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In the Footsteps of Graphicons: Tracing Parameters and Pragmatic Strategies in Graphicon Usage

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Abstract. The textual intercourse in computer-mediated communication is intertwined with graphicons of various forms, gaining new meanings and functions. They are part of the online culture and, specifically, part of the communicative skills in digital environment. In many cases, graphicons are used not as signs of emotion but rather as indication of the illocutionary force of the textual utterances that they accompany. The current work endeavours to reveal the specific aspect of language use where iconoid objects "take over" and substitute textual utterances. The paper also attempts to trace to what extent pragmatics could be applicable in the analysis of the visual representations (i.e. graphicons) embodied in computer-mediated communication as means of communicative acts. The different graphicon forms and the dynamics in the usage carry additional challenge for the interpretation of the "visual" act. However, it is possible to systematically trace a pattern in the occurrence of the graphicons – their use as a complementary to a written statement, and their use as a single communicative act.

Keywords: graphicon, pragmatics in computer-mediated communication, visual speech act

1. Research objectives

Undoubtedly, one could agree that in the past one-two decades we have witnessed the emergence and the active implementation in everyday life of a digital channel of communication – the computer-mediated communication (CMC). In a broad sense, computer-mediated communication enacts written or face-to-face (i.e. video) discourse in digital environment, mediated by a device such as a computer, a tablet, or a smartphone. This kind of communication has abruptly become predominant

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during the previous months due to the extraordinary social situation in which people from all over the world found themselves as a result of the pandemic outburst in early 2020. For millions of people, computer-mediated communication has been the only channel to associate with friends and relatives and also the main channel for professional communication and education or training. This unprecedented urge for computer-mediated communication would most likely lead to robust linguistic data and to subsequent analyses in that particular field.

The objective of the present study is to turn to a specific realization within the digital language communication – the implementation of *graphicons*[1] in written discourse. It aims at tracing the pragmatic strategies in graphicon usage by also taking into account the chronological development and the variability of graphicon forms. The purpose is twofold: while deploying the graphicons in CMC, it also endeavours to map aspects of their communicative functions (on the pragmatic level) in order to indicate to what extent pragmatics could offer pre-eminent analysis of such visual representations embodied in textual intercourse (as means of communicative acts).

A study on graphicons – simply due to their nature, if nothing else – is inevitably expected to have a multidisciplinary nuance: incorporating linguistic, social, cultural, and IT aspects, among others. Furthermore, the various types and enactment of graphicons bring an additional source of hesitation to the interpretation of such "visual" acts. The current work undertakes the challenge to trace systematic patterns in the occurrence of the graphicons – their use as a complementary to a written statement and as a single communicative act. The following two types have been considered:

(1) *Patterns in graphicon positioning in CMC*

a. The use of a graphicon as a complementary to a written text statement e.g. '*I understand* 🙄'

b. The use of a graphicon as a response, that is, as a single communicative act, e.g.
'*We are in Valletta!*'
'👍'

2. The concept of *graphicons*

Under the common name *graphicons* (a *graphical icons* blend), as pointed out in Herring and Dainas (2017), various 'iconoid' images are gathered. They include, though not exhaustively, the following forms:

1 There is certain hesitation as to whether the word is countable or non-countable, as also seen in the variations of its use in linguistic studies. In the present paper, it is treated as a countable noun.

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(2) *graphicons*
emoticons
emoji
GIFs (Graphics Interchange Format files)
stickers/images
memes
memoji, etc.

Despite the fact that the above-mentioned visual representations have a relatively short presence in human communication, it is noticeable that they have already demonstrated a rather rapid development, rich in variations (i.e. forms, social platform sets, static/video, etc.). This could be observed when tracing the chronology of graphicons and some characteristic variables that have appeared since their first use, as revealed further below. Before turning to the overall frame of the graphicon presence in CMC, however, it is necessary to mention the motivation behind choosing to review *en gros* the "visual" acts – some enlisted in (2) above – under the common concept of graphicon. The pragmatic paradigm behind the implementation of graphicons is expected to be revealed in a clearer frame when the visual act (i.e. graphicon) is not sub-divided into different types, e.g. pictorial, video, "hashtagized", etc. Instead, by putting the line between textual and icon-like communicative acts, it is assumed that their use as a complementary to a written statement or as a single communicative act where graphicons take over and substitute textual utterances would be more distinguishable and could point at a certain systematic pattern. Graphicons are developing rapidly, virally, and one could expect new forms and shapes to appear practically as we discuss the variants – it seems a challenge to exhaustively trace and describe all the types.

Therefore, the current paper has opted to refer to all icon-like (both static and video) graphic realizations within computer-mediated communication under the common name of *graphicons.*

2.1. Chronology and characteristic variations

The first emoticon – :-) – is said to have been created in 1982, in the USA, on a *Carnegie Mellon* University bulletin board (cf. Herring and Dainas 2017). The term "emoticon" is a witty portmanteau of "emotion" and "icon," logically suggesting an image that indicates emotional expression.

Apart from representing an emotional status, such as :-) (depicting a smile/smiling), emoticons can be pictorial as well, e.g. *<\:-) (depicting Santa Claus). No additional software or key sets are necessary to produce emoticons. This fact makes the use of emoticons rather natural and easy. Thus, they opened the door to textual communication for non-text participants and left it wide open.

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The followers of the emoticons arrived into CMC in a rather swift manner. The concept of *emoji* takes researchers to Japan – according to various reviews on emoji – and, as indicated in the emoji reference website *Emojipedia* (https://blog.emojipedia.org/correcting-the-record-on-the-first-emoji-set/), it was created in 1997, representing actual pictures such as a panda.[2] The word itself comes from Japanese, bearing the original meaning "picture character" (Li and Yang 2018). In 2009/2010, an emoji set was added to Unicode[3] for the first time. It is worth mentioning this fact because due to this move in particular did the emoji images become standardized and applicable in various language environments in computer-mediated communication (e.g. Japanese, English, Bulgarian, Hungarian, Hebrew, and many more). Thus, the term *emoji* was adopted together with the graphic images (Sugiyama 2015).

Today, it is usual to come across emojis practically everywhere (a rather extreme but perhaps truthful statement). Their "rise" was observed in 2015 when *Oxford Dictionaries* (http://www.oxforddictionaries.com/press/news/2016/9/2/WOTY) chose *emoji* as their traditional "word of the year" for 2015.[4] In doing so, the *Oxford Dictionaries* marked not only the thriving of the emoji but also – in a way – gave it a language status: it was treated as a "word". A rather curious fact is that there is even a "translation" into the emoji version of an English language text: 10,000 sentences from the classical novel *Moby Dick* were "translated" into only emojis, cf. www.EmojiDick.com.

As various social (and media) platforms and smartphone applications started to offer their own sets of emoji based on the Unicode standard, the spread of that type of visual representation received the potential to achieve even larger scales. For example, in a report on the appearance of emojis, Dimson (2015) states that more than 50% of the posts in social platforms contain emojis – a rather impressive result. The author concludes that there is an additional boost in the use of the emojis, which is perhaps due to the fact that users are able to upload and edit pictures/images along with a caption (Dimson 2015).

So, here we not only witness the usage of pre-ready images, but communicators are also given the freedom to create their own compilations and to personalize visual representations. This option enforces the pragmatic mechanisms for the interlocutor, and it should not come as a surprise that the occurrence of this type

2 The exact year (1997 or 1999) and the creator (Docomo or Soft Bank) of the first set of emojis are still disputable. However, the country where emoji began its "life" is certainly Japan (for more details, see: https://blog.emojipedia.org/correcting-the-record-on-the-first-emoji-set/).

3 For more information on Unicode characters for text and emoji, cf.: https://home.unicode.org/.

4 This was motivated by saying that the chosen emoji, "face with tears of joy", was the word that best described the feeling/mood of the year 2015. Furthermore, the "face with tears of joy" was the most commonly used emoji, making up approximately 20% of the emoji usage as logged by SwiftKey in 2015 (for details, cf.: http://www.oxforddictionaries.com/press/news/2016/9/2/WOTY).

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of graphicon has grown and led to further development and to viral versions, as the chronological overview comes to reveal in the paragraphs below.

The graphicon forms, referred to as *stickers*, usually represent images larger than graphical emoticons and emojis. The access to *stickers* is via software products – following the same logic as the above discussed emoji implementation. They are predominately designed to complement communication interfaces in social platforms and smartphone applications.[5] In their recent study, Konrad, Herring, and Choi (2020) compare emojis and stickers and see the latter ones as perhaps "next generation" emojis (Konrad–Herring–Choi 2020: 218).

Rather frequent participants in the CMC are *memes*. The word *meme* (based on Ancient Greek *mīmēma* "something that is imitated") is associated with the name of an English evolutionary biologist and writer Richard Dowkins, who used this lexical form in his book *The Selfish Gene* (He 2008). Nowadays, it is used to denote a visual representation in a mini video format (or rarely a photo format). Again, as it is with the previous types of graphicons, sets of various memes are available in different social and messaging platforms. As Lankshear and Knobel (2007: 202) point out, the *meme* is in a way a cultural phenomenon which spreads rapidly through the computer-mediated communication and bears cultural information (such as ideas, puns, etc.) presented individually or as a compilation of text/language "move", image, or some other unit of cultural "carrier".

Albeit the inevitable difference in using the various types of graphicons, their positioning within the CMC proves to remain the same, as enhanced by some research focused on different types, for example, Dresner and Herring (2010) on illocutionary force, Maíz-Arévalo (2015) on face-saving strategies, etc. As mentioned above, due to the high percentage of CMC in the everyday life of people all around the world and the possibility to personalize the graphicons, it is likely to expect "newcomers".[6]

3. Observations on graphicon usage; theoretical overview of certain "laws" of intercourse in written communication

Along with the robust usage of graphicons, linguistic studies in that particular field do not represent a long history, and, as it could come handy to say, the history of graphicon usage is now being made (referring to the actual

5 They are offered as thematic sets and are often organized in tabs and personalized collections (see also De Seta 2018).

6 What would be interesting to observe is whether there is an interchangeability of the graphicon types while preserving the pragmatic force in a subsequent, language-data-based research.

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language implementation). A certain theoretical background concerning the pragmatic implementation is found in previous studies on computer-mediated communication (cf. 2.1. and also Konrad–Herring–Choi 2020, Maíz-Arévalo 2015, Dresner–Herring 2010, etc.), and it allows for the following bird's eye generalization:

(3) *Graphicon usage "at large":*
   a. graphicon – a divider between clauses;
   b. graphicon – a compensator for the lack of non-verbal cues in written communication;
   c. graphicons are optimal emotional enhancers.

Konrad, Herring, and Choi (2020) even conclude that "[f]rom expressing emotion, they came to indicate the illocutionary force or the intended tone of textual utterances, and now mostly function like punctuation" […] (2020: 218). The main function of emoticons, according to Hård af Segerstad (2002), is to compensate for the lack of non-verbal cues in CMC, as predominately agreed in subsequent research concerning graphicons.

The use of emojis as *punctuation marks*, as mentioned under point (3a) above, is one of the functions of emoji observed by Sugiyama in a study involving Japanese-speaking participants in a series of focus groups (Sugiyama 2015). Furthermore, the orthographic role of emoji is enforced by a dataset consisting of 1.6 million tweets (messages in a social platform) from 13 different countries, where Novak et al. (2015) found that emojis are commonly placed at the end of a tweet.

Despite the existing works on graphicons and their pragmatic functions, there are still limitations in the linguistic studies. Most empirical research focuses on one or two functions of a given type of a graphicon: for example, Darics (2010) observes the politeness strategy of emoji, or Luor et al. (2010) discuss the way different types of emoticons and emojis fulfil pragmatic functions in various communication settings. An attempt to classify the research on the different types of graphicons is found in an article by Tang and Hew (2019). The authors focus on three types – emoticon, emoji, and sticker – and distinguish between three fields of investigation – communication, linguistics, and psychology, also with the aim to "…reduce the terminological confusion in the literature" (Tang–Hew 2019: 2457).

3.1. Relativeness of interpretation

As the etymology of the word emoticon (if we look at that particular "pioneer" graphicon) indicates, it is largely connected with the extralinguistic communication markers expressing emotion in non-face-to-face written communication, thus giving indication regarding the interlocutor's facial expression (Walther–D'Addario 2001, on emoticons). In their rather influential research, Dresner and Herring (2010: 523) state that "emoticons do not comprise

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new lexical or morphosyntactic constituents of English. Thus, what is required is a theoretical framework that situates emoticons (or rather some of their uses) between the extremes of non-language and language."

The more "iconized" companion of the emoticon, the emoji, brings additional object representations, which actually do not correspond to facial expressions (such as various objects, e.g. guitar, animals, poo; even activities, e.g. running, eating, sleeping, etc.), becoming a more elaborated variant of the pictorial emoticons. Further, the "hashtagized", personalized GIFs, memes, etc. bring the additional involvement of the potential counter-communicators (CMC participants) by counting on, for example, their cultural background (cf. Herring 2004). This brings the research on graphicons into the field of cultural context, quite inevitably.

3.1.1. The issue of cross-linguistic and cultural "strings" in graphicon usage

By original intention, as already mentioned in 2.1. above, memes tend to represent mostly jokes mediated through visual icon-like *image* + *text* or *GIF* + *text* combinations. They spread virally on various platforms, receiving updates and changing along the way, resembling a gene-copying process.[7]

It is interesting to point out that such graphicons may contain diverse (non-) cultural references (such as historical, (pop) cultural, political, ethnical, religious references, along with country- or profession-specific references) and subsequently require certain background of knowledge in order to be apprehended. Thus, a pragmatic "decoding" of the communicative act of such visual representations is expected to be implemented.

Some researchers even stipulate that the adequate *ad hoc* understanding of personalized graphicons (in their research on memes), i.e. decoding the references, could be linked to a certain age group – the so-called *millennials*, who, due to the amount of time spent online and in CMC, carry most this capacity for understanding and (re-)creating memes (Kostadinovska-Stojchevska–Shalevska 2018). This is a rather far-fetched statement, but perhaps it does reflect a certain tendency. Such assumptions are an additional motivation for shaping up a strictly linguistic apparatus for investigating the linguistic impact of graphicons in written discourse.

The actual interpreting of graphicons proves to be highly variable in terms of individual and cultural variations (Miller et al. 2016). For example, the emoticons

7 It is interesting to point at the link between graphicon-type *meme* and *memetics* – an approach which attempts to give some explanation of cultural evolution based on Darwinist evolutionary views. The meme denotes a unit of cultural information: languages, cultural practices/concepts that can be "replicated and transmitted again and again", as He indicates (2008: 71), in two ways – the same content in different forms and the same form with different content (He 2008: 71–72).

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originated as sideways representations "J", and they further developed in East Asia as "right way up", e.g. Japanese *kaomoji* (lit. 'face marks') ^_^. The functions of graphicons can have an effect of the interpretation of a message; this has already been indicated in the discussion above. The fact that the interpretation of an utterance in CMC depends on the presence/lack of a graphicon is also a factor. For example, a study on emoji use observes that Japanese teenagers believe that when there is no emoji in the message, then the person is angry at them. Alternatively, a message containing a lot of emojis can be interpreted as too enthusiastic (Sugiyama 2015). In regard to language environment, it is necessary to note that the majority of studies only deal with monolingual CMC, within one language (predominantly English, but also Swedish, French, Japanese, or Chinese) (Tang–Hew 2019), meaning that there is lack of information about how computer-mediated communication differs cross-linguistically. Furthermore, the interaction between graphicon use – frequency, form, sociopragmatic parameters – and text across various languages may reveal interesting data as far as the typology (and universality) of graphicons is concerned. As mentioned above, graphicon studies do tend to demonstrate its multi-disciplinary nature. Furthermore, it seems that the visualization of graphicons in CMC could not be unambiguously interpreted in terms of the "traditional" linguistic entities such as words and phrases (for more opinions on the subject, cf. Herring 2004: 338–376).

4. Some directions for "new horizons" of pragmatic strategies in graphicon usage

The freedom to write and be read that people enjoy nowadays has never been greater. And – as an illustration of the potential "charge and power" of CMC – if it could be said metaphorically that Gutenberg allowed everyone to become a reader, then it could also be said that the Internet allowed everyone to become a writer – on the digital communication channels (resulting in robust language data, including spontaneous and non-edited records). Naturally, such freedom generates new types of written forms, some of which are equipped and upgraded with static or video visual acts (for new types of writing, see also McCulloch 2019). A newly emerged linguistic tool, the *computer-mediated discourse analysis* (CMDA), observes such developing linguistic characteristics (Herring 2019).

The appearance and active use in written discourse of the graphicon forms, such as stickers, GIFs, memes, etc., clearly reveals the tendency of "liveness" of the graphicon concept. Such iconic presence in written communication does provoke the linguistic society/research to give it a status as to whether they could be analysed in terms of linguistic theories dealing with language systems. Following the above discussion on interaction between visual communicative

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act and the textual implementation (among others, cf. Dresner and Herring 2010, Lankshear and Knobel 2007, Hård af Segerstad 2002, Herring 2019, etc.), some indications for new horizons of language change could be outlined:

(4) *Graphicon generalizations on language change*
   a. Graphicons (all types regardless the specific parameters in form and use) are becoming increasingly conventionalized as textual markers.
   b. Sociopragmatic variables: different user behaviours across cultures; the age factor in relation to the type of graphicon.
   c. Graphicons may become a universal symbolic language.

5. Concluding words

Based on designations regarding graphicon usage within the rather dynamic and non-coherent relevant literature (as revealed in the above discussion (cf. 3. and also indicated in Konrad–Herring–Choi 2020, Miller et al. 2016, Tang–Hew 2019, Vishogradska-Meyer 2021, etc.)), it is assumed that it is possible to systematically trace a pattern in the occurrence of the graphicons. Given these parameters of graphicon studies, it is worth putting forward the idea that research objectives should involve the conceptual treatment of visual communicative act (within the frame of pragmatics). Despite that the initial observation is that both communicative functions of the graphicons indicated in (1) demonstrate wide usage, in order to establish the "laws" of intercourse in written communication for the use of graphicons as a complementary to a written statement, and their use as a single communicative act, a wide range of empirical material needs to be examined. Such an ambitious project to compile a database of graphicons needs to consider various (socio-)pragmatic factors, also possibly fluctuating cross-linguistically, which inevitably interact with IT parameters. From that perspective, the current work is a mere incentive for pointing at the parameters and pragmatic strategies in graphicon usage in CMC, thus providing a start-off as part of a larger-scale research.

The linguistic studies dealing with the incorporation of iconoid objects in texts are challenged by the "freshness" of the material and the possibility to face newer and newer graphicon forms. Albeit the agreement that graphicons are not "traditional words" (as they are not made of alphabetical graphemes), they have proven to be features of language in terms of interfering in the linguistic codes.

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