

Faces Across Platforms. 2021. [ncbi.nlm.nih.gov](https://ncbi.nlm.nih.gov)

11. Robertson A, Ferdousi Liza F, Nguyen D, McGillivray B et al. Semantic Journeys: Quantifying Change in Emoji Meaning from 2012-2018. 2021. [PDF]

12. Danesi M. The Semiotics of Emoji: The Rise of Visual Language in the Age of the Internet. London: Bloomsbury Academic; 2016.

13. Pavalanathan U, Eisenstein J. Emoticons vs. emojis on Twitter: A causal inference approach. Soc Sci Comput Rev. 2016;34(6):592–606.

14. Evans V. The Emoji Code: The Linguistics Behind Smiley Faces and Scaredy Cats. New York: Picador; 2017.

15. Stark L, Crawford K. The conservatism of emoji: Work, affect, and communication. Soc Media Soc. 2015;1(2):1–11.

16. Ge J, Herring SC. Communicative functions of emoji sequences on Sina Weibo. First Monday. 2018;23(11). doi:10.5210/fm.v23i11.9413.

17. Kelly R, Watts L. Characterising the inventive appropriation of emoji as relationally meaningful in mediated close personal relationships. In: Proceedings of the 19th International Conference on Human-Computer Interaction with Mobile Devices and Services. ACM; 2017. p. 1–11.

18. Zappavigna M. Searchable Talk: Hashtags and Social Media Metadiscourse. Soc Semiotics. 2015;25(3):274–291.

19. Cramer H, de Juan P, Tetreault J. Sender-intended functions of emojis in US

messaging. In: Proceedings of the 18th International Conference on Human-Computer Interaction. Springer; 2016. p. 484–500.

20. Alshenqeeti H. Are emojis creating a new or old visual language for new generations? A socio-semiotic study. Advances in Language and Literary Studies. 2016;7(6):56–69.

21. Bai Q, Dan Q, Mu Z, Yang M. A systematic review of emoji: Current research and future perspectives. Front Psychol. 2019; 10:2221.

failure, revealing contentious aspects of emoji with implications for more egalitarian digital public spheres 2.

Emojis have been shown to be an efficient visual communication tool that provides affordances for the nuanced framing of communication. However, their visual semiotic nature might have implications on the emotional and representational agency of emojis and people's practice-oriented, context-specific use of them in television soap-operas. It is suggested that emojis provide affordances for the framing of emotional agency in social media communication, as they personify and present emotional experiences and sentiment through a distinct visual semiotic system 6. Emojis promote a partnership between sender and receiver of the communication, embodying and framing emotions as visual agents rather than as verbal representations. As the emotional representations of emojis vary, their use in a specific environmental context relates to issues of in-group membership, affection and sociality. However, mass-personification of emotion through emojis may also threaten the authenticity of the representation, marking it as a shallow solution to framing a complex emotional experience.

## References:

1. Zhou Y, Lu X, Ai W. From Adoption to Adaption: Tracing the Diffusion of New Emojis on Twitter. 2024. [\[PDF\]](#)
2. Wiseman S, J.J. Gould S. Repurposing Emoji for Personalised Communication: Why pizza slice emoji means "I love you". 2018. [\[PDF\]](#)
3. Moschini I. The Face with Tears of Joy Emoji. A Socio-Semiotic and Multimodal Insight into a Japan-America Mash-Up. 2016. [\[PDF\]](#)
4. Chen Y, Yang X, Howman H, Filik R. Individual differences in emoji comprehension: Gender, age, and culture. 2024. [ncbi.nlm.nih.gov](https://ncbi.nlm.nih.gov)
5. L. Behrens J. "Unknown Symbols": Online Legal Research in the Age of Emoji. 2019. [\[PDF\]](#)
6. Holtgraves T, Robinson C. Emoji can facilitate recognition of conveyed indirect meaning. 2020. [ncbi.nlm.nih.gov](https://ncbi.nlm.nih.gov)
7. Goldman E. Emojis and the Law. 2018. [\[PDF\]](#)
8. Barbieri F, Camacho-Collados J. How Gender and Skin Tone Modifiers Affect Emoji Semantics in Twitter. 2018. [\[PDF\]](#)
9. Kutsuzawa G, Umemura H, Eto K, Kobayashi Y. Age Differences in the Interpretation of Facial Emojis: Classification on the Arousal-Valence Space. 2022. [ncbi.nlm.nih.gov](https://ncbi.nlm.nih.gov)
10. M. B. Fugate J, L. Franco C. Implications for Emotion: Using Anatomically Based Facial Coding to Compare Emoji

change. Three potential avenues for future research include a more detailed examination of emoji development trends, focusing on novel emojis and platform-specific emoji design, (2) an analysis of the interface between emoji and other semiotic systems, such as text and other digital artefacts, and (3) a study of the socio-political impact of emoji 1.

This chapter has explored trends in the creation and popularity of emoji across the Unicode releases of 2010, 2015 and 2020, and has proposed a typology of emoji based on their form (design, pictorial vs symbolic, abstract vs iconographic) and content (culture-independent vs culture-specific, universal symbols vs local motifs). To gain a more nuanced understanding of emoji evolution, this typology could be further elaborated or nuanced. Researching how the design of newly added emoji affects usage over time could be undertaken at the level of individual emoji (e.g., over a year or two after introduction), or at release period level, examining how platform entities choose to represent these emoji 11.

The role of operating system platform in emoji usage and per-platform style shift over time has received less attention, indicating an avenue for further research. In platform-specific emoji datasets, research could study the overlap between platforms and usage dynamics of the most popular emoji on a given platform over time (e.g., a longitudinal approach). Platforms also have their own emoji design changes, sug-

gesting potential areas of research. Finally, all emoji-related research in this chapter is focused on Twitter. It could be expanded to new apps where the interface between emoji and other semiotic systems such as GIFs, stickers, QRs and videos come into play. In research of emoji evolution, a certain degree of combination with ecological approaches is more and more required.

### 11. Conclusion

Politically engaged younger generations often communicate on social media through a distinct semiotic system composed primarily of emojis. This paper aims to parse how young debaters and political party representatives frame emoji usage as tools for performance and identity construction in their social media communication. By conceiving meaning as something which is co-produced in an ongoing system of social interaction, the performances and functions of emoji are examined in three practice-oriented case studies recorded in discussions of the topic 'Emoji in Politics' in the Nordic Youth Debate Forum – a transnational digital public sphere. The analysis illustrates that, on a content level, emoji are used predominantly, although not exclusively, performatively to voice emotions and behaviours associated with persona or identity. However, this framing is nuanced by the material affordances of emojis, which are imbued with agency that shapes their appropriation as modes of communication. The data also reveal instances where emoji use is construed as communicative

engaged as gatekeepers of emoji designs such as Unicode consortium and social media companies. These developmentally unequal emoji are either improperly out of asset front stage social semiotic resources or recommendations /availability front stage resources devoid of local knowledge. On these grounds with semiotic legitimacy some emoji are reduced to nothing when equidistantly remediated front stage social semiotic resources. Inadequate understanding of emoji or the semiotic richness of emoji has contributed a lot to emoji miscommunication or misunderstanding. This kind of misunderstanding is especially exhibited in Arabic culture.

### 10.1. Emerging Emoji Technologies

Recent developments in emoji technologies and practices point to the rise of innovations in emoji creation and search. An early indication of moving beyond key words to search for emojis is EmojiNet, which uses word senses and semantic representations of emojis. Along with EmojiNet and the development of shortcuts, emoji keyboards (in which emoji are embedded in the product) are also becoming more prevalent in mobile applications, social networks, and browsers. In addition, web designers and app developers are adopting tools and libraries that support emoji markup. It is also possible to localize the emoji palette by ad hoc redefinition of how emoji are mapped from Unicode code points to rendering devices. The establishment of standards is part of negotiations and power struggles

between controlling organizations, many of which democratize and participate in each stage of innovation processes, unlike most 20th-century media technologies 2. The emoji Wikipedia documents the comprehensibility of emojis and indicates cultural awareness of emoji semiotics in general and the process of decoding emoji in particular. Moreover, it deals with emoji-related controversies.

In 2015, a report put together from a wide variety of sources examining how people use emoji, with a focus on its growing significance in communication. A finding of interest was that 1 in 3 women used emoji in their online profiles, a response that aide to characterizing why “red” (hearts), “blue” (sweaters), and “green” (eyes) were hot emoji across continents. This inquiry into the growing significance of emoji was entirely unlike traditional largely bottom-up analyses of media. Finally, the emoji regulations adopted by Japan’s Ministry of Internal Affairs and Communications in 2010 were similar to other electronic communication standards in that an organization selected the code points and rules for encoding a given character, for which there was international agreement.

### 10.2. Predictions for Emoji Evolution

While emoji have become ubiquitous in online communication, there are still many opportunities for research regarding their continued evolution. To a large extent, the phenomena discussed in this chapter are evolving, as emoji usage and platforms

and winking, introducing a more positive tone or implying that mum knew something'. Unlike most new visual language developments in history, emoji receive less rigorous scrutiny than written language. In comparison with verbal and written language, emoji have been the lowest priority in addressing issues such as their laws, contracts, and cultural imagery. Emoji is often added after-the-fact unless emerging laws or regulations are expected to have societal impact, so there are typical patterns of miscommunication. Regarding emoji ambiguity, emoji meaning must ultimately include both verbal working memory and environmental knowledge beyond a contextual moderator. A sender or recipient could reasonably miss the sweat bead, which may cause reasonable senders and recipients to misunderstand each other, damaging communication accuracy. There is also the risk that a party will mis-decode the sweat bead as a tear, leading to unintended recipient responses. This also responds directly to other forms of understanding emoji such as emojis previously unknown to the recipient or unheard-of developments in emoji language morphology. Courts usually have extreme difficulty with emoji meaning interpretation due to litigant ignorance or suspicion of emoji, of which the client could be cognizant.

#### **10. Future Trends in Emoji Communication**

Future trends in emoji communication focus on understanding emoji design, es-

pecially modifier emojis, with hopes of reducing misunderstanding. Another area that needs exploring is future impacts of emoji use on message receiver's interpretation, including research on emoji features of interest to news agencies and interrogating how emojis impact user engagement on social media. Also worthy of exploration is the area of human-robot interaction and emoji use. A timely follow-on work to critical study of emoji is to follow this trend through, perhaps with a new team focusing on the systematic provision of a particular emoji or emojis sourced from someone's socio-cultural milieu.

Finally, some research areas orientation and questions that have yet to be interrogated using emoji communication or are just very early days with respect to emoji communication's pertinent research are suggested. This includes: Rethinking emoji: emoji as a semiotic system. A perusal through the emoji landscape suggests that emoji is a very much complex semiotic system not simply reducible to discrete emoji pictograms and their affordances for emotive, affective expression; Complex emoji design are a residue of social and technical decisions in the backstage before being offered as a type of semiotic resource in the front stage communicative scenario. Negotiable design has not only endowed emoji with the property of negotiate-enabling but produced, in turn developmentally unequal varieties of emoji for hegemonic institutions or agents actively

nature as a semiotic (and visual) system. Much like the pictorial systems that preceded it, emoji is inherently flexible in its semantic meaning. The Unicode consortium acknowledges this fact and states that emoji are encoded based primarily on their general appearance, not on an intended semantic. An apple is a fruit. But what a speaker means by symbolising with an apple is fiercely variable. It may be used in debate about healthy eating, excessive sugar intake, education, climate change, or possibly, as a counterattack to insult her(its) degeneracy or decay. This meaning variability is what renders emoji both very rich and very tricky to use, all depending on who uses what, when, and where.

Numerous research efforts have been devoted to quantifying aspects that distinguish between popular and unpopular emoji in terms of independent user population, receiver-preference and a host of vocal differences. In this research, smaller communities like close friends, partners, and families are deliberately analysed, and specific emoji, when used in direct reference to specific group membership, are hypothesised to contribute more to better communication with less ambiguity. Specific emoji like flowers or hearts were popularly discussed as means to reinforce tacit understanding or shared knowledge. For instance, two partners who often use one pink rose emoji to represent 'I love you' may completely ignore its original lexical sense of flora or beauty in their exclusive

conversations.

## 9.2. Miscommunication Through Emojis

In a story, a man died in a caravan somewhere and his wife was apprehended for murder. The wife was on a caravan holiday down the coast with her family, and she texted a friendly complaint to the ground, saying she had one of those cheeky faces on Gran's face. Before she went on holiday, the family had worked together to pack up, and she sent a message to the ground giving him a time to collect the keys and saying to go in if he wanted, but the family would be back on 3 August. After the family left, the police searched the caravan. They found the message and say that the face is winking – presumably meaning that the mother knew they wouldn't be coming back and had deliberately lured people into having access to her caravan when it would be unoccupied. This interpretation seems misguided. The message clearly has one smiley face, and that face is not winking. There might have been some more smiley faces or other expressions, but the police interpreted this single face as so significant when it is just a smiley face, whatever the time, and this is facetiously rather than cheerfully written. The police interpretation here is the result of the determined efforts of a specialist unit who presented a codified 'emoji dictionary' to the jury. The court's interpretation was also gendered: the cheerful (i.e. more innocent) interpretation is cast as feminine whereas the more positive facial expression (i.e. knowing): 'the emoji is smiling

reading those without emoticons, and a low arousal emoticon is more effective than a high arousal emoticon when reading messages that contain either strong or basic emoticons. Emoji, as the way of emoticon evolution, is attracting more and more attention from researchers but still rarely used. In a word, emoji, as a pictographic character, is widely used to post different types of content and is attractive to users for emotions, descriptions, and fashionable effects.

### 9. Challenges and Misinterpretations

Despite these challenges, emoji have become an integral part of digital communication and often serve as a remedy for such challenges 6. The use of emoji to express a nuance of meaning that would otherwise be imprecise adds to their popularity. Emoji can convey messages related not only to phonetic sounds but also to their iconographic representations. However, the pictoriality and iconicity of emoji can pose issues for their effective communication 2. Some emoji refer directly to their intended sentiments, such as the laughing emoji having a clear and obvious connotation of either happiness or amusement. However, some emoji have multiple immersed meanings based solely on their shapes and visual representations, potentially leading to confusion in their usage.

For example, the pizza slice emoji is often used to convey love indirectly. This usage takes advantage of the confuted pictorial representation of mathematical symbols

heart used in typesetting. Although the pizza slice emoji has no direct relationship with love, its usage has evolved in such a way that it is perceived as “I love you”. Such divergences in emoji meanings ask for a higher level of interpretation, which can, in turn, result in a misunderstanding or misapplication of emoji meanings in digital conversations. Overall, despite emoji’s capability of alleviating some communication challenges presented in a digital context, emoji misunderstanding and misinterpretation are two pitfalls that are unique to emoji usage in digital conversations. There are still various unknowns regarding the understanding and misinterpretation beyond literary metaphorical information. The exploration of such issues regarding emoji meanings is presented in the following chapters.

#### 9.1. Ambiguity in Emoji Usage

Despite their ever-growing popularity in digital communication, emoji are far from straight-forward to use. The crucial issue of understandability is exacerbated in these cases because of the inherent blurry nature of emoji in the first place 2. The ambiguity of emoji, in the meaning of both the pictorial element and the semantic attribution, opens up a plethora of possibilities for communicators to play with them. Thus, despite (or more accurately: because of) their great versatility, emoji use is fraught with potential misunderstanding, miscommunication and misinterpretation. At the root of the ambiguity of emoji lies their

have been hypothesized to primarily convey emotional information comparable to human facial expressions, even though the introduction of graphic icons significantly augmented the screens of various electronic devices. Today, emojis denote a broad variety of objects, clothes, activities, food, animals, landscapes, concepts, and various other stimuli outside the psycho-evolutionary evolution of humans who constructed the encoding of vivid facial expressions. Although the range of emoji types has expanded, the primary purpose of emojis has not departed from the basic system of emoticons 10. Emojis are symbolic representations of human facial expressions that are used to convey emotional sentiment in computer-mediated communication. The perception of an emoji face is hypothesized to depend primarily on “emotional expression information” in the similar vein to a face image of a human. A growing number of studies continue to advance the understanding of the intended and perceived emotional expression from the emoji face. In the first attempt, researchers used two approaches using the affective images of an emoji face. One approach was to create several face-like landmarks and assess the efficacy of altering the landmarks in able to convey happiness and surprise using a computer-graphics tool. The other was to validate that the consistency of emotional perception occurred even when viewing an emoji face rendered differently.

## 8.2. Impact on Interpersonal Relationships

With the development of network technology, the way we communicate with others is diversified. In particular, many researchers focus on computerized communication, and emoji is one of the important subjects. Emoji has become a necessary tool in daily chatting; 9% of online users use at least one emoji in their posts. A survey proved that by sending emoji, people can create a relaxed chatting atmosphere, cultivate interpersonal relationships, beautify communication content, and reduce its ambiguity 4. Emoji is developed in the late 1990s. An emoji can better indicate the speaker's attitude than the single full form or abbreviated form of the attitude 6. Emoji can express richer emotion information, subtler emotional and social meaning, and more complex emotions than emoticons.

With a set of pictorial characters, emoji can convey messages quicker than texts and become a fashionable way of information sharing. A study found that online messages with emoji express more emotion and humour compared to those with textual expressions. With emoji, online emotion disclosure has a new mode, information can be depicted much intuitively at emotions. Additionally, from the perspective of life-long development, the emoji life spans of various life events in mobile content are analysed through their momentums effect. According to research, people smile more when reading that contains emoticons than

prestige, and taste.

### 8. Psychological Aspects of Emoji Use

Emerging from the final use of the conventional keyboard to create facial features, the simple emoticons are developing practical symbols that are not only more beautiful but also convey more meanings and emotions. Initially, a set of 176 original 12×12 pixel emoji integration symbols for mobile internet access was developed. These symbols have various levels of abstraction to express complex meanings. Similar to those famous pictograms, emoji can be categorized, easily inferred, easily memorized, and quickly searched. Emoji, in a sense, are more artistic and freer to design than emoticons. Unlike the rigid codes and rules of keyboard characters, they attract users' eyes more easily as new design complies with naturally aesthetic beauty. They were first lost in translation due to the different operating systems and interfaces. Understanding emoji widely is now attainable by encoding in Unicode characters. With the development of internet software and hardware, emoji have become an essential element of mobile social communication in many countries 4. A Mac user on iMessenger/FaceTime may use emoji with a variety of styles, but an Android user on WhatsApp will see the symbols in a relatively pixelated way. The materials and methods in emoji design are very diverse. Firstly, they can roughly be categorized into immaterial and material design.

Emoji have become increasingly popular in

enhancing interactions in CMC. A plethora of empirical studies have investigated emoji production, comprehension, semiotic, and cognitive processing, in which CMC is regarded as a provoked variable of emoji use. CMC environments with different communicative modalities have been taken into account, such as computer versus smartphone, texting versus photo, public sites versus closed groups, as well as time limitation. A comparatively low production rate of using emoji will be observed due to the limited, finger-based keyboards. It has been noticed that designers may utilize animation and motion as essential resources in social media, since they can more easily attract attention and convey implicit messages. Emoji functioned as mellowed referents transforming an originally explicit task-directed message into implicit social interactions in a longitudinal study. The degree of emoji's polysemy and productivity declined as the communicative association faded. There is an over-saturation of emoji that is normally observed within dense usage periods. The enjoyment of emoji use faded after receiving emoji through a digital thread longer than five messages.

#### 8.1. Emojis and Emotional Expression

The advent of digital communication tools has given birth to the use of emojis, an extensive system of pictograms that accompanied the standard written language. Emojis have been employed to accentuate the emotional sentiment of standard text, which is climaxed in an emoji. Emojis

and these static illustrations eventually evolved into emoji.

### 7.1. Cultural Variations in Emoji Interpretation

Cross-cultural situations make the assignment of meaning particularly more complicated than in one culture contexts. Cultures differ with respect to evaluation and description of seemingly universal emotions, resulting in different understandings of the emotion being actuated by the situation. Emoji are applied in various cultural contexts, thus users from different backgrounds can have different understandings of the same emoji. As evidenced in the usage of some indicators in different cultures, emoji portraying crying can lead to confusion because, while Muslims and Middle-Easterners use it for conveying empathy, Americans usually interpret it as a symbol for crying or sadness 2. An example is the donut emoji, which is popularly used in Turkey to mean more than just food, referring to the shape of the crescent moon and often used in political contexts.

### 7.2. Emojis and Globalization

In recent years, emojis have proliferated in popularity, driven by rapid globalization through digital communication. Mobile platforms increasingly offer standardized Indexed Unicode encoding systems, facilitating cross-platform, in- and cross-linguistic communication across national and cultural borders. Long-distance exchanges of digital messages in textual and audio-visual formats continue to proliferate. Never-

theless, they always come up against spoken language codes that elaborate general meaning, intent, emotion, and visual imagery expressed in still and moving images. With globalization, emojis have spread to cultures previously without a written system or with orally transmitted literacy 2. Technological and linguistic disparities have significant implications for analysis of the generic, semiotic, and cultural status of emojis within broader systems of globalization.

As they disseminate globally, emojis are diversified into locally produced designs along with use in local language scripts. While appear historically credited with initiating this digital revolution, key actors such as paved the way for rapid dissemination of emojis and emoji-magic through the mass personalized use of mobile devices in the acceleration of global flows of culture. They also facilitated spontaneous use and development of local emojis. As emojis become a medium of everyday socializing, the development of local codes diverges or branches off in fundamentally new ways in languages, semiotico-cultures, and recommender systems. Local codes multiply in variation and complexly inscribe emojis in their own semiotic production through creative repurposing, remixing, parodying, and even digitally altering templates of emoji-magic. Much of this production is now left untranslatable, as supervisory algorithms strive to make them speak emojis as ideology and inherently index culture,

that is largely stable within platforms. The original semiotic viewing of emoji semiotic would sometimes be accommodated to a new meaning. Even though a repurposed emoji may have originated from a collective or broader context, its understanding and application would subsequently be often limited to a specific communicative dyad. However, someone might still lack the semiotic understanding, and relationship breakdowns could occur as a result. A semiotic viewing of emoji is therefore collective, as it emerges from and also shapes the communicative practices taking place in a speech community. It is also limited as it is localised to specific communicative dyads.

**7. Cultural Implications of Emoji Use**

Emoji have achieved widespread adoption among both young and old populations, with diverse emoji comprehension because of varying life experiences and cultural backgrounds. 4 investigated the role of age, gender, and culture, as those differences in emoji processing have the potential to create digital barriers among emoji users. Two studies were conducted to explore these moderators with two types of emoji comprehension tasks, matching and categorization. Young adults outperformed older adults in comprehension task accuracy and rating decision commitment. Females outperformed males in matching accuracy, but no gender difference was found in the decision confidence. Cultural differences in emoji interpretation were identified, with

American participants giving higher valence and arousal ratings than Chinese participants. With the rapid growth in social media communication, emoji have become pervasive in people’s digital conversations. As a new form of non-verbal communication, emoji enrich the semantic representation of messages and complement the text. Online users attach emoji to their text, resulting in a more lively online dialogue. A survey reported that approximately 95% of respondents use emoji with an average of 6-10 emoji used in every text. The widespread adoption of emoji risks creating digital barriers among emoji users. Emoji are not universal and linguistic differences and cultural background can affect digital communication. Proposed candidate emoji that English words associated with happiness, anger, or sadness may not have same emotional associations in Mandarin. A frustration jump situation often occurs in cross-culture communication in where the sender uses emoji to convey sarcasm or laughter while there are only textual replies to the emoji comments. Age, gender, and culture differences may impact emoji comprehension. As emoji are frequently used in mobile communication, researchers focused on this ubiquitous form of communication, investigating emoji processing and use in diverse forms, including full-length news articles. Initially, cartoons and simple drawings were used to convey ideas or to complement the text, later animation graphics began to emerge

enced by the principles of Ferdinand de Saussure, frequently acknowledges two-sided relationships in semiotic systems. This system is interpreted as basic signifiers, which denote and connote background. The one-sided arrows are forms of signs being interpreted as a concept. Emoji will join more complete developments of communicative resource that have functions of representation, identification, and structure, through signifier and meaning 2. Signifiers of emoji include visual pictograms or ideograms representing objects that inspire emotions and decisions in people like faces, gestures, and hearts, and tangible objects including animals, plants, vehicles, mood expressions, and emojis. Many emoji have connotations that extend beyond their meanings, such as vibrating heart emoji many women employ in their discussions likely to make manly expectations; getting a hand on a face hydrated slice emoji mean “this is wrong!” Facial glowing emoji shapes through cellulose deep digestion convey “what are you doing” remote discursive discussions. Auxiliary emoji language, as semiotic resources indicating or classifying linguistic mechanisms, perform enunciative perspectives in intersubjective approaches.

## 6.2. Emojis as a Form of Non-Verbal Communication

During the past decade, the growing use of emoji in digital communication has led to a flurry of debate about their meanings and functions. Emoji have been reported as

being used to impart emotion to text or to provide information about non-verbal cues such as intonation or intention 6. However, user-generated emojis are often reported as taking on added significance within specific communicative dyads, or in entirely peculiar ways to their current users. For example, there is a well-documented practice of using the pizza emoji to mean “I love you” among members of the popular Spirals meme. Using user-generated emoji as a form of communication that differs from their conventional meaning brings up questions about semiotic understanding. Much the same as other language forms might be reappropriated to take on localised meanings, there are ways emojis are used that differ from conventional understanding; this is termed “repurposing.” Repurposed emoji sometimes acts to convey a sentiment that the original pictograph alone cannot. This is not to say emoji are simply a replacement for a face-to-face action that would take place in a colocated conversation 2. It is conceivable that two users could create a recipe-based emoji that could not be verbally expressed, then to share with another user that pizza emoji to mean “I love you.” Emoji do not add a quotable content or information, but can be a way of saying highly selective thoughts/feelings and ideals without a necessary physical presentation. Using repurposed emoji is not a conscious subversive act, but the eccentricities of specific communicative dyads and also affordances of the visual design of emoji

the usage and emotional loading, even in a first-encounter interaction 9.

6. Emojis as a Language

Over the last ten years emojis have become extensively used all over the world and are recognised as forms of communication. Since emojis are images, they could be considered as pictures, icons, or glyphs, displaying pictorial representation of intended signs. However, in their own right emojis are a semiotic system that varies from the vernacular and usage of textual grammars 2.

Picture and Icon. Emoji is considered as picture and icon, showing no explicit rules on how they could convert onto the paper, and employing graphics, the mode that has been employed since the cave drawing age. A picture shows a visual object or event, whereas an icon depicts a concept. An image of an apple can always switch onto written words in any valid languages. In this sense, the definition states that a system is a language, written or spoken words are ultimately re-presentations. A picture, showing a banana, can depict “banana” as such, but is also used to signal “food”, “yellow”, “cooking”, “Africa”, etc. Because the intended meaning is infinite ambiguous in reliance of the context, this way of picturing cannot be converted onto written forms. After being formal and sophisticated, these pictures will be re-interpreted and repurposed by people to build new connotation. Taking pizza slice emoji for example, during romantic communication,

using the pizza slice emoji means ‘I care for you/ I love you’ etc. At the first glance, the reception elder generation may feel weird of its use. It is not until one learns what pizza slice emoji means, the analogy moving onto the pictorial forms will on turn explain its use. Depending on the proximity of experience, it may take long time for one to be up-to-date with the language change. Glyph. Emoji “Language”. As a starting point of encoding, it can create more grammatically structured pictographs, e.g. “I love coffee” can be represented with the representations of these glyphs “I” + “love” + “☕”. It could be responsive to form the combination “☕♥️🍷🍷” on behalf of depicting both ‘XXXXXXXX 🍷’ and ‘ILoveYou’.

It could also build a more complex gapped pictographs, such as this one “I am angry because you did not turn the Wi-Fi on” – “😡🔌🔌🔌🔌”. In this combination,

it is not about the interpretation of one or two glyphs. But it requires an overall understanding of the question description.

6.1. Emojis and Linguistic Theory

This chapter will examine how emojis are grounded in theories of linguistics, particularly semiotic systems, signifiers, and the role of convention in language use. Semiotic systems convey meaning through symbolism, from basic word systems in animal communication to the complex communication in human languages. Modern linguistic theory, heavily influ-

son's expressions and actions, but they also depict scenes, places, food, transportation, etc. The earliest emoji sets were composed of simple 12 x 12 pixel images. A standard set of 176 emojis was encoded by UTF-8 on May 2010 4. Emojis enhance the richness of emoticons and are widely used in digital communication via social media platforms. Generation Z (Gen Z) and their relationship with emojis and emoji use, especially in online contexts, has been studied. Generation Z is the cohort born in the late 1990s to early 2010s who have grown up during the age of advanced technology and the internet. While Gen Z is the first cohort to have been raised in the digital world and often referred to as "digital natives," Generation Y (Gen Y), also known as the "millennial generation" and the "echo boomers," are often acknowledged as the "digital pioneers" or "digital immigrants" who adopted significant technology before it became mainstream 2. Emojis have also attracted the interest of auto-generative emoji studies including emoji popularity and emoji predictions. Emojis are increasingly incorporated into academic writings beyond marketing and business-related disciplines. Academic research on emoji use dating back to the mid-2010s and the emergence of emojis before that shows a lack of historical studies in the academic domain. Hence, this study aims to examine how younger and older generation cohorts experience, use and understand emojis differently, how generational aspects affect

the perception and comprehension of emojis.

**5.2. Comparative Analysis Across Age Groups**

Age differences exist across the understanding of emoji communications. Although younger participants viewed fewer emojis as neutral compared to older participants, overall age differences in interpretation tended to mirror descriptions of emojis in the unreserved communicative mode. That is, younger participants tended to perceive more emojis as happy, sad, and angry, while older participants tended to perceive more as tolerant. For the neutral emoji category, there were two interesting findings. One was that both age groups perceived the information emoji as neutral, although the neutral emoji cluster was distinct in each age group. The other was that older participants viewed the OK emoji, which is neutral for younger participants, as slightly happy 4.

Many emoji communicants struggle over whether emojis are meant to add subtlety to the text or intended to be the text's most expressive part. In this regard, emojis share common traits or landmarks across age groups, but at the same time, there still exists a broader scope in meaning and usage across age groups that may cause misunderstanding. Emojis should facilitate communication in a user-friendly way across different ages, but rather than the intention of the sender, the meaning of an emoji is more susceptible to interpretation based on

One of the most aggressive cases of VB is the massive multi-player online role-play game community, which allows for teaming with strangers. One of the most frequently discussed and transparent toxic interactions of a game developer team appears to be public chat rooms in which players can conduct VB such as verbal abuse, trolling, petty quarrels, and productive interactions such as organizing teams for game quests.

5. Demographic Analysis

Research on emoji has seen increasing attention over the past decade. Existing literature primarily focuses on how emojis may influence communication within a conversation, while their role as a semiotic system has been neglected. In addition to how emojis are used in digital texts to enhance interactions and fill information gaps, it is important to investigate what emojis actually convey, namely emoji semantics—how emojis are represented and understood 8. For grounded semantic knowledge, one needs to consider both the pictorial representation of the emoji itself and the social-cultural knowledge of it, which should be analyzed through a demographic lens. This article aims to fill this gap by analyzing the semantic modeling and exploration of emojis with respect to user demographics. Twitter emojis were employed as a case study due to the open nature of the data, and a demographic inference model was implemented to derive emoji usage from users’ demographics such as gender, age, and location.

In the digital age with rapid advances in Internet technologies, online communication through computer-mediated communication (CMC) has dominated everyday interaction. When sending a message, people can insert emojis, which are usually graphics that represent a happy or sad face, to convey their emotional status. Earlier research on emoji largely focused on the effect of emoji usage 4. The current state of emoji research indicates two research frontiers: emoji use across in-groups and out-groups; and emoji semantics analyzed through a demographic lens. Emoji is a semiotic system that conveys meaning through a symbolic modality. Existing literature has mainly focused on how emojis convey humor, evaluate sentiment, and understand semantic relations. Additionally, some early studies suggest the capability of gender inference from emojis and their potential in predicting political ideology. As a relatively novel graphical modality for communication, the use of emojis across user demographics, such as gender, age, and location, merits further study.

5.1. Usage Patterns Among Younger Generations

The interpretation of emojis among older and younger generations has not been explicitly studied. Various characteristics (age and gender differences) may affect emoji comprehension. Emojis, a visual communication tool, were first introduced in Japan in the late 1990s. Emojis are similar to emoticons in that they can describe a per-

trendy social media platforms. The main criteria for choosing the texts are their relevancy with “emoji” and “digital communication”. The texts were deliberately limited to those which are either about ‘emoji and affect or expressing’ or ‘emoji and identity or interpreting’ aspects.

All selected texts contain a specific numerical figure. This semantic preference implies the author’s rhetorical intention to reduce the considerable complexity of emoji as a semiotic system into a smaller figure or concise terms. In digital communication, a huge mass of information, message, identity, behavior, etc., is encoded in a small emoji sign. For this reason, texts having a specific numerical figure also exhibit specific rhetorical effects. The numerical figures, classified into three types: fixed figure, open figure, and absurd figure, indicate three metadiscursive or rhetorical effects, depending on the communicative context of the texts. The ordinary value of these figures is that they state conciseness, succinctness, usefulness and relevance. Meta-discursively, they signal heuristic value and instructiveness 7. Nevertheless, the influence degree varies depending on the communicative context. When the text context provides background knowledge about emojis, fixed figures and absurd figures can produce expressions of critique, incredulousness, or blame ineffectiveness. These rhetorical functions of exaggerated figures enhance the emojis as a semiotic system in digital communication.

### 4.3. Emojis in Online Gaming

Gaming is widely utilized for entertainment in online spaces and retailing the games; the expansion of online gaming public chat rooms and teaming with strangers has brought a new challenge to the digital gaming community of the appropriate behavior of their members 4. Virtual worlds allow for the addition of avatars, which have personality and unique behaviors, or chat messages that contain user-generated content bringing variation in language. Given that in-game chats seek to afford a level of anonymity and tranquility, this function most gauged against obscenity in English and Western-centric burgeoning fears of gaming communities becoming toxic 2. Such activities, in all manners of respectful verbal behavior, should be closely monitored by companies in the gaming community in any language. Given that toxicity is now a target of applied linguistic studies, it is important for a global game developer to understand how players of specific languages other than English fill in-game chats with verbal abuse (VB) or why they refrain from it. Toxic gaming behavior is growing into a phenomenon of societal concern. It has been argued that video games as participatory media have not evolved in conjunction with their native interactivity. In this context, some developers increasingly engage in better moderation measures to create a gaming environment that is free from hate speech, sexism, aggression, and verbal abuse in public chats or voice chat logs.

pragmatic model either theoretically didactic or computationally formal within the computer domain is informed with gaps. The great variability of emoji use with unique forms of meaning relies on a complex interconnected pattern of sign systems and languages. Only an assemblage-based semiotic pragmatic account can fit the diversity of sign figures and meaning potential seen in emoji interaction. For cultural variance in emoji use and meaning, a personal, interactive, and participatory view is taken expecting cultural difference in emoji representation and interpretation, while regardless of such differences, commonly accepted conventions are applied in interaction 6. A basis for such a view is seen in the recent allocation of roles in emoji representation by cultural background.

#### **4.1. Role of Emojis in Text Messaging**

Emojis have become a ubiquitous form of communication across various contexts and have been used to transmit meaning in quick and convenient ways. Designed as a supplement to text, emoji are interpreted as a separate code that influences how communication is perceived. Similarly, emoticons consist of a small combination of normal characters, which can be generated on a standard computer keyboard, and have been also widely adopted in communication over the Internet. The visual signal strength of each character in emoticons is low due to the large range of seven types (pauses) being presented as an ASCII text. An alternative annotation technique, based

on international-standard Unicode code points, has been adopted for emojis, which greatly improves the visual prominence or foregrounding of this mode of signals in alternative forms 6. In addition to decoding the snaking emotions embedded in original signal messaging texts represented by emoji, the text messaging systems have accounted for conventional ways for discrete textual emojis to express emotions in the rear of texts. However, it is noted that such design would predominantly address texts without emojis. Due to the adoption of a different code and the rendering of emojis in arbitrary geometries and sizes across different platforms, the text messaging media systems are hampered to conduct examinations involving the overall spatial contexts, the heterogeneous sizes and characters, combination of emojis and texts, and directly-coded emoji. Such limitations lead to observations being missed of the physical co-presence and engagements at a personal level in digital communication. Therefore, the location display of digits is enabled to denote key features in the texting logs, and actions could be taken towards emojis and texts on their locations, as an interpretation from the ASCII generated earlier design of emoticons 2.

#### **4.2. Emojis in Social Media Platforms**

This section analyzes the pervasiveness and significance of emojis as a semiotic system in digital communication using a qualitative method, text analysis or close reading. The targeted texts were collected from



Fig 2: Apple's Emoji Evolution 1997—2018

#### 4. Emojis in Digital Communication

Computational approaches have been proposed for automatically interpreting emoji in the context of social media, but approaches that account for the semiotics of emoji (and text) in interaction are scarce. Partially inspired by 2, a representation of emoji and emoji-text embedded narratives is described. The proposed representation accounts both for the semantic and pragmalinguistic function (e.g., situational context whether personal or public) of emoji. A computational implementation of the representation in an interpretative NLP model is outlined and applied by annotating and interpreting emoji and emoji-text narratives as rhetorical dialogues. The interpretation of emoji both as signs in the semiotic sense using the semantic hierarchy of sign functions (pictorial, symbolic and indexical traces) and as social signs within broader situated contexts takes into account locally operative semiotic resources and cultural practices as representations of meaning. The representational projec-

tive potential of emoji, in terms of their pictorial functions, symbolic functions, as indices and as social variables, introduces complexity into the design of cognitive and interpretative models of emoji. It is claimed there are many kinds of people in the world, each culturally speaking a variety of languages, so it is hardly surprising that emoji use, and the meanings they express, are not uniform. To meaningfully interpret emoji in interaction situational context, ethnographic analysis is necessary to place them into narrative action-based personal and interpersonal social acts relevant to presumed co-interlocutors. Ethnographic analysis is so uniquely suited to this interpretative task. Informatics-based methods for automatically interpreting emojis in the context of social media apply NLP techniques to extract underlying semantic representations. Limitations of the Pragmatics-insufficient Model of Emoji Interpretation at the Current Stage in Emoji Modelling are indicated. Anything other than a social semiotic

most frequently used character on social media platforms 3. This article draws on theories from Multimodal Studies, Cultural Studies, Sociology, and Transnational Studies in order to analyze a screenshot of two tweets produced by Donald Trump and translated into Japanese, and their mutual translations produced by the Twitter user “@NABATA” 2. Using these semiotic resources, the findings and arguments of this analysis will ideally help scholars to further investigate the subtleties of TLM, and especially its playful deployments of styles, languages, and “scripting systems” as a means of self-representation.

**3.2. Evolution of Emoji Usage**

As online communication surges, so does the use of emojis. The over 3,000 emojis available today are emblematic of a burgeoning semiotic system of visual language second in breadth and usage only to the alphabet and punctuation 2. This fascination with symbols from a diverse range of established and emerging cultures, forming a multi-layered and patterned semiotic system of concern to social semioticians, extends across the globe. Yet emojis have barely begun to affect language scholars and the curriculum. It is anticipated that emojis will increasingly blight written text, a return to the initial attitudes to visual expression thought consigned to the cave 1. The rapid emergence of new emojis in established icons and models is a prompt for close examination of the modes of social semiotics involved and theories of repu-

tation, meaning, connotation, denotation, and discourse used. An approach to designing a modeling language built on semiotic resilience to accommodate the erosion and alteration of forms, and further evolution of unicode for navigating networks of cultures, is discussed. The relatively stable objects of written and spoken discourse, increasing erosion and transformation of the textual, pictorial, and diagrammatic signs that have represented views of the world, and the threats posed to personal and cultural meaning and memory by fast-emerging digital forms are examined. The animation from traditional rapid dissolution of written and spoken language to scripture or text satellites modelling the world of objectivity is examined. The invention of spectacles, of punctuation in classic and medieval monastic and literary repositories and the emergence of the textual, pictorial and diagrammatic signs contributing to informational, analytic, logical, poetic, relational use are outlined. The evolution of disciplinarity, protocols and communities of practice from generalized cultural sense-making through visualizing and designing to discipline-based theory construction is described. Early models of community-based textual styles, genres and traces open to customization and enrichment by every user is discussed. As these borders erode specificity and the community turns define dialogues participants and their roles become local. See figure 2.

expressions, and icons.

### 3. Historical Overview of Emojis

Although a greater understanding of emoji usage depends on the cultural and social context of messages produced with emoji, an understanding of the technical background to emoji is also beneficial 2. This section aims to provide a high-level overview of the historical development of emoji. It concludes with a brief discussion of recent developments in emoji usage. In August 1999, Shigetaka Kurita developed the first 176 emoji in Japan, having been requested to do so by NTT DoCoMo. The immediacy with which these symbols were adopted—and the rapid expansion of emoji beyond Japan—has fascinated emoji researchers 5. Emoji soon spread globally. In November 2010, the Unicode Consortium began incorporating emoji into its standard. This shift enabled emoji to be interpreted and displayed effectively on screens other than mobile phones. In February 2011, the first emoji were introduced in iOS, enabling emoji to become some of the most commonly used symbols in digital communication.

Over the past decade, emoji have been increasingly adopted as a semiotic system for digital communication. They are often referred to as “the lingua franca of the digital age”. Numerous emoji studies now exist, addressing a wide range of topics. In recent years, the Unicode Consortium has also begun to address universal design and inclusion, such as representation of gender,

skin tones, disabilities, etc., but emoji editing software does not yet fully accommodate these developments. Although the use of emoji persists in various and evolving forms, they now attract little attention as a cultural phenomenon. Emoji usage largely continues its path as an ordinary semiotic resource. Nevertheless, a solid empirical understanding of emoji usage and its meanings is still lacking. This project investigates this as a visual<sup>317</sup> semiotic project, a blend of semiotic theory and empirical work in cognitive and social semiotics.

#### 3.1. Origins of Emojis

In 1999, the Japanese mobile phone company NTT Docomo launched a website featuring its original set of 176 emojis that included the passionate graphic “Face with Tears of Joy.” Rather than a smiley face, which had been in widespread use beforehand, the “Face with Tears of Joy” featured a face with two large eyes from which flood two straight discharge tear droplets and a broad grinning mouth, mirroring the intent to convey joy, and pictorially depicting a laughing gasp in reference to “convulsions of laughter.” With its inventive and humorous design, this emoji, also termed as the “joy” emoji, soon achieved successfully to overcome the linguistic and cultural barriers and rapidly circulated around the globe. Even after Unicode Consortium set the standard for digitalized emojis, the importance of “Face with Tears of Joy” was confirmed when Time listed it as the Word of the Year in 2015 for having become the

different sign systems. Thus, a semiotic approach to the latter can put emphasis upon the semiotic denominations (i.e., various sign systems) that may be used in translating meaning contents. The point is that all signs cannot be resemotized into equivalent other signs because intersemiotic translation can yield different meaning shapes and significations, alternatively “interpretations.” In this vein, it is noted that the production of signs, that is a “combination of meaning and form,” is “motivated.” People’s moves from mode to mode and from media to media are driven by interests and by “what is possible to express and represent, readily, easily with a mode, given its materiality and given the cultural social history of the mode.” The semiotic study of translation involves the study of how meaning is recreated in new combinations of signs 2.

### 2.2. Cultural Context of Emojis

Commonly referring to all methods of visual communication, the term “icon” has somewhat of a less conventional interpretation in semiotics. Specifically, it denotes a representational sign, where one object takes on meaning because it looks or sounds like another 2. Icons, as a subcategory of signs, are typically depicted as pictures, gestures, and analogies. In less developed pictorial semiotic systems, icons have presented challenges. For image-based systems, the instability of meaning due to iconic polysemy is a concern, while for gesture-based systems, the lack of a visual modeler value is troubling. The emoji

system surpasses these challenges and is exceedingly stable, with significant global usage in a standardized and standardized manner. The growth of the emoji system has resulted in the improvement of many pictorial signs and how they are used in narrative representation. It has propelled a move towards a more semiotic digital life by stimulating the invention of other semiotic signs in a pictorial race 4. Compared to traditional and long-established semiotic systems, the emoji system took shape sooner. The necessity of visual representation took root with written language, but pictorialness was only allowed along with the development of technology to attach signs, thus co-evolving with the technologies to record speech. Compared to texts, images with inherent polysemy allow for more freedom of interpretation but invite more misinterpretation at the lexical level. This describes how one pictorial strategy of visualizing the same thing may convey different stimuli. Emoji became a better conceptualization than emoticon with effects similar to metaphors but visualized in a pictorialised mode, becoming widely used individually, socially, commercially, and politically. The concept of emoji first emerged in Japan in 2010, when Shigetaka Kurita designed 176 emoticons for NTT Docomo’s mobile internet platform. Giving shape to the term “emoji”, it was originally a Japanese word meaning pictograph, but in English became a broad term denoting a graphic representation of artefacts, actions,

Table 1 : Grinning Face Emoji Evolution Across Platforms

| Platform  | Emoji Preview | (Version(s                 |
|-----------|---------------|----------------------------|
| Apple     | ☺             | iOS 11, iOS 10             |
|           | ☺             | iOS 9, iOS 8, iOS 6        |
| Google    | ☺             | Android 8.1, 8.0           |
|           | ☺             | Android 7.0                |
|           | ☺             | Android 5.0, 4.4           |
|           | ☺             | Android 4.3                |
| Microsoft | ☺             | Windows 10 Updates         |
|           | ☺             | Windows 10, 8.1            |
|           | ☺             | Windows 8.0                |
| Samsung   | ☺             | Experience 9, TouchWiz 7.1 |
|           | ☺             | TouchWiz 7.0               |
| LG        | ☺             | G5, G4                     |
| Twitter   | ☺             | Twemoji 2.5, 2.2           |
|           | ☺             | Twemoji 1.0                |

2.1. Semiotics and Communication Theory

Central to communication, whether among individuals or communities, is meaning. Often referred to as semiotics or semiology, the theory and study of signs and symbols, is concerned with how meaning is conveyed in a modality independent manner. Semiotics is a subset of semiology, the general science of communication through signs and sign systems, of which language is but one. Semiotics is concerned with signs, their structure, classification, and function as well as the processes through which they convey meaning, namely signification and interpretation. Signification involves the practical explore of how something comes to stand for something else, how a sign refers to a denotatum and thus represents an object. Indeed, it has

often been said that semiotics is an exploration of how linguistic signs relate to things in the world and how they construct meaning 3. Semiotics does not confine itself to the realm of verbal or linguistic signs, it has also been developed to provide more general insights into non-verbal and/or non-linguistic signs. Semiotics, more clearly, is the handmaid of communication studies. Because there is no communication without the deployment of some kind of signs and sign systems, signs constitute the very existence of communication. Effective communication presupposes some shared semiotic codes between communities, societies, cultures, and nations. The semiotic approach to the study of communication may also be extended to the study of intersemiotic translation among

sire to express affection led to multimodal communication including both an auditory utterance and a corresponding emoji. This communication pattern is analysed across the interactional contexts including attributions of meaning and other target items considered. The implications of contextual mode-switching for emoji repurposing are also discussed, particularly in relation to emoji interpretation in general. Despite anecdotal accounts of both emoji being applied creatively to new messages outstripping designer intent and also leading to interpretability disadvantages in computer-mediated communication 2, emoji usability and versatility have only a paucity of detailed empirical investigations. As digital modes have taken on increasing importance in global communication, yet there is significant knowledge gap regarding the communicative modes that rise in

prominence whilst lacking an established cultural code or standardized grammar. The semiotic features of emoji text were modelled focussing on the disruption of productivity/generativity. The theory of social affordance was applied across modes to outline conditions required for cultural codes to be established. The aim is to document innovative emergent sense-making processes in emoji communication and critique how semiotic transformation forwards and hinders insights into seen digital communication. One short video of a conversation on Whatsapp, following one participant's use of a pizza slice to mean 'I love you', is analysed in detail using a multimodal narrative analysis framework. The individual semiotic resources are documented and the affective inclinations embodied by them are then analysed complementarily in context 3. See table 1.

| Name           | Code    | Android                                                                           | iOS                                                                               | Twitter                                                                           | Windows                                                                             |
|----------------|---------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Fearful Face   | U+1F628 |  |  |  |  |
| Clapping Hands | U+1F44F |  |  |  |  |
| Person Pouting | U+1F64E |  |  |  |  |

Fig 1: Emojis to illustrate the meaning difference

On a social level, it is unstoppable and presents challenges for formal language, as there is no standard formation for many of these new language units. However, the study of a new semiotic unit provides insights into the pattern, nature, and potential future of online communication. It can also serve as a case study of using semiotic research to better understand social phenomena. The information landscape of the Web era is ever-changing, with the recent 20 years witnessing a great fluctuation and evolution of language units on the Web. Understanding the expansion and evolution of these new language units is crucial to understanding the fast-changing nature of communication on the web and the underlying social phenomena and trends.

The history and evolution of emojis as a universal sign will be examined as a new visual mode in digital communication. The semiotic qualities and mechanisms of emojis will be studied to see how they work as a new visual semiotic mode in digital communication. A semiotic frame-

work will also be developed to tackle how existing language units evolve in a semiotic process on the web 1. Many people used emoticons in their digital communication, which can be seen as a first step in visualizing text as a new mode. However, the production of emoticons was time-consuming and variant. For example, 'happy' could be depicted as (^ ^), ^ \_ ^, ^ \_\_ ^, and so forth. Emojis were first invented in support of the i-mode platform by the Japanese telecom company NTT Docomo in 1999. The 'Japanese emoji' has since been re-semiotized and incorporated into new platforms and cultures.

## 2. Theoretical Framework

The choice of emoji and their interpretability are discussed, focusing on how people appropriate the affordances of emoji to generate new meaning in communication. The focus is on a single pizza slice emoji that one participant repurposed to mean 'I love you' through the lens of emoji-led communication. The study shows how a de-

tion.

**Keywords:** Emojis, digital communication, semiotics, youth culture, online language, nonverbal cues, computer-mediated communication

ملخص:

تبحث هذه الدراسة في دور الرموز التعبيرية كنظام سيميائي معقد في سياق التواصل الرقمي، لا سيما بين جيل الشباب. تطورت الرموز التعبيرية من تعبيرات تصويرية بسيطة إلى أسلوب دقيق في صياغة المعنى، يُكمل اللغة المكتوبة أو يُعَدِّلُها أو حتى يحل محلها في التفاعلات عبر الإنترنت. يستند البحث إلى نظريات من علم السيميائيات وعلم اللغة الاجتماعي ودراسات الإعلام لتحليل كيفية نقل الرموز التعبيرية للتفاصيل العاطفية الدقيقة، وإدارة نبرة الحوار، ودعم التواصل بين الأشخاص في البيئات الافتراضية. علاوة على ذلك، تستكشف الدراسة كيف يعكس الاستخدام المتكرر للرموز التعبيرية الأنماط الثقافية الأوسع، والهوية الجيلية، وتفضيلات التواصل الفريدة لدى الجيل الرقمي. من خلال تحليل بيانات واقعية من وسائل التواصل الاجتماعي، ومنصات المراسلة، والمنشآت الإلكترونية، توضح الورقة البحثية الطرق الاستراتيجية، وغالبًا ما تكون إبداعية، التي يستخدم بها المستخدمون الشباب الرموز التعبيرية لبناء المعنى والتعامل مع الديناميكيات الاجتماعية. تُبرز النتائج ضرورة الاعتراف بالرموز التعبيرية كمكونات مشروعة ومؤثرة في الخطاب الرقمي الحديث، مع تداعياتها على تطور اللغة، والمعرفة الرقمية،

والتواصل بين الثقافات

الكلمات المفتاحية: الرموز التعبيرية، الاتصالات الرقمية، السيميائية، ثقافة الشباب

## 1. Introduction

In the last two decades, the development of mobile technology and mobile internet access has changed how people communicate. In tandem with the burgeoning popularity of smartphones, social network platforms have been transformed into ubiquitous online communication tools. The number of unique social network postings has since exploded and become an online phenomenon. The nature of digital information dissemination differs from traditional forms of information publishing, most notably by its unique language. To make their postings attractive, netizens are smartly associating symbols, texts, colors, media, layout, and links as a new semiotic resource. It emphasizes the multimodal nature of information in Web 2.0, combining different modes to deliver meaning. This has implications for traditional grammar and syntax, which have been shown to be amounting only partial feature of social network languages. See figure 1.

# Emoji the language of the Digital Generation

## الإيموجي لغة الجيل الرقمي

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### Abstract

This study investigates the role of emojis as a complex semiotic system within the context of digital communication, particularly among members of the younger generation. Emojis have evolved from simple pictorial expressions into a nuanced mode of meaning-making that complements, modifies, or even replaces written language in online interactions. The research draws upon theories from semiotics, sociolinguistics, and media studies to analyze how emojis convey emotional subtleties, manage conversational tone, and support interpersonal connection in virtual environments.

Furthermore, the study explores how frequent emoji use reflects broader cultural patterns, generational identity, and communication preferences unique to digital natives. By analyzing real-world data from social media, messaging platforms, and online forums, the paper illustrates the strategic and often creative ways in which young users employ emojis to construct meaning and navigate social dynamics. The findings highlight the necessity of recognizing emojis as legitimate and impactful components of modern digital discourse, with implications for language evolution, digital literacy, and cross-cultural communication.