about emoji-based communication to be considered as a new language or not. Some researchers are still being done about if emoji usage has the attributes of a language.

Danesi says that this discussion starts with investigating the punctuation-like nature of emoji. Also, Markman and Oshima (2007) and Dresner & Herring (2010) mentioned the sentence-ending role of emoticons.

Dürscheid and Siever (2017) also discuss if emojis can be considered as a universal language but say that the probability is low because of the fact that emojis by their simple nature cannot convey complex matters.

Tyler Schnoebelen is a linguist who wrote his Ph.D. thesis about emojis and noticed a pattern in emoji usage by the analysis of millions of tweets. He found out that emojis tend to appear at the end of text messages. Tyler Schnoebelen discovered the usage of emojis divide into two main categories: either they can be thematic, or they tell a short linear narrative.

Vyvyan Evans (2018), a professor of linguistics evaluates the emojis within 360-degree perspective from the beginning of communication history and the emoji being a language like in his “The Emoji Code” book. This book is not just about the similarities between Emoji and language, but also their differences.

He alleged that language is always evolving based on its dynamic and flexible structure. However, emojis differentiate the language from this point “Linguists and lexicographers cannot regulate and maintain the associated meaning of emojis and emoticons, due to their rapid, daily introduction/evolution.” He also says that emoji could be considered as modern hieroglyphics because of its semiotic attributes. The idea of communicating sentiment or emotion in print is an old concept and holds its beginnings in typography.

Professor Marcel Danesi, the writer of The Semiotics of Emoji, says that emoji is the world's fastest-growing form of communication. He also asks several questions like, if emojis are making us dumber or not or can they replace the daily language itself. His book is an important reminder of the limitations of language and sound, and how much visual symbols can aid human interaction and add to the richness of communication. These images which have emerged as a compensatory universal language convey a complexity of emotions which cannot be translated into words easily.

Neil Cohn (2015) disagrees with the fact that emoji are becoming a new language

due to its lack of grammatical rules and limited vocabulary. As people cannot make up new emojis; this is an ability belonging to Unicode Consortium.

1.1.3. SENTIMENTAL MEANS

Besides whether being language or not, sentimentally meaning of emoji also argued frequently.

Within their studies, Walther and D'Addario (2001) found out that their participants highly agreed on sentimental interpretations of the three emoticons which are :-) and :-(and ;-).

Davidov, Tsur, and Rappoport (2010) worked with Amazon Mechanical Turk participants in their study. They found out that when presented with tweets in which emoticons had been removed, participants were able to identify the original emoticon that has been removed.

Kralj Novak et al. (2015) analyzed over 70.000 tweets written in 13 languages sentimentally. They came up with a sentiment distribution consisting of 751 emoji characters. Their research showed that emojis were "tools" that reflect human sentiments, which was observed when sentiment classification models could be created and applied to.

Tian et al. (2017) say that positive emojis are more common in use than negative ones.

According to Gullberg (2016), emojis can be used to respond incoming messages from others in a polite way with it sentimental meaning which may not need a long reply.

1.1.4. INTERPRETATIONAL - HERMENEUTICALLY MEANS

An emoji does not stand for a single meaning. The meaning of an emoji being used depends on the context and the cultural variety.

Walther and D'Addario (2001) found that a negative emoticon usage can change the interpretation of the message.

And Lo (2008)'s study supports this finding showing that the same text can be perceived as either happy or sad depending on which emoticon accompanies it.

Liebman and Gergle (2016) demonstrated that emoticons are important in interpersonal relationship development over text-based communication.

Danesi (2017) examined the connotative and direct interpretations in the context of facial emoji.

Miller et al. suggested a psycholinguistics theory states that misunderstandings may occur in all kinds of communication. These misunderstandings are heightened in emoji-based communication because emoji may not have a meaning set or the meaning is presently developing. Although Unicode tags offer intended meaning of emoji, it is not guaranteed that the same meaning will be shared among the users.

Eisenstein and Pavalanathan (2016) claim that increased emoji usage caused a decrease in emoticons. Having access to a lot of colorful and expressive images, made users prefer emojis against emoticons.

In "Toward a Textualist Paradigm for Interpreting Emoticons" John Ehrett mentioned the necessity of interpretation for emoji and emoticons because of the clear understanding for legal purposes.

Thompson and Foulger (1996) found that aggressive messages which contain positive emoji can change the perception of the hostility level.

C. Kelly (2015) searched the emoji usage of university students and found that they use the emojis to increase the understandability of their message and 70% of them interpreted the message based on the sender.

Like C. Kelly, R. Kelly and Watts (2015) also claimed based on a quantitative study that people use the emoji for a sustaining the interactivity of communication and making the conversation more fun and intimate.

1.1.5. CULTURAL VARIABILITY

Lu et al. conducted research about emoji usage across more than 200 countries to reveal the differences & similarities between them. They found out that there are great similarities in the emoji patterns used by the same language speaking countries.

In “Emoticon Style: Interpreting Differences in Emoticons Across Cultures” , Jaram Park, Clay Fink, Vladimir Barash, and Meeyoung Cha say that the usage way of emoticon mostly similar among friends compared to same language speakers.

At last, Barbieri et al. (2016) made a comparison between the interpretation of emojis among different languages and they found that the meanings of the commonly used emojis are the same in all languages.

Besides these studies, some researchers considered the emojis from different angles such as; Andral and Larroque (2016) mentioned that emoji could be used as marketing tools to improve the brand image and increase the consumers’ interest towards the company.

Moreover, according to Pele (2016) “Artists have transformed several famous children’s stories into emoji posters, Bible has also been anonymously translated in emoji. In the context of broken English and visual culture, social media users adopted emojis as means of expression. Worriers fear that, in the existing ripe conditions, we are witnessing the demise of written English.”

CHAPTER 2

2.1. THEORETICAL BACKGROUND

Examining emojis in new media rhetoric with their historical antecedents offers extensive range area to search. As a subject matter, it is difficult to stay on a single focus such as only semiotic, semantic or pragmatic usage of emojis. To shed some light on the historical presence of emoji I used archival research methodology with the light of mainly Foucault's genealogy theory.

Genealogy offers a fundamental review of the present with a not only historical perspective but also investigative method. Genealogy works on the boundaries of what people think, not only reveal these limits, it also reveals the spaces of freedom that humans can yet experience and the changes that can still be made. (Foucault 1988). As Maria Tamboukou described “Genealogy conceives human reality as an effect of the interweaving of certain historical and cultural practices, which it sets out to trace and explore. Instead of seeing history as a continuous development of an ideal schema, genealogy is oriented lo discontinuities.” Moreover, it provides conceptual tools to help people to understand how historical forces shape critical forces and assets to analyze and reveal the relationship between knowledge, power and human subject in modern society. (Tamboukou, M. 1999)

While searching the emoji’s trace of the past which is the part of our day-to-day communication, leaving the ‘communication historiography’ out of the scope would be made the research as deficient. As a communication method, emoji is a part of communication historiography.

So, genealogy together with the communication historiography, according to Peter Simonson, Janice Peck, Robert T. Craig and John P. Jackson’s views “Communication history is at once a new field and a very old practice” so it should be considered beyond the genealogical reconstruction as. “They believe that the communication historiography includes all related areas such as practices, ideas, institutions, processes, communicative expressions, circulation and so on, to

recognize and identify its power and concerns for reaching the operative understanding" (R., M., Briggs 2016).

In 'Communication Research Methods' Gerianne Merrigan, Carole L. Huston and Russell Johnston assert "Historical research is often necessary to bring disparate sources together and to reconstruct a view of the past that otherwise may be lost to memory" (Merrigan et al., 2012).

Moreover, these methods also exist in computer-mediated communication. Dr. Donald G. Godfrey the writer of "Researching Electronic Media History," claims that the history of electronic media which contains both mobile and computer-based communication is just like other historical research.

I tried to examine the emojis and its historical background on new media in communication historiography perspective. Historically grounded method it is not itself free from the influencers of the societal framework. Moreover, this will help me to be used and merged different theories to reach a holistic view for emoji.

CHAPTER 3

3.1. HISTORY OF EMOJI AND EMOTICONS

3.1.1. WHAT IS THE EMOJI?

As a word, emoji is came from the kanji which is a made-up word and reproduced from Japanese “e” (絵) for picture and “moji” (文字) for the character. It can also translate as pictograph which refers to actual pictures or icons.

They are used for expressing our thoughts and emotions via our messages in new media. These pictographs can be added in anywhere of the text area like special characters of other languages alphabets with their special keyboard. So, this graphic writing (both logographic & pictographic) system is the sort of combination of pictorial and text-based communication.

As the all other communication tools, they serve the same purpose: to be understood, which is the one of the basic need of all human being.

3.1.1.1. The Origin of Emoji

Emoji is originally designed for mobile communication. It started with a heart and telephone shaped icons, which added to NTT DoCoMo’s Pocket Bell beepers for especially young users to made them show their positive feelings in the short messages within a cute way in 1995. This decision increased DoCoMo’s market share about 40%. Next year they added a cup of coffee and a clock to their new generation devices. These four images can be count as the precursors of Emoji.

Figure 3.1:NTT DoCoMo's Character Set in 1995

In 1997, NTT DoCoMo decided to dismiss the heart shape in order to be perceived more business-friendly and they added to their device kanji and Latin alphabet support. This business strategy has made the young people who are the core customers of NTT DoCoMo's look for new alternatives. Because among all four images only heart symbol had given to users to show their emotions and chance extend their conversations in various types. So DoCoMo's market share was dramatically decreased. They noticed that they misinterpreted the consumer's expectations. They have needed to find a proper and attractive solution to get back their customers. So, they came up with Emoji!

In 1999 Shigetaka Kurita who was one of the developers of I-mode which was a primitive mobile application platform for sharing information, like weathers and news. On those days cell phones have limited visual space on screens. This limitation forced him to find a better way to show this information as an old employee he was lived the golden era of heart shape on NTT DoCoMo. So, he designed 176 picture characters in the light of his past experience which are accepted the roots of the today's Emoji.

3.1.1.2. The Three-Legged Stool of Emoji Design

Shigetaka Kurita expresses his creation progress as "From the perception that the heart is a particularly important pictorial symbol, I wanted to prepare several variations. The 'Broken Heart' had been used for a long time, and it was adopted as one emoji easy-to-understand. The 'Beating Heart' expresses an excitement

feeling by shaking the heart, and the 'Two Hearts' emoji had not a specific intention. I made it as a nice design variant of the heart."

Kurita's emoji set even seen as a far cry from the today's that we used ones; they can be accepted as the roots of the emojis which we used to use. We can say that the characters in the standard emoji set in today especially related with facial expression are related entirely with the Kurita's Manga love.

Manga is a term which refers to the Japanese comic-like art which uses the metaphorical narration a lot. He inspired from the "manpu" -the Manga symbols- with its keiyu (metaphorical figure) and kouka (effect symbols). In manga these manpus may represent a visual metaphor like a light bulb on the head for visualizing the idea or circling birdies after head trauma and they may convey any physical or psychological states with exaggeration such as huge sweat drops for under the stress or embarrassment moments (Wallestad, 2013).

Figure 3.2: "The drop" is the one of the most used Keiyu Manpu (Wallestad, 2013)

Besides manga, Kurito also inspired from infographics which were invented by Otto Neurath in 1920's. Otto Neurath created an iconic visual system to be understood easily by everyone which was known as Isotype. These isotypes can be described primarily as universal symbols for public areas such as park sign, toilets, non-smoking area, etc. (Burke, C et al, 2014)

As lastly that Kurita was inspired from Kanji; one of the three Japanese writing system which based on logographic Chinese characters. Using Kanji gave him the opportunity to show abstract ideas within a single character.

3.1.1.3. The Evaluation and Spreading of Emoji

Of course, DoCoMo was not the only player in the Japanese telecom market and its competitors had adopted the emoji into their systems. The craziness of communicating with these cute icons would not be limited to Japan alone.

In 2007 Google took the first step in the standardization of emoji by giving a petition to Unicode which provides the standard and consistent use of text characters and symbols in the world of computer software which is actually & basically consist of 1 and 0.

In 2009 Apple followed this step. Moreover, as a company who sensed the opportunities earlier, they adapted the emojis which are taken from Japan market to their own operating system which known as IOS. By 2011 the emojis became a standard feature on Apple's phones and tablets. Windows tried to catch this trend in 2012 with Windows 8 but its full capacity utilization completed on 2015 with Windows 10. The Android operating systems including Samsung were one of the latecomers to emoji world until 2013 emojis did not standardized.

The peak point of emoji spreading came through with the Oxford Dictionaries "word of the year" announcement which was not a word it was an emoji! This decision can even be interpreted as the entrance to the classic written literature of the symbol of the electronic world. From that moment emojis could not stay as the cute emotional indicators of personal electronic communication. It started to use a lot in both social and communicative spaces in new media by public figures and influencers.

At the same year the communication platforms of the new media gave new dimensions to use of emoji. Twitter was one of them. It designed special emojis for special occasions such as emojis for Pope Francis America visit.

3.1.1.4. Protocols and Standardizations

The Unicode is a consortium which provides network standardization for computer-mediated communication protocols, allowing a client to access message consistently which are sent through servers with the help of a program. This institution assigns unique numbers to each character for ensuring the same understandability of these characters between any program, device, platform or language without need any compatibility between them. It can be simply defined as a system that allows the fonts shown the same way in different programs or as a system that allows the read a mail in Gmail which is sent from Outlook.

Before the seeking the answer of where Unicode stay in emoji world, to take a look at the situation of the emoji before Unicode would be useful. At the beginning of the 2000s, emojis were only limited with Japan market. Every mobile vendor was developed their own standards without thinking any unity between other vendors' devices. This incoherency caused several problems such as an emoji which was sent from a mobile vendor could not be shown in other vendor or platform.

The Unicode (universal - code) association -which is deemed initially for text standardization- was notified of the pictographs of NTT DoCoMo in 2000. After the Google & Apple's requests in 2006 finally the emojis were included formally as of version 6.0 in 2010 into Unicode. Moreover, so, via this standardization, emojis have come out of from Japanese citizenship and became the world citizen. A standard has been developed even for non-standard usage, the question mark symbol into the box has been set for emoticons that cannot be read on another platform (□?).

The emojis which were started off with Kurita's 176 emoji designs in 1999, entered to Unicode 6.0 with the purpose of standardizing mobile communications with 722 characters in total 114 of 722 characters were country flags. The standardization of emoji has increased its usage in different countries on different devices and programs. This fast-growing usage revealed different

emoji needs of different cultures.

To fulfill these needs, international markets and big players of these markets requested additional designs for emoji from Unicode. With these demands, nearly 250 new emoji have been added to Unicode's version 7.0 and 41 new emoji designs have been added to 8.0.

Finally, with the new emojis that were added to the Unicode 10.0 version in July 2017, the number of emoji included in the standards was 2777. However, standardization which is completed by Unicode does not mean that all these emojis are in use, for example, gender diverse emojis exist in Unicode since 2010. Yet they have been not activated until Apple's IOS 10 in 2016.

Unicode's emoji code can be considered in two dimensions. The first one is the technical indicators for the numeric expressions in the hexadecimal system in the form of "u '\ u0001f633'" or "u '\ ud83d \ ude33'" and the second one is the representation of these unique codes into graphical glyphs like "  ." While the technical part is directly related with Unicode itself, the issue of how to display these glyph-like graphical icons are in vendors' space. Each vendor should decide how they display these icons in their systems, platforms or programs. They are obliged to notify their decision to Unicode. Since the emoji icon designs reflect the different vendors' decisions like Apple, Microsoft, Facebook and Twitter, the same hexadecimal form can have different display variation on different platforms.

Figure 3.3: Emoji in Corresponded Platforms (Unicode.org)

Although the general frames of the standards of emojis are defined, these standards seem to continue to expand to respond to the necessities of the time. This continuous repertoire enlargement caused incrementally increase for emoji usage in communication.

According to Marcel Danesi who is the writer of Emoji Semiotics, “emoji use became a veritable new writing code, indicating how people communicated via the internet and mobile devices and permeating many areas of society as well, from advertisement to political campaigning”.

The standardization of emoji should not take up about only technically or visually it also should take up comprehensively with interpretation issue too. “Cultural globalization will lead to emoji standardization as people from around the world will at some point start interpreting culture codes in the same way. Moreover, as we keep using emoji, even more, it is possible that the phenomenon will turn from a proto-writing system into a writing system as it is the only way for it to evolve.” (Todorović M.,2017)

3.1.2. WHAT IS THE EMOTICON?

The emoticon, as a word, comes from the compound of English emotion and icon. Based on Barrett, they can be considered as the alternative form for the nonverbal communication the form of the alternative (Barrett,2002)

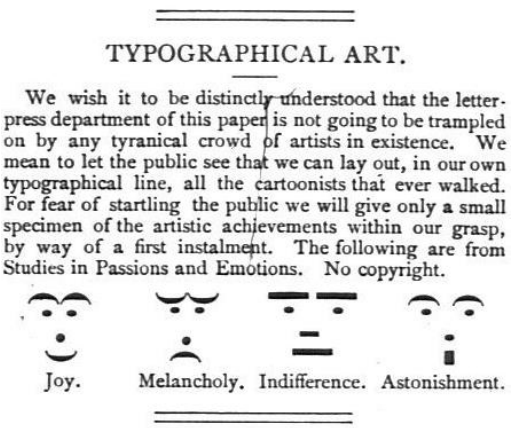
Emoticons are often described as the precursor of emoji (Novak et al. 2015). Before the entrance of emojis into our life, we have got used to use emoticons to satisfy our emotional expression need with emoticons in CMC. Among the Gavin Lucas description, who is the writer of The Story Of Emoji, “All emoticons are comprised of combination of readily available and familiar typographic marks and symbols and are used to imply tone in a text or typed message where body language facial expressions or vocal intonation aren’t able to denote the tenor of the communication” (G, Lucas 2016) Emoticons have a significant role in expressing emotions in communication through technology especially closing the gap between cues of face to face communication and computer-mediated communication. In the absence of non-verbal cues, emoticons can translate emotions to express facial expressions, e.g. :), a smile (Walther & D’Addario, 2001). In digital communication, emoticons help to depict a scope of feeling and tone through various facial gestures that convey explicit emotions. Through these

non-verbal communication icons, the receiver of the communication can easily pretend the sender's mood, mean intention or temper.

3.1.2.1. History of Emoticons

There are several different opinions in the literature about the appearance of the first emoticon. According to some, very early use of an emoticon can be in Robert Herrick's poem from the 17th century with the ':)' appearance or it was in Abraham Lincoln's text speech in 1862 with the ;) symbol. However, there are no sure proofs to accept them as marks that mention the emotions which were put there consciously. According to common belief, these were just coincidental typographic mistakes. But believing that the emoticons usage roots to the 18th century are not totally wrong!

Under the 'typographical art' headline, a satirical humor magazine in the United States, Puck, published four vertically arranged face like symbols for joy, melancholy, indifference and astonishment which were a combination of punctuation marks, parenthesis, dashes and full stops to add emotional expression in print publications in 1881.



TYPOGRAPHICAL ART.

We wish it to be distinctly understood that the letter-press department of this paper is not going to be trampled on by any tyranical crowd of artists in existence. We mean to let the public see that we can lay out, in our own typographical line, all the cartoonists that ever walked. For fear of startling the public we will give only a small specimen of the artistic achievements within our grasp, by way of a first instalment. The following are from Studies in Passions and Emotions. No copyright.

Joy. Melancholy. Indifference. Astonishment.

Figure 3.4: Puck Magazine Printed emoticons in 1881

In 1940's emoticons had also made an appearance in sci-fi fandoms. According to Gregory Benford, the science fiction writer and astrophysics professor, "most of the Net's 'emoticons' had appeared in fanzines by the 1950s" (Benford 1996).

Apart from these, Alan Gregg wrote an article in Harvard Lampoon (Harvard Campus-based humor magazine) in 1936, and he proposed to use some punctuation mark for expressing some acts such as; smiling '–', laughing '—', winking '*', and showing attention '#'. While his aim similar with the emoticons –expressing emotions-, his usage far cry from the representing total facial expressions yet only represents the relevant part of the face such as mouth or eye.

3.1.2.2. The Yellow Smiley Face

Harvey Ross Ball, the graphic designer who is the inventor of the "yellow smiley face" which is the guiding light to emoticons on CMC also accepted as the ancestor of today's modern facial expressive emojis, may be inspired from Puck's emoticons. In 1963, he was hired by an insurance company to design something to increase employee morale and emerge the collaborative working after companies merged. Moreover, he quickly sketched a simple yellow round face with dot eyes and smiling line-mouth. And this cute graphic design became a universal phenomenon in a short time without being out modish in years. As the Harvey Ball himself told, "Never in the history of mankind or art has any single piece of art gotten such widespread favor, pleasure, enjoyment, and nothing has ever been so simply done and so easily understood in art." Neither Harvey Ball nor the insurance company applied to trademark or copyright the design. However, after becoming incredibly popular in 1970's to get copyright comes to someone's mind, such as Spain brothers in the United States and a journalist, Loufrani from France. It was used for peace or happiness symbol or whishing 'have a nice day', and used in various areas, such as music groups album covers, comic books, sign of a Windsor Free Festival and also an icon for the 1980's electronic music culture which known as acid house. It became even a commercial item. This commercialization was not appreciated by Harvey Ball, to bring back to original meaning and intent behind his creation, he initiated the world smiley which is celebrated each year at the first Friday of October from 1999 with the support of his world smiley foundation.

Figure 3.5: The original smiley face& its owner H.R.Ball

These commercialized and copyright issue discussions took us to where the smiley face comes from originally question. Regarding the Loufrani's one of the smiley face claimer "The earliest recorded Happy Face was found on a stone in a cave and dates to the Neolithic era, circa 2500 BC. The perfectly round stone is a pictograph showing two rounded eyes and an arched mouth - representing a smile." Moreover, this claim might be not pointing a coincidently composed ancient shape. Regarding to latest findings, world's oldest smiley face might be used for decorating a Hittite jug which dates to 1700 BC (J. Daley. 2017)

Figure 3.6: Ancient pitcher shows a smiley face

Based on the simplicity of the design format it is sure that similar variations were produced before Harvey Ball yet only his one had the distinct honor of the being the most iconic!

3.1.2.3. First Emoticon in Computer Mediated Communication

As the same with the first written emoticon of offline media, there are several opinions for electronic or computer-mediated communication-based emoticon usage. Some sources mention that the first emotion used by teletype machine users at the beginning of 1970's like a kind of shorthand for communication with each other. Moreover, for some, the first emoticon was used by PLATO system users which also alleged in their websites in today: "Like so many things, PLATO was doing emoticons and smileys, online and onscreen, years earlier. PLATO users began doing smiley characters probably as early as 1972." PLATO's emoticons were more advanced than those that came afterward since they might be utilized in any composed shape and included characters which come about in a graphic image. They have looked like to today's modern emojis rather than emoticons!

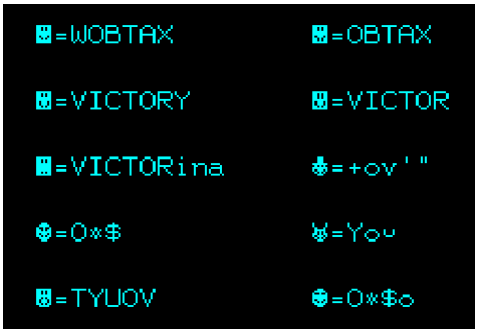


Figure 3.7: Some Famous PLATO Emoticons

In 1979 Kevin Mackenzie, the user of the online message group named ARPANET, suggested using dash and parenthesis symbols '–)' for represent to "tongue-in-cheek" in messages. Even though these icons are similar with the "Smiley," their interpretation had not been utilized within general emoticons which we used still today.

The most approved inventor of emoticons on CMC is Scott Fahlman, a computer scientist at Carnegie Mellon University. In 1982, he suggested to use the specific character sequences on the notice board of university for preventing misunderstandings as below:

"I propose that the following character sequence for joke markers: :-) Read it sideways. It is probably more economical to mark things that are NOT jokes, given current trends. For this, use :-("

The usage of the emoticons had spread the other online platforms such as ARPANET and Usenet very quickly. Via spreading of usage, a number of variations of emoticons were extended.

This CMC based emoticons appeared in print publications on the beginning of 1990's starting with the New York Times.

In 1993, entitled Smileys, dictionary written by David Sanderson published from O'Reilly & Associates, Californian computer book publisher. This 93-page emoticon dictionary aimed to tell CMC users, when and how emoticon should be used. Around that time, an online emoticon dictionary was launched by James Marshall which is still working and has thousands of entries.

Finally, these facial features representative icons which are consisted of punctuation marks for expressing the emotions by June of 2001, were added to Oxford English Dictionary's printed edition.

As a common belief, the emoticons that are a face like typographic characters can be viewed sideways. Especially Latin alphabet users easily adopted the usage this style of emoticons. They accepted Fahlman's suggestions and wrote or drew the emoticon from left to right like the eyes on the left and then the nose and mouth. But eastern side of the word, emoticon sets have written or drawn totally different regarding both characteristics of the alphabet and cultural forms.

3.1.3. WESTERN VS EASTERN STYLE EMOTICONS

3.1.3.1. Western Style Emoticons

Although the western style emoticon mostly comes from Fahlman's first set, they originated in ASCII format. When the internet was entirely text-based, emoticons were rendered in ASCII (Jones, S., 2003). ASCII (The American Standard Code for Information Interchange), was developed in 1960's by ASA (American Standards Association) today known as ANSI (American National Standards Institute) and Bell data services to standardize of telegraph codes for more convenient list sorting mostly in alphabetization. It basically encodes 128 specified characters into seven-bit binary integers to allow communication equipment and other devices to process and represent text. (G. Lucas 2016)

Emoticon and ASCII relation roots to textual art which can be found even in handwritten manuscripts. As a very old tradition, from the beginning of the writing, people want to merge aesthetic with the thoughts for not only enhance the appearance but also state the owner of the book. Illuminated manuscripts, calligraphies and decorative schemes such as 'lombards' (decorated initials), page borders, illustrations, and miniatures can be taken as examples of an earlier text related art.

After the invention of printing press, decoration patterns also crafted and used in book publish and with the invention of the typewriters in 1870. This art reshaped just after few years of its invention; artists started to use this machine for producing art. It is considered as a new medium for art creation (B. Tullett. 2014). Artists used the letters or texts as a brush for creating graphic art which is called as typewriter art.

Figure 3.8: Early example of typewriter art by Flora F.F Stacey (1898)

ASCII format which contains letters, numbers and other alpha-numeric characters also used for creating art, as a follow-up of this tradition, which is using the words or letters in any kind of method turned into a way for art making, which called as ASCII art. As Alexis Madrigal's said, "ASCII art reached the zenith of its popularity before the web. It was the visual language of BBSs, Telnet, and many other pre-WWW networks. In a wholly text-based world, these works proliferated. For the moment that modems were the preferred mode of access to other computers, they were useful. And their sketchy aesthetic seemed right for mediums that were provisional and changing rapidly." (Madrigal, A. 2014)

ASCII art used for printing or transmitting the text as an image which is easier than printing graphics or where it is not possible to transfer pictures includes various platform from typewriter to computer networks. Moreover, also it is used for logo representation of company or products within the source code of computer programs.

Especially in 1980's ASCII art was a common approach for individuals to share graphics with each other's in electronic bulletin boards. While more sophisticated

ones like the detailed portrait are available, the smiley emoticon of Fahlman is also considered as kind of primitive ASCII art.

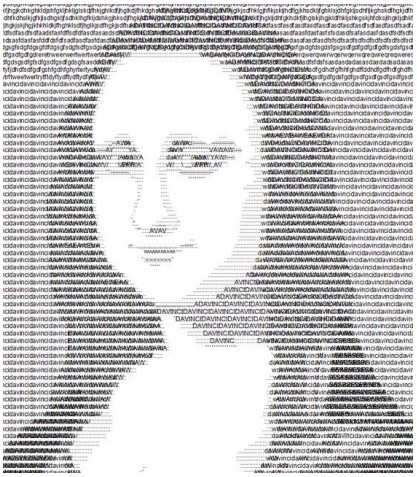


Figure 3.9: An Example of sophisticated ASCII art; Mona Lisa in Text Format by Robert Kenneth 2013

Western-style emoticons are needed to read by tilting one's head according to the usage of Latin alphabet norms; writing and reading from left to right. A regular western style smiley emoticon should be ordered in horizontal plane starting with eyes, then a nose in the middle which is optional, and lastly mouth. While eyes have mostly shown with colon or semicolon, nose shown with hyphen and mouth shown as parenthesis –opened or closed- or straight line. According to Steve Jones who is the editor of Encyclopedia of New Media, "Emoticons a contraction of the words "emotional icons" are glyphs used in computer-mediated communication, meant to represent facial expressions." The emotion behind the emoticon, generally represents with mouth shape, for instance, if open parenthesis used this means happy if closed parenthesis used this means sad. Moreover, the emphasis the depth of the emotions has also given with mouth via using more than one icon repetitively.

Sad: :-(or :(

Very Sad: :-((or :(((

Happy: :-) or :)

Very Happy: :-)) or :))

This usage is not belonged only the emoticons, writing with repetitive letters to add phonetic features to writings is common in the western world for giving the sense of emotion, for instance, pleeeaaaaseeeee doooooooon't doooooo it! As, Junichi Azuma & Martin Ebner described, "Very often, these show the lengthening of a certain syllable or a segment but, interestingly enough, our "inner ears" tend to perceive prominence with a significant pitch movement at these points. On the other hand, it is natural that emoticons or smiles have gradually entered cyberspace to provide the language-only and seemingly logic-only cyberspace communication with an emotional and human touch ;-). In a sense, an emoticon, very often placed at the end of a phrase or a sentence, is a typographic version of a paralinguistic or prosodic feature." (J., Azuma M. Ebner 2008)

Basic emoticons can be rotated inconsistency with form thus become transformed. Basic variations in emoticons can create different meanings. Such as a wink can be represented as ;). Some other western style emoticon and meanings:

Cry: ;(or :'(

Grin :D

Tongue:P

Unsure: :/ or :\

Heart: <3

Broken heart: </3

Among these basic representations, there are some complicated figures can be shown as basically such as the pope: +-(:-) or Elvis Presley 2:-) or Uncle Sam: =):-).

According to Maja Katarina Tomić, Marijana Martinez and Tedo Vrbanec as used font type can affect which emoticon will be used. They also mentioned that "some variants are specific to certain countries due to a keyboard layout. In Scandinavia,

the common use of “smiley” is =), because the keys are for characters = and> placed next to each other. The user can also use a similarly shaped bracket showing mouth :) or]. Sometimes the diacritic characters O and U are used with an umlaut as emoticons. :Ö -surprise” (M., K., Tomić, et al. 2013).

3.1.3.2. Eastern Style Emoticons

Eastern style emoticon usage started in Japan in 1980’s. Especially the users of JUNET (Japanese Unix Network), which were academic based networks between American and European universities and research institutes were the early adaptor of emoticons. Following years, the internet has started to use by general public users. With the awareness of the popularity of emoticon usage in western culture, Japanese people developed their own versions which emerged in the Japanese ASCII NET online bulletin board network in 1986. Eastern style emoticons also originated in ASCII formats itself, instead of Falman’s set. These emoticons elaborated from pre-existing narrative forms which were recognizable without the need of head tilt to the left. As similar with the western style, Japanese emoticons also aimed to represent the facial expressions. With this reason, we call the Japanese emoticons as Kaomoji from the words of kao (face) and moji (character).

Kaomoji is written in parallel to the text horizontally such as (•‿•). It generally represents the entire face straightforwardly and eyes have huge importance. The kaomoji mood or emotion is given by eyes.

Facial contour is one of the significant marks of Eastern style emoticons which is mostly shown by parenthesis. Mouth shown with underscore character is placed between the eyes. Eyes can be shown in various signs based on the preferred mood. Different emotions can be conveyed by replacing eye shape such as; (*) stars are used for the neutral mood (*_*), while (T) express the sadness (T_T), and (x) represent the stress (x_x). The focus point of Japanese emoticons is in the eyes while Western-style emoticons focus on mouth according to cultural expressivity tradition which is proved by several studies. Yuki M Maddux et al. found that “Americans weighted cues displayed in the mouth more when judging emotions

whereas Japanese tended to weight cues in the eyes more than Americans." (Yuki M, Maddux et al., 2007)

Kaomoji has wide shown levels. It can be simple as only two characters for eyes; ^^ or more complicated with the usage of more than two characters; \ (* ^ ワ ^ *) / while the most common ones approximately around five-six characters (o.o). Like Western-style, repetitive characters express the mood with exaggeration, but only side characters can be repeated except eyes or mouth. A vast number of different Kaomoji can be created easily in a stylistic way thanks to alphabet characters variety of Eastern countries. There are no exact shapes for kaomoji display. It can be made up easily up to creativity level of writer.

Junichi Azuma, the professor of Kobe Gakuin University in Global Communication Faculty, mentioned that "The cultural origin of the two items of digitally mediated communication is different. As a matter of fact, while emoticons stemmed out of the community of US computer scientist user groups, the creation of kaomoji – that are Japanese emoticons and the 'ancestors' of Kurita's emojis – can be traced back to youth culture in particular to teenage female subcultures (shōjo) and to obsessive fans of manga, otaku" (J, Azuma. 2010).

User culture affected the emoticon usage way. While the western emoticon spread in Japan computer-mediated communication, mostly young and geek people have interested in these icons. Yet they were also very keen on the manga comics and they added these manga cultures feature elements to their writing style. And also, Japanese young female users tend to write as a kitten which is under effect the kawaii culture (Kinsella 1995). So, with kawaii and otaku together composed the new expression way for emoticons. The logographic kanji writing system is played a significant role in order to offer more variants to create complex visuals because of the using double-byte character code system, while western characters represented with only one byte.

As Katsuno and Yano explain that kaomoji feature a quite complex structure and may incorporate words, movements and onomatopoeic sounds like single frames of the manga. Such a complexity allows kaomoji to stand on their own and to express meanings working better than the verbal code (Katsuno & Yano 2007). According to Gavin Lucas “kaomoji can be quite complex can even be made up of more than one line of text build up an ASCII art style image in Japan you talk to as either ShiftJIS art (ShiftJIS is a superset of an ASCII intended for Japanese usage) or AA standing for ASCII art.” (G. Lucas. 2016).

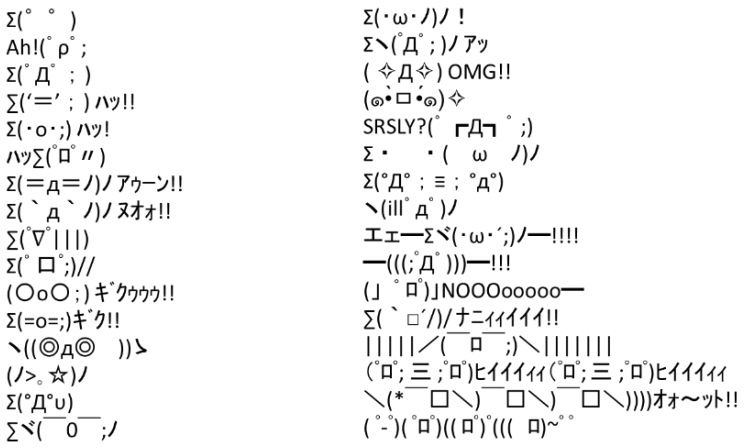


Figure 3.10: Example of two byes emoticons; showing the same mean: Surprised. Taken from http://cutekaomoji.com/

In the eastern side of the world Japanese emoticons are not the one and only one, there are also Korean and Chinese styles.

Korean style emoticons are mostly similar with Japanese emoticons in display format. They are written in Hangul letters. These letters called as Jamo, and they are used for representing to the eyes, mouth, and nose.

For the eyes; ㅇ, ㅎ, ㅍ Jamos are used, and mouth and nose mostly merged in Korean style emoticons for mouth and/or nose mostly; ㅅ, ㅁ, ㅂJamo signs are used. They are (ㅇ ㅅ ㅇ) or ^오^ or ㅎ _ ㅎ.

Chinese style emoticons mostly ideographic compared to other eastern and western types, rather than pictographic. For instance, the frowning face is shown

with 囧 character, which means bright. Moreover, also this characters origin date back to earliest Chinese writing which is belonged to late of 2000 BCE and existed in oracle bone scripts. The exact mean of the used character is not used; the mean of the character comes from the visual similarity of the desired meaning. The ‘崮’ character is used for king expression, and ‘卣’ this also represent a computer game character which known as ‘Bomberman’

Exposure to both western and eastern style in digital bulletin boards and forums, made out the merged emoticons, especially with the not only ASCII but also Wingdings font allows to users write like the eastern style. In western side these emoticons called anime styles or Kirby styles instead of kaomoji. They have very minor differences form real eastern style; the eyes mostly represent with punctuation marks instead of kanji based characters such as <(‘.’ - ^), <(- ‘.’ -)>, <(^. ^)>, ^___ ^ . With the support of non-western writing systems in computers allowed more complicated glyphs usage to create new emoticons. From katakana writing system the “shug” ツor “shruggy” ¯_(ツ)_/¯ raised.

The complexities of Eastern style emoticons are good for the allowance of the different expression within a creative way but also hard to write in new communication tools like cell phones. As Luke Stark and Kate Crawford said, “The complexity of horizontal kaomoji also meant an increase in the number of characters needed to produce any particular image. This challenge to speed and clarity was perhaps one of the reasons why emoji were first developed in Japan.” (L. Stark. K. Crawford., 2015)

3.1.4. EMOTICON VS EMOJI

The complexity of the emoticons caused the searching new way for expressing emotions with simplicity. And the simpler solution was found by Kurita at the late of 1990's; emojis. Basically, emoji emerged from emoticons to fill the void in CMC from the absence of non-verbal communication cues practical and simple remedy. Emoticons are not exactly same with emojis despite being its precursor. There are several differences between them.

By comparison, emoticon offers a typographic display for expressing emotional states primarily, while emoji offer a pictographic display with wider spectrum to express not only emotions but also activities, objects, animals and among other things. In emoticon expression is limited with available keyboard strokes without detailed representation. Whereas emoji, with its graphic-based nature, have cues to show details such as colored faces, skin tones, eyebrows, streams for tears, body gestures which are more noticeable than emoticons.

Besides the visual differences, technically emoticons are created by keyboard strokes and possible to made up new emoticons by means of analogy anytime such as \/(^+^)\/ (a dog) or :F (a vampire with orthodontic issues). Emoji does not make conducive for being created by the user; it is created by computer codes to decode into pre-defined visuals which are based on the rules of Unicode consortium. Normally the new media enlarge with the user created contents yet there is no user effect on emojis. Emojis have their own protocol and standards. Of course, Unicode allows everyone to propose for new emojis, but it is strictly rule-bound and accepted emojis could not be available instantaneously. While emoji should be select from the pre-defined set, emoticon can be created anytime in any shape depends on imagination.

While emoticons mostly used for expressing emotions emoji can be utilized individually or together to form a string. They can use to represent the word or constructs visually. Moreover, they convey the meaning of the message in a creative and more expressive way. Emoji is more open to lexical usage with

illustrating the meaning without using the word, while emoticons are more paralinguistic. Emojis also used as a narrative instrument, the Emoji Dick (Moby Dick translation into emoji) of Benenson could be one of the best examples for this.

Based on the study of Ganster, Eimler, & Nicole, emoji influenced the loyalty more than emoticons and it has a strong impact on receiver's personal mood and the perception of the sender aim (Ganster, Eimler, & Nicole, 2012).

Emoticons -as being keystrokes like texts- can easily display in any platforms steadily while emoji is platform-dependent due to having different display variation on different platforms. And also, in CMC many platforms automatically convert to emoticons into emoji with permitting emoticons to be utilized to input emoji.

Regarding to interpretation of emoji and emoticon, Davidov, Tsur, and Rappoport (2010) found that emoticon interpretation can be easily made compared to emojis. They conducted research with Amazon Mechanical Turk participants with showing them the tweets without emoticons which were originally contained. They found that the participants easily identified the original emoticons with high precision. Novak et al. (2015) and Liu, Li and Guo (2012) worked on emoji sentiment classifiers and they found that specified cases of emoji being related with various and occasionally opposite, sentiment labels.

3.2. THE EMOJI USE

3.2.1. THE REASONS BEHIND THE USE

Emojis have a definite place within the new media rhetoric; it significantly shaped the 21st century communication. Emojis can be considered as both a brand-new concept and an old acquaintance at the same time. We quickly adapted to Emoji and made them sine qua non part of our daily digital text-based communication for various reasons. Being accustomed to them, expressing our intentions or emotions and keeping up with the pace of innovations were played a major role in emoji spread.

In the new media rhetoric of today, emoji has more effective than words to convey sender intentions to the receiver. Although written communication is harder than face to face communication (with the difficulty of translating ideas into writing), emoji helps with this transformation with its pictographic nature. As Dr. Cheri Florance asserted in the Brain World magazine "The opticoder brain is considered to be 20,000 times faster than the lexicoder brain, leading to the type of visual, outside-the-box thinking that has resulted in some of the world's greatest inventions and creative contributions" (C. Florance 2011). This could be true for also emoji. With the use of emoji, people can express themselves in not only fast but also a creative way.

The nonverbal behaviors (which are 93% of face to face communication) have great importance for communication (Mehrabian, 1977). Moreover, non-verbal cues can be used for various purposes such as transferring information about feelings and intentions and organizing the interactions (Patterson, 1983). According to Hogg and Vaughan, these nonverbal behavior repertoires are provided by inherent accumulation without being subject to specific training. Emoji use also does not require any training (Hogg, M., and Vaughan, G. M. 2007).

Facial emojis are often used for expressions of gestures and mimics for various purposes like the real nonverbal cues. The scientific research has shown that the

human brain reacts in a similar manner to facial emojis like true facial expressions. They both activate the same area of the brain (Daskiran 2015).

In the lights of this information, the reasons behind the emoji use can be sum up into three topics: the first one is the seeking simplicity & speed, the second one is the need of abbreviation and finally one, expressing emotions and intentions.

3.2.1.1. The Need of Simplicity and Speed

Having not enough time is one of the biggest issues of the modern individuals. Technological developments bring the speed concept to our lives than before. We are using technology to ease life. And we are seeking this easiness nearly in every part of the life. From this point of view, Gulcan Sener and Motif Atar told that "In this digitized age of speed and communication, the modern individual prefers short and concise messages, refrains from long messages, and even balks at the thought of reading lengthy texts" (G. Şener, & G. M. Atar 2017)

CMC allows us to communicate with each other literally instantaneously. The message which is sent by one keyboard stroke to 'enter' or 'send' button, can be seen on the screen of the receiver, without any time delay. Thus, emoji writing via the visualizing the expressions into message makes the written text more practical compared to the written world only texts. Emoji basically offers to its user simplicity. According to Marcel Danesi, "Short messages seem tailor-made for emoji use since in this case, the Emoji code does not entail an increase in the effort but instead a more economical and effective way of conveying tone and nuance. So, in line with the least effort principle, it would seem that that hybrid Emoji writing might preserve and spread even more in the future" (M. Danesi 2017).

3.2.1.2. Abbreviation and Shorthand

The abbreviations that prevent to write down the whole word with longhand have a long history. They provide the shorthand writings. The first examples of abbreviations can be found in Greek and Roman writing systems. The reason of the use of the abbreviation on that times might be related with the need of time or space saving or secrecy. Another usage area for shorthand was stenography that was the method for recording the spoken word quickly before the invention of electronic recording type devices. The first known shorthand notation system was Tironian notes which were used in 60s BCE for recording to Cicero's speech. In 1837, the English educator, Isaac Pitman invented the most widely used shorthand notation system which known as Pitman shorthand. He dreamed of making his shorthand writing system replacement of the conventional writing. He adopted the "time saves are life gained" as his motto.

Figure 3.11: Exemplary sentence for Pitman's Shorthand

There are also other shorthand systems for stenography including Greeg, Duployan, Munson, and so on. These can be easily assumed as one of the precursors of Emoji writing based on the practicableness and time-saving. They can differentiate from each other with the requirement of training; while all shorthand needs special training before the use, where emoji does not.

Abbreviations and shorthand mostly were used in the matter of professional areas until the emergence of electronic communication tools. However, the 'new' communication tools such as telegraphs which can be used for daily life matters were costly to use efficiently. Thus, people started to use abbreviations and shorthand in their daily life with also economic purposes apart from the need of speed. The widespread use of mobile phones and beeper in 90's, increased the popularity of textual communication. Due to high priced calls, people preferred to

more economical solutions such as SMS text messaging. The short message system of mobile phones had limited message length which was only 160 characters at most. This limitation gave rise to abbreviations and shorthand.

The abbreviations and shorthand also are used in CMC in various ways from conversancy such as ‘ASL’ which is used as a question to find out age, sex and location of the person one talking to), to emotional expressions such as OMG (Oh my God) or LOL (laugh out loud). Especially young people created their own shorthand systems for instance ‘did u c?’ (did you see?) or ‘brb’ (be right back) which is suitable for mobile and computer-based messaging systems which called Textese. David Crystal identified this type of writings as a “save a keystroke principle” (D. Crystal 2016)

In the meantime, Emoji was created to meet the need of telling more with less character usage. Especially the shorthand for emotional expression were accepted as a textual version of emojis. However, they need at least three keyboard strokes while emoji needs only one stroke. The final progress on shorthand of digitalized world is the Keymoji function of the Apple keyboards which suggests emoji automatically regarding the intention of the message. Which diminish the time consumption for choosing right emoji, simple chooses of the word brings it instantly. It can be assumed as an emoji translator due to figure out the intention of users from their words. The need for the fast & compact writing made the emoji as constant essential pieces of our daily communication.

3.2.1.3. Transmissions of the Emotions

Computer-mediated communication lacks important nonverbal cues of face to face communication. Transmission of the emotions in is the real aspect of the emojis. They emerged out for clarifying the confusion between sincerity and sarcasm in online communication. Today, Kurita’s 12 x 12-pixel humble icon designs have been the milestone to humanize the humans in digital communication.

Accepting Emojis as emotional indicators is a quick and simple inference which

can be done by anyone in anywhere. The reason for this is that people have the same associations for the emotions. Unless having a special condition, any man from any part of the world can feel the happiness, anger or fear. The famous American psychologist Paul Ekman has searched the emotions worldwide and theorized that the seven emotions as happiness, sadness, disgust, fear, anger, surprise and contempt trigger the same micro expression patterns globally which are statistically predictable (P. Ekman 1977). Circumstances or reasons for emotion felt can be changed regarding culture, age or gender yet the main emotional reactions stay similar.

An Asian individual can be afraid of something that looks like a little girl whose face is covered with long hair and this figure may not mean anything to a westerner who has not watched a thriller called "The Ring." It is because the appearances of spiritual beings are related to the cultural background. For instance, in Middle Eastern culture, an evil spirit is defined as a person who has reversed feet. Still, we all give the same emotional reaction to the different stimulus of fear which can be read from our face 😱.

While there are seven universal emotions regarding to Ekman, only four physiologically grounded emotions are accepted as primarily; fear, anger, depression, and satisfaction. All other emotions except these are called as secondary emotions. Regarding Theodore Kemper, “This integration of primary with secondary emotions incorporates the contributions of both positivist and social constructionist positions in the sociology of emotions.” For example, “the guilt is a socialized response to the arousal of the physiological conditions of fear”. From this point of view, we can ask whether emoji can cover any kind of emotion. While the number of possible emotions is limitless due to the integration of primary and secondary emotions, trying to answer this question will be like spin one’s wheels. As Kemper mentioned, “As long as society differentiates new social situations, labels them, and socializes individuals to experience them, new emotions will continue to emerge” (T. Kemper 1987). Emoji also transform in

time. However, emojis conversion speed may look snail-like compared to the speed occurrence of new situations in the digitalized era.

Even not being able to express all kind of emotions, the several studies which were done by Fussel, Derks, Bos and Grumbkow are pointed that emoji has used for the need of expressing emotions (Derks, Bos and Grumbkow, 2008). As a human being, being understood is one of our essential needs for communication. Regarding this point of view, emoji can be considered as one of the key factors for personality reflection in digitalized communication. Emoji allows to personalization with its large icon set. People can select the most appropriate icon which suits them. The emoji character set has got more than twenty faces to represent the smile; such as grinning face, face with tears of joy, wry smile, smiling face with horns, smiling face with halo, smirking face, smiling face with heart-eyes or slightly smiling face and so on.

Ryan Kelly and Leon Watts explored that emojis are not used for only the emotional expression, it has more than it; they found that emoji also used for transmitting and modify the meaning and emotions of the selected words (R Kelly & L. Watts 2015). In addition to this, Xi Zhu mentioned that emojis used for expressing the emotions in text-based communication which changed the attitude toward how people perceived the message in emotional and attention level in new media (X. Zhu 2015). The interpretative elasticity of emoji allows changing the meaning. The meaning of one emoji may not be the same as it is in another even they shared the same cultural background and values. Regarding to Monica Riordan, “The only true consensus surrounding emojis is that they convey the positive emotion of some kind—in however such positivity might translate into a particular context for a particular relationship” and it is able to add the positivity even into negative messages. “Adding an emoji to a negative message actually makes the message seem less negative” (M. Riordan 2017).

These little pictographic icons may reveal our deeper emotions which we do not feel consciously. We may not be as upset as we have shown that could be the

reason for the positive negativity in our messages which we mentioned above. We tend to reflect our emotions and thoughts both conscious and unconscious with our pictures, images or colors choice. Like collage projective technique which is rooted in psychology and commonly used in qualitative research to get deeper insights and reveal the real thought and feelings; we may already be doing collages that reflect ourselves in daily life with our selections from emoji character set. However, the limited character set of emoji could be caused misinterpretation about our feelings even to ourselves, or these choices could not be decided instantly as we thought. Regarding to a digital anthropologist Pamela Pavliscak, "When we do this (selecting emoji from defined character set), we are not revealing our emotions; we are often stifling them" She believes that "emojis are making us feel less of the feels" (P. Pavliscak 2018).

Cengiz Anik, Ali M. Kirik and Ayse G. Soncu have asserted that emoji as a virtual representation system is very different from the real-life representation systems. In real life practice, the visual representations have solid backgrounds which are rooted in social and historical stories. However, the virtual representation systems have not. They are just empty replicas of the real-life visual representation. Moreover, they also believe that the human values are being "dehumanized" by being rewarded and rendered as extensions of the social media networking organism (2017). Different from this perspective, Luke Stark and Kate Crawford believed that emojis acted as enthusiastic forms of social expressions when the practical use of emojis focused on the normalization, capitalization, and focus of the effect of the online interaction of human social relations (L. Stark., K. Crawford. 2015).

3.3. VISUAL COMMUNICATION HISTORY

3.3.1. VISUAL COMMUNICATION

Humans always need to communicate with others which is one of the fundamental differences between humankind and animals. Of course, the communication code is not only human-specific, but animals can also communicate between same species in order to defend their territory, attract a mate or make food call, etc. However, animals are not able to transmit their communication throughout the future in such a way that human can. Ever since ancient times, people have found a way to transmit their thoughts and feelings to the future. They have used pictures and symbols to achieve this. Using visuals in order to transfer information and message to each other's is not a new concept. It is used ever since prehistoric man scratched the first image into a cave wall. The first pictograms were created by cavemen to convey their stories. Thus, the visual communication has a long history starting from cave walls to hieroglyphics. As Barbara Guzzetti mentioned in the Handbook of Research on Societal Impact of Digital media; human have utilized graphic depictions as a representation of information (Guzzetti. B., 2016). We used images far longer than words.

The earliest writing systems designed mostly glyph based to represent that they reference. This system continued with reforms in each civilization till the ancient Greeks. They found a new form to represent their thoughts and feelings which was based on phonetics of spoken word rather than visual cues or physical object references. Thus, the invention of writing in phonetic form transformed the written communication rapidly; yet this transformation did not abandon the visual expression need. Even today, we are exposed to the visual messages which are providing by mass communication systems more than written ones. So, all these visual forms provide a clear genealogy regarding to appeal and adoption of Emojis (Alshenqeeti, H. 2016).

In other words, when Emoji emerged, using the glyphs based on pictorial resemblance was not a new concept.

3.3.2. CUNEIFORM

Cuneiform one of the earliest symbolic forms of written communication which was invented by Sumerians around 3300-3400 BCE can be accepted as primarily premise of emoji after then cave paintings. It had used over 3000 years. Basically, it started as a pictographic system, and in time it has derived to logographic with the contribution of over a thousand icons.

The writer of the Emoji Code book, Vyvyan Evans asserted that "Quite clearly as it currently stands, Emoji is pictographic in nature reminiscent of the earliest stages of the cuneiform writing system" (2017). Emoji has similarities with cuneiform besides their pictographic form. Firstly, both needed specific tools to be written while cuneiform needed clay tablets, Emoji needs digital technology (Tuttle 2016). Moreover, both have been able to evolve structurally. While cuneiform had evolved from pictures to abstract symbols in over a period of more than two thousand years, emoji has evolved from icons to pictures into last two decades.

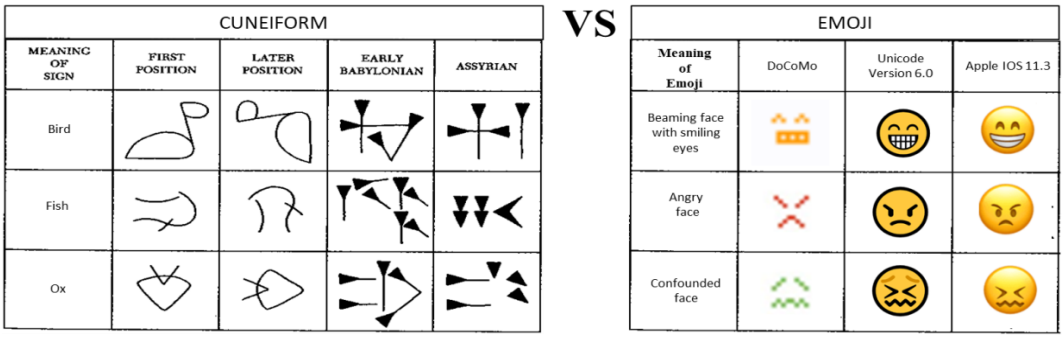


Figure 3.12: The evaluation of Cuneiform and Emoji

3.3.3. HIEROGLYPH

Egyptian hieroglyphs are considered the most well-known pictographic writing system which came into existence a little after cuneiform. The meaning of hieroglyphs is holy writing due to emerging for Gods and pharaohs. Although Egyptian hieroglyphs were primarily pictographic; they had also undertaken the syllabic alphabet functions. The denotations of hieroglyphics were not rigid. Hieroglyph writing is a mixed modal system; the meaning has been subjected to the format of usage. According to writing flow, they can be interpreted as just pictograms which resemble what they address or ideograms which represent the idea, or logograms which accompanied by phonetic complements (Daniels 1997). For example, -pr word which read as per, means 'leave /to go out' and it is written the house, building ( ) hieroglyph.

Although emoji is accepted as the successor of Egyptian hieroglyphs based on their resemblance to each other's due to their pictographic natures; there are major structural differences between them. First, despite both of their picture meaning can be interpreted depends on the context; hieroglyphs can also be read by phonetically. The meaning of a emoji essentially lies in its visual image which are assigned and defined by Unicode with a few exceptions such as the interpretation of emojis among different cultures or changing the meaning attribution of an emoji in closed circuit circles specific usage (Folded hand emoji (🙏) could be the best example for these, while it is used as "thank you" in Asian cultures, Westerners use it as a pray icon and also it can be used as 'hi five' icon among school kids). Emoji cannot represent the sound; it does not have phonetic functions as hieroglyphs had. Both have about a thousand visual elements in their writing set. Assuming the hieroglyphs as sole picture writing would be an inadequate definition. Egyptians were created many texts in various topics including medical issues and poems by hieroglyphs from which are much more advanced than can be conveyed through emoji.

Hieroglyphs and Emoji can be used for denoting the ideas, yet hieroglyphs were

enough to convey the ideas directly on their own, while emoji needs to articulate to any writing script. Basically, hieroglyphs invented as a written form of the Egyptian language and used to record history whereas emoji attempted to add emotional intention to message in a personal level.

Finally, we should touch on the rebus principle which could also be applied to emoji as well. The rebus principle is the use of the symbols of pictograms as a sound rather than their actual meanings. It was used in hieroglyphs to represent abstract ideas. Using the existing symbols with their sound associations enable to create more complex scripts. To read the actual meaning which is given by rebus needs to decode thus, this writing style also called as rebus puzzles. For example, the English word 'I' can be represented by eye emoji regarding rebus principle.

Figure 3.13: Exemplary use of Emoji rebus puzzle

Rebus puzzle solving needs cultural or linguistic background similarity to be deciphered in the context correctly. Thus, for both hieroglyphs and emoji meanings which are constructed by rebus principle are not easily deciphered by everyone around the world even if it used by them.

In a nutshell, the visual representation with ideograms and pictograms has a transcendent and long history which started with the existence of human being. Visual communication emerged long before then the writing. Thus, it would not be wrong to say that even earliest writing system derived by pictograms which had also been the basis for emoji. (V. Evans. 2017)

All writing scripts had been derived under the influence of from previously used writing modals. Even some modern scripts which are more complex and bimodal are involved from at least two main types of writing systems. Japanese for instance was influenced by Chinese writing system. Especially the syllabaries as Hiragana

and Katakana initially were designed to supplement the characters which were inherited from Chinese.

As Marcel Danesi (2017) annotated in his book, “Every alphabet character is the symbolic residue of a stylistic alteration to some earlier pictograph. The alphabet character, ‘A’ for instance, started out as a pictograph of the head of an ox in Egypt. This came, at some point, to be drawn only in its bare outline, and eventually standing for the word for ox (aleph)”.

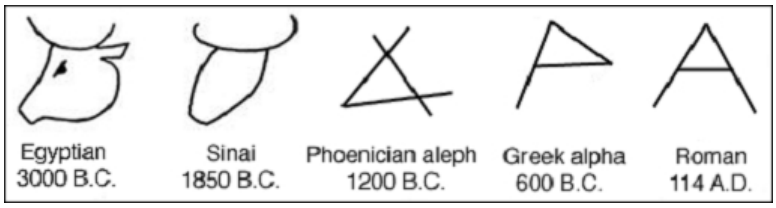


Figure 3.14: Evolving of Ox character to Aleph to A letter

3.3.4. PICTOGRAM BASED MODERN AND STRUCTURED WRITINGS

Before the emoji, there have been several attempts to create visual communication with the representation of graphic symbols such as Leibhiz’s or Bliss’s.

The German mathematician, scientist, and philosopher Gottfried Leibniz, in the early 20th century, projected the ideal language which would be understandable by anyone easily without any misunderstandings. His modal technically was ideographic based on Chinese scripts. He had aimed to create ‘Characteristica Universalis’ with natural signs which were able to use in hybrid forms.

Figure 3.15: Basic elements of Leibniz's pictograms

3.3.4.1. Blissymbolics

It is developed by Charles Bliss in 1950s; it can be accepted as the successor of Leibniz's picture writing system. He had the same dream with Leibniz, to create charakteristica universalis project. He was influenced by Chinese ideographic signs while he was in China. We wanted to learn to read them and while he was studying to read, he realized that he translates the meanings of the signs in his mother tongue. This experience had illuminated the idea of developing the universal writing system. Blissymbolics is an attempt to make written communication easily understandable by globally.

Blissymbolics and Emoji are similar in some way but also, they have fundamental differences. Neither Blissymbolic nor emoji does not have the own natural spoken language like other writing systems. Both developed by certain persons and have consisted of over two thousand symbols. Moreover, all two of them have classifications based on usage area; Blissymbolics have three main categories which are material things, actions & activities and human values while emoji have basically eight categories including food, human, sport, buildings etc. The symbols set of Blissymbolics are not limited; they can be modified and combined regarding to create expressive structures with infinite variety based on needs, unlike emojis set which is limited by Unicode and does not allow to create new icons.

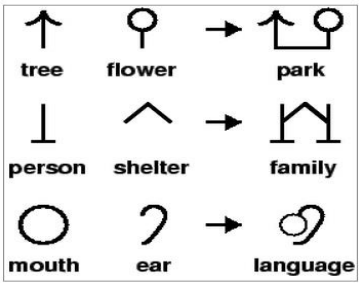


Figure 3.16: Exemplary for Bliss symbols and their combined meanings

Thus, Blissymbolics open to creating structure allows writing on various topics, including geometry as like any languages. One of the significant differences between emoji and blisssymbols lies in their objectives. Blissymbols aimed to

create characteristica universalis – universal writing scripts as Leibniz also did to replace existing systems. While emoji does not aim to replace existing systems, its spruce usage has derived it from being more like characteristica universalis than Leibniz's or Bliss's systems unintentionally. Emoji has made the communication possible between different language speakers.

The prehistory of today's emoji lies in the originated early visual writing systems. When considering the evolution of and the source of inspirations of emoji which are Manga's Manpus, izotypes, and Kanji, all have shared the same roots, the visual communication.

As a human being giving the major importance to visual items is not surprising, a significant proportion of our brains responsible for processing the visuals. Regarding to neurologists, the vision-related neural activities of the brain is much more dominant than other four senses.

As a result, emoji even derived and inspired from the previous visual writing systems, yet if emoji continue to retain its current pictographic nature which is the under suppression of Unicode, it would not have to change to convert itself a logographic system which allows the transition to syllabary.

3.4. EMOJI FROM LINGUISTIC PERSPECTIVE

3.4.1. EMOJI AND LINGUISTICS

The perception of writing literacy and communication of today are shifting to new paradigm under the influence of emoji usage. This change is triggered by not only emoji but also CMC itself. These new instruments allow us to merge different sources of communication such as visual, textual and audio. We can efficiently utilize them in tandem with alphabetic or non-alphabetic scripts in our message composition (M. Danesi 2017).

In communication, word construction is possible with the physical presentation of signs and spoken languages such as symbols and gestures. In this regard, Emoji can be assumed as a word. In Emoji both semantic and formal like functions can also be found. These functions express feelings or thoughts like words of any spoken or written language. Furthermore, unlike to a linguistic symbol, emoji, as being a single meaningful unit, usually has a direct connection between the graphic icon and the idea that it evokes. The American linguist Leonard Bloomfield who worked on structural linguistic area stated that "writing is not language, but merely a way of recording language by means of visible marks" (Bloomfield, 1933).

Language is a system which uses the words to convey the meaningful units based on the set of rules. These rules comprise the grammar system which is made possible to the expression of thought and feelings understandably and adequately.

There is no prohibition for the use of visual icons in textual scripts based on linguistics. In this perspective it is possible to adopt a grammar system to emoji as well.

3.4.1.1. Emoji Writing

According to linguists, alphabets, syllabaries and logographies are the three sections of the writing system. Alphabets as a set of letters which are the indicators of the speech sounds are used for combining the linguistic units such as word. Syllabaries represent the sound groups of the specific symbols in writing systems such as Japanese Hiragana. In logograms writing system a symbol represents the whole word such as in Egyptian hieroglyphs, Chinese writing and Kanji of Japanese. A number of the required symbols is the most significant difference between them. Alphabetic systems usually contain between 20-30 symbols or letters; there are also exceptional alphabets in the world such as Cambodian Khmer alphabet according to Guinness Book of World Record (1995) it is the largest with 74 letters. Syllabaries usually are around a hundred symbols. Logographic systems require more symbols than hundreds. Briefly, creating meaningful units with a combination of symbols are more convenient for the one which has a fewer symbol.

Compared to all other writing systems, since the first emoticon existence, emoji evolved to express the emotional attitude. In order to achieve this, it uses graphic icons and punctuation marks. Punctuation marks are used in writing medium for the creation of sense, clarity and stress as paralinguistic cues. With the effect of this transformation from punctuation to graphic icons, one of the common uses of emoji is putting it at the end of the sentence as an end mark like putting a stop sign.

Emoji can be accepted as intention indicators; they are almost essential in CMC to clarify the communication which is complex in nature and prevent the confusing between receiver and sender. Regarding intention of the sender, emoji can reflect or emphasize various things based on its replacement in the sentence. It can be used as a salutation mark at the beginning of the written conversation. The usage of right after the word can be emphasizing the expression via putting the icon with same the meaning of the written word. Alternatively, it can be used to enhance the meaning or adding nuance. Using emoji instead of the word is another writing

mode. Occasionally it could be interpreted as a word itself for instances ‘where is the  ?’. Furthermore, it can convey the whole sentence such as the smiley face emoji; its single emoji-only usage can mean that ‘I’m happy’ or ‘I like this’ (Dresner and Herring, 2010). This meaning could be taken out easily from the visual representation of smiling face which is a clear symptom of happiness.

First, they have added to Unicode standard as any character. Then, even not being an actual word, word-like usage of emoji entered to written literature with the declaration of Oxford Dictionaries, “face with tears of joy emoji” has chosen as a word of the year in 2015. According to Caspar Grathwohl, the president of Oxford Dictionaries, “Emoji are becoming an increasingly rich form of communication, one that transcends linguistic borders,” and embodies the “playfulness and intimacy” that characterizes emoji-using culture (Steinmetz 2015). Following year, Apple introduced the new feature for keyboard, the emoji prediction which suggests to emoji alternatives related to written text and also highlights the word that can be replaced with an emoji.

3.4.1.2. Grammar of Emoji

There are different approaches to whether emoji have grammatical structure. Regarding Marcel Danesi, “Like any neutral language grammar, distribution of emoji in texts as well as the construction of phrases and sentences with emoji symbols, in them, it would be impossible to literally 'read' the Emoji texts” and (M. Danesi, 2017). From this perspective, we can say, emoji has its own grammar-like system to create consistent and meaningful combinations with its syntactics and organization flow. However, Vyvyan Evans says the exact opposite to Danesi’s, “Emoji is not a true language: It lacks the grammar and vocabulary required to avoid the sort of ambiguity that arises when we put two emojis next to each other”. Moreover, he adds “While the writing system reflects and represents a spoken language, Emoji is a colorful addition to our writing systems, providing a sort of entranced alphabet for the digital age” (V. Evans 2017). Evans also seems right, yet some examples of emoji-only writing may challenge his argument.

The contemporary artist, Xu Bing, wrote a book which is written entirely with emoji titled ‘Book from the Ground: from Point to Point 2014’. From grammar perspective, while his book recalled the rebus puzzles which is far from grammatical contexture, it also has the grammar-like structure which gives the time order. The readers can easily understand which event happened before and what happened then.

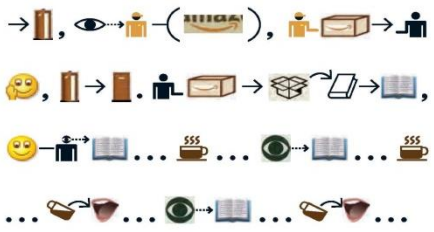


Figure 3.17: A Quotation from Xu Bing's book

Fred Benenson’s ‘emojified’ version of Moby Dick which titled as Emoji Dick, also is another example of written with emoji-only. The book has differentiated from similar ones, with its use of crowdsourcing for emoji icon selection. He used two steps to write his book, firstly he used Amazon Mechanical Turk (is a crowdsourcing Internet marketplace for work that requires human intelligence) to translate the original book into emoji and secondly, he used this source again for finding the most fitting translation via voting. Benenson wrote this book for a reason as he claimed, “I think I was super interested in pushing the boundaries of both crowd-sourcing and also of Emoji – to see how far you can take it” (Popovich 2013). Although it is written only in emoji, Benenson also added the original sentences of Herman Merville below his `emojified` sentences, which might be related with the being sure about its understandability or desire of the improve the readability. Emoji Dick is closer to rebus puzzle logic with its writing style.

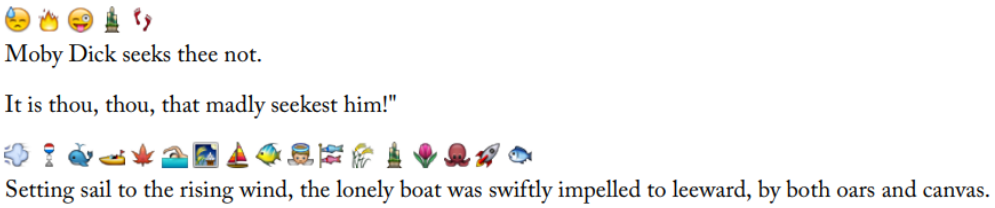


Figure 3.18: Example of Emoji Dick's emojified writing

As a shortly we can say that the emoji grammar has a conceptional structure which needed subjective interpretation to derive the meaning from emoji texts.

In general, Emoji draws attention to a concept which is indirectly evoked by emoji. Regarding to Marcel Danesi, “The emoji translations are calques involving a superposition of emoji forms onto the syntactic layout of the word forms. The calquing is thus not purely lexical but also involves conceptual and rhetorical dimensions. (M. Danesi 2017).

Basically, it can be said that reading the emoji from left to right which is compatible with the Latin alphabet languages grammar syntax is the most common way to write emoji-only texts.

Emoji has been a hygiene factor of our daily communication. Like alphabet characters of regular writing systems, Emoji also has its own sign sets and keyboard. However, it has limited availability to fully represent and reflect the spoken language whether it does not have advanced grammar structure.

To sum up, as Vyvyan Evans pointed, Emoji can be assumed as a colorful and enjoyable add-on for writing systems which provides a sort of entranced alphabet for the digital age (2017).

3.4.2. IS EMOJI A LANGUAGE?

As to whether emoji has language skills is one of the popular questions in today, and the answer of it is still sought by various communication professionals and linguists. However, no agreement has yet been reached on this issue. There are several arguments on both sides.

The reference points of those who think that the Emoji as a language is mostly related to the similarity of language and emoji use. Emoji code was designed according to the system like any other languages. So, it is expected for Emoji to behave like a language.

The spread of use has expanded the Emoji's linguistic abilities. It created new opportunities for the expansion of innovative communication channels and traditional writing via making the language more visual and playful. Moreover, it transforms the languages into more creative form (M. Danesi 2017).

The paralanguages which are mostly developed by specific social groups in order to identify themselves and being different from peers and the mainstream has a pioneering role in the language evolution over time. In this perspective, Emoji also have a similar role with paralanguages with its adaption to written language to optimize usage of the message size, constraints of text and reaction speed. (T. Gamble & M. Gamble, 2016).

Basically, we can say that emoji has its own language. It can transfer not only emotions but also other contexts with even serious or reflective tone including those intended to threaten someone which caused discussions in legal platforms. (Dunn 2015)

Emoji-only books strengthen the arguments that emoji is a language. As mentioned earlier, the book of Xu Bing can be read with no need for translation. From this perspective, Miloš Todorović connoted that "If there is a book written only in emoji, then it must be a language" (M. Todorović 2017).

According to Marcel Danesi, “The rules of emoji usage have emerged like those of a natural language, through the usage itself” (M. Danesi 2017). These rules will help to institutionalize the structure of emoji grammar systematically in time.

Even though not being a verbal language, emoji has its own core lexicon and its demonstrations even for personal pronouns, questions and indicators which are also existed in the verbal language.

Those who think that the Emoji is not a language emphasize the emoji limitations.

The word inventory of the Emoji is limited. It is not possible to tell everything with Emoji. There are no emojified demonstrations for technical terminologies or the words such as responsibility, comparison, standard or trust.

As Vyvyan Evans pointed, “While Unicode prescribes a standard, each operating system realizes emoji in distinct ways, providing what we might think of as different varieties” and “The consequence of each platform offering a system-specific variety is the following: the same emoji evokes different responses from users of different platforms (V. Evans 2018). Thus, emoji causes many issues that are lost in translation, which leads to the conclusion that emoji usage could not be sufficient to represent a single language.

The relationship between language and culture is deeply rooted; as the mentioned in the website of Encyclopedia Britannica’s language section, “It is indeed more in accordance with reality to consider language as a part of the culture.” However, emoji has not a cultural union; one emoji can mean one thing to someone, while the same emoji can mean entirely different to another one. The interpretation of emoji is related to the receivers’ cultural code and also everyone interprets the meaning of the emoji in their native language.

The grammatical structure of emoji is debatable. It is not standardized, unlike an actual language. For this reason, emoji-only writings need help for decoding such as happened in Emoji Dick.

Languages are like living organisms; in time new words can appear based on changing needs instantaneously. Although it is possible to propose for new emoji, to create a new word is not easy as real language itself. The creation of new emoji is under the control of Unicode Consortium, and the acceptance of the proposal of new emoji usually takes more than a year. Moreover, in real language, some words can diminish from the usage in time, unlike the emoji.

As lastly, emoji cannot represent the sounds, unlike spoken languages can.

3.4.2.1. The Structure of Emoji Code

Emoji, the graphic icons, have both emotive and relational functions which can be used for adding semantic nuances or avoiding the misunderstanding. While Emoji have emerged to indicate the feelings, it can also convey the intention cues expressions such as innuendos, sarcasm within a text which are hard to transmit with written or spoken language.

Different from the writing or learning language emoji is not required special training; it can be learned with self-learning through use.

Emoji can be evolved in time like but not the same with language. Until today, it evolved to not only the form or appearance of glyphs but also the context of the categories.

Emoji symbol inventory enlargements are subjected to rules of Unicode; this system needs to approve of the committee members, so we can say the extensive vocabulary of emoji comprised democratically, unlike any other languages.

While they are not character based, Emoji also have selected from its own keyboard with a stroke like any other signs of the alphabet which are also defined in the Unicode system. The choice of emoji character is made not only for conceptual reasons but also semantical.

3.4.2.2. Artificial Languages

Regarding to Vyvyan Evans, “Natural languages have evolved over time, within a community of speakers with a shared culture, to facilitate communication. In contrast, constructed languages are invented by one or more individuals, and their genesis typically be pinpointed to a specific date, period or event” (V Evans 2017). From this perspective, Emoji could be clearly assumed as an artificial language.

More than 200 artificial languages have been invented to date including Blissymbolics and Leibniz’s systems. One of the best known artificial languages is Esperanto. It is invented by a Polish physician and oculist, Ludwik Lejzer Zamenhof in the late of 19th century. Zamenhof did not want to replace the actual languages as it was tried by many other artificial languages; he just aimed to break down the barriers between different language speakers via creating an international language which would be a Lingua Franca. The structure of Esperanto used the Indo-European language frameworks. It could be easy to learn for Indo-European language users, yet its easiness was controversial for those who do not use the Indo-European languages. For this reason, its universality was also controversial from the beginning. Whether it is universal or not, Esperanto has succeeded to reach a large user base. In today it is possible to find native Esperanto speakers, who have acquired the Esperanto as their mother tongue. The exact numbers of the Esperanto speakers are not known due to lack of national or territorial exclusivity; however, it is considered that there are more than 100.000 fluent speakers.

Emoji have significant similarities with Esperanto, especially in usage frame. As being a constructed system, it has reached the universality level which was aimed by Esperanto. Moreover, both have their own grammatical structure which is shaped based on the flow of the sentences.

There are also many other constructed languages which are intended to serve narrative or artistically purposes, for instance, the Klingon of Star Trek or Hobo sign language.

Hobo Sign Language can be assumed as another antecedent of Emoji within allowing communicating with the others via directly signs from starting date at the early 1900s. Hobo Sign Language had emerged with Great Depression which caused displacement of over half million people in the U.S.A. The communication between hobos (a word stands for nomad homeless people) was done with these symbols which were carved or drew on trees, railways, walls, bridges and such various areas in outside. From the use of the outside materials and carving or drawing to make the symbols aspect, it can be assumed as the successor of cave paintings, like emoji too. Its structure is shaped by use. It is shaped by community usage like natural languages. And again, like a natural language, there is no certain inventor of it. Hobo Signs mostly guide to others on a large scale like life itself, from pragmatic ones to survival. These signs are still used but very minor compared to past.

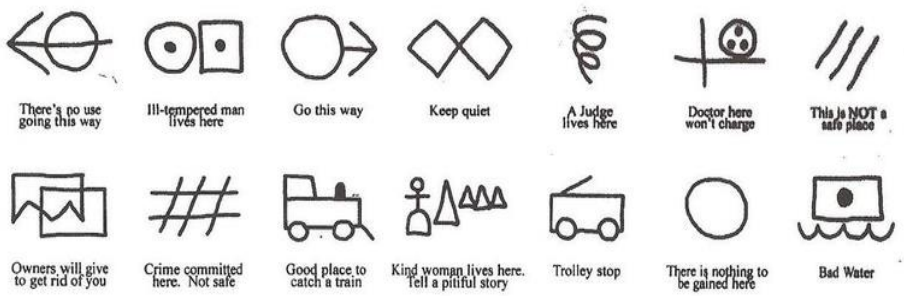


Figure 3.19: Exemplary for Hobo Signs

Universal languages which are tried to make a standardization to provide a universal lexicon have been insufficient to solve the dilemmas or remove the ambiguities and diverse uses.

With the definition of the Marcel Danesi, "Unlike the other universal language movements, such as the Esperanto one, the Emoji phenomenon springs from a desire to enhance the reach of communication among users of different languages, without replacing them; for this reason, it has had a broader reach than other artificial languages, since it does not radically threaten the survival of linguistic diversity" (2018)

Whether emoji is a language or not is still controversial, what is undoubtedly accepted by everyone is that it is a form of writing.

On the other hand, looking at the path that it has passed over in 10 years, it seems like that emoji can institutionalize itself by finding a way to broaden rapidly in time, as suitable for demands of the digital age.

3.4.2.3. Why are the antecedents of Emoji, the artificial languages or earlier writing systems are not being used today?

The answer of this question can be given from McLuhan's perspective. He believed that "medium that shapes and controls the scale and form of human association and action" (M. McLuhan 1964). From this perspective, alphabet system can be assumed as the medium.

Moreover, he formulated the four laws of media that govern the action of all human artifacts: amplification, obsolescence, reversal and retrieval (M. McLuhan and E. McLuhan 1988). As M. Danesi pointed, "Hybrid writing can go back to all layers of writing, to recall and withdraw (to reuse McLuhan's term), to illuminated manuscripts and Rebus traditions" (M. Danesi 2017)

From this perspective, evaluating the earlier writing systems and artificial languages as diminished from the literacy argument could be wrong, they are not faded away; they just retrieved and be reborn from the all old writing systems and languages ashes in layers of the newcomers' structure such as emoji.

As Tuge Gulsen pointed, "The language in messaging in digital communities has reached a level beyond the emoticons and emojis that express emotions and has become a new form of picture language. Moreover, Similar to the Egyptian hieroglyphics that bring ancient narratives to our time, today the emoji texts tell the stories of users on digital platforms" (T. Gulsen 2016).

3.5. THE GLOBALIZATION OF EMOJI

The emoji phenomenon has been spread the all-around world in a short time which caused lots of arguments about its universality. Such a wide cross-cultural adaptation strengthens the arguments that it is a universal language. Yet, the universal forms of emoji such as the emotional expressions are not enough to be accepted it as a universal. Unicode receives many requests to add language or culture-specific emojis to the emoji code from all around the world.

The Turkish tea production company Caykur's #TeamojiNow campaign could be taken as an up to date exemplary for this. Tea is an important cultural item for the Turkish ones. However, the emoji character set has contained only 'a mug' icon for corresponding the tea. Nevertheless, it is not clearly understandable for Turkish people, because tea is served with special Turkish tea glass instead of the mug. The similar campaign regarding to tea also had started by English people; they would like to see their traditional cups in emoji set. These examples could be enlarged. As briefly emoji has lots of insufficiency regarding reflecting the cultural issues. It seems like a real utopia to expect from emoji to reflect all the cultural fragments with a level of global intelligibility.

Regarding universal language discussions, we need to remember that the languages rely on an agreement between the members of the culture. From this perspective, it is hard to say that emoji could be a universal language due to its cross-cultural and also cross-platform differences. As Jonathan Cohen theorized based on Leibniz's language, universal languages require three main criteria. The first one is the having international auxiliary language function which is fulfilled by emoji itself. The emoji can be easily added to written texts in any system. And the second one is the symbolism for the exact and systematic expressions which could be expanded to future knowledge (1954). This is controversial for emoji, although it can be modified itself in time, but these modifications or amplifications could take a long time so to catch future needs. The last one is to be an instrument of discovery and demonstration for basic concepts which is absolutely has a match with emoji. From Cohen perspective, accepting the emoji as a universal seems

suitable due to its structural build. Moreover, it has enough potential to be used for in communication between different language speakers as being an indicator of cues, intention and tonality. Thus, emojis can be accepted as a sort of universal language according to users' perspective.

Regarding to Marcel Danesi, "Emoji code has more universal features in it than has any alphabetic script (M. Danesi 2017).

As Arielle Pardes wrote in her article in the Wired; "Emoji had become too popular to ignore. Unicode's blessing was not just a way to maintain standards for the evolving lexicon of emoji—it was the beginning of legitimizing emoji as a form of communication" (Pardes. A, 2018).

Emoji has its own special day, every year the release day of the Unicode's new version of which is on the 17th of July is celebrated as World Emoji Day.

Whether it has universal understandability or the general features of universal languages or has not, the Emoji deserves the credit because it is building a global behavior pattern.

3.6. EMOJI AND ART

The art should be taken as another reason for emoji universality. Starting with Stone Age and cave paintings, writings have always included the aesthetical concerns in it which also served as decoration in living places. People tend to enhance their living areas to feel good and glamorize their life. For this reason, the art had always been appreciated with its aesthetical value which is also applied by emoji; emojis use the visual icons to enhance our communication and evoke emotional reactions in an aesthetical way.

Except for completely aesthetic concerns, Emoji can be used to arouse creativity. Some famous writers and artists such as Leonardo Da Vinci or Lewis Caroll are known to use visual symbols or pictograms to reveal their deeper feelings and thoughts and communicate their ideas effectively. According to Pamela Pavliscak, "Emojis began as a light-hearted way to breathe life into our interactions and have since evolved into a creative art form. Gifs and memes likewise lend levity to our everyday encounters" (P. Pavliscak 2018).

In 2016, Kurita's original set of 176 characters officially classified as an art. It is added to the permanent collection of New York Museum of Modern Art (MoMA). Moreover, the first set of emojis is located between Pablo Picasso and Jackson Pollock's art pieces.

As Architecture & Design Collection Specialist of MoMa, Paul Galloway emphasized that "Today's emoji (the current Unicode set numbers nearly 1,800) have evolved far beyond Kurita's original 176 designs for NTT DOCOMO. However, the DNA for today's set is clearly present in Kurita's set".

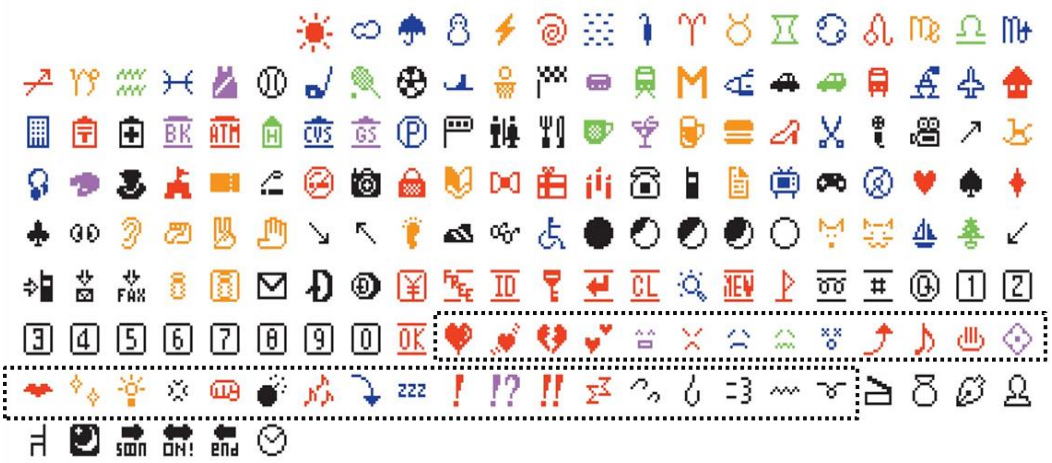


Figure 3.20: Kurita himself outlined the DoCoMo set, the emojis surrounded by an outline with dashes were for messaging and chatting intended for users, the rest were developed for i-mode platform and content".

CHAPTER 4

4.1. CONCLUSION

Humans can keep up with the technological changes. This is also applied to communication systems. From the beginning of the time, people had found a way to communicate with each other. First, they have drawn pictures on cave walls, then they wrote with symbols on clay tablets and pictographic shapes on papyrus and finally, they found a way to transfer sounds into writings on parchments. People changed not only the style of writing but also the media in time. With technological improvements, the writing media also improved. The writing platforms upgraded from cave walls to paper and typewriters to computers and lastly up to mobile phones.

While the basic needs remain the same, people have always adapted themselves to technological changes. When people cannot change their needs with technology, they have shaped the technology according to their needs. So, the each 'new' technological development has emerged from this adaptive behavior. The writing systems emerged from the need for communication which is one of basic human need. Writing emerged from to need of both expressing the feelings and thoughts and transmitting them throughout the future. With the technological developments, the human needs for communication went wider. Besides the transmission of feelings and thoughts, people needed to communicate faster, with much more receiver and in economical. And they had tried various things to solve these issues likewise from shorthand to emoticons.

Finally, a 'new' way has been found to merge all writing systems which were used till today; Emoji! Yet, being as a new concept of writing, the emoji has not a totally new concept, it did not emerge from ex nihilo, it is built on its ancestor's structures. In other words, when Emoji emerged, using the glyphs based on pictorial resemblance was not a new concept.

From staring with cave art every pictographic and ideographic systems can be accepted as the precious of Emoji. Besides the main similarity of expressing ideas,

they are also like each other with their structural logic to convey the feelings and thoughts.

As Aldous Huxley quoted, “Technological progress has merely provided us with more efficient means for going backward.” Therefore, with its all experience, emoji enables the more effective communication via creating more effective communicators.

In the absence of the face to face communication’s nonverbal cues, like intonation, body gestures and mimics which are used for enhancing and clarifying the message context; emoji has been used as the substitute of these cues in digital communication.

The spread of use has expanded the Emoji’s linguistic abilities. However, its language like structure is still controversial. Especially the interpretation differences across different cultures is the powerful argument for not accept it as a language. Yet, the languages also host the cultural differences in it. The different dialects of the same languages have emerged from these cultural differences. So, from this standpoint, accepting emoji as a language like would be suitable.

Emoji is not a real language, but it is certainly a language-like writing system. It creates new opportunities to communicate more enjoyable and innovative with its visual nature. As Vyvyan Evans pointed, Emoji can be assumed as a colorful and enjoyable add-on for writing systems which provides a sort of entranced alphabet for the digital age.

The most fundamental difference between the emoji and its ancestors is the universality. None of the precursors of emoji could manage to reach global usage as aimed by some. However, as being the world’s fastest-growing communication form, emoji reached that success.

As Douglas Adams pointed, “First we thought the PC was a calculator. We found out how to turn numbers into letters with ASCII and we thought it was a

typewriter. We discovered graphics and thought it was a television. With the World Wide Web, we have realized it's a brochure." In other words, the perceptions of human have been shaped by the structure of the technology which is used at that moment.

The future is uncertain and not clear from today, but there is a certain thing, it will continue to change and grow. And the new changes in technology may again change the communication ways. From this standpoint, Emoji phenomenon can also remain as an ephemeral trend, but the communication need of human would be lasting.

Overall, it is not known whether emoji can remain as emoji in the future, but it will surely evolve into something that carries the historical accumulation and experience of emoji.

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