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DOI: <https://doi.org/10.24815/siele.v13i2.1101>

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P-ISSN 2355-2794
E-ISSN 2461-0275

Discovering the Communicative Functions of Cybertextual Contexts in Digital Media Environments: A Sociosemiotic Multimodal Perspective

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Abstract

Context plays a crucial role in language use, as it shapes the meaning of text interaction or communication. The exploration of the conceptualization of contexts in contemporary language studies, including cybertextual contexts, has long been debated among linguists. With the emergence of computer-mediated communication, social identity cues within cybertextual contexts have become an important area of inquiry. This research examined cyberpragmatics by analyzing textual environments

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Citation in APA style: Rahardi, R. K., Risdianto, F., Purnomo, B., Fitriana, I., Sari, M. K., Rianita, D., & Jumanto. (2026). Discovering the communicative functions of cybertextual contexts in digital media environments: A sociosemiotic multimodal perspective. *Studies in English Language and Education*, 13(2), 1051-1068.

Received December 21, 2024; Revised August 17, 2025; Accepted April 6, 2026; Published Online May 31, 2026

<https://doi.org/10.24815/siele.v13i2.1101>

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through a socio-semiotic multimodal lens. Drawing on Leech's perspective on general pragmatics, the notion of 'context' acquires a broader dimension, encompassing the circumstances surrounding digital interactions beyond the immediate social environment. This study employed online observation, expert-based selection, verification, classification, and interpretation to discover the communicative functions of the cybertextual contexts in the digital media environment. Based on a socio-semiotic multimodal analysis of six multimodality cybertextual contexts data, the findings identified six functions of cybertextual contexts: (1) providing background for intent delivery, (2) affirming intent delivery, (3) illustrating intent delivery, (4) shaping intent interpretation, (5) complementing intent conveyance, and (6) describing intent and meaning. Theoretically, this research highlighted the roles of visual, spatial, gestural, and aural contexts within cyberpragmatics. Empirically, this research illustrates the relationship between language and context in digital environments to uncover the evolving nature of communication in cyberspace.

Keywords: Cyberpragmatics, cybertexts, digital research environment, multimodality research, social semiotics.

1. INTRODUCTION

The significance of context in language studies has long been the subject of extensive debates among linguists and researchers in related fields (Armstrong & Ferguson, 2010; Doedens & Meteyard, 2022). Discussions surrounding contextual identity have gained prominence as language studies increasingly encompass diverse paradigms and approaches. Early studies of context emerged primarily within functionalist and post-functionalist paradigms. Over time, the concept of 'context' has evolved alongside developments in linguistics and pragmatics.

In the period of linguistic formalism, 'context' is perceived as the linguistic environment that precedes and follows the language entity, contributing to its meaning. This intra-linguistic context also goes by the name of the 'semantic context' due to its frequent usage in dyadic semantic meanings, thus becoming known as the 'dyadic context'. In the era of systemic pragmatics, the focus shifts to understanding the speaker's intentions through context. While retaining some influence from the characteristics of the dyadic context, this period marks a transition into pragmatics, where comprehension of the speaker's intention extends beyond the linguistic entity (Crandall & Basturkmen, 2004; C. Li et al., 2025). However, exploring the speaker's intention remains rooted in formalistic linguistic systems and the realm of pragmatics (Cummings, 2013; Y. Li & Xie, 2025).

The advancement of pragmatics has led to culture-specific pragmatics, where the local culture plays a crucial role in understanding the speaker's intent. This evolution is closely intertwined with interdisciplinary fields of linguistics such as sociolinguistics, anthropolinguistics, metaphorical ecolinguistics, and sociopragmatics (Atkins et al., 2024; Tusting & Maybin, 2007). Culture-specific pragmatics extensively utilizes the social context introduced by Dell Hymes in the 1970s as part of the anthropological approach to communication. In Indonesia, Soepomo Poedjosoedarmo, a renowned sociolinguistic expert, further expanded Dell Hymes' concept within the context of Javanese society (Bråten, 2001; Goddard, 2010). From a cultural perspective, pragmatic studies increasingly emphasize the importance of horizontally structured social contexts. The social dimension of context has consequently become central to various interdisciplinary language studies. These studies recognize that language can no longer be viewed as homogeneous but rather as inherently plural and heterogeneous. The integration of contextual analysis with the ethnography of communication has further accelerated the development of interdisciplinary linguistics (Duranti & Goodwin, 1992; Jacobs & van Hest, 2024). As culture-specific pragmatics continues to develop, it has become integral to understanding language in relation to cultural diversity and social meaning.

A subsequent stage in the development of pragmatics was marked by the contributions of scholars such as Leech, whose work remains highly influential across various areas of pragmatic inquiry. Leech's work (2007) introduced the notion of situational context as a central component of pragmatic interpretation. In Leech's (2007) framework of general pragmatics, 'context' refers to the circumstances surrounding an interaction, extending beyond the socially grounded perspective emphasized in the ethnography of communication. Within this framework, the roles of the speaker and hearer are central to determining the communicative purpose of an utterance, particularly through the verbal actions that shape meaning. Consequently, speakers actively shape the contextual elements relevant to a given interaction. Understanding speaker intention therefore requires attention to speech as the outcome of interconnected verbal activities (Mazzarella & Vaccargiu, 2024; Rossen-Knill & Henry, 1997; Szatrowski, 2014).

Globalization has accelerated technological advancement across the world. The proliferation of technology profoundly impacts language development, given its integral role in culture. The rapid expansion of technology has significantly influenced language development because of the close relationship between language and culture. In particular, developments in information technology have transformed contemporary communication practices. Language and culture maintain an interdependent relationship (Berger & Packard, 2022; Srite & Karahanna, 2006). As culture evolves alongside technological innovation, language practices likewise continue to develop.

Within today's digitally mediated linguistic landscape, the present socio-semiotic multimodal study investigates the communicative functions of cybertextual contexts in digital media environments. The study is framed through three interrelated dimensions: communicative functions, cybertextual contexts, and digital media environments, each of which has been widely examined in prior research. The first body of research on communicative functions has highlighted how meaning is constructed and interpreted across diverse communicative modes and contexts. For instance, Arsanti (2021) examined code-mixing as a communicative function and identified intra-sentential and inter-sentential forms as key patterns of use. Similarly, Hamdan (2022) found that emojis function as non-verbal communicative cues in computer-mediated communication (CMC), acting as a limited but effective form of paralanguage in digital interaction.

Apart from linguistic and digital symbols, communicative functions have also been explored in relation to cognitive, social, and multimodal processes. Valle et al. (2021) emphasized the importance of integrating gestural communication to better understand interactional competence in minimally verbal individuals. Bruckner et al. (2021) further reported how communicative processing can be affected by neurological conditions, contributing to broader comprehension of speech perception and rehabilitation. In a similar vein, Tomasello et al. (2022) showed that speech prosody plays a crucial role in conveying communicative intent, supported by neurophysiological mechanisms that enable rapid interpretation of meaning. Chang et al. (2023) extended this perspective by identifying the premotor cortex as a key region involved in representing communicative functions as goal-directed actions. At the pragmatic level, Morrison and Tavakoli (2023) revealed that communicative function influences fluency, as different speech acts (e.g., complaints or delivering bad news) produce varying temporal and pause patterns. Across these studies, these studies found that communicative functions operate across linguistic, cognitive, and interactional dimensions, shaping how meaning is produced and interpreted in context.

A second body of research has focused on cybertextual contexts, highlighting how digital and computational environments reshape textuality, authorship, and reader interaction. Early foundational work by Koskimaa (2000) integrated cybertext theory with literary studies, suggesting that computer games and virtual environments represent emerging forms of literature. Similarly, Giddings (2006) developed cybertextual analysis as a method for understanding video games as simulational systems embedded in everyday interaction. Further studies have expanded cybertextuality into multimodal and post-digital domains. Ensslin (2007) explored the interaction between reader intentionality and embodied experience in physio-cybertexts, introducing the

concept of retro-intentionalization. Kayyali (2026) addressed issues of selection in digital literary systems that presented implications for collaborative authorship and automated poetry generation.

More recent research has extended cybertextuality into generative and algorithmic environments. Lagerkvist and Ghajargar (2020) examined machine-learning-based interactive literature, finding that while users found generated texts engaging, they struggled to conceptualize them as coherent navigable spaces. Similarly, Slater (2022) reconceptualized biological systems as cybertextual structures, opening new possibilities for biomedicine and genetic poetry. Vargas-Iglesias (2019) proposed a procedural rhetorical approach to cybertextual tragedy, while Handayani (2021) explored techno-journals and zines as transitional media linking print and cyberspace. Taken together, these studies position cybertextuality as a dynamic framework in which textual meaning emerges through interaction between human users, computational systems, and digital environments.

A third strand of research has examined digital media environments as socio-technical spaces that shape communication practices, participation, and knowledge production. Fähnrich (2021) argued that science communication must be re-conceptualized in response to digital transformation, particularly in understanding science–society interaction. Zulli (2021) similarly highlighted the dynamics of socio-mediated scandals to emphasize their rapid emergence and dissipation in digital platforms.

From an educational and communicative perspective, Bobkina and Domínguez Romero (2022) found that student-created digital videos effectively enhance oracy and public speaking skills. Grossman (2022) further examined digital media systems and their implications for citizen participation, noting mixed outcomes for informational diversity and media pluralism. Other studies have focused on technological mediation and user behavior. Ochsner et al. (2022) explored how mobile technologies mediate human-environment interactions, while Otto et al. (2022) demonstrated the relationship between digital news exposure and emotional responses. Milfeld and Haley (2022) investigated how brand managers interpret digital media environments, identifying key organizational sensemaking trends.

In addition, research has addressed broader socio-cultural and communicative shifts. P. Li (2022) discussed the role of digital media in transforming traditional art practices, while Yang (2022) highlighted the emergence of citizen science communicators within online platforms. Haugsgjerd et al. (2023) and Schäfer (2023) further examined digital news exposure and its impact on knowledge formation and political understanding. Recent studies such as Löffler (2023) and Yun (2024) extend this discussion by analyzing digital media's influence on education systems and media commodification. As a whole, these studies indicate that digital media environments are not merely channels of communication but complex socio-technical ecosystems that reshape interaction, knowledge, and cultural production.

While prior research has extensively examined communicative functions, cybertextuality, and digital media environments separately, few studies have integrated these dimensions within a unified socio-semiotic multimodal framework. In particular, the intersection of cybertextual communicative functions in digital environments remains underexplored. This gap provides the basis for the present study, which seeks to analyze how communicative functions operate within cybertextual contexts in digital media environments from a socio-semiotic multimodal perspective. This combination holds a significant theoretical and practical value, as it contributes to the development of pragmatics, particularly cyberpragmatics focusing on multimodality, while practically providing understanding for educational contexts and digital communication literacy. Based on this research gap, the research questions were formulated as follows:

1. What communicative functions of cybertextual contexts are there in the digital media environment?
2. How are communicative functions as part of language identity in a cybertext described?
3. Why do types of cybertextual contexts become part of language identity in a cybertext?

Upon the findings referred to by the research questions, this research is expected to focus on visual, spatial, gestural, and aural contexts as part of cyberpragmatics, as well as noteworthy rapport between language and context in the digital environment to elucidate the evolving nature of communication in cyberspace.

2. LITERATURE REVIEW

2.1 Multimodality in Language Research

In earlier stages of linguistic formalism, language studies primarily focused on monomodal and, to a lesser extent, bimodal forms of communication. However, rapid technological advancement and the proliferation of digital platforms have encouraged contemporary language research to adopt multimodal approaches. This multimodal era is characterized by increasingly diverse communicative forms facilitated by social media, digital mass media, and internet technologies, often associated with the broader development of the Internet of Things (IoT) era (Kress, 1990). In contrast to traditional notions of context, which emphasized social, cultural, and situational dimensions, the multimodal era introduces new forms of virtual and digitally mediated extralinguistic context. Kress and van Leeuwen (1996, 2021) made significant contributions to the development of multimodality studies in linguistics. Building on M. A. K. Halliday's conception of language as a social semiotic system within Systemic Functional Linguistics (SFL), these scholars argued that meaning is constructed through multiple semiotic resources, including linguistic, visual, and symbolic forms (Duranti, 2011; Jewitt et al., 2025).

These metafunctions include ideational, interpersonal, and textual dimensions. The ideational metafunction relates to the representation of experience and the construction of reality through language. The interpersonal metafunction concerns the social interactions between writers, readers, speakers, and their conversation partners. On the other hand, the textual metafunction relates to the organization of language into coherent and meaningful discourse (Halliday, 1975). Halliday conceptualized language as fulfilling several communicative functions, including instrumental, regulatory, representational, interactional, personal, heuristic, and imaginative functions, which are broadly realized through the ideational, interpersonal, and textual metafunctions (Matthiessen & Teruya, 2023; Wells, 1994). The instrumental function refers to the use of language to express speakers' wants and needs. The regulatory function involves the use of language to influence attitudes and behaviors through pleading, ordering, and other forms of social control (Mulyaningsih et al., 2022).

These functions can be observed in various communicative contexts. For example, when lecturers assign specific tasks to students, when announcements or advertisements are made through mass media or social media platforms, or when someone delegates tasks to students, language serves as a medium for transmitting information, knowledge, and cultural meaning (Wincana et al., 2022). Engaging in conversations, exchanging messages, or reading books also exemplifies the symbolic function of language, which conveys meaning and content.

The interactional function of language plays a pivotal role in building social connections and facilitating communication between individuals (Wincana et al., 2022). Whether through social media interactions or discussions about health, language serves as the conduit for interpersonal contact. Moreover, the heuristic function of language involves its role as a means of seeking truth, solving specific issues, or constructing knowledge in scientific research (Wincana et al., 2022). In addition, the imaginative function of language reflects its capacity to express creativity and aesthetic meaning. This dimension is often realized through artistic and expressive forms of communication such as poetry writing, music, and singing (Halliday, 1993; Halliday, & Hasan, 1989). Kress and van Leeuwen's (2021) multimodal framework introduced the concept of visual grammar, emphasizing the integration of five semiotic resources in meaning-making. Within this framework, language functions as a vehicle for conveying linguistic intent. Technological developments have expanded the range of semiotic resources available for communication. In multimodal communication, the linguistic components interact with visual, spatial, gestural, and auditory resources to construct meaning collaboratively.

2.2 Cybertextual Contexts

Visual elements constitute one dimension of cybertextual contexts, including color, facial expressions, images, icons, and emoticons. These visual resources contribute significantly to

meaning-making by enhancing the illustrative and persuasive dimensions of digital communication, particularly in advertising discourse. However, linguistic elements remain crucial in anchoring and interpreting visual representations within multimodal texts. Another important dimension of cybertextual context is spatiality, which shapes the organization and interpretation of multimodal communication. It extends beyond physical proximity between speakers and interlocutors, encompassing various spatial features within the cybertextual contexts (Gee, 2025).

However, a notable disparity exists between texts that represent the linguistic aspect and visuals encompassing the visual resources. For instance, a visualization depicting cheerful individuals hugging their lively and enthusiastic children exemplifies how the dimension of 'space' can be interpreted within the multimodality perspective. The proximity of advertising figures in certain beauty advertisements, with only a small distance between them in the image visualization, further confirms the significance of the spatial aspect in delivering the advertisement's message to the audience. Gestural elements also constitute an important component of cybertextual contexts, particularly through bodily movement. In various advertising visualizations, movement may manifest through the subjects' stances or bodily actions. For instance, a powerful gestural feature can be observed in a wife's leap of excitement when her husband presents a particular gift or product, often portrayed by advertising figures. Such gestures are particularly impactful in advertisements displayed on television, YouTube, and similar digital platforms.

Notwithstanding, research on multimodality cannot overlook the significance of the aural or speech dimension (Faisol, 2021; Yus, 2011). The aural aspect of advertising language is represented by various vocal expressions, such as wide-open mouths exuding sounds of excitement and distress. This highlights the importance of studying cyberpragmatics from a socio-semiotic linguistic perspective within the multimodality framework. Thus, the central challenge that this investigation aims to address is determining the identity of cybertextual contexts in cyberpragmatics research from the perspective of socio-semiotic multimodality.

3. METHODS

3.1 Research Design

The study adopted a descriptive qualitative approach, which serves as the starting point for exploring the diverse research techniques involved in identifying cybertextual contexts from the perspective of multimodality and social semiotics (Jewitt et al., 2025). The concepts of multimodality and social semiotics play crucial roles in this exploration (Jewitt et al., 2025; Kress & van Leeuwen, 2021). The central focus of this inquiry was the identification of cybertextual contexts in alignment with the study's title. As this research sought to understand the context of multimodality and semiotic society, a descriptive qualitative approach would help examine the intricate relationship between linguistic expressions and their social implications, particularly in digital environments (Armstrong & Ferguson, 2010).

3.2 Data Collection Techniques

To obtain the research findings, five data collection techniques were employed: online observation, selection through auto-expert judgment, verification, classification, and interpretation. The research explored cybertextual contexts through the selection of six cybertexts as corpus data, referred to as Multimodality Cybertextual Contexts Data (MCCD). The data sources were categorized into two groups: locational data sources and substantive data sources. The locational data sources consisted of online mass media and social media platforms containing cybertextual context data, while the substantive data sources included utterances representing the identification of cybertextual contexts. Data acquisition was conducted through listening, reading, and detailed note-taking procedures. The corpus data were selected using an auto-expert judgment

technique following online observation (Giddings, 2006; Yus, 2011). After the data had been collected, the researchers organized and categorized them based on relevant multimodal and socio-semiotic features (Kress & van Leeuwen, 2021). The collected data were then triangulated to ensure the validity and reliability of the findings (Atkins et al., 2024).

3.3 Data Analysis Techniques

Following the data collection stage, cyberpragmatics analysis was conducted using a socio-semiotic multimodal perspective (Kress & van Leeuwen, 2021; Yus, 2011). Terms such as Multimodality Cybertextual Contexts Data (MCCD), Aspects of Cybertextual Context (ACC), and Functions of Cybertextual Context (FCC) were used. In the analysis of MCCD, ACC, and FCC, the symbol (+) denoted the presence of relevant elements, while the symbol (-) indicated their absence. The analysis involved verification, classification, and interpretation of the selected cybertexts to identify the communicative functions of cybertextual contexts. This approach enabled the researchers to examine the relationship between cybertexts and contextual identity in digital communication.

This study also employed contextual analysis, commonly referred to as the extralingual equivalent method, to interpret the collected data (Duranti & Goodwin, 1992). Through this method, linguistic elements were analyzed in relation to visual, spatial, gestural, and other contextual dimensions present in cybertexts. The final stage of analysis focused on interpreting the findings to explain how cybertextual contexts contribute to meaning-making and language identity in digital media environments.

4. RESULTS

4.1 Distribution of Cybertextual Contexts in Multimodal Data

Based on the cyberpragmatics analysis from a socio-semiotic multimodality perspective, several significant findings on the functions of cybertextual contexts were identified. These findings corresponded to the formulated research questions and research objectives, as presented in Table 1.

Table 1. Results on a cyberpragmatics analysis within a socio-semiotic multimodality perspective.

Corpus-data code	Aspects of Cybertextual Contexts (ACC)				Functions of Cybertextual Contexts (FCC)					
	Visual	Spatial	Gestural	Aural	FCC-1	FCC-2	FCC-3	FCC-4	FCC-5	FCC-6
MCCD-1	+	+	+	-	+	-	-	-	-	-
MCCD-2	+	+	+	-	-	+	-	-	-	-
MCCD-3	+	+	+	+	-	-	+	-	-	-
MCCD-4	+	+	+	+	-	-	-	+	-	-
MCCD-5	+	+	-	-	-	-	-	-	+	-
MCCD-6	+	+	+	-	-	-	-	-	-	+

Table 1 shows that visual and spatial aspects appeared consistently across all multimodality cybertextual contexts data (MCCD), suggesting their dominant role in constructing meaning within digital media environments. Gestural aspects were identified in most data, while aural aspects appeared only in selected cybertexts, particularly those involving audiovisual elements. Furthermore, each corpus data represented distinct communicative functions of cybertextual contexts. MCCD-1 demonstrated the function of providing a background for intent delivery (FCC-1), whereas MCCD-2 reflected the function of affirming intent delivery (FCC-2). MCCD-3 illustrated intent delivery (FCC-3), while MCCD-4 inspired intent interpretation (FCC-4). In addition, MCCD-5 showed the function of complementing intent conveyance (FCC-5), and

MCCD-6 described intent delivery and meaning (FCC-6). In general, the findings highlighted the significant role of multimodal cybertextual contexts in shaping communication and meaning-making processes in digital media environments.

4.2 Cybertextual Contexts as Intent Backgrounds (FCC-1)

The analysis revealed that cybertextual contexts can also function as a background for intent delivery (FCC-1), as exemplified by Corpus Data 1: MCCD-1 (see Figure 1). In MCCD-1, a snapshot of a photograph originally published in a magazine was captured with multimodal texts. These multimodal texts effectively communicated their intended meaning using a combination of formal language and comprehensive linguistic codes (elaborated codes). The linguistic expression reads as follows:

- (1) Looking at something that is forbidden corrupts the mind.

The spatial and gestural features of this poster played a crucial role in conveying its intended meaning. The message implied a prohibition against accessing pornographic material, warning that such behavior could lead to moral and mental degradation. It combined prohibitive and persuasive functions to discourage engagement with pornographic content. In this context, meaning was not conveyed solely through language, but also through multimodal components, including visual, spatial, and gestural elements. While language remained the primary vehicle for communication, the cybertextual context was constructed through the interaction of these semiotic resources.

The visual aspect of the poster, featured in the latest issue of *Mata Air* magazine, was represented through several illustrations. One image depicted a man peering from behind a wall, emphasizing secrecy and hidden observation (see Figure 1). The textual presentation was further enhanced through color variation and rectangular formatting, which strengthened the emphasis of the message. The word *yang* was visually distinguished to highlight its significance within the text. In terms of gestural meaning, the man's hands gripping the wall reinforced the act of secretly observing something. This gesture reflected curiosity and attraction toward pornographic content, supporting the overall communicative intent of the poster.



Figure 1. An image from *Mata Air* magazine (2020) in Corpus-Data 1: MCCD-1.

4.3 Cybertextual Contexts as a Confirmation of Conveying Intent (FCC-2)

The second function of cybertextual contexts identified is as a confirmation of conveying intent (FCC-2), as illustrated by Corpus Data 2: MCCD-2 (see Figure 2). Figure 2 presents an article cover from the *Tempo* newspaper entitled *Neraca Tahun Keenam* [‘Sixth Year Balance’], portraying a former Indonesian president, Joko Widodo (popularly known as ‘Jokowi’), sitting on

a chair and covering his ears using his index fingers. The article, which was published on October 20, 2020, immediately attracted readers' attention. They were intrigued by the significance of the statement, indicating their need to understand its hidden meaning. In this context, the multimodal texts expressed the intended message, particularly through the ideational metafunction. The visual elements of the newspaper cover also represented another metafunction, with the primary image featuring a brick-red color, which effectively reinforced the idea that Jokowi possessed a strong commitment to Indonesia's development despite facing continual challenges. His political acumen and leadership qualities enabled him to overcome these obstacles. Even amidst disruptive public demonstrations, his composed demeanor appeared unaffected. The visual presentation reinforced the primary intent conveyed through the written content.

Furthermore, the gestural depiction of Jokowi covering his ears with his index fingers while sitting comfortably in a chair demonstrated his relaxed yet controlled demeanor, symbolizing his commitment to focusing on governing the nation despite frequent demonstrations. The italicized and capitalized text below the image represented various ideational metafunctions. The strategic use of space in writing and the positioning of specific images in the foreground further supported and validated the central message communicated through the linguistic elements.



Figure 2. An article cover of the *Tempo* (2020) newspaper portraying Jokowi sitting comfortably while covering his ears, coded as Corpus Data 2: MCDC-2.

4.4 Cybertextual Contexts as an Illustrator of Conveying Intent (FCC-3)

Another function of cybertextual contexts found here is as an illustrator for conveying intent (FCC-3), as illustrated by Corpus Data 3: MCCD-3 (see Figure 3). As shown in Figure 3, a Telkomsel advertisement combined linguistic features, visual representation, and spatial aspects to convey its intended messages. From a linguistic perspective, the language employed in the advertisement appeared informal and conversational. This advertising campaign specifically targeted younger generations who tended to prefer informal language, thus making the linguistic style of this ad appropriate for its target audience. The use of phrases such as *Seru MAX*, 'Pay a little', *Puas Internetan*, and 'YouTube' resonated strongly with this demographic. The primary message of the advertisement was communicated through the linguistic elements, which, within the framework of multimodality, can be interpreted as manifestations of the surrounding social environment. It is essential to highlight that the contextual element here was not limited to the linguistic aspect, as language primarily serves as the vehicle for conveying ideational

metafunctions. In multimodal texts, the cybertextual contexts also encompass non-linguistic elements, emphasizing the significance of visual components in illustrating meaning construction.



Figure 3. An advertisement of Telkomsel's service on Shopee, coded as Corpus-Data 3: MCCD-3.

The visual representation of this advertisement played a crucial role in delivering the intended meaning. Elements such as the Telkomsel trademark logo and the *Seru Max* product logo reinforced the primary idea conveyed in the advertisement. The vibrant red, white, and blue colors further strengthened the assertiveness of the main message. The visual aspect effectively fulfilled its illustrative function within this multimodal advertising framework. Equally important was the utilization of the gestural component to reinforce the communication of the advertisement's primary objective. The advertising figure displayed an expression of joy while holding a technological device in both hands, symbolizing the benefits of using Telkomsel services, which offered various payment options.

The spatial aspect of the advertisement also contributed to its realism and effectiveness. Careful adjustments were made to maintain a realistic visual presentation, particularly from the spatial dimension, when the advertisement was presented in an audiovisual medium. The aural component also contributed to the delivery of the advertisement, creating a more comprehensive and engaging multimodal experience. It is essential to reiterate that the components of the cybertextual context in this advertisement were utilized effectively to highlight the communication of its primary meaning. The language component, although vital, should not be regarded as an isolated context but rather the primary vehicle for conveying meaning.

4.5 Cybertextual Contexts as an Inspiration for Intent Interpretation (FCC-4)

Cybertextual contexts also serve as an inspiration for intent interpretation (FCC-4), as illustrated by Corpus Data 4: MCCD-4 (see Figure 4). Figure 4 illustrates a book's cover, which effectively communicates its purpose through the use of both linguistic and non-linguistic components, explaining the cover design process. In this multimodality study, verbal elements function as the primary medium for conveying meaning, while non-linguistic aspects such as colors and visual element function as cybertextual contexts. This presentation introduced the book's content while simultaneously emphasizing the significance of the cover design. Although the linguistic aspect is commonly regarded as the primary vehicle for conveying ideational meaning in Halliday's perspective, there are situations in which meaning cannot be adequately understood through words alone, particularly when attractiveness, engagement, and comprehension are limited. Thus, meaning can only be fully grasped through other forms of communication. Thus, contrary to common assumptions, language is not always the sole medium through which ideational meaning is communicated.

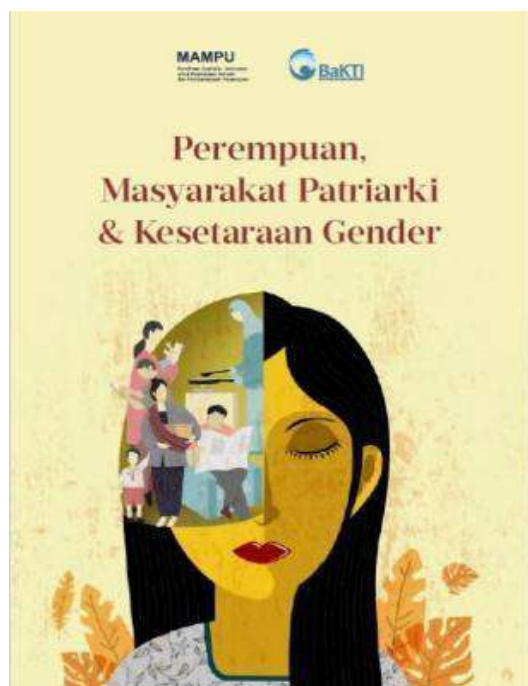


Figure 4. The book's cover of the *Jalastoria* article, dated 16 April 2020 (*Perempuan, Masyarakat Patriarki & Kesetaraan Gender*, coded as Corpus-Data 4: MCCD-4).

The title *Perempuan, Masyarakat Patriarki & Kesetaraan Gender* ('Women, Patriarchal Society, and Gender Equality') constituted the conceptual focus of this work. The linguistic vehicle element fulfilled its ideational metafunction through its verbal expression. Simultaneously, the cybertextual context, from the perspective of multimodality, highlights the representation of women and men living within a patriarchal society. The background illustrations depicted women engaged in various activities, such as selling products, caring for children, and preparing meals, thus portraying the complexities of gender inequality. Similarly, an image of a man reading a newspaper was juxtaposed with another image of a woman engaged in demanding work. The visual elements of the book cover were strategically utilized as cybertextual contexts to illustrate the theme of gender inequality vividly. These elements functioned as interpretive supports that enrich the understanding of the primary meaning conveyed through written language. Within the framework of multimodality, achieving effective communication of meaning becomes more straightforward by combining linguistic and nonverbal features, as exemplified by the context of cybertexts. Certain technological aspects, as components of culture, also play a significant role in shaping the delivery and interpretation of communicative intent.

4.6 Cybertextual Contexts as a Complement to Conveying Intent (FCC-5)

Another function of cybertextual contexts identified in this study is as a complement to conveying intent (FCC-5), as illustrated by Corpus Data 5: MCCD-5 in Figure 5. Figure 5 shows an article from the *Kompas* newspaper about *Simalama Minyak Goreng* ('Simalama Cooking Oil'). While most cybertext data is presented through various linguistic aspects, the message's content in this article remains relatively easy to comprehend. It can be argued that aspects of the cybertextual contexts are only obligatory when necessary. In this context, the delivery of the purpose relied on the inclusion of cybertextual contexts within the linguistic vehicle to enhance the intended meaning. This is the objective of the cybertextual contexts, which is to complement and enrich the intended message. Regrettably, a considerable proportion of academics and language observers seemed to lack a proper understanding of the significance of context in linguistic research. The role of context in pragmatic research has been a subject of prolonged debate. Context plays a pivotal role in determining the meaning of linguistic expressions. Neglecting context while attempting to decipher meaning can lead to misinterpretations,

considering the surrounding circumstances is vital in understanding the true meaning of something.



Figure 5. An article from the *Kompas* newspaper about *Simalakama Minyak Goreng* (*'Simalakama Cooking Oil'*, coded as Corpus-Data 5: MCCD-5).

In the example of a book titled *Simalakama Minyak Goreng* (*'Simalakama Cooking Oil'*), the term *Simalakama* prompted readers to reflect on its meaning and relevance to the book's content. The well-known proverb "It is like eating the *simalakama* fruit," which metaphorically refers to a situation where a person is caught in a dilemma, is associated with the potential risks involved in consuming fruit. The title suggests that this specific cooking oil plays a crucial role in people's lives and that its shortage may lead to significant difficulties, particularly for lower-income communities. The visual elements on the book cover, such as the image of a bottle of cooking oil resembling a public official, convey the association between political maneuvering and the public panic caused by the cooking oil shortage in the country. However, it is essential to highlight that the visual illustrations merely complement the primary message conveyed through the linguistic medium. Verbal components remain indispensable for the successful communication of meaning and cannot be replaced in effectively conveying the intended message. This challenges the misconception that cybertextual contexts are less important than the linguistic aspects. Correcting this misperception is essential for a better understanding of multimodality studies.

4.7 Cybertextual Contexts as a Description of Intent Delivery and Meaning of Intent (FCC-6)

Cybertextual contexts also function as a description of the delivery and meaning of intent (FCC-6), as illustrated by Figure 6 (Corpus-Data 6: MCCD-6). It shows a poster revolving around cultural digitalization, effectively conveyed through photographs and written content. This combination of linguistic and visual elements enhanced the delivery and effectiveness of the intended message. The linguistic component, represented by the phrase 'Cultural Digitality', served as the primary vehicle for conveying the ideational metafunction of the poster. In contrast, the nonverbal components provided descriptions and visual representations of the core message and its mode of communication. The poster included images of technological devices and

traditional tales depicting various aspects of cultural life. These visual elements were particularly relevant as they highlighted the use of available technology in transmitting cultural values.

The gestural aspect observed in the poster featured *Gatotkaca*, a traditional icon, symbolically bridging the real world and the realm of imagination. This representation appealed to millennials by encouraging them to explore the dynamic world of cultural digitization. The use of colors and graphic representations further accentuates the delivery and significance of the poster's intended message. The combination of verbal and nonverbal elements in this cultural digitalization poster creates an engaging presentation that effectively conveys its message. Unlike a monomodal perspective that relies solely on linguistic components, a multimodal approach ensures clarity, consistency, and avoidance of ambiguity in meaning-making. In conclusion, a multimodal perspective encompassing both verbal and nonverbal aspects enriches the understanding and impact of the cultural digitalization message. The integration of linguistic and visual components within cybertexts facilitates a comprehensive and unambiguous communication process.



Figure 6. A poster on ‘Cultural Digitalization’ made by a student of Universitas Sebelas Maret, coded as Corpus-Data 6: MCCD-6.

5. DISCUSSION

The findings can be interpreted through the multimodality framework of [Kress and van Leeuwen \(1996, 2021\)](#), which views meaning-making as the result of interactions among multiple semiotic resources. Communicative meaning in cybertexts is conveyed not only through verbal language but also through visual, spatial, and contextual elements.

Although language remains the primary medium for expressing intention, it functions as a vehicle of meaning rather than a cybertextual context itself. Therefore, communicative functions in digital media emerge from the integration of linguistics and non-linguistic resources within cybertextual environments ([Kress & van Leeuwen, 2021](#)).

These communicative functions can be understood through Halliday’s metafunctional framework, comprising ideational, interpersonal, and textual meanings. The ideational metafunction represents experiences and interpretations, the interpersonal metafunction manages social relations, and the textual metafunction organizes meaning into coherent discourse ([Halliday, 1975](#); [Halliday & Hasan, 1989](#); [Matthiessen & Teruya, 2023](#)). In digital communication, the metafunctions are realized through multimodal resources that shape how users construct and communicate meanings.

The connection between communicative functions and language identity is further explained by Halliday’s seven language functions: instrumental, regulatory, representational, interactional, personal, heuristic, and imaginative ([Halliday & Matthiessen, 2014](#); [Wells, 1994](#)). These functions enable users to express needs, influence others, build relationships, present

identities, and explore knowledge. In cybertexts, such functions are often reinforced by visual and technological affordances, making language identity visible through communicative practices and digital interactions.

The findings also indicate that cybertextual context become part of language identity because they provide the multimodal and social frameworks through which communication occurs. As users repeatedly employ specific communicative functions within particular digital context, these practices become associated with recognizable identities and communicative styles. Thus, the ideational, interpersonal, and textual metafunctions contribute not only to meaning-making but also to identity construction and recognition in digital discourse (Halliday, 1975; Halliday & Matthiessen, 2014; Matthiessen & Teruya, 2023).

6. CONCLUSION

In conclusion, this research has identified six functions of the cybertextual contexts from the perspective of socio-semiotic multimodality in cyberpragmatics. Based on the corpus data analysis conducted within a socio-semiotic framework, the six functions of cybertextual contexts were identified as follows: (1) a background for delivering intent (FCC-1), (2) an affirmation of delivering intent (FCC-2), (3) an illustrator of delivering intent (FCC-3), (4) an inspiration for interpreting intent (FCC-4), (5) a complement to conveying intent (FCC-5), and (6) a description of delivery and meaning of intent (FCC-6). Additionally, this study identified various aspects of cybertextual contexts, including visual, spatial, gestural, and aural elements. However, it is important to note that the linguistic aspect, which is often regarded as the contextual aspect in multimodality, cannot be classified as a cybertextual context, as the ideational metafunction is primarily expressed through linguistic means. This research empirically contributes to understanding visual, spatial, gestural, and aural contexts as components of cyberpragmatics. It also advances knowledge of the relationship between language and context in digital environments, clarifying the developing nature of communication in cyberspace.

Although this research generated significant discoveries, it acknowledged certain limitations of the research, particularly concerning the restricted corpus data employed in the study. A more comprehensive research design is necessary to provide a fuller description of cybertextual contexts. Future studies should adopt a broader scope and more flexible approaches to yield more comprehensive results. Thus, future researchers are encouraged to conduct related studies to contribute to a better understanding of the complexities of cybertextual contexts.

Funding

This research received no external funding.

CRedit authorship contribution statement

R.K.R. – Conceptualization, investigation, methodology, investigation, writing – Original draft
F.R. – Conceptualization, methodology, resources
B.P. – Data collection and curation, formal analysis
I.F. – Data collection, formal analysis, reading article draft
M.K.S. – Proofreading, review writing, and editing
D.R. – Proofreading, review writing, and editing
J.J. – Methodology, resources, proofreading, revising, and editing

Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work, the authors used ChatGPT and Grammarly solely to improve language quality and readability. After using these tools, the authors reviewed and revised the content as necessary and take full responsibility for the content of the publication.

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