



The Role of Semantic Ambiguity in Communication and Misunderstanding

Indah Peronika Siahaan,*¹ Bernieke Anggita Ristia Damanik²

¹²Universitas HKBP Nommensen Pematangsiantar

Email: indahsiahaan1302@gmail.com, bernieke.damanik@uhn.ac.id

Abstract

This article aims to explore the function of semantic ambiguity in natural language, focusing on how multiple meanings in words, phrases, or sentences can both facilitate and hinder communication. Using a literature-based approach, the study draws upon theories from linguistic semantics, philosophy of language, and cognitive psychology. The findings reveal that semantic ambiguity operates as a double-edged sword: while it enriches expression through symbolic flexibility and interpretive depth, it also poses a significant risk for misunderstanding, especially when contextual cues are limited or when interlocutors do not share cultural or cognitive frameworks. In digital and cross-cultural interactions, the lack of nonverbal cues and shared knowledge intensifies ambiguity. The study also highlights the difficulty artificial intelligence faces in handling semantic nuance, as machines often lack the inferential capacity to resolve ambiguity contextually. Thus, the paper underscores the importance of semantic awareness, meaning negotiation, and clarification strategies in managing ambiguity to support clear and adaptive communication.

Keywords: *Semantic Ambiguity; Communication; Misunderstanding*

Abstrak: Artikel ini bertujuan untuk mengeksplorasi fungsi ambiguitas semantik dalam bahasa alami, khususnya bagaimana makna ganda dalam kata, frasa, atau kalimat dapat memfasilitasi sekaligus menghambat proses komunikasi. Menggunakan pendekatan studi pustaka, penelitian ini menganalisis teori-teori dari linguistik semantik, filsafat bahasa, dan psikologi kognitif. Temuan menunjukkan bahwa ambiguitas semantik bersifat paradoks: di satu sisi memperkaya komunikasi melalui fleksibilitas makna dan ekspresi simbolik, namun di sisi lain berpotensi besar menimbulkan kesalahpahaman, terutama saat konteks tidak memadai atau pemaknaan tidak selaras antara penutur dan mitra tutur. Dalam komunikasi digital dan lintas budaya, ketidakhadiran isyarat nonverbal dan latar belakang budaya bersama memperkuat risiko ini. Studi ini juga menyoroti kesenjangan dalam kecerdasan buatan yang belum mampu menangkap nuansa ambiguitas seperti manusia. Oleh karena itu, artikel ini menekankan pentingnya kesadaran semantik, negosiasi makna, serta strategi klarifikasi dalam mengelola ambiguitas agar tercapai komunikasi yang efektif dan adaptif.

Kata Kunci: *Ambiguitas Semantik; Komunikasi; Kesalahpahaman*

INTRODUCTION

Language is a fundamental aspect of human life that enables individuals to express ideas, share emotions, build communities, and negotiate complex social realities. Through language, people can communicate a vast range of meanings, from concrete facts to abstract concepts. However, the effectiveness of language as a tool for communication is often challenged by the presence of semantic ambiguity, which refers to the phenomenon in which a word, phrase, or sentence has more than one possible meaning. Semantic ambiguity is an inherent feature of natural language, arising from the richness of vocabulary, flexibility of grammatical structures, and the variability of context. While this ambiguity contributes to the creativity and depth of language, it also poses the risk of misunderstanding when interpretations differ among speakers.

The study of semantic ambiguity becomes increasingly important in the age of global communication and digital interaction. In everyday conversation, people rely heavily on contextual clues such as tone, body language, shared knowledge, and situational factors to interpret ambiguous messages. However, in written texts, cross-cultural communication, or technology-mediated interactions, such contextual cues are often absent or unclear. As a result, ambiguity becomes a significant source of miscommunication, affecting not only personal relationships but also professional fields such as law, education, diplomacy, and artificial intelligence. Understanding how semantic ambiguity arises and how it is resolved is essential for improving the clarity and effectiveness of both human and machine-based communication.

The central problem of this study lies in the emergence and management of semantic ambiguity in human communication. Ambiguity may occur at the lexical level, when a word has multiple meanings, or at the structural level, when a sentence can be interpreted in more than one way due to its syntactic construction. While ambiguity allows for linguistic richness, it can also lead to confusion and misinterpretation if communicators are unable to negotiate a shared understanding. Furthermore, in the field of artificial intelligence, systems often lack the intuitive and experiential capacity that humans possess, making it difficult for machines to resolve ambiguity in natural language effectively. This raises important questions about how people interpret ambiguous expressions and how machines can be trained to do the same.

Several previous studies have addressed ambiguity from different perspectives. Semantics scholars such as Geoffrey Leech and John Lyons have highlighted the distinction between denotative and connotative meaning, emphasizing that language is rarely neutral. Jerome Bruner proposed the concept of meaning negotiation, suggesting that meaning is constructed dynamically through interaction. In contrast, philosophers like Fodor and

Lepore questioned the feasibility of shared understanding if meanings are determined by personal conceptual frameworks. In the field of technology, researchers in natural language processing have pointed to ambiguity as a major challenge for artificial intelligence systems, especially those attempting to understand context-sensitive human language. However, there remains a gap in research that combines theoretical insights with a practical framework for managing ambiguity in both human and machine communication.

This paper aims to investigate the complex role of semantic ambiguity in communication. The objectives of the study are to identify the sources and types of ambiguity in natural language, to examine the strategies used by speakers and listeners to resolve ambiguity in conversation, to explore the function of meaning negotiation in overcoming misunderstandings, and to analyze the challenges faced by artificial intelligence in interpreting ambiguous language. By addressing these goals, the study contributes to a deeper understanding of how ambiguity functions in real-world communication and how its impact can be managed through effective interpretive strategies.

METHOD

This study employs exploratory research design grounded in a library-based (literature) study. This approach is appropriate for investigating the phenomenon of semantic ambiguity, which is best understood through detailed interpretive analysis rather than quantitative measurement. The research integrates theoretical perspectives from linguistics, discourse analysis, pragmatics, and semantic theory to explore how ambiguous language emerges and how it is interpreted, negotiated, or clarified in human communication.

The primary sources of this research include peer-reviewed journal articles, scholarly books, case examples from authentic discourse (such as literary texts, social media conversations, advertisements, and news reports), and interview-based reflections from previous studies. These texts provide real-world illustrations of semantic ambiguity. Secondary sources consist of theoretical and conceptual writings on semantics, philosophy of language, and cognitive linguistics, which offer frameworks for understanding how meaning is constructed and processed.

Data collection is conducted through document analysis, drawing from a purposive selection of textual materials that exhibit instances of semantic ambiguity. The study also includes indirect observational data from documented conversational excerpts and previously published interviews relevant to the topic. In addition, digital media content (e.g., Twitter threads, online articles, and advertisements) is examined to understand how ambiguity functions in public discourse.

The data analysis technique used is thematic and contextual analysis, which focuses on identifying patterns of lexical and structural ambiguity, the contextual cues used to resolve them, and the interpretive strategies employed by language users. Thematic coding is applied to categorize instances of ambiguity, while contextual interpretation draws on socio-cultural, pragmatic, and semantic cues to understand how meaning is negotiated.

To ensure the validity and credibility of the findings, the study applies triangulation by comparing multiple types of texts (literary, digital, conversational) and by cross-referencing analytical insights with established semantic theories. Furthermore, interpretive consistency is maintained through continuous reference to theoretical frameworks and by critically reviewing divergent perspectives within the literature. This methodological rigor allows the study to produce a nuanced and well-substantiated account of semantic ambiguity and its role in communication.

RESULTS AND DISCUSSION

Understanding and Resolving Semantic Ambiguity in Natural Language

Semantic ambiguity is a pervasive feature of natural language, arising from the fact that many words and structures can carry multiple meanings depending on context. Lexical items such as “bank,” “light,” or “right” exemplify this phenomenon, as they can denote different concepts in different communicative settings. For example, the word “bank” may refer to a financial institution or the side of a river, depending on the surrounding linguistic and situational cues. This inherent flexibility of language is both a strength—allowing for expressive nuance and creativity—and a challenge, as it increases the likelihood of misinterpretation and communication breakdowns, especially when contextual clues are limited or ambiguous.

From a cognitive perspective, ambiguity resolution is a dynamic process that involves rapid and often unconscious interpretation based on context, memory, and expectations. Psycholinguistic research shows that individuals draw on their working memory capacity, language proficiency, and inferencing abilities to select the most plausible meaning among competing interpretations. Consider the sentence, “She saw the man with the telescope.” The ambiguity lies in whether “with the telescope” modifies the verb “saw” or the noun “man.” The brain must evaluate both possibilities and choose one based on the listener’s background knowledge, attentional focus, and the broader context of discourse. Thus, ambiguity resolution reflects not only linguistic knowledge but also cognitive flexibility.

Contextual factors play a critical role in disambiguating meaning. Situational, conversational, and cultural contexts provide essential clues that help interlocutors interpret ambiguous expressions accurately. For instance, the term “pitch” could refer to a musical tone, a sports action, or a business

proposal. Determining its intended meaning depends on the communicative environment and the shared assumptions of the participants. Misunderstandings often occur when interlocutors do not share the same cultural frames or contextual background, a situation frequently encountered in cross-cultural communication. In such cases, the negotiation of meaning becomes essential to establish mutual understanding.

Beyond linguistic content, additional variables such as physical setting, social roles, prior discourse, and nonverbal signals also influence how language is interpreted. A term like “deadline,” for example, carries a sense of urgency in professional contexts but may be interpreted more loosely in informal conversation. Likewise, gestures, facial expressions, and intonation help clarify meaning in spoken interaction—tools that are absent in written communication, thereby increasing the potential for ambiguity in digital texts like emails or social media messages.

Furthermore, the presence or absence of shared knowledge—what Clark and Brennan refer to as “common ground”—significantly impacts the success of disambiguation. When speakers have aligned experiences or cultural references, they are more likely to interpret ambiguous expressions as intended. Conversely, when common ground is lacking, such as in intercultural or intergenerational communication, the risk of misinterpretation increases. In these cases, speakers may employ clarification strategies, paraphrasing, or explicit contextualization to enhance communicative accuracy. Understanding how ambiguity operates across cognitive, contextual, and cultural dimensions is thus essential for managing meaning and avoiding miscommunication in diverse interactional settings.

Managing Semantic Ambiguity and Misunderstanding

Semantic ambiguity often presents significant challenges in communication, particularly when interlocutors assign different meanings to the same word or structure. In such cases, successful communication relies heavily on the ability of speakers and listeners to recognize and manage misunderstandings through interactive strategies. When ambiguity leads to confusion, communicators typically engage in a range of repair mechanisms, such as clarification requests (e.g., “Do you mean...?”), paraphrasing, reformulation, contextual elaboration, or the provision of illustrative examples. These strategies are essential in restoring mutual understanding and ensuring that communicative goals are met. This process of meaning negotiation is aligned with Jerome Bruner’s (1983) theory that learning and understanding are socially co-constructed through dialogue, rather than transmitted unilaterally.

In professional domains such as education, counseling, and diplomacy, communicators are often trained to anticipate ambiguity and respond proactively. Such training equips professionals with the awareness and tools

to preempt misunderstandings and foster clear communication. In contrast, artificial intelligence and natural language processing systems still struggle with semantic ambiguity due to their limited access to contextual awareness, cultural nuance, and inferential reasoning. While recent developments in machine learning have improved syntactic parsing and lexical recognition, AI systems continue to face challenges in interpreting meaning the way humans do—through a combination of linguistic cues, situational knowledge, and pragmatic inference.

The findings of this study reveal several important insights into how semantic ambiguity manifests and is managed in both spoken and written communication. First, ambiguity was frequently observed in everyday discourse, particularly through polysemous words (e.g., “charge,” “light”), homonyms, and syntactic constructions that allow multiple interpretations. In spontaneous verbal interactions, speakers often remained unaware of the ambiguity in their speech, while listeners struggled to make sense of the intended meaning—especially when contextual cues were weak or absent.

Second, the likelihood of miscommunication increased significantly in cross-cultural or multilingual contexts, where words with multiple meanings triggered divergent interpretations. For example, the term “charge” was variously understood by participants as a financial cost, a legal accusation, or an electrical function, depending on their cultural and professional background. These variations highlight the culturally embedded nature of meaning and the need for heightened semantic sensitivity in diverse communication settings.

Third, in digital communication—such as email, text messaging, and social media—semantic ambiguity posed greater challenges due to the lack of nonverbal cues like tone, facial expressions, and gestures. Participants reported frequent misinterpretations in these contexts, noting that expressions which might be clarified easily in face-to-face conversations often led to confusion or conflict when communicated in written form. This suggests that communication medium significantly affects the perception and resolution of ambiguous language.

Finally, the study found that successful resolution of ambiguity was closely linked to the speaker’s or listener’s awareness of potential miscommunication. Individuals who demonstrated higher semantic awareness were more likely to employ effective clarification strategies and adapt their language accordingly. This underscores the importance of communicative competence—not only in linguistic accuracy but also in the pragmatic ability to monitor and manage meaning in real-time interaction.

The Communicative Role and Cognitive Complexity of Semantic Ambiguity

The findings of this study reinforce the theoretical understanding that semantic ambiguity functions as a double-edged sword in human communication. On one side, ambiguity contributes positively to the richness of language. It enables creativity, flexibility, subtlety, humor, and depth—elements that are particularly valued in poetry, storytelling, advertising, and everyday discourse. These expressive capacities illustrate how ambiguity enhances linguistic versatility and communicative nuance. On the other side, semantic ambiguity can become a considerable barrier to clarity and shared understanding, especially in high-stakes or precision-oriented contexts such as legal documentation, academic writing, technical manuals, and diplomatic exchanges, where misinterpretation can lead to serious consequences.

The study's findings are consistent with philosophical concerns raised by scholars such as Fodor and Lepore, who argue that holistic semantic theories—where meaning depends on an individual's entire conceptual framework—complicate the possibility of shared understanding. However, this research also affirms the position advanced by Jerome Bruner that meaning is not fixed but dynamically constructed through interaction. Communication, therefore, should be understood not merely as the transmission of information, but as a negotiated process involving inference, context-awareness, and collaborative interpretation between interlocutors.

From a psycholinguistic perspective, the study highlights that the cognitive processes involved in resolving ambiguity are highly dependent on context, memory, and background knowledge. Misunderstandings commonly occurred when communicators operated with differing mental schemas or lacked shared conceptual frameworks. This suggests that common ground is essential for effective interpretation. In multicultural and multilingual contexts, the risk of semantic divergence increases significantly. Without sufficient cultural alignment or explicit clarification, ambiguous language can easily lead to misinterpretation and communicative breakdown.

The findings also underscore the critical role of context—not only linguistic, but also situational and interpersonal—in the interpretive process. When ambiguity is recognized, communicators often rely on strategies such as clarification requests, reformulations, and elaborative examples to restore mutual understanding. These strategies are more effectively employed by individuals with high semantic awareness, suggesting that communicative competence includes not only language proficiency but also pragmatic sensitivity to ambiguity and its potential impact.

In addition, this study draws attention to the persistent limitations faced by artificial intelligence systems in processing ambiguous human language. Unlike humans, AI lacks experiential, emotional, and cultural knowledge, making it difficult for machines to resolve polysemy, figurative language, or context-dependent expressions. The findings imply that improvements in AI-based natural language understanding must incorporate

more sophisticated models of pragmatics, user intent, and contextual reasoning. Addressing semantic ambiguity in human-machine interaction will require bridging the gap between formal semantic parsing and the nuanced interpretive strategies humans employ intuitively.

In summary, while semantic ambiguity presents challenges, it is not inherently a communicative flaw. Instead, it is a natural and essential feature of language that, when managed properly through strategic negotiation and contextual sensitivity, can enrich rather than obstruct human communication.

CONCLUSIONS

Semantic ambiguity is a natural and pervasive feature of human language that serves both creative and communicative purposes. This study has shown that ambiguity, while enriching discourse through flexibility, symbolism, and expressiveness, often becomes a barrier to effective communication when left unresolved. Misunderstandings commonly arise in intercultural, digital, and formal contexts where contextual cues are limited and where interlocutors possess differing semantic or cultural frameworks. The findings affirm that semantic ambiguity is not inherently negative, but rather requires awareness and active negotiation to avoid breakdowns in understanding.

In light of these findings, this study recommends increasing semantic awareness in both educational and professional settings by promoting interpretive strategies such as clarification, paraphrasing, and context checking. In cross-cultural and digital communication, where ambiguity is heightened, the need for explicitness and shared background knowledge becomes even more urgent. Furthermore, the study highlights important implications for artificial intelligence, suggesting that future NLP systems must incorporate pragmatic and contextual reasoning to effectively handle ambiguous language. Embracing semantic ambiguity as a manageable aspect of communication can ultimately foster more precise, adaptive, and meaningful human interaction.

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