



The Digital Evolution of Gender

A Visual Analysis of Women's Representation Through Emoji Communication

Raquel Forma Klafke^(✉) and Daniela Kutschat Hanns

University of São Paulo, São Paulo, Brazil
{raquel.klafke, dk.hanns}@usp.br

Abstract. For the past 20 years, the Unicode Consortium put efforts to implement a consistent pictorial alphabet across multiple systems and platforms: the emoji. This long term, continuous initiative intended to narrow the gap between face-to-face and digital communication, adding subjective cues – such as emotions – and synthesizing textual content into smaller information units to optimize interactions through computers and mobile devices. As the graphical technology gained complexity, the emoji's aesthetic developed as well, embracing new symbolic possibilities regarding user experience. This short paper aims to develop a qualitative visual analysis within a range of 20 years – from 2000 to 2017 – to better understand how one particular symbolic feature, the gender, was addressed in digital communication. The work will be organized as a comparative visual timeline, showing how the study object gained complexity, new attributions and purposes. The historical progression will be based on notable examples of interface history, especially ICQ and Apple, with its correspondent emoji set decomposed within a design perspective – colors, textures and forms. The gendered dimension was chosen due its contemporary importance in community discussion, political measures and mediatic repercussion. As a result, the poster will demonstrate how the language influence (and can be influenced) by technology and cultural demands, growing as an emergent, complex and vivid system.

Keywords: Emoji · Digital language · Gender · Visual design

1 Introduction

For the past 20 years, the Unicode Consortium put efforts to implement a consistent pictorial alphabet across multiple systems and platforms: the emoji, visual icons which represents a broad spectrum of concepts (places, objects, emotions, and more). This long term, continuous initiative intended to narrow the gap between face-to-face and digital communication, adding subjective cues and synthesizing textual content into smaller information units to optimize interactions through computers and mobile devices. As the graphical technology gained complexity, the emoji's aesthetic developed as well, embracing new symbolic possibilities regarding user experience.

As emoji gain more importance to mediate digital communication processes, several political discussions arise over its development, such as sexual, ethnical and gender

diversity. The objective of debate is the possibility to create consciously a diverse pictorial alphabet, helping to integrate a bigger inclusive agenda. As a result, the poster will demonstrate how the language influence (and can be influenced) by technology and cultural demands, growing as an emergent, complex and vivid system.

2 Objectives

This short paper aims to develop a qualitative visual analysis within a range of 20 years – from 2000 to 2017 – to better understand how one particular symbolic feature, the gender, was addressed in digital communication. The work will be organized as a comparative visual timeline, showing how the study object gained complexity, new attributions and purposes.

3 Method

This research was organized in two parts. The first one was an exploratory look into the emoji history through the perspective of official sets launched by companies such as ICQ and Apple. The sets were chosen according to their recurrence in the desktop research. This was crucial to understand how the visual language was being designed and used in a large-scale basis. The main consulted authors include Gülşen [1] and Oliveira e Paiva [2], both based on linguistic and cultural approaches, and Davis and Edberg [3], from a technical background. Since the emoji history is still recent and yet to be academically compiled, web articles from reliable resources, such as *Wired* magazine, were consulted to complement the historical and theoretical framework. It is important to observe that, for the matters of this short paper, the emoji's predecessors (emoticons, smileys, and other minimalistic or pictographic signs) won't be taken into consideration.

The second part is the construction of the visual timeline, composed of two dimensions: chronological perspective and design perspective. The temporal sections were based on *Wired's* "Guide to emoji", which take into consideration gender, diversity and other criteria that match the objective of this paper. The design criteria were based on Lupton [4] and Royo [5] works, and consist in form, color and texture. Those criteria combined result in more complex concepts, such as detail and symbolical values. Lastly, the emoji from each group were compared against each other from a single and collective perspective, resulting in a conclusion about the evolution of gender in this scope of digital language.

4 The Digital Evolution of Gender

4.1 A Brief Emoji History

According to Oliveira e Paiva [6], language is a complex adaptive system, since it's expression is based on people's past experiences which feeds actual interactions. The

The complexity of emoji development resulted in Unicode creating the Unicode Emoji Subcommittee, a group dedicated to deliberate and coordinate the emoji creative guidelines for companies as Google (directly involved in Unicode’s emoji history [12]), Microsoft, Facebook, Apple, and others. The Consortium, with non-profit objectives, organized a top-down submission process which included the user’s preferences and proposals for new symbols. From 2010 to 2017, it is observed an intense debate regarding how emoji was and could represent better people’s subjectivity and social inclusion, arising a strong political potential. In 2015, Unicode included the Fitzpatrick scale to represent different ethnicities and a set of same-sex couples to represent sexual diversity. Later on, a project led by Been [13] included woman representation in the labor market, which was reflected in creating male and female emojis for every type of symbol (Figs. 2 and 3).



Fig. 2. Contrast between two ICQ’s emoji sets: ICQ 2000 a, from 2000, and ICQ 5.0, from 2005. (Source: M-GAMES, <http://www.m-games.iplace.cz/menu/smajlici-na-icq>)

4.2 The Visual Evolution of Gender in Emoji

Emoji and gender came stronger in the 2010’s. Although the main conceptual change was the inclusion of male/female facial icons with skin variations, increasing considerably the number of emoji in the set, few was done regarding a broader discussion about gender. In 2017, Hunt [14] goes further and questions the current binary gender model, proposing neutral gender emoji. He argues that “[...] In terms of emoji reflecting our emerging understanding of gender, the addition of three gender inclusive people emoji is only a first step.”

Until then, gendered emoji went through several design modifications. This short paper will analyze a specific case, the “open mouth smile”, one of the oldest emoji to date. This emoji will be compared with its correspondent version from 2000 to 2017, including its gendered approximate version. The visual analysis will take three aspects into consideration: form, color and texture, as specified in Method.

In a general sense, it is possible to observe that the improvement of computer graphics made an increase of the number of colors and the complexity of textures possible, giving more details to emoji. Emoji got more resolution, smoother aspects and volume. With higher resolution, female and male emoji got details to differentiate visually them even more, with distinct eyes, eyebrows and noses.

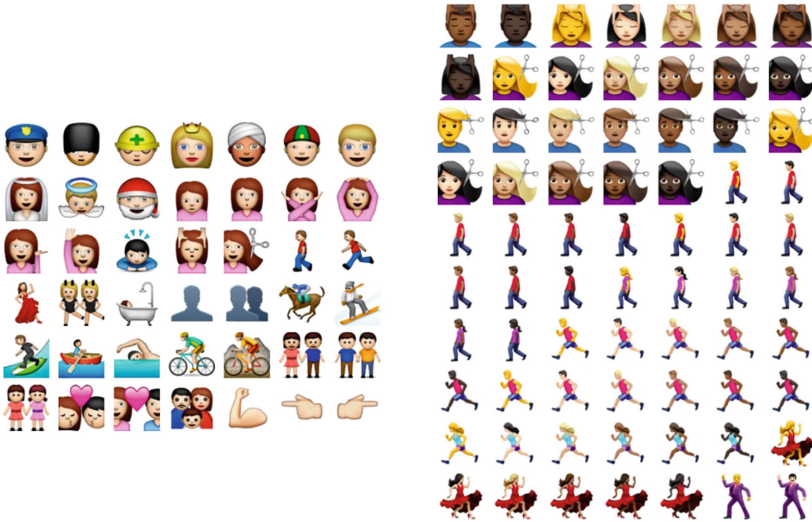


Fig. 3. Contrast between Apple’s emoji set. To the left, emoji from the iOS 6.0, 2012. To the right, emoji from the iOS 11.2, 2017. (Source: Emojipedia. <https://emojipedia.org/>)

The cultural symbols of femininity and masculinity, however, still remain. The hair length, the face format and the difference between bigger lips and moustache. As Hunt indirectly pointed, the gender discussion in emoji won’t remain in the increasing number of details and features to tell male and female apart, as the timeline suggests. Rather it involves a whole new symbolic discussion, in which not only the aesthetic perfection is sought, but also *what is represented* is subject of discussion (Fig. 4).

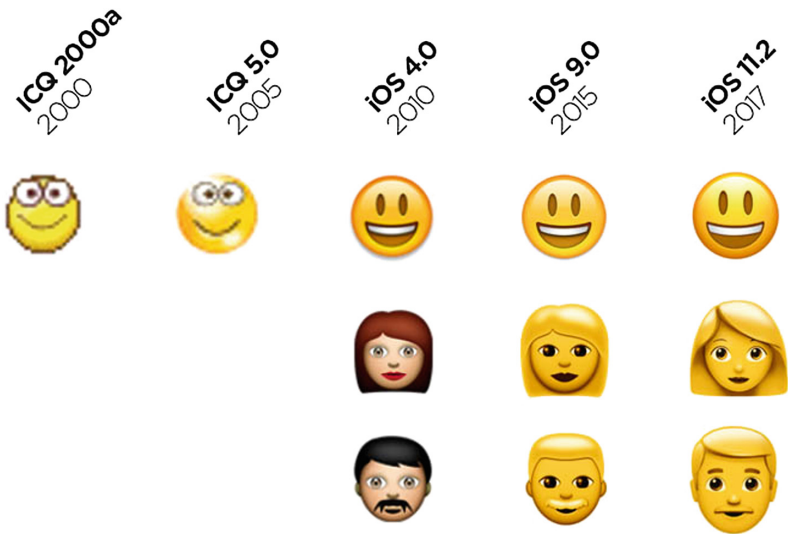


Fig. 4. Timeline with one of the oldest emoji and its evolution through 17 years. (Source: Emojipedia and M-GAMES. Organized by the authors)

5 Conclusion

The technological development, which brought deep changes in how people think and create their personal narratives and discourses, lead the transformation of the emoji concept. If the first version, back in 1999, was meant to be simple, beautiful and commercially competitive, the emoji set shared among companies such as Google, Apple and Microsoft, are meant to bring meaning and personal touch to their users. In this sense, the gender dimension represents not only physical traits or individual characteristics, but also an urge to introduce a broader political discussion within the creation of language.

References

1. Gülşen, T.T.: You tell me in emojis. In: Computational and Cognitive Approaches to Narratology, pp. 57–65 (2016)
2. Oliveira, E., Paiva, V.L.M.: A linguagem dos emojis. *Trabalhos em Linguística Aplicada* **55** (2), 379–399 (2016). <https://doi.org/10.1590/010318134955176321>. Campinas, Maio/Agosto
3. Davis, M., Edberg, P.: Unicode Technical Standard #51: Unicode Emoji. The Unicode Consortium (2017). <http://unicode.org/reports/tr51/>
4. Lupton, E.: *Novos Fundamentos do Design*. Cosac Naify, São Paulo (2008)
5. Royo, J.: *Design Digital*. Edições Rosari, São Paulo (2008)
6. Oliveira e Paiva, V.L.M.: (2016)
7. Oliveira, M.K.: O verbal e o não-verbal. In: *Revista USP*, São Paulo, no. 16, pp. 52–61 (1992)
8. Pentland, A.S.: *Honest Signals: How They Shape Our World*. MIT Press, Cambridge (2010)
9. Gülşen, T.T.: (2016)
10. Crystal, D.: *A revolução da linguagem*. Jorge Zahar, Rio de Janeiro (2005)
11. Pardes, A.: The Wired Guide to Emoji. *Wired* (2018). <https://www.wired.com/story/guide-emoji/>
12. Pardes, A.: (2018)
13. Been, R.: Expanding Emoji Professions: Reducing Gender Inequality. The Unicode Consortium (2016). <https://unicode.org/L2/L2016/16160-emoji-professions.pdf>
14. Hunt, P.: What is Gender and Why Does it Matter to Emoji? *Emojipedia*. <https://blog.emojipedia.org/what-is-gender-and-why-does-it-matter-to-emoji/>