



## Grice's Cooperative Principle: A Critical Review and Implications

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Received: July 14, 2024

Accepted: August 20, 2024

Published: August 29, 2024

### Abstract:

This article presents a comprehensive evaluation of Grice's Cooperative Principle, emphasizing its substantial contribution to the field of pragmatics and its influence on communication. It systematically analyzes the formulation and practical application of Grice's conversational maxims—Quality, Quantity, Relation, and Manner—demonstrating their crucial role in the generation of implicatures and the facilitation of effective conversation. Furthermore, the article examines the interplay between logic and natural language, revealing how logical principles are embedded in everyday discourse. By differentiating between various forms of cooperation, the study illuminates the intricate dynamics of conversation. The article also critically addresses the challenges to Grice's theory, including cultural differences and the limitations of his maxims, thus contributing to ongoing scholarly debates and advocating for the continued refinement of conversational theories.

**Keywords:** Grice's, Cooperative Principle, Logic and Conversation, Implications.

### المخلص

يقدم هذا المقال تقييماً شاملاً لمبدأ التعاون لغريس، مسلطاً الضوء على مساهمته الكبيرة في مجال التداوليات وتأثيره على التواصل. يقوم المقال بتحليل صياغة وتطبيق قواعد المحادثة التي اقترحها غريس—الجودة، الكمية، العلاقة، والأسلوب—مبيناً دورها الأساسي في توليد الدلالات الضمنية وتسهيل المحادثة الفعالة. علاوة على ذلك، يستكشف المقال العلاقة بين المنطق واللغة الطبيعية، كاشفاً عن كيفية تضمين المبادئ المنطقية في الخطاب اليومي. من خلال التمييز بين أشكال التعاون المختلفة، يسلط البحث الضوء على تعقيد ديناميكيات المحادثة. كما يتناول المقال بشكل نقدي التحديات التي تواجه نظرية غريس، بما في ذلك الفروقات الثقافية والقيود المفروضة على قواعده، مما يسهم في النقاشات الأكاديمية المستمرة ويشجع على مواصلة تطوير نظريات المحادثة.

**الكلمات المفتاحية:** مبدأ التعاون لغريس، المنطق والمحادثة، التداويات.

### 1. Introduction

In the field of pragmatics, the primary objective of communication is typically viewed as the exchange of information. Individuals generally collaborate to express their intentions and the implicit meanings behind their utterances. Consequently, conversations are, under normal circumstances, cooperative endeavors rooted in mutual understanding and directed toward a common goal. In this context, Grice's exploration of the Cooperative Principle (CP) was instrumental in establishing pragmatics as a distinct discipline within linguistics. However, interpreting the CP can be challenging, as Grice's specific use of the term "cooperation" is frequently conflated with its more general connotation [1].

Grice's work on the CP is fundamentally anchored in the concept of rationality. This focus on rationality is critical because Grice's broader project was to explain how communication functions efficiently and effectively between rational agents. The principle itself is not merely about cooperation in the everyday sense but is about the rational basis that underpins communicative acts. According to Grice,

communication relies on a set of shared expectations and mutual recognition of these expectations by both the speaker and the listener. This shared understanding is what allows people to convey meaning, even when they do not explicitly state everything [2]. In contrast, most linguists who have adopted and adapted Grice's CP in their studies have focused more narrowly on its application to language use. They are particularly interested in how the CP can explain phenomena such as flouting, violating, infringing, and opting out of conversational maxims. For instance, when a speaker flouts a maxim, they deliberately break one of the conversational rules, but in doing so, they generate an implicature that the listener is expected to understand. This is a critical area of study because it helps explain how people can communicate effectively even when they do not adhere strictly to the literal meanings of words [3].

However, these linguistic studies often sideline Grice's emphasis on rationality. Grice's maxims—Quantity, Quality, Relation, and Manner—are not merely prescriptive rules to be followed but are examples of broader rational principles that guide communicative behavior. Grice viewed these maxims as heuristic tools that speakers use to generate implicatures and that listeners use to interpret them. The rationality behind these maxims is what makes communication efficient; speakers assume that listeners will interpret their utterances in a way that is consistent with these principles, and listeners, in turn, assume that speakers are following these maxims unless there is evidence to the contrary [4].

Grice's introduction of the CP and his explanation of conversational implicature in his 1975 paper "Logic and Conversation" were groundbreaking because they provided a systematic framework for understanding how meaning is generated and understood in conversation [5]. Grice argued that the generation and perception of conversational implicatures—meanings that are implied rather than explicitly stated—depend on the CP. He formulated this principle as: "Make your conversational contribution such as is required, at the stage at which it occurs, by the accepted purpose or direction of the talk exchange in which you are engaged" [6] This principle can be seen as an attempt to make explicit the rational underpinnings of conversation. When people communicate, they do so with an understanding that their contributions to the conversation will be relevant, informative, truthful, and clear.

In his theory, Grice draws a crucial distinction between "saying" and "meaning." He posits that speakers can generate implicit meanings beyond the literal content of their words, and that listeners are adept at inferring these intended meanings through the context of the conversation. Grice argues that communicative participants adhere to certain patterns or conventions in their interactions, leading listeners to naturally assume that a speaker's utterance is both sufficiently informative and relevant to the ongoing discourse. When an utterance appears to violate these assumptions, it does not necessarily indicate a breakdown in communication; rather, it signals to the listener that there is a deeper, non-literal meaning to be inferred [7]. For example, an apparent violation of relevance often serves as a cue for the listener to search for an implicature, rather than assuming a lack of cooperation on the speaker's part.

Grice's focus on the coherence or unity of conversations operates at a rational level, what he refers to as the rational structure underlying communicative exchanges. He is particularly interested in how speakers and listeners manage to connect their utterances in a meaningful way, and in the underlying reasons for why speakers choose to say what they do in a conversation. This rational structure of conversation is crucial for understanding how meaning is negotiated and maintained between interlocutors [8]. The concept of coherence in conversation is especially relevant when considering interactions where different speakers may have competing interests or topics they wish to promote. However, it appears that Grice conceptualized an idealized form of conversation in his theory—one where rationality and cooperation are perfectly aligned. In reality, conversations often reflect a more complex and dynamic interaction between participants, where coherence is achieved through negotiation and adaptation to the varying intentions and perspectives of the speakers involved.

In terms of the Principles of Discourse within Grice's Theory, several studies have engaged with and expanded upon these foundational ideas. These studies have explored various aspects of how Grice's maxims and the CP operate in different communicative contexts, offering insights into the nuanced ways in which discourse is structured and understood. A recent paper [9] delves into the intersection of Speech Act Theory and Gricean Pragmatics, highlighting the significance of language as an action medium. The paper emphasizes that pragmatic strategies are crucial in uncovering the nuanced features of speech. Strategies such as entailment, presupposition, implicature, context of situation, and speech acts are employed to analyze how meaning is constructed and conveyed in communication.

The article is fundamentally grounded in pragmatic theory, specifically focusing on Speech Act Theory, which examines how utterances are not just statements but actions in themselves.

In [10], the paper undertakes a critical review of how speakers manage to convey more than what is explicitly stated and how listeners are able to infer the intended meaning behind the speaker's words. This study adopts a descriptive qualitative approach to explore these dynamics of communication. The key findings of the study are presented in two primary contexts. Firstly, the study observes that speakers often intentionally adhere to Grice's conversational maxims, thereby supporting the CP, which posits that participants in a conversation typically strive to fulfill at least some of the maxims. This adherence underscores the cooperative nature of effective communication as outlined by Grice. Secondly, the study highlights that speakers also exploit these maxims, either deliberately or unintentionally, by choosing to violate, suspend, flout, infringe, or opt-out of a conversation.

According to [11], the IELTS Listening section, as a globally recognized assessment tool for English proficiency, plays a critical role in evaluating the language comprehension and practical application skills of test-takers. This study undertakes a comprehensive analysis of the IELTS Listening conversations through the lens of Grice's CP. The research focuses on 130 questions selected from the Listening sections of IELTS academic practice tests (14-18) published by Cambridge Exams Publishing. The findings reveal that violations of the CP within the IELTS Listening conversations often convey deeper intentions or information. These violations can serve as key indicators that guide test-takers to the correct answers. By examining these instances of CP violations, the study offers new insights and methodologies for English listening instruction and assessment. Moreover, it provides practical strategies that test-takers can use to improve their listening comprehension skills, thereby enhancing their overall performance in the IELTS Listening section.

In [12], Grice's Cooperative Principle is recognized as a fundamental concept in pragmatics, yet its interpretation often presents challenges. The term "cooperative" seems to cause confusion, as it is frequently misunderstood in its technical sense as intended by Grice, leading to what is termed "cooperation drift." This drift occurs when the specialized meaning Grice attributed to the term is conflated with its general, everyday usage, resulting in misinterpretations. The paper argues that these misinterpretations partly arise from the transition of the Cooperative Principle from its original philosophical context into the field of linguistics. A detailed examination of Grice's writings reveals that cooperation, in the everyday sense, is actually peripheral to his core ideas. Instead, Grice's primary concerns lie with the distinction between sentence-meaning and speaker-meaning, the systematic nature of language, and the centrality of rationality in human action. These elements, rather than a simplistic notion of cooperation, are the recurring themes that underpin Grice's theory.

An evaluation of Grice's Cooperative Principle makes a significant contribution to the field of pragmatics by providing a thorough analysis of Grice's Cooperative Principle and its impact on communication. It explores the formulation and practical application of Grice's conversational maxims—Quality, Quantity, Relation, and Manner—highlighting their role in generating implicatures and facilitating effective conversation. The article also delves into the relationship between logic and natural language, examining how logical principles manifest in everyday communication. By distinguishing between different types of cooperation, the article sheds light on the complexity of conversational dynamics. Additionally, it critically engages with the challenges posed to Grice's theory, including cultural variability and the limitations of his maxims, contributing to ongoing debates and encouraging further refinement of conversational theories.

## 2. Grice's Maxims

To elucidate the processes underlying implication, Grice (1975) introduced the following maxims:

- Quality: The speaker is expected to convey information that is truthful or can be substantiated by adequate evidence.
- Quantity: The speaker should provide an amount of information that is as informative as necessary for the conversation, without being overly detailed or too brief.
- Relation: The speaker's contributions should be relevant to the ongoing topic of discussion.
- Manner: The speaker should avoid ambiguity and obscurity, striving to be direct and straightforward in their communication.

These maxims are not prescriptive rules dictating how one should communicate, but rather they explain the assumptions that listeners make about how speakers generally communicate. Grice [13] introduced these maxims as guidelines for successful communication. Bach argues that these maxims are better understood as presumptions about utterances—presumptions that listeners rely on and that speakers generally adhere to in order to facilitate effective communication. The study [14] posits that when the literal or surface meaning of an utterance appears to deviate from the Gricean maxims, but the context suggests that the speaker is still adhering to the Cooperative Principle, the listener should look beyond the surface meaning to uncover the implied or intended meaning. This approach aligns with Grice's concept of implicature, where the speaker conveys additional meaning by seemingly flouting the maxims. Grice identifies three categories in which a maxim may be flouted, clashed, or violated, each leading to different interpretive outcomes:

- **Flouting a Maxim:** This occurs when the speaker deliberately fails to observe a maxim, not due to an inability to do so, but to convey an implicit meaning. For example, a speaker might intentionally say something untrue (violating the Maxim of Quality) to produce irony or sarcasm, expecting the listener to recognize the deviation and infer the true meaning.
- **Clashing Maxims:** A clash occurs when a speaker is unable to fulfill one maxim without violating another. For instance, providing as much information as is required (Maxim of Quantity) might conflict with being truthful or not revealing sensitive information (Maxim of Quality). In such cases, the speaker prioritizes one maxim over another to maintain respect or protect the listener.
- **Violating a Maxim:** This involves a hidden or subtle breach of a maxim where the speaker may mislead the listener, either intentionally or unintentionally, creating a situation of non-cooperation. Despite this, the listener typically assumes that the speaker is still cooperating, leading to a search for a deeper, implied meaning.

Grice argues that in all these scenarios, listeners naturally assume that the speaker is cooperating, adhering to the underlying principles of communication, even when maxims are not explicitly followed. However, Grice's conversational maxims have not been universally accepted without criticism. For instance, the article [15] proposed a simplified model, identifying only three maxims instead of Grice's original four. Furthermore, the article [16] discusses the development of Relevance Theory, chose to disregard the structured approach of maxims altogether, instead focusing on the overarching concept of relevance. The evolution of theories like Relevance Theory highlights the ongoing debate about the best way to conceptualize the principles underlying human communication. Despite these debates, Grice's work remains foundational in the study of pragmatics, offering key insights into how meaning is constructed and interpreted in everyday conversation.

### **3. Logic and Conversation**

In term of Logic and Conversation, Grice [17] explores the intricate relationship between logic and conversation, focusing on how logical principles manifest in everyday language. He acknowledges that logic serves as a fundamental philosophical tool, but he also argues that the formal devices used in logical expressions—such as "and," "or," and other logical connectives—do not always align perfectly with their natural language counterparts. This discrepancy leads to a divergence between formal logic and the way language functions in ordinary communication. Grice outlines the opposing views of formalists and non-formalists on this issue. Formalists contend that the additional meanings found in natural language are imperfections within the language system. They argue for the creation of an ideal language that employs formal devices and constructs clear, explicit sentences free from metaphysical ambiguities [18]. The formalist position emphasizes precision and the elimination of any elements in language that do not serve a strictly logical or scientific function.

On the other hand, non-formalists maintain that the absence of a direct logical equivalence in natural language should not be considered a flaw. They argue that language serves multiple purposes beyond just conveying scientific or logical information. For non-formalists, the richness and complexity of natural language—including its metaphoric, poetic, and contextual aspects—are essential features that enable it to fulfill a wide range of communicative functions. Grice criticizes the formalist perspective, arguing that it fails to account for the logic inherent in conversational exchanges. While formalists recognize the divergences between formal logic and natural language, they tend to dismiss these differences as errors or shortcomings of natural language. Grice counters this by suggesting that these so-called "mistakes" actually stem from a lack of appreciation for the unique conditions and principles that govern conversation [19].

To challenge the formalist view, Grice endeavors to demonstrate that logic does indeed operate within the framework of everyday conversation, albeit in a more nuanced and context-dependent manner. He introduces the concept of implicature as a tool to reveal the underlying logical structures that guide conversational exchanges. Implicatures, according to Grice, serve as a means of investigating the philosophical implications of language use and illustrating that it is possible to systematically explain conversational structures without relying solely on formal logic. Through implicature, Grice shows that conversational logic is not bound by the rigid constraints of formal logic. Instead, it operates according to a set of principles that reflect the complexity and flexibility of natural language [20]. This approach allows for a more comprehensive understanding of how meaning is constructed and interpreted in conversation, bridging the gap between formal logic and the practical realities of communication.

#### 4. Critical Challenges to Grice's Theory

Grice's theory of implicature and the Cooperative Principle has been foundational in the field of pragmatics, providing a framework for understanding how meaning is generated in conversation. However, several critical challenges to Grice's theory have been raised by scholars over the years. These challenges address various aspects of the theory, from its applicability and scope to its underlying assumptions about communication and human interaction [21-23].

- **Cultural and Contextual Variability:** One significant challenge to Grice's theory is its limited consideration of cultural and contextual variability in communication. Grice's maxims are often seen as being based on Western, particularly Anglo-American, conversational norms, which may not apply universally across different cultures. In some cultures, indirectness, ambiguity, or withholding information might be valued or expected, which can lead to a different interpretation of the maxims. This variability suggests that Grice's principles may not be as universally applicable as initially thought.
- **Relevance Theory:** Sperber and Wilson's Relevance Theory (1986) presents a major theoretical challenge to Grice's approach. They argue that the concept of relevance, rather than adherence to specific conversational maxims, is the central guiding principle in human communication. According to Relevance Theory, speakers aim to be as relevant as possible in their contributions, and listeners interpret utterances based on the assumption that the speaker is aiming for optimal relevance. This theory simplifies Grice's model by suggesting that a single principle—relevance—can account for the same phenomena that Grice explains through multiple maxims.
- **Over-Specificity of Maxims:** Critics have also argued that Grice's maxims are too specific and rigid, potentially limiting their applicability in real-world conversations. Communication is often more fluid and context-dependent than Grice's model allows. For instance, the maxim of Quantity (providing just the right amount of information) can be difficult to apply uniformly, as what constitutes "sufficient information" varies greatly depending on the context, the relationship between speakers, and their shared knowledge.
- **The Problem of Flouting:** Grice's theory hinges on the idea that speakers may flout maxims to generate implicatures, yet this concept has been critiqued for its reliance on the listener's ability to recognize and interpret these floutings accurately. In practice, the line between flouting a maxim and simply failing to communicate effectively can be thin, leading to misunderstandings. This raises questions about how robust the theory is in accounting for less cooperative or more ambiguous forms of communication.
- **Ambiguity and Vagueness in Language:** Grice's maxims presuppose a degree of clarity and precision in language that does not always align with actual language use, which often involves ambiguity and vagueness. While Grice acknowledges that speakers can be ambiguous intentionally to generate implicatures, his theory does not fully address how ambiguity operates in everyday conversation, particularly when it is unintentional. The Maxim of Manner, which calls for clarity and avoidance of ambiguity, is particularly challenged by the inherently vague nature of much human communication.
- **The Scope of Cooperation:** The notion of cooperation itself has been a point of contention. Some scholars argue that Grice's idea of cooperation is too narrow and fails to account for situations where speakers may not be fully cooperative, yet still manage to communicate effectively. This includes scenarios where speakers might be strategically uncooperative, such

as in negotiations, sarcasm, or irony. The challenge here is that Grice's theory presumes a level of cooperation that may not always be present in all forms of communication.

- **The Role of Social and Power Dynamics:** Grice's theory tends to overlook the influence of social and power dynamics in conversation. Power relations can significantly impact how maxims are followed or flouted. For instance, in situations where one speaker holds more power or authority, the expectations for adherence to conversational norms may differ. This aspect of communication suggests that Grice's maxims might not be sufficient to explain how meaning is negotiated in all social contexts.
- **Alternative Theoretical Models:** Other theoretical models, such as politeness theory (Brown and Levinson, 1987) and discourse analysis, have also offered alternative explanations for how meaning is constructed in conversation. These models focus more on the relational and social aspects of communication, rather than purely on logical or cooperative principles. They suggest that Grice's maxims might be just one part of a larger set of communicative strategies that people use.

While Grice's theory of implicature and the Cooperative Principle has provided invaluable insights into the mechanics of communication, it is not without its challenges. Cultural differences, the complexity of human communication, the role of power dynamics, and the emergence of alternative theories all highlight the limitations of Grice's approach. These critiques suggest that while Grice's maxims offer a useful framework, they may need to be adapted or supplemented by other concepts to fully capture the richness and diversity of human communication.

## 5. Conclusion

The article explores Grice's formulation of the four conversational maxims—Quality, Quantity, Relation, and Manner—offering insights into how these principles govern effective communication. It examines the practical application of these maxims in everyday conversation, highlighting their role in facilitating the generation of implicatures, where speakers convey more than what is explicitly stated. The analysis also delves into the nuances of how these maxims are either adhered to or intentionally flouted to produce deeper meanings. Moreover, building on Grice's foundational work, the article investigates the relationship between logic and natural language as it manifests in conversational exchanges. It discusses Grice's argument that formal logic and natural language expressions often diverge, and how these divergences can still be systematically explained through implicature. The article emphasizes Grice's assertion that logical principles are embedded within conversation, albeit in a form that adapts to the fluid and context-dependent nature of language use.

The article critically examines the concept of cooperation within Grice's framework, distinguishing between different types of cooperation, such as formal versus substantial cooperation, as discussed by various scholars. It addresses the broader implications of these distinctions, particularly in how they affect our understanding of linguistic and extra-linguistic goals in communication. By exploring these different kinds of cooperation, the article sheds light on the complexity of conversational dynamics and the ways in which speakers navigate the interplay between information exchange and social interaction. It engages with various scholarly critiques, including cultural variability, the relevance theory proposed by Sperber and Wilson, and the limitations of the maxims in accounting for all forms of communication. The article also considers the influence of social and power dynamics on conversational cooperation, questioning the universality and applicability of Grice's maxims in diverse communicative contexts. By addressing these challenges, the article contributes to ongoing debates in pragmatics and highlights the need for a more nuanced understanding of Grice's Cooperative Principle.

Overall, this article contributes to the academic discourse on Grice's Cooperative Principle by providing a balanced evaluation that acknowledges both the strengths and limitations of his theory. It offers a detailed examination of Grice's maxims, their logical underpinnings, the varieties of cooperation in communication, and the critical challenges that have emerged in response to his work. Through this comprehensive evaluation, the article not only deepens our understanding of Grice's contributions to pragmatics but also encourages further exploration and refinement of theories related to conversation and meaning.

## References

- [1] E. Waloyo, S. Lestari, and I. Mutiaraningrum, "Exploring studies on cooperative principle in English language teaching: A literature review," *Metathesis J. Engl. Lang. Lit. Teach.*, vol. 7, no. 1, pp. 17–30, 2023.
- [2] J. U. Akpulu and T. N. Udemmadu, "Discourse analysis and Grice's cooperative principle in Igbo phone-in radio programme," *IGIRIGI*, vol. 4, no. 1, pp. 57–67, 2024.
- [3] N. I. Sidabutar, "Violating based on Grice's theory of cooperative principal maxim in podcast," *Branches of Linguistics*, vol. 1, no. 01, pp. 30–36, 2024.
- [4] F. Togatorop, "The use of cooperative principle in students' conversation," *JoAL*, vol. 3, no. 2, pp. 77–84, 2024.
- [5] M. H. Hamza and N. R. M. Nordin, "Pragmatic deviation of Grice's cooperative principle in Trump's political interview with the CNN News Channel," *Theory Pr. Lang. Stud.*, vol. 14, no. 3, pp. 883–892, 2024.
- [6] N. I. Sidabutar, "Flouting and violation Grice's theory of cooperative principle maxim in Podcast Dedy Corbuzier Scene Widi Viera-Cinta Laura," 2023.
- [7] M. Wölfel, M. B. Shirzad, A. Reich, and K. Anderer, "Knowledge-based and generative-AI-driven pedagogical conversational agents: A comparative study of Grice's cooperative principles and trust," *Big Data Cogn. Comput.*, vol. 8, no. 1, p. 2, 2023.
- [8] Y. W. Sari and A. Afriana, "The cooperative principle analysis in About Time movie," *Linguist. Engl. Educ. Art (LEEA) J.*, vol. 4, no. 1, pp. 66–76, 2020.
- [9] D. E. Ekoro and M. Gunn, "Speech act theory and Gricean pragmatics: A review," *Lwati J. Contemp. Res.*, vol. 18, no. 4, pp. 130–143, 2021.
- [10] J. Yeboah, "The Principles Underlying What is Communicated and not Said: A cursory Discussion of Grice's Cooperative Principle and its Maxims," *Journal of English Language Teaching and Applied Linguistics*, vol. 3, no. 5, pp. 10–17, 2021.
- [11] S. Meng, "An analysis of IELTS listening conversations from the perspective of violations of Grice's Cooperative Principle," *jerp*, vol. 6, no. 7, pp. 54–61, 2024.
- [12] B. L. Davies, "Grice's cooperative principle: Meaning and rationality," *J. Pragmat.*, vol. 39, no. 12, pp. 2308–2331, 2007.
- [13] N. K. Mirayanti, N. L. S. Beratha, and N. W. Sukarini, "Violations of Grice's Maxim," *ijellacush*, vol. 2, no. 2, pp. 84–93, 2024.
- [14] N. Hasan, N. Mohamad, M. F. Mohamed Ghazali, M. Nasri Rifin, and N. A. A. Mohd Salleh, "Guidelines of rational communicative behavior: An analysis of grice's maxim exploitation," *Int. J. Acad. Res. Bus. Soc. Sci.*, vol. 14, no. 5, 2024.
- [15] M. H. L. Kaas and I. Habli, "Assuring AI safety: fallible knowledge and the Gricean maxims," *AI Ethics*, 2024.
- [16] V. Agustin, S. M. Murni, and F. K. Lubis, "Flouting maxims by Indonesia presidential candidates in Najwa Shihab's talk show," *Rand. Inter. Edu. Ling. Sci. J.*, vol. 5, no. 2, pp. 464–473, 2024.
- [17] Y. Hu, "A socio-cognitive reinterpretation of Grice's theory of conversation," *Intercult. Pragmat.*, vol. 21, no. 1, pp. 99–119, 2024.
- [18] T. Puczylowski, "Why a Gricean-style defense of the vacuous truth of counterpossibles won't work, but a defense based on heuristics just might," *Synthese*, vol. 203, no. 1, 2024.
- [19] Y. Nam, H. Chung, and U. Hong, "Language artificial intelligences' communicative performance quantified through the Gricean conversation theory," *Cyberpsychol. Behav. Soc. Netw.*, vol. 26, no. 12, pp. 919–923, 2023.
- [20] E. B. Ramos, "The philosophy behind the conversation: Implicatures and the indirect speech acts," *Bakhtiniana Rev. Estud. Discurso*, vol. 18, no. 2, pp. 9–38, 2023.
- [21] B. Nkurunziza, J. P. Ngoboka, and H. Habyarimana, "A pragmatic analysis of conversational implicatures in English drama and their role in teaching critical literacy," *African Journal of Empirical Research*, vol. 5, no. 3, pp. 34–46, 2024.
- [22] C. Genovesi and E. Garmendia, "Introduction: A critical eye on critical pragmatics," *Topoi (Dordr.)*, vol. 42, no. 4, pp. 907–911, 2023.
- [23] R. Yousif Abdulateef and H. Najim Abd Ali, "Pragmatic awareness of speech acts, politeness, and Grice maxims of Iraqi EFL postgraduate students," *SSRN Electron. J.*, 2023.