

Dialogues about Graphicons in Digital Communication: Introduction to the Special Issue

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Introduction

Graphicons, as defined by Susan C. Herring and Ashley R. Dainas (Herring & Dainas, 2017), are graphical icons used in text-based computer-mediated communication (CMC), including but not limited to elements like emoticons, emojis, stickers, GIFs, images, and video clips. These visual symbols have become pervasive in digital communication, even as their forms and functions have continued to evolve. This rapid evolution presents challenges, particularly in analyzing the meanings and functions of graphicons and understanding their broader impact on communication. These challenges are taken up in various fields, including but not limited to linguistics, semiotics, psychology, communication, behavioral science, and computer science (Bai et al., 2019). Linguists, for instance, explore how graphicons function as part of language systems, focusing on their role in meaning-making, syntax, and pragmatics, while semioticians analyze the symbolic and cultural meanings behind graphicons. Psychologists focus on how graphicons influence emotions and social interactions, and computer scientists develop algorithms to track and analyze their usage across platforms.

Despite this widespread interest, there has thus far been a notable lack of interdisciplinary communication or cooperation as regards graphicon research. This often leads to different disciplines retreading the same ground rather than building productively on each other's work. Yet graphicons are complex and multifaceted; their meanings, functions, and impacts extend beyond the scope of any single discipline, making it essential for scholars from different fields to exchange ideas, methods, and perspectives to deepen knowledge of graphicon use.

To promote interdisciplinary dialogue, in December 2022, the Center for Linguistics and Applied Linguistics at Guangdong University of Foreign Studies in China organized a virtual symposium on "Graphicons and Digital Media." The two-day symposium aimed to foster cross-disciplinary exchange by bringing together scholars from around the world. The organizers of the symposium invited leading experts, including semiotician Marcel Danesi (University of Toronto, Canada), computer-mediated discourse analyst Susan Herring (Indiana University Bloomington, United States), social semioticians Michele Zappavigna (University of New South Wales, Australia) and Sumin Zhao (University of Edinburgh, United Kingdom), along with several emerging scholars from the fields of pragmatics, psychology, and social semiotics, as well as industry practitioners.

The participants presented cutting-edge research on and applications of graphicons in digital media, sparking intellectually stimulating discussions and emphasizing the need for continued dialogue.

The present special issue of *Language@Internet* continues the dialogues across disciplines on the nature of how graphicons are used, understood, and processed in online communication. All of the authors in this special issue were presenters at the symposium, with some transforming their presentations into articles, while others contributed more recent research findings. Each article featured herein stands alone as an important contribution to the author's respective discipline. Equally important, the articles should be understood as being in conversation with each other on the nature of graphicons and the ways in which their uses and natures can be studied. A number of different perspectives are represented in this collection: CMDA, semiotics, linguistics, and communication. Related to this, each article draws on a different kind of data, i.e., literature reviews, experimental results, and survey data. Moreover, different graphicon types are included in this special issue to encourage comparisons across types, as well as to improve understanding of lesser studied graphicons such as stickers, images, and GIFs.

This special issue is an interdisciplinary space where researchers from different specializations have come together to share their research on graphicons. Although the authors of each article adhere mainly to their areas of expertise, their inclusion in this body of work required some adjustment for our intended broad interdisciplinary audience. As editors for this work, we encouraged the authors to keep in mind that not all readers would be familiar with their methods or empirical assumptions, and thus we guided them in presenting their work in what we hope is a widely accessible manner. Although such efforts are less necessary in a domain specific space, here they can open the door for greater understanding and communication among researchers of different backgrounds.

In the next section, we first introduce the articles included in the special issue. Following that, we outline several potential directions for future research that emerge from the insights presented in these contributions.

Articles in this Special Issue

Computer-Mediated Discourse Analysis (CMDA) (Herring, 2004) is a toolkit of methods for studying online communication drawn from language related fields, including linguistics, ethnomethodology, conversation analysis, and critical discourse analysis. The framework was originally created for the purpose of analyzing textual online communication. But as Herring (2018) argues and Dainas demonstrates in this special issue, it has potential for providing a structured way to approach the varying levels at which graphicons operate in discourse. CMDA posits that there are four levels to discourse: Structure, Meaning, Interaction Management, and Social Phenomena. The structural level deals primarily with the building blocks of online discourse: typography and orthography, syntax, discourse schemata, and formatting conventions. The level of meaning focuses on what users intend to communicate and the extent to which they are successful. The level of interaction management deals with how users manage conversational interaction online;

this includes how conversations are structured, the timing of turns, and how misunderstandings are handled. The level of social phenomena includes a wide range of social dynamics accomplished through discourse, such as politeness and expression of gender and cultural differences. Applied to graphicon research, such an approach is useful because it shows how multiple research approaches can be understood as being in conversation with each other.

In her contribution to this special issue, Dainas attempts to bridge the gap between fields and methods in graphicon research, proposing graphical CMDA as an overarching framework that can accommodate multiple research approaches. Through her review of the literature on stickers, images, and GIFs, Dainas illustrates how graphicons function at different levels of granularity, specifically: Structure (e.g., how is a graphicon physically constructed and how often does it appear?), Meaning (e.g., how are graphicons interpreted in context?), Interaction Management (e.g., how are graphicons used to manage turn taking?), and Social Phenomena (e.g., does graphicon use vary by age, gender, culture, relative power distance, etc.?) (cf. Herring, 2004). CMDA was originally created to allow linguists to analyze text-based CMC using primarily linguistic methods. In contrast, Dainas' application of CMDA draws research from a variety of disciplines in addition to linguistics, including communications, media studies, and computer science. This approach is necessary because of the multimodal (as opposed to textual) nature of graphicons. It is also useful, because it highlights gaps in the broader graphicon literature related to specific methods, contexts, phenomena, and graphicon types (e.g., emojis, stickers, and GIFs) which require further study and which would not be as easy to identify without an interdisciplinary framework. The other articles in this special issue can also be understood within this proposed framework for graphical CMDA, adopting approaches from psychology, social semiotics, and behavioral research to explore the structure and meaning of graphicons.

In the second article, Logi and Zappavigna apply a social semiotic approach to the interaction between GIFs and written language on the social media platform Twitter (now X), based on a data set of 100 GIFs regarding the lawsuit and settlement that followed from Fox News' claim that Dominion voting machines had been rigged to steal the election from then-President Donald Trump in the 2020 US elections. Logi and Zappavigna conceptualize graphicons as paralinguistic resources that offer users rich and flexible ways to create new and nuanced meanings. The GIFs in their data were found to draw on shared cultural references and discourse semantic parallels, adding layers of inter- and intra-textual meaning not typically seen, for example, in emoji-language interactions. Their study contributes to establishing the unique role GIFs play in social media communication and highlights their distinctive meaning potential within the broader graphicon landscape.

Next, Weissman, Engelen, Thamsen, and Cohn adopt an experimental approach to emoji understanding that has been relatively underutilized thus far, but that has great potential for furthering understanding of graphicon structure and meaning. Using constructed rather than naturalistic data, they investigate how participants interpret a minimal emoji sequence, two side-by-side emojis, compared to a combined representation of the two emojis that is more like a sticker or image. For all 20 stimuli that were presented, participants found the combined image easier to

interpret and respond to, although the emoji sequences were still understandable. On the basis of these findings, the authors suggest that the reason participants were slower to interpret linear sequences of emoji is because such sequences require the reader to make inferences about the relationship between each emoji in the string, whereas composite images (and spoken language) do not require such inferences. Although emoji are currently limited to presentation in sequential order, the authors describe a tool called *Emoji Kitchen* (2023) that allows users to create mashups from two existing emoji.

In the last article in this issue, Zhukova and Herring analyze how different demographic groups, notably different genders and generations, perceive the uses of four common emoji, with a focus on their positivity or toxicity. The authors' online survey data found significant demographic differences in respondent perception, with non-binary individuals and Gen Z participants more likely to interpret emoji-containing messages as sarcastic or passive-aggressive. With regard to specific emoji, younger generations viewed the thumbs up and smiley face emojis as more passive-aggressive, while older generations reacted more negatively to emojis like the bomb and fire emoji. These findings have implications for both online content moderation and legal considerations of intent in cases involving potentially toxic emoji use.

The articles in this issue vary in the perspectives (experimental linguistics, semiotics, behavioral research), methods (experiments, semiotic analysis, surveys, content analysis), data (naturalistic vs. elicited), and interpretive perspectives (the researchers' versus those of graphicon users) they adopt. Interestingly, however, they all primarily focus on the CMDA level of meaning, although this is not inevitably the case, as Dainas's review of graphical CMDA demonstrates. Nonetheless, cross-disciplinary studies of graphicons at other levels are much needed. In the following section, we outline several other areas of graphicon research that are not addressed in this collection that we recommend be addressed in future research.

Future Directions

Platform Diversity. There is a tendency for graphicon research to focus solely on Western platforms. For example, the one article in this issue that focuses on naturalistic graphicon use by Logi and Zappavigna analyzed data from Twitter (now X). Despite the increasing global popularity of a few CMC platforms (i.e., Facebook, Instagram, Snapchat, YouTube, X, TikTok), there is a need to examine graphicon use on platforms outside the Western context. Research on platforms from other contexts, such as Weibo and Bilibili in China and Kakaotalk in South Korea, would enrich understanding of graphicon use, since both platform affordances and local culture likely play a role in how graphicons are used and interpreted. For example, the Chinese platform Bilibili shows distinct patterns of graphicon evolution, heavily influenced by platform-specific practices shaped by technological affordances and social dynamics (Zhang et al., forthcoming, 2025).

Cultural Diversity. There is also a related need for research into sociocultural differences in graphicon usage, as well as research on how graphicons are used differently in different languages.

The articles in this issue focus on English-speaking Western cultures. Investigating cultural differences in graphicon usage could reveal how cultural norms influence the forms and functions of graphicons and communication patterns involving graphicon use. For instance, the most frequently used graphicon types from a Twitter corpus (Wang et al., 2024) differ greatly from those from a Bilibili corpus (Zhang et al., 2022). Further, Chinese users tend to use emojis more frequently in contexts related to family and social relationships, whereas their Western counterparts use emojis extensively in professional settings (Guntuku et al., 2019). These differences call for more systematic studies of graphicon usage across cultures.

Graphicon Diversity. Emojis continue to be the primary focus of graphicon studies, likely due to their status as a closed, searchable set of icons that enjoy widespread popularity. However, as noted in Dainas' review, other graphicons, such as stickers, images, and GIFs, are also prevalent and play an important role in shaping online communication practices worldwide. As Logi and Zappavigna's analysis demonstrates, GIFs differ from emojis in their interaction with language in meaning-making processes. In addition to the aforementioned areas for future research, it is essential for any researcher tackling these issues to remain mindful of the larger, more complex, and harder-to-track graphicon types that also contribute to the evolving landscape of digital communication. Researchers should recall that despite their different sizes and appearances, graphicon types tend to share similar functions (cf. Herring & Dainas, 2017). Where possible, graphicon researchers should seek to consider multiple graphicon types.

Longitudinal Research. All the articles in this special issue focus on synchronic research. Longitudinal research into graphicons presents a significant challenge due to the ephemeral nature of CMC data and storage, yet it must nonetheless be tackled. There is a pressing need to create searchable corpora of graphicon use across platforms, languages, and time periods to enable comprehensive overviews of how graphicon use had evolved over time and place. The evolutionary trajectories of graphicons predicted by Konrad et al. (2020) using synchronic survey data have been only partially corroborated by empirical data from the Chinese social media platform Bilibili, as presented by Zhang et al. (2022). This partial validation reveals the complexity of graphicon evolution and highlights the need for systematic, longitudinal research to further explore these developments.

The creation of longitudinal corpora will also facilitate the study of how graphicons have affected verbal language and may continue to affect language use in the long term, an important area that has not been addressed in the current issue. There is a particular need for longitudinal empirical research on naturalistic data in order to address popular media concerns about graphicon use acting as a "threat" or "danger" to language (Thurlow & Jaroski, 2020). Researchers could test the impact of graphicon usage on language, exploring how graphical communication might influence language structure and pragmatics. Zhang et al. (2023) investigated the impact of graphicon use on sentence final particles (SFP) in Chinese, finding that certain functions of graphicons are competing with language as an alternative to SFPs. Future studies could explore the extent to which graphicons influence syntactic structures and discourse markers across different languages and

social media platforms, as well as how a shift toward competition between graphicons and language might affect the broader dynamics of multimodal communication.

These research directions are promising but also come with significant challenges. Pursuing any of them would involve cross disciplinary collaboration in developing appropriate methodologies and interpretive perspectives.

Conclusion

This special issue seeks to create a space for cross-disciplinary dialogues within graphicon studies, and ultimately to encourage researchers from diverse fields to explore the complex roles of graphicons in digital communication. We hope that readers of this special issue will be inspired to seek out opportunities for collaborations that cross disciplinary lines as well as to keep abreast of the full range of graphicon research. A collaborative and expansive approach to graphicon studies will ultimately support a broader understanding of how these visual elements contribute to and shape contemporary communication.

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