

Semantic Shift in Emoji Usage Among Generation Z in WhatsApp Group Chats

Sylvia Opoku-Fofie^{1*}, Kaitlyn Naa Ahima Quarcoo²

¹Department of English, Kwame Nkrumah University of Science and Technology, Ghana

²Department of English, Kwame Nkrumah University of Science and Technology, Ghana

*Correspondence Email: sopokufofie@gmail.com

ARTICLE INFO

Article history:

Received : December 1, 2025

Reviewed : December 3, 2025

Revised : December 30, 2025

Accepted : December 31, 2025

Available online : January 5, 2026

Keywords:

*Emoji; Semantic Shift;
Generation Z; WhatsApp;
Digital Communication*

Abstract

The meanings of emojis have shifted from just conveying emotions to be complex semiotic symbols. In this ethnographic case study, we investigate how Generation Z repurpose the meanings of emojis during their WhatsApp group interactions. This study is guided by Ullman (1957) and Paul's (trans, 1970) theoretical frameworks on semantic shift. Using a purposive sampling of six WhatsApp groups (information-oriented, academic 1&2, religious, socialization, business-oriented), the results reveal six semantic-shift patterns which include: Transfer of Meaning (36.2%), Broadening (30.6%), Amelioration (17.5%), Pejoration (10.1%), Narrowing (6.0%), and Degeneration (1.1%). The findings reveal Transfer of Meaning as the predominant semantic shift pattern within the WhatsApp interactions of Generation Z. The conclusion drawn is that emoji semantics is context-driven, making one better appreciate the digital language evolution of the Generation Z cohort.

INTRODUCTION

Digital Communication has experienced a rapid growth in the past decades and has transformed communication modes and practices. With the advancement in technology, which led to the introduction of smartphones, messaging apps like WhatsApp have been developed to make communication easier, simpler and faster (Silva, 2025). A characteristic of these messaging apps is the use of emoticons (emojis). Although seen as a set of simple icons in the last decade of the 20th Century, emojis have evolved in their usage to increase personalization to become interactive objects (Konrad, Herring & Choi, 2020). Because of this, emojis have greatly enhanced digital communication. With time, the use of emojis has advanced and has led to semantic shifts, where some emojis can be used to convey meanings other than their initial meanings (Jain, 2024). WhatsApp group chats accelerate semantic shift through immediate user response, shared memes and widespread social trends, unlike spoken language where semantic shift occurs gradually (Wijaya & Yeniterzi, 2011). WhatsApp group chats present instances that show how emojis are often used in diverse ways to show sarcasm, irony, emphasis and emotional tone, which result in changing their original meanings (Tambunan et al., 2023).

According to Brosdahl and Carpenter (2011), Generation Z refers to a cohort of individuals born in 1991 and later. However, Bencsik et al. (2016) and Wijoyo et al. (2020) explicitly describe Generation Z as persons born between 1995 and 2010. Unlike previous generations like the Gen X and Gen Y, Gen Z exhibits unique characteristics. They have easy access to technology and the internet due to the web revolution that happened in the 1990s. Although the Generation Zs live in

different cultural, social, economic and political settings, they share common characteristics which are a result of technology and globalization (Panagiotou, Lazou, & Baliou, 2022). They live their lives with technology playing a central role, and are familiar with smartphones, the internet and social media. Therefore, they make use of digital tools like pictures, GIFs, emojis, and videos because their communication style is visually engaging and interactive (Stillman & Stillman, 2017).

Despite the extensive studies on the semantic shift of words (Traugott, 2017; Jatowt & Duh, 2014; Periti et al., 2024), research on emoji semantics is still emerging. While some research works have examined emoji processing (Barach, Feldman, & Sheridan, 2021), grammatical constraints in pictorial communication (Cohn, 2019), and the shift in meaning over time (Robertson et al., 2021), few specifically address how Generation Z reinterprets emoji meanings in WhatsApp Group Chats. In view of this, this study seeks to identify the semantic shift patterns that are evident in emoji usage among the Generation Z in WhatsApp group chat and to identify the dominant semantic shift pattern that emerges from WhatsApp group chats of Generation Z.

LITERATURE REVIEW

Theoretical Framework

The study adopts the semantic change theory as a lens to provide an understanding of how the meanings of symbols (emojis) change within WhatsApp groups frequented by Generation Z users. The framework categorizes six patterns, which include narrowing, broadening, amelioration, pejoration, transfer of meaning and degeneration, which are mapped onto two foundational linguistic theories. Paul's (trans, 1970) Logico-rhetorical approach emphasizes figurative mechanisms of change by focusing on narrowing, broadening and transfer of meaning while Ullman's (1957) emotive and connotative theory focuses on amelioration, pejoration and degeneration.

Broadening is a semantic process where a lexical item or symbol expands to have multiple meanings and interpretations beyond what it originally had (Paul, trans 1970). In linguistic terms, it is when a word or symbol has a wider range of meaning due to how it is used metaphorically (Traugott, 2017) or its social adaptation (Tianying & Bogoyavlenskaya, 2023).

Narrowing is the opposite of broadening. It is also a semantic process of restricting the meaning of a sign to become more specific (Paul, trans 1970). It reduces the range of interpretations in order to arrive at a more focused one (Traugott, 2017). The symbol undergoes a refinement to perform a specific communicative need (Clark, 2013).

Pejoration is a semantic process whereby a lexical item or sign attains a negative or mocking meaning that shifts from what it originally meant (Ullman, 1957). With symbols, Pejoration usually happens when a sign is repurposed to either ridicule or show sarcasm (Jeshion, 2021).

Transfer of Meaning occurs when a word or symbol shifts from its original semantic territory into a new context through a pragmatic reinterpretation (Paul, trans 1970). While it applies to lexical items, visual symbols are no exception since their meanings are usually driven by context.

Degeneration refers to the erosion of a symbol's original connotative power, leading to reduced clarity or trivialization. In Ullman's (1957) framework, the semantic shift pattern is not conventionally categorized as degeneration; however, his explanations on semantic weakening offer the basis for examining how repetition can weaken a symbol's emotional depth.

In this study, we transfer semantic change theories of Ullman (1957) and Paul (trans 1970) which were originally meant as the analytical framework for lexical items to emojis to prove that emojis experience semantic shift. In the lens of these frameworks, this study explains the contextual processes that result in semantic shifts in the use of emojis. Therefore, this study examines how emojis acquire new meanings, experience metaphorical or contextual extensions and mirror the changing patterns of communication among Generation Z.

Empirical Review

Current studies on semantic change present a significant theoretical basis for examining semantic change in emoji usage. Nevertheless, some gaps and points of convergence can be highlighted in those studies as a result of differences in terms of scope, data and analytical focus, and this is what this study seeks to fill.

In Agyekum's (2009) study on semantic change in Ghana, it is shown how governmental policies, societal attitudes, and practical communication needs influence meaning and language choice. The findings also stress that multilingualism, assimilation and language maintenance act as the main determinants of semantic change. Although there is no adoption of any semantic change theory, an important sociolinguistic principle that meanings change to suit user's communicative contexts is emphasized. This same insight can be identified during online communication where emojis become semiotic markers shaped by group conventions and communicative needs. However, his reliance on interviews and questionnaires decreases insights into real-time meaning negotiation, a gap which the present study, through the analysis of naturally occurring WhatsApp chats, intends to fill.

Opoku (2016) finds metaphor, metonymy, hyperbole, euphemism, and calquing as dominant characteristics of Ghanaian English in his study of semantic change in Ghanaian English. His use of Kachru's (1985) Concentric Circles Model reveal how non-native English varieties adapt to reinforce local identities. His study is conceptually relevant as semantic processes like metaphor and pragmatic extension also operate in emoji usage, where visual symbols develop culture-specific meanings beyond their literal representations. However, his emphasis on words does not address how semantic shift may happen in the use of emojis.

Carling et al. (2023) present a broad theoretical account of semantic shift through the lens of the Prototype Theory. Their results reveal that meanings originate from central prototypes through semantic processes like generalization, specialization, metaphor, and metonymy. Their study also details how prototypical senses act as cognitive anchors, from which other meanings emerge. They provide a useful approach for evaluating emojis, where emojis have prototypical visual meanings that develop through frequent contextual usage in online communications. On the other hand, the diachronic and cross-linguistic approach to spoken language does not reflect the rapid interaction-driven semantic shifts typical of digital communication.

Also, Adogba (2022) highlights how Ghanaian English undergoes semantic adaptation to reflect local identity by focusing on the role of language users in creating meaning. This practice is similar to how emojis acquire new meanings to express attitudes, humour, sarcasm or social alignment in online communication. However, his emphasis on established cultural expressions contrasts with the unstable and evolving meanings of emojis, which normally change over short periods and across digital communities.

In emoji-centered research, Robertson et al. (2021) present a quantitative, longitudinal account of emoji semantic change by observing similar patterns to meaning change in spoken language. Their results support the claim that emojis undergo semantic shift through processes similar to metaphorical extension and contextual reinterpretation. Nonetheless, by focusing on frequency and pattern detection, their computational approach provides limited attention to sociocultural interpretation, making room for a qualitative and context-driven analysis.

Conversely, Udoudum et al. (2024) and Amadu (2024) observe semantic ambiguities surrounding emoji meaning, which create the risk of misinterpretation. Both studies support the argument that emoji meaning is shaped through social interaction. While both studies confirm the fluidity of emoji meanings, there remains a descriptive limitation on how and why emoji meanings

change. Also, both studies approach semantic change primarily as a communicative problem, rather than as a structured linguistic process governed by specific semantic mechanisms.

Taken together, existing scholarship recognizes the evolving nature of meaning, but offers little engagement with semantic-shift theory in qualitative approaches to emoji usage in real-time, naturally occurring digital interactions in Ghanaian WhatsApp chat groups.

METHOD

Research Design

The study employs a qualitative content analysis with descriptive statistics within an ethnographic case study design. Ethnography is a research approach intended to understand social practices and cultural phenomena by a close observation of participants in their natural context (Hammersley & Atkinson, 2007; Wolcott, 2008). Naturally occurring digital interactions are collected to capture real-time use of emojis. Based on Mayring (2014) and Schreier's (2012) approach, the emojis are first analysed qualitatively to uncover the patterns of meaning and semantic shift under the lens of Ullman (1957) and Paul's (trans 1970) semantic change theories. Each instance of an emoji is coded based on the semantic shift pattern it signifies. Next is descriptive statistics, where frequencies and percentages are calculated to summarize the instances of the various semantic shift patterns identified to present a clear picture of the dominant patterns together with their interpretive analysis (Sandelowski, 2001). This research design ensures a systematic and context-driven analysis which captures both the making processes and general trends in emoji usage.

Data Source

This study uses WhatsApp chats, which include emojis, as the primary data. The data were exported from the WhatsApp group chats. The researcher is a member of all six WhatsApp chat groups whose participants mainly fall within the Gen Z cohort and so, through purposive sampling, those groups were selected. The criteria used for the selection include their level of engagement and the frequent use of emojis in their interaction. This formed the basis for the selection so that relevant data for the semantic shift analysis could be exported. Throughout the selection process, participant consent was sought from the group administrators. Permission was sought from the group administrators instead of the individual members since there was an average of about two hundred (200) participants in all the groups except one. Therefore, obtaining consent from each participant in the groups would have delayed the data collection process. However, the group administrators were assured that the data would be used for only academic purposes, thus ensuring that the anonymity and confidentiality of the participants in every group used for the study are prioritized (Hwang, 2023).

Data Collection

The process began by exporting the entire text messages within the group without media to a secure Gmail account, which happens to be the researcher's account. This was done to simplify the data collection process and ensure easy access and organization of the data (Taherdoost, 2021). After the chats were exported, specific texts were selected to align with the focus of the research's objectives to analyze emoji usage. The selected chats were then cleaned and prepared by eliminating personal identifiers within the chats (Stewart, 2023).

To understand how Generation Z use emojis to change their literal representation, six WhatsApp groups of which one of the researchers was a member of were selected. This was to ensure that each group had a majority of Gen Z participants who actively engage in group interactions. The groups selected included two academic groups, an information-oriented group, a socialization-oriented group, a religious-oriented group and a business-oriented group. Those groups were named using the alphabet rather than their actual names as part of ethical standards and privacy protection (Dube, Mhlongo & Ngulube, 2014).

Academic Group 1- Group A was a student-led WhatsApp group dedicated to academic discussions. This group was selected due to its engagement level among the members identified as Generation Z to observe how the students repurpose emoji meanings to express their sentiments in academic-related interactions.

Academic Group 2 – Group B was equally academic-oriented, but unlike the first, which was mainly students, the second group included a lecturer. To provide a contrasting academic context where formal discourse and hierarchical roles were present. The presence of the lecturer did not interrupt the study's demographic focus since the majority of members were in the Gen Z cohort. It rather created a context to investigate the shifts in the meanings of emojis and communicative dynamics when an authority figure joins in the interaction.

Information-Oriented Group – Group C was selected since participants were active and interested in current affairs and trending issues. The focus of the group in discussing news-related items made it ideal for observing how emojis were used within the informational contexts.

Religious Group – Group D was also selected as it served as a space for interaction for church related activities. It was selected because of how emojis were repurposed within this group to align with the spiritual dialogues they have within it.

Socialization-Oriented Group–Group E was selected because of the way members actively engaged in interactions as well as the informal tone within the group, which made them use emojis almost every time they interacted. This made it an ideal source of data, relevant to the study's objectives.

Business-Oriented Group – Group F was selected to observe the diversity of emoji usage within an entrepreneurial and transactional environment. The group members belonged to the Gen Z cohort and this group was included because of the study's aims as it displayed how the meanings of emojis shifted to play functional roles.

Data Analysis Procedure

The data were analyzed using a content analysis procedure. Content analysis includes several procedures in relation to its analytical goals and the techniques developed to achieve those goals (Titscher et al., 2000). This procedure guaranteed the understanding of the semantic shift of emojis by linking the qualitative interpretation with the quantitative tracking of the occurrence patterns of particular emojis. The analysis was guided by the semantic change theories of Ullman (1957) and Paul (trans 1970) – Broadening, Narrowing, Amelioration, Pejoration, Transfer of Meaning and Degeneration. Therefore, the emojis were classified and analyzed within the chats, that is, their conversational context, to identify the semantic shift patterns. More so, the frequency of the patterns of semantic shift identified was calculated to determine the prevalent pattern.

Coding Steps

The coding procedure followed a systematic, multi-step technique: first was data familiarization, where exported WhatsApp chats were read severally to understand the communication context. Second was the initial coding where every occurrence of an emoji was coded according to its contextual meaning, not its default Unicode meaning. Third was the theoretical coding where the codes were classified based on Ullman (1957) and Paul (trans 1970) semantic shift patterns. Fourth was verification by context where the emoji meanings were cross-checked against surrounding chat and response patterns to confirm their interpretive validity. Fifth was quantification where the coded instances were totaled to generate descriptive statistics. The examples below illustrate the coding steps:

Example 1 “Please, if you are not ready to make payment don’t ask for my momo number 🙏”

Example 2 “So no one is sympathizing with this poor obolo. How come people are so mean 😏❤️”

The default Unicode meanings of the emojis 🙏, 😏, ❤️ are prayer, joy and heartbreak respectively. However, in the contexts above, they are used to signal politeness, irony and sarcasm.

Such instances were coded as semantic extension with pragmatic reinterpretation (narrowing and perjoration). The number of occurrences was then counted and presented descriptively.

RESULTS AND DISCUSSIONS

The sections below address the research objectives. The first research objective sought to identify the semantic shift patterns evident in the emoji usage among Generation Z in WhatsApp group chats. The second research objective sought to determine the dominant semantic shift patterns that occurred across the various WhatsApp groups.

Semantic Shift Patterns Evident in Emoji Usage in WhatsApp Group Chats among Generation Z

The results presented from the findings suggest evident ways of how emojis were repurposed within the digital communicative space of Generation Z users. The semantic shifts identified were either socially driven or contextually driven. By applying the framework of Ullman (1957) and Paul (trans, 1970), six semantic shift patterns were identified.

Broadening

Paul (trans 1970) defines semantic broadening as a process where the meaning of a word expands beyond its definition, like when a word takes on extra meanings. According to Paul (trans 1970), the process is not a random one. It is usually driven by the speaker's intentions to adapt familiar words to new communicative contexts. Although the original meanings of the words are retained, new related meanings are added based on the context in which they are used. In the examples below, the following emojis are broadened:

Example 3 “We are restocking today 🎉🕺 please load your wallet to avoid sold out”

Example 4 “📍📍📍📍📍 class is cancelled”

In example 3, the emojis 🎉 and 🕺 emojis which originally represent celebration and dancing respectively, were used to amplify the announcement of restocking and excitement about the business to cause a shift from their literal denotations. This supports Paul's (trans, 1970) notion of individual reinterpretation, as a result of expressive needs, where the sense of a word is retained while the meaning expands. With example 4, the 📍 emoji shifted from denoting location to signaling emphasis. This supports Paul's (trans, 1970) idea that semantic broadening emerges from pragmatic adaptation, where users reassign emojis to meet a communicative goal.

Narrowing

Paul (trans 1970) explains semantic narrowing as the situation where a lexical item or sign loses some of its original semantic range through specialized usage. This restriction happens when a word or sign is continuously used within a limited context, causing its broader connotation to fade gradually. Paul (trans, 1970) emphasizes that semantic narrowing is a sign of psychological and functional adaptation. The meaning of the word or sign is narrowed to achieve a communicative need as shown in the examples below:

Example 5 “Please can we have the PDF or slides 🙏🙏🙏🙏”

Example 6 “No offense 🙏; wisdom should tell us that more clarification will be given if we are to go zoom even though the format had already been stated 🙏”

From examples 5 and 6, the 🙏 emoji, which represents prayer, was used to show politeness and etiquette. The religious connotation was narrowed to a marker of courtesy. These examples align with Paul's (trans 1970) theory of narrowing, where an emoji's original meaning is narrowed within a particular context through psychological adaptation. The 🙏 emoji, therefore, shifts in meaning through narrowing in the given examples.

Transfer of Meaning

Paul (trans 1970) describes Transfer of Meaning as a process where a word acquires a new sense through contextual reapplication. This shift is often metaphorical and the word or sign goes beyond its literal referents. The meaning usually shifts to convey emotional and abstract associations as shown in examples 7, 8 and 9

Example 7 “As we don’t know your identity, we can’t risk honoring your invite 😎”

Example 8 “Please tell him we want the remaining classes like this and forever 😄👉”

Example 9 “Relax 😊 next time sit in front to share your opinions”

In example 7, the emoji 😎, which represents coolness, is used to signal ironic detachment from the message, and create a mocking tone. The emojis 😄 and 😊 which represent joy and crying respectively are used to show exaggeration. This reflects Paul’s (trans 1970) notion of metaphorical transfer, where the meaning of a word or sign is redirected to take a new function or meaning. The emojis metaphorically expressed emotional depth. The shift in meaning from the examples aligns with Paul’s (trans 1970) theory that semantic change emerges from how it is used in context.

Amelioration

Ullman (1957) defines amelioration as a semantic process where a word acquires a more positive or favorable meaning over time. According to him, it is the elevation of emotive values, where words or signs with ordinary connotations are reinterpreted to show some elevation in their meaning. Amelioration is evident in examples 10 and 11.

Example 10 “Thank you all for your patronage during our last post 😊👏”

Example 11 “Very inspiring, thank you Nana 🙏”

In examples 10 and 11, the emojis 😊👏 and 🙏 are used to express gratitude, encouragement and emotional support, shifting from their original meaning of smiling, hands up, and prayer. The 👏 emoji is used to show appreciation, shifting from the original denotation of hands up. In the same way, the 😊 emoji shifts from smiling face to display gratitude. The 🙏 emoji also change from being a sign of prayer to indicate support and encouragement. These changes support Ullman’s (1957) concept of amelioration, where the emotive value of each emoji is elevated to a more positive tone within the messages.

Pejoration

Pejoration is described as a semantic process where a word undergoes a decline in emotive value, obtaining a negative tone (Ullman, 1957). Pejoration is not just a shift in tone but also a change in the evaluative meaning of a word. Pejoration is seen in examples 12 and 13

Example 12 “That’s a real threat to have citizens who do not see security threat as serious 💔”

Example 13 “Talk to us directly Mamavi 😂😂 stop hiding behind her 😂😂”

From the examples 😂 and 💔 shift from their literal representation of joy and heartbreak to ironically represent a tease and critique. Ullman’s (1957) concept of pejoration is evident in these examples, with how the emotive values of the emojis are reduced to serve ironic and critiquing functions.

Degeneration

Ullman (1957) defines degeneration as a semantic process where the clarity of a word’s meaning is lost due to excessive use. With signs, the erosion of their meanings usually happens through habitual repetition, resulting in the loss of their emotional and expressive functions. Degeneration is seen in example 14

Example 14 “Our prayer time is ending soon🔔🔔🔔🔔🔔🔔🔔🔔”

The 🙄 emoji, which is associated with vulnerability, is repeated within the message. This makes it lose its Unicode meaning of vulnerability to act as an attention marker.

Dominant Semantic Shift Patterns across the Different WhatsApp Groups

In addressing research objective two, a total of 268 messages across the six WhatsApp groups were analysed through the lens of Ullmann's (1957) and Paul's (trans. 1970) semantic change theories, combining qualitative content analysis with descriptive statistics. Further, instances of the semantic shift patterns were tabulated across the various groups to summarize them, while illustrative examples show each type of semantic shift pattern. The table below illustrates this:

Table 1. Frequency and Percentage of Semantic Shift Patterns across Different WhatsApp Groups

Group	Transfer of Meaning	Broadening	Amelioration	Pejoration	Narrowing	Degeneration	Total
Information-Oriented	22 (38.6%)	16 (28.1%)	5 (8.8%)	9 (15.8%)	3 (5.3%)	2 (3.5%)	57
Socialization	24 (50.0%)	13 (27.1%)	3 (6.3%)	7 (14.6%)	3 (6.3%)	0	48
Academic	26 (65.0%)	5 (12.5%)	0	5 (12.5%)	3 (7.5%)	1 (2.5%)	40
Student-led Academic	17 (39.5%)	7 (16.3%)	10 (23.3%)	4 (9.3%)	7 (16.3%)	0	43
Business	4 (13.3%)	13 (43.3%)	11 (36.7%)	2 (6.7%)	0	0	30
Religious	4 (8.0%)	28 (56%)	18 (36%)	0	0	0	50
Total	97 (36.2%)	82 (30.6%)	47 (17.5%)	27 (10.1%)	16 (6.0%)	3 (1.1%)	268

Semantic Shift Patterns

Transfer of Meaning (36.2%)

The results show Transfer of Meaning as the predominant semantic shift pattern. This proves that emoji meanings can change to take on new symbolic roles different from their Unicode representation. This pattern was predominantly evident in informal and playful groups to mirror how Generation Z creatively repurpose emojis. The example below from the Socialization group illustrates this:

Example 15 “Ah their coach he be twi teacher or what??😏 His coat like 😏”

This emoji 😏 appears two times, not for laughter, but as a mockery of the coach's outfit. This shows a metaphorical and ironic repurposing of the emoji. Also, in example 16, the emoji 🙄 in “As we don't know your identity, we can't risk honoring your invite🙄” is an indicator of an ironic detachment rather than coolness. This buttresses Ullman's (1957) assertion that meaning inevitably changes in socially patterned ways, thus, extending the application of this theory to the domain of semiotics. As asserted by Zahra (2025), the Generation Z cohort is characterized by the ability to creatively craft messages using signs and symbols. Therefore, the pervasiveness of Transfer of Meaning explains how this cohort tends to often employ symbols to construct multiple layers of meanings and manipulate context. This is an indication that emojis act beyond their Unicode meanings to creatively express complex emotions, a practice particularly typical of the Generation Z cohort during WhatsApp interactions.

Broadening (30.6%)

The results indicate Broadening as the second most dominant semantic shift pattern. This is seen in examples where the meanings of the emojis are generalized beyond their initial meaning. In the Business group:

Example 17 “We are restocking today 🎉💃”

The emojis 🎉 and 💃 extend from celebration and dance to convey excitement about products. In the Religious group, the example 18 “The fire of God is falling in this place 🔥🔥🔥”, the 🔥 emoji is broadened to symbolize divine power. Broadening is prevalent in expressive or promotional contexts, showing flexible, context-driven emoji use. Similarly, emojis like !! and 🙌 are generalized for emphasis rather than their literal meaning. This asserts Carling et al. (2025)’s claim that semantic expansion is a natural result of frequent symbolic action.

Amelioration (17.5%)

Amelioration appears in cases where the emojis are interpreted to express positive and uplifting meanings. Thus, in some groups, the emojis served as markers of appreciation, gratitude, encouragement or spiritual affirmation. For instance in example 19, in the Student-led Academic group: “What are you waiting for, make wild try your heart ❤️”. The ❤️ emoji conveys encouragement rather than romantic love. Also, 😊 and 🙌 are used to express gratitude and support in Business and Information-Oriented groups. The results support Newman’s (2015) argument that semantic shifts typically emerge in highly emotional contexts and Adogpa’s (2022) observation that the youth communicate in creative and emotionally expressive ways during online interactions.

Pejoration (10.1%)

Pejoration reveals how Generation Z chatters twist emoji meanings through ironic and sarcastic use. Here, the emojis were employed as tools for mockery and criticism instead of expressing their intended meanings. This is consistent with Stillman and Stillman’s (2017) observation that Generation Z typically use language in distinct and emotional ways, which could lead to negative interpretation. Example 20 in the Information-Oriented group illustrates this: “You couldn’t come to class for a week 😏😏😏”. The 😏 emoji shifts from joy to ridicule. Other emojis like 🙄 and 🖤 were similarly repurposed for critique or mockery.

Narrowing (6.0%)

Narrowing is seen in cases where an emoji like the ✅ was strictly employed as a confirmation signal to indicate a semantic restriction within localized discourse, as noted by Opoku (2016). In example 21, 🙏 in academic and business contexts signals politeness rather than prayer: “Please if you are not ready to make payment don’t ask for my momo number 🙏”

Degeneration (1.1%)

Degeneration mirrors the process of semantic bleaching as its repeated use weakens the expressive clarity of the emojis, thus, affirming Zaliznaik’s (2015) concept of semantic fading in overused symbols. For instance in example 22 in the Academic Group illustrate this: “You even said ‘for the first time?’ 🤔🤔🤔,”

The emoji 🤔 originally represents coldness or freezing; however, its repeated use within the context does not clearly evoke fear, cold, or shock. Its repetition weakens its Unicode meaning to create an ambiguous tone which may be interpreted as disbelief, ridicule or ironic emphasis.

CONCLUSION

This study examined semantic shift in emoji usage among Generation Z during their WhatsApp group interactions. Using Ullmann (1957) and Paul (trans 1970) as the theoretical backdrop, it sought to firstly identify the semantic shift patterns found in the use of emojis and secondly, to identify the dominant semantic shift patterns. Using qualitative content analysis with descriptive statistics, six semantic shift patterns were identified – Transfer of Meaning (36.2%), Broadening (30.6%), Amelioration (17.5%), Pejoration (10.1%), Narrowing (6.0%), and Degeneration (1.1%). This proves that emojis also experience semantic shift within digital interaction just like words.

The results show that informal and playful groups usually employ Transfer of Meaning pattern to mirror their creativity with the use of emojis. Thus, they creatively use emojis to express complex pragmatic meanings such as sarcasm, irony, emotional expression and social identity. In expressive groups, Broadening semantic shift pattern is pervasive to extend emoji meanings for excitement or symbolic purposes. Amelioration and Pejoration highlight positive reinforcement and ironic critique in emotionally or evaluatively charged messages. Narrowing and Degeneration are rarely used, showing context-specific usage and meaning erosion due to repeated use. This underscores the adaptive and flexible characteristics of emoji usage in real-time conversational situations.

The results also illustrate that emoji semantics is socially constructed and contextually dynamic, thus, emphasizing that it is not static but influenced by the chatters' community of practice, conversational tone and socio-cultural trends. This study adds to the growing linguistic research which recognizes emojis as key components of contemporary multimodal digital discourse, that can evolve metaphorically and pragmatically much like spoken or written language.

Semantic shifts in emoji meanings are expected to occur more rapidly and dynamically than conventional linguistic change as a result of the fast-paced nature of digital communication. Therefore, there is a need for emerging scholarship to employ both qualitative and computational approaches to fully trace the multidimensional nature of emoji meanings and their temporal evolution. Finally, there is a need to promote emoji literacy to minimize the risk of misinterpretations in digital discourse.

REFERENCES

- Adogpa, J. N. (2022). *Exploring the semantics and functionality of Ghanaianisms* (Doctoral thesis, Lingnan University, Hong Kong). Retrieved from <https://commons.ln.edu.hk/otd/151/>.
- Agyekum, K. (2010). Language shift: A case study of Ghana. *Sociolinguistic Studies*, 3(3), 381–403.
- Amadu, M. F. (2024). Exploring Tertiary Students' Comprehension and Utilisation of the Emoji in Social Media Communication: Insights from a University in Ghana. *The Journal of Social Media in Society*, 13(2), 259–283. <https://thejsms.org/index.php/JSMS/article/view/1429>
- Barach, E., Feldman, L. B., & Sheridan, H. (2021). Are emojis processed like words? Eye movements reveal the time course of semantic processing for emoji-fied text. *Psychonomic Bulletin & Review*, 28(3), 978–991. <https://doi.org/10.3758/s13423-020-01864-y>
- Bencsik A., Horváth-Csikós G., Juhász T. (2016) Y and Z Generations at Workplaces. *Journal of Competitiveness*, 8 (3), 90-106 <https://doi.org/10.7441/joc.2016.03.06>
- Brosdahl, D., & Carpenter, J. M. (2011). Shopping orientations of US males: A generational cohort comparison. *Journal of Retailing and Consumer Services*, 18, 548–554.
- Budiarti, R., & Damanik, B. A. R. (2025). Semantic change and its implications in modern English. *Jurnal Sains Student Research*, 3(5), 892–895. <https://doi.org/10.61722/jssr.v3i5.5820>
- Carling, G., Frid, J., Cronhamn, S., & Lundgren, O. (2023). The evolution of lexical semantics - dynamics, directionality, and drift. 8. 10.3389/fcomm.2023.1126249/full.

- Clark, B. (2013). Lexical pragmatics. In *Relevance theory* (pp. 240–252). Cambridge University Press.
- Cohn, N., Engelen, J., & Schilperoord, J. (2019). The grammar of emoji? Constraints on communicative pictorial sequencing. *Cognitive Research: Principles and Implications*, 4, 33. <https://doi.org/10.1186/s41235-019-0177-0>
- Dangal, M. R. (2021). *Qualitative research design*. Kathmandu University. <https://doi.org/10.13140/RG.2.2.34406.55360>
- Dube, L., Mhlono, M., & Ngulube, P. (2014). The ethics of anonymity and confidentiality: Reading from the University of South Africa policy on research ethics. *Indilinga African Journal of Indigenous Knowledge Systems*, 13(2), 201–214.
- Hammersley, M., & Atkinson, P. (2007). *Ethnography: Principles in practice* (3rd ed.). Routledge.
- Hwang, H. J. (2023). The importance of anonymity and confidentiality for conducting survey research. *Journal of Research and Publication Ethics*, 4(1), 1–7.
- Jain, A. (2024). The changing face of everyday communication: Emojis as catalysts. *Journal of English Language Teaching*, 66(2), 39–43.
- Jatowt, A., & Duh, K. (2014). A framework for analyzing semantic change of words across time. In *IEEE/ACM Joint Conference on Digital Libraries* (pp. 229–238). IEEE.
- Jeshion, R. (2021). Varieties of pejoratives. In *The Routledge handbook of social and political philosophy of language* (pp. 211–231). Routledge.
- Khatibah. (2011). *Metode penelitian bahasa* (Cetakan ke-3). Graha Ilmu.
- Konrad, A., Herring, S., & Choi, D. (2020). Sticker and emoji use in Facebook Messenger: Implications for graphicon change. *Journal of Computer-Mediated Communication*, 25(3), 217–235. <https://doi.org/10.1093/jcmc/zmaa003>
- Leech, G. (1981). *Semantics: The study of meaning* (2nd ed.). Penguin.
- Mayring, P. (2014). *Qualitative content analysis: Theoretical foundation, basic procedures and software solution*. Klagenfurt.
- Newman, J. (2015). Semantic shift. In *The Routledge handbook of semantics* (pp. 266–280). Routledge.
- Noble, B., Sayeed, A., Fernández, R., & Larsson, S. (2021). Semantic shift in social networks. In *Proceedings of SEM 2021: The Tenth Joint Conference on Lexical and Computational Semantics* (pp. 26–37).
- Opoku, G. (2016). *Aspects of semantic change in Ghanaian English* (MPhil thesis). University of Ghana. <https://ugspace.ug.edu.gh/handle/123456789/>
- Panagiotou, N., Lazou, C., & Baliou, A. (2022). Generation Z: Media consumption and MIL. *Imgelem*, 6(11), 455–476.
- Paul, H. (1970). *Principles of the history of language* (Original work published 1880). Рипол Классик.
- Periti, F., Picascia, S., Montanelli, S., Ferrara, A., & Tahmasebi, N. (2024). Studying word meaning evolution through incremental semantic shift detection. *Language Resources and Evaluation*, 1–37.

- Rashid, G. (2025). The emoji effect: Unpacking emotion in the digital age. *Journal of Discourse Review*, 1(1), 75–84.
- Robertson, A., Liza, F. F., Nguyen, D., McGillivray, B., & Hale, S. A. (2021). Semantic journeys: Quantifying change in emoji meaning from 2012–2018. *arXiv preprint arXiv:2105.00846*.
- Sandelowski, M. (2001). Real qualitative researchers do not count: The use of numbers in qualitative research. *Research in Nursing & Health*, 24(3), 230–240.
- Schreier, M. (2012). *Qualitative content analysis in practice*. SAGE.
- Silva, H. M. (2025). The reconfiguration of social bonds in the digital age: Virtual connections vs. face-to-face relationships. *Nature Anthropology*, 3(1), 10003.
- Simons, H. (2014). Case study research: In-depth understanding in context. In P. Leavy (Ed.), *The Oxford handbook of qualitative research* (pp. 455–470). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199811755.013.005>
- Stewart, L. (2023). Data anonymization in qualitative research: Methods & practices. *ATLAS.ti Research Hub*. <https://atlasti.com/research-hub/data-anonymization-qualitative-research>
- Stillman, D., & Stillman, J. (2017). *Gen Z @ work: How the next generation is transforming the workplace*. HarperCollins.
- Taherdoost, H. (2021). Data collection methods and tools for research. *International Journal of Academic Research in Management*, 10(1), 10–38.
- Tambunan, A. R. S., Lubis, F. K., Sari, W. S., Andayani, W., & Fikri, M. H. (2023). Representation of irony in WhatsApp group chat. *Lire Journal*, 7(1), 43–55.
- Tianying, L., & Bogoyavlenskaya, Y. V. (2023). Semantic transformation and cultural adaptation of metaphor and multimodal metaphor in multilingual communication. *Eurasian Journal of Applied Linguistics*, 9(1), 161–189.
- Titscher, S., Meyer, M., Wodak, R., & Vetter, E. (2000). *Methods of text and discourse analysis*. SAGE. <https://doi.org/10.4135/9780857024480>
- Traugott, E. C. (2017). Semantic change. In *Oxford research encyclopedia of linguistics*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780199384655.013.323>
- Udoudom, U., William, G., Igiri, A., Okon, E., & Aruku, K. (2024). Emojis and miscommunication in text-based interactions among Nigerian youths. *Journal of Informatics and Web Engineering*, 3(1), 226–240.
- Ullmann, S. (1962). *Semantics: An introduction to the science of meaning*. Basil Blackwell.
- Wijaya, D. T., & Yeniterzi, R. (2011). Understanding semantic change of words over centuries. In *DETECT 2011: International workshop on detecting and exploiting cultural diversity on the social web* (pp. 35–40).
- Wijoyo, H., Indrawan, I., Cahyono, Y., Handoko, A. L., & Santamoko, R. (2020). *Generasi Z & Revolusi Industri 4.0*. CV. Pena Persada.
- Wolcott, H. F. (2008). *Ethnography: A way of seeing* (2nd ed.). AltaMira Press.
- Zalizniak, A. A. (2018). The catalogue of semantic shifts: 20 years later. *Russian Journal of Linguistics*, 22(4), 770–787.