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Multimodalities and Conversational Implicature in Cross-Cultural Pragmatic Context: A Systematic Review

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ABSTRACT: This study explores the intersection of multimodal communication and conversational implicature in cross-cultural pragmatic contexts through a systematic literature review. Pragmatics, a branch of linguistics emphasizing the dynamic interaction between language and context, often involves inferential processes that extend beyond literal interpretation. The review synthesizes research published between 2020 and 2024, focusing on multimodalities and conversational implicature in American, Indonesian, and Chinese contexts. Key findings highlight the diverse applications of pragmatics theories, such as Grice's Cooperative Principle, in examining verbal and non-verbal communication. Studies reviewed investigate contexts ranging from sitcoms, political debates, and humorous dialectal speech to educational methodologies leveraging implicature for language learning. Emerging themes include the pedagogical implicature to enhance students' pragmatic competence, particularly in understanding implicit meanings and cultural nuances. Additionally, the review underscores the role of multimodal resources, incorporating visual and auditory cues, to support pragmatic awareness. The findings demonstrate that conversational implicature, whether generalized or particularized, varies significantly across cultures, reflecting distinct communication styles and social norms. This variation emphasizes the importance of integrating cultural sensitivity into language education. The review concludes with pedagogical recommendations, advocating the incorporation of multimodal materials and authentic language use to foster critical thinking, cultural adaptability, and effective communication skills. Overall, this systematic review offers valuable insights into the role of multimodal communication and conversational implicature in shaping cross-cultural interactions, providing a foundation for further research and practical applications in language teaching and intercultural communication.

KEYWORDS: Pragmatics, implicature, multimodality, communication, culture

I. INTRODUCTION

Pragmatics is defined as the examination of language usage, emphasizing the interplay between language and context (1). Yule (1996) views pragmatics as the analysis of meaning conveyed by a speaker or writer and understood by a listener or reader, stressing the importance of context in interpreting communication. Conversely, Huang (2014) argues that characterizing pragmatics solely as language in use oversimplifies its scope, proposing it as the structured exploration of meaning influenced by or depend on language usage. Furthermore, Huang (2014) points out that, "Certain linguistic phenomena can be handled naturally by the recourse to extralinguistic pragmatic factors such as context, real-world knowledge, and inference" (p. 8-9). Listeners frequently need to infer the speakers' intended meaning beyond the literal interpretation based on context-driven cues. This inferential processing, referred to as pragmatic inference, builds upon the outcomes of initial semantic analysis, incorporates contextual information, and leads to conclusions that extend beyond the evident clues at hand (Feng, et al., 2017). In general terms, inference can be defined as the process of accepting a statement or proposition (referred to as the conclusion) based on the acceptance of one or more other statements or propositions. This includes deductions, induction, and abduction. It further encompasses entailment, presupposition, and implicature (5).

An implicature is an idea or meaning that a speaker conveys or hints at through an utterance, even though it is not explicitly stated in the literal wording. Grice (1975) proposes two types of implicature, namely conventional and conversational implicature. Conventional implicatures arise from the inherent meanings of the words themselves and are independent of the maxims or specific aspects of the context (7). Meanwhile, conversational implicature refers to the implied or inferred meaning conveyed by the utterance of a sentence, beyond its literal interpretation, which is not explicitly stated but understood within the context of the conversation (Huang, 2011). Conversational implicatures arise from a range of situations, such as responding with metaphors, idioms, irony, tautology, hyperbole, sarcasm, indirect criticism, and more (George & Mamidi, 2020).

A pragmatic theory of language needs acknowledging a multimodal component because language usage, during both production and reception, is inherently grounded in multimodality. Multimodality has replaced the traditional term of non-verbal

communication (9). Multimodality is the presence of multiple semiotic modes within a specific context. It can also be described as "the utilization of various semiotic modes in creating a semiotic product or event, along with the specific manner in which these modes are integrated" (Palanques, 2016, p. 163). Plethora studies have examined how these different modes of communication interact and contribute to meaning-making in various contexts, such as a study conducted by Reiter, Manrique, & Cantarutti (2023) who investigate the daily work routines of four ambulant vendors across a 20-day period. Through a multimodal pragmatics analysis of video recordings capturing their sales interactions, the study identifies three distinct stages characterized by body movements synchronized with other physical and verbal actions aimed at capturing the audience's attention and emphasizing product attributes. Liang (2021) delves into the process of socially integrating peers into virtual environments through the use of gameplay instructions. The researcher combines pragmatics and multimodal conversation analysis to examine the discourse of online gameplay interactions between seasoned and inexperienced players. The analysis reveals how participants reframe gameplay activities, transforming, rigid verbal commands into more playful directive pathways for avatar-driven interactions. The findings indicate an expansion of directive approaches through adaptable instructions and diverse forms of play, fostering the development of gameplay proficiency and communicative abilities.

Understanding the intricate interplay between diverse communication modalities and implicit meaning generation across cultural boundaries is crucial in comprehending the role of pragmatics in cross-cultural context. Thus, this paper aims to present a systematic review to examine the role of multimodal communication and conversational implicature within cross-cultural pragmatic contexts. Through a systematic review of literature on multimodalities and conversational implicature in cross-cultural pragmatic contexts, this study aims to analyze the intricate interplay between diverse communication modalities and implicit meaning generation across cultural boundaries. By synthesizing existing literature, the objectives of the study are:

1. To review studies concerning multimodalities and conversational implicature, contributing to a deeper understanding a cross-cultural communication dynamics.
2. To recognize emerging themes throughout the studies, interpreting the data and articulating comprehensive findings.

II.   LITERATURE REVIEW
A.   *Pragmatic inferences: Implicature*

Implicatures are a common occurrence in verbal communication, where speakers naturally anticipate that listeners will discern the implied meanings conveyed by them. However, a notable characteristic of implicatures sets them apart from other forms of verbal expression: they are implicitly conveyed. This raises the question of how speakers manage implicatures and what mechanisms facilitate their understanding (13). Grice (1989) recognized this overarching tendency and famously posited that individuals engaged in conversation adhere to what he termed as the Cooperative Principle. Moreover, he outlined four main categories of maxims: Quality (which pertains to truthfulness), quantity (focused on informativeness), relation (concerned with relevance), and manner (emphasizing clarity). Grice also introduced three types of implicature. Initially, he differentiated 'conventional implicature' which he believed stemmed from meanings of the words employed, from 'conversational implicature', which relied on contextual assumptions and the principles of conversation. Within conversational implicatures, he further categorized them into 'generalized' implicatures, typically arising from uttering something, and 'particularized' implicatures, which were context-specific and only occurred in certain situations (7). To simplify, Clark (2022) summarizes Grice's view of linguistic communication as the following figure.
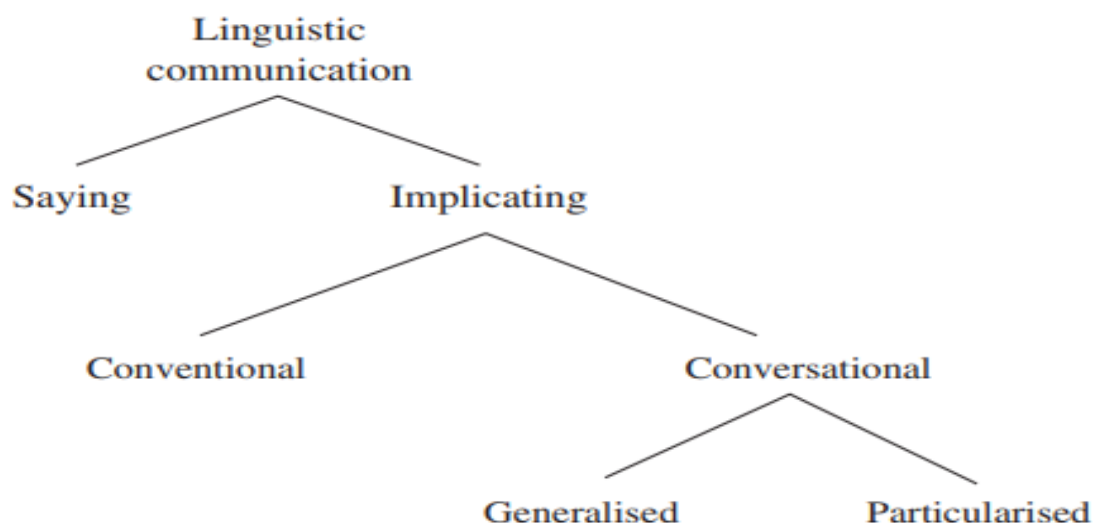

Figure 1. Grice's view of linguistic communication (Clark, 2022, p. 35)

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Current research conducted by George & Mamidi (2020) introduces a dataset comprising dialogue snippets consisting of three components: the context, the utterance, and the implicated meanings, which represent conversational implicatures. The utterances were gathered by transcribing listening comprehension sections from English proficiency tests such as TOEFL, as well as extracting dialogues from movie scripts accessible on IMSDb (Internet Movie Script Database). The paper outlines types of implicatures as can be seen in the following Table 1.

Table 1. Types of implicature (George & Mamidi, 2020)

Type of implicature	Context	Utterance	Implicature
Scalar	Who made these donuts?	I made some of thse donuts	I did not make all of these donuts
Generalised	Did you call John and Benjamin?	I called Benjamin	I did not call John
Particularised	Did you drink the milk I kept on the table?	The cat seems to be happy	No. I did not drink milk. The cat might have drunk the milk.
Relevance	How about going for a walk?	Isn't it raining out?	No, I am not coming for a walk now
PopeQ (Pope question) as a response	Are you sure you can take care of yourself this weekend?	Can a duck swim, mother?	Yes, I am sure I can take care of myself
Metaphor as a response	Do you like her?	She is like cream in my coffee	Yes, I like her a lot
Tautology as a response	Do you want to taste my hamburger?	Hamburger is hamburger	No. Hamburgers are not too good to taste
Hyperbole as a response	Are you hungry?	I could eat a horse	Yes. I am extremely hungry
Idiom as a response	I could have been more careful	It is useless to cry over spilled milk	It is useless to be sad about what had already happened

A research conducted by Zhang, et al. (2023) delves into a particular type of implicature, such as scalar implicature. They argue that the term "some" frequently triggers a scalar implicature during understanding. For example, "Some of today's letters have checks inside" is commonly understood to imply that not all of today's letters contain checks. In prior work, Goodman & Stuhlmuller (2013) proposed a model suggesting that this implicature hinges on the speaker's level of knowledge: if the speaker has only inspected a portion of the available letters (for example, two out of three), individuals are less inclined to infer that 'some' implies 'not all' compared to when the speaker has examined all available letters. Their paper demonstrate that by extending Goodman & Stuhlmuller (2013)'s model, (1) they anticipate the knowledgeability effects observed, and furthermore (2) they predict that the knowledgeability effect will diminish when the speaker's language suggests the availability of numeral alternatives.

Meanwhile, Tamburini (2023) proposes an alternative theory of conversational implicatures that eliminates the need for Grice's concept of making– as-if-to-say. This theory defines conversationally implicating that *p* as a means of signifying that *p* by either stating that *q* or remaining silent. It successfully accounts for cases that Grice's theory fails to capture and accurately describes cases that Grice's theory misinterprets. Additionally, it necessitates a clear differentiation between conversational implicatures and pragmatic inferences drawn from what speakers express, as well as a separate treatment for figurative speech that does not involve implicatures.

B. *Pragmatics and multimodalities*

Language is fundamentally multimodal. Across various cultures and in numerous contexts, communication primarily occurs face-to-face, involving a minimum of two individuals. It encompasses not only verbal exchanges but also incorporates visual cues, intonations, gestures, and objects, all seamlessly interwoven to convey meaning. Moreover, language usage frequently serves a collective purpose, facilitating the coordination of individuals to accomplish tasks. These tasks range from storytelling, engaging in conflict, and flirting to engaging in "phatic communion" to initiate conversation topics. Additionally, tasks can involve providing detailed spatial directions to a stranger in a city or delivering technical explanations of a scientific field to an entire group of unfamiliar individuals (Alviar, Kello, & Dale, 2023). Alviar, et al. (2023) propose that adopting an ecological approach to multimodal behavior provides a promising framework for understanding natural conversation, both in controlled experimental settings and in real-world contexts beyond the laboratory. They introduce a quantitative hypothesis suggesting that multimodal signals manifest in lower-dimensional manifolds that can be characterized using dynamical systems, termed as "pragmatic modes" and contrast the concept with several prior theoretical proposals. The paper concludes by outlining how to connect quantitative descriptions of multimodality with abstract, qualitative theories from recent decades and by proposing

avenues for investigating pragmatic modes, their evolution during conversation, and their relationship to the comprehension of human communication.

A research conducted by Saz-Rubio (2018) combines pragmatic and multimodal analysis. The primary objective of the research is to reveal the portrayal of female identities within a corpus of TV advertisements for toiletry products, employing a pragmatic and multimodal approach to describe the most prevalent thematic elements addressed in the ads. These thematic elements are identified through an analysis of the implied messages conveyed about women and the products or brand being advertised, categorized into emerging topical themes. To assess the validity of these thematic themes, a group of 8 female participants rated their agreement with a list of implied meanings presented in each ad analyzed. The findings indicate that the TV ads construct female identities around two primary recurring thematic elements: (i) empowerment in terms of sexual and beauty standards, and (ii) the portrayal of women overcoming internal emotional struggles related to aging or confidence issues. Both thematic elements reinforce stereotypical notions that pressure women to conform to societal beauty standards through product consumption. Female participants are encouraged to recognize their self-worth and redefine beauty standards as a means of empowerment and boosting self-esteem. While verbal cues are crucial for understanding implied assumptions, visual and auditory cues are found to reinforce verbal implications and facilitate the conveyance of subtle implications about the depicted female participants in the ads examined in this study.

Meanwhile, a paper employs a multimodal perspective that integrates linguistic and visual analyses to examine the interaction between identity and distance within the website and integrated social media platforms of the Centers for Disease Control and Prevention (CDC), a division of the Department of Health and Human Services in the United States, is conducted by Sindoni (2021). The linguistic and visual analysis of the monthly Vital Signs reports on HIV prevention campaigns concentrate on redefining the concept of deixis to examine how it has been adapted in multimodal environments. The results demonstrate that person, time, and place deixis have been redefined in digital contexts with the objective of actively involving participants and disseminating knowledge to encourage behavioral change.

In exploring the intricate tapestry of human communication, it becomes evident that language operates within a rich multimodal framework, integrating verbal exchanges with visual cues, intonations, gestures, and objects to convey meaning across cultures and contexts. These studies underscore the significance of pragmatic modes, emphasizing the interplay between verbal and nonverbal elements in shaping perception and behavior.

III.   METHOD

Research Design

The present study employs a systematic review approach, relying on qualitative data collection methods. Systematic reviews are among the most frequently utilized types of reviews and are recognized for offering the highest level of evidence. A systematic review entails methodically searching, synthesizing, and contextualizing existing literature pertaining to a particular topic (Carrim & Nkomo, 2023). According to Denyer & Tranfield (2009), a systematic review is described as "a specific methodology that locates existing studies, selects, and evaluates contributions, analyses and synthesizes data, and reports the evidence in such way that allows reasonably clear conclusions to be reached about what is and is not known. The aim of the study is to review multimodalities and conversational implicature studies between 2020 - 2024 across cultural context. The review process entailed searching for pertinent studies online through diverse electronic databases, applying inclusion and exclusion criteria to identify studies for thorough analysis and ultimately evaluating the selected studies. The writer explored related studies by utilizing a range of online electronic databases, such as Google Scholar, Mendeley Desktop, and those available through the Atma Jaya Catholic University of Indonesia library. The search for relevant studies employed suitable keywords and search terms. Some of the key phrases utilized in this search were such as: "Pragmatic", "multimodalities", "conversational implicature".

Data Sources

For the current review study, the data sources are chosen through judgement sampling, a method involving the writer's discretion in selecting data for analysis (23). The writer applies her own judgement to identify appropriate data for extraction and analysis from potential studies. This process included reviewing titles and abstracts, selecting relevant studies, and excluding irrelevant ones. Ultimately, nine studies from American, Indonesian, and China contexts are chosen to be reviewed and analyzed in the findings section and are discussed further in the discussion section.

Data Analysis

The data extracted from the nine studies from American, Indonesian, and China contexts is subjected to a comprehensive review. Subsequently, a systematic thematic analysis process is conducted. According to Braun & Clarke (2006), thematic analysis involves identifying, analyzing, and exploring recurring themes within the data. Thematic analysis was chosen as the preferred approach for data analysis due to its effectiveness in organizing the data, identifying emerging themes across the studies, interpreting the data, presenting detailed findings, and ultimately achieving the study objectives.

IV.   FINDINGS AND DISCUSSION

A.   Reviewing studies concerning multimodalities and conversational implicature, contributing to a deeper understanding of cross-cultural communication dynamics.

Studies of multimodalities and conversational implicature in American context

The first study conducted by Cezar (2021) focuses on utilizing situation comedy (sitcoms) in educational settings to enhance metalinguistic awareness, by examining segments from *Seinfeld* episodes, particularly focusing on implicatures and their potential for fostering pragmatic awareness in American English. The growing popularity of using sitcoms for language learning, especially in EFL classrooms or self-study contexts, warrants investigation into their benefits for additional language acquisition. Given that pragmatic objectives might not receive sufficient attention in EFL settings, it is crucial for teachers to recognize the advantages of explicitly teaching pragmatic goals. Utilizing multimodal resources, such as video segments to illustrate pragmatic aspects, can aid learners in recognizing and applying them effectively. Furthermore, since sitcoms are widely consumed by teenagers and young adults, it is valuable to explore how they can be used for educational purposes, particularly in second language acquisition and the development of pragmatic competence. The study constitutes a descriptive qualitative research methodology aiming to explore the capacity for nurturing metalinguistic awareness concerning conversational implicatures in American English through sitcoms. Ten segments extracted from the American sitcom *Seinfeld* were chosen specifically for their incorporation of implicatures. These segments are scrutinized to discern the types of implicatures evident within the dialogues. The dialogues under examination are brief and contain inferential pragmatic elements. The findings indicate that the majority of conversational implicatures identified in the selected *Seinfeld* segments were of the particularized type, implying that they necessitate a specific context for inference. In multiple segments, the speaker intentionally violated one or more conversational maxims proposed by Grice. This form of implicature illustrates the ability to convey alternative meanings despite the violation of these maxims. In sitcoms, the act of breaking maxims and the failure to grasp implicatures often serve as comedic devices, as it is anticipated that the listener will be able to interpret them. Among the particularized implicatures identified in the chosen segments, the majority involved the flouting of a maxim, where the maxim of manner was the most frequently violated in the selected segments.

The second study is an analytical-descriptive paper written by Kwarteng (2021) who explores the adherence to and violation of Grice's (1975) cooperative principles (CPs) during interviews between American journalists and former President Donald Trump. The study involved analyzing ten interviews with Donald Trump, covering topics such as racism, coronavirus, elections, politics, leadership, and social relations, randomly selected from YouTube. Its objectives were to critically assess the observance and breach Grice's CPs and its maxims, as well as speech act theory, aiming to enhance interlocutors' communication skills. Additionally, pragmatically, the study investigates the perlocutionary impact of utterances on interlocutors and listeners, offering a fresh perspective on understanding speakers' cooperative principles and maxims throughout communication. The research sample was analyzed primarily through conversational implicature and the examination of Grice's four maxims under the cooperative principle, as well as speech act theory. Results suggest that speakers' uncooperative behavior is often influenced by psychological factors like frustration, irritation, nervousness, anxiety, conflicts of interest, as well as considerations of politeness, insincere compliments, lack of information, entertainment, and sometimes deliberate violation. Furthermore, it was found that language users often cooperate due to the perlocutionary effects on themselves and listeners. However, interlocutors may occasionally violate maxims due to their limited understanding of the consequences of their responses. Interestingly, despite speakers' potential lack of awareness of Grice's maxims and cooperative principles, they frequently adhere to them in communication. The study recommends a deeper understanding of Grice's CPs and maxims, speech act theory, and suggests improvements in communication skills for readers. Overall, it underscores the importance for communicators, language learners, educators, and linguists to be mindful of their language choices and their implications for participants and society as a whole.

The third study is conducted by George & Mamidi (2020) who present a dataset comprising dialogue snippets consisting of three components: the context, the utterance, and the implied meanings. The dataset serves as a valuable resource for identifying and synthesizing conversational implicatures. The dialogues were sourced from 74 listening comprehension sections of the TOEFL English proficiency test and 45 movie scripts available on IMSDb (Internet Movie Script Database) of the animation genre. The paper also discusses the challenges encountered during the crowdsourcing of dialogue collection and implicature annotation. Given that implicatures arise in diverse contexts and heavily rely on the hearer's interpretation, the research primarily revolves around polar questions where an indirect response lacking explicit '*yes*' or '*no*' generates implicatures. The writers expand the scope by incorporating additional contexts beyond polar questions and annotating the identified dialogues with implicatures. In the forthcoming research, the writers will concentrate specifically on scalar implicatures, which can be identified using comparison keywords such as < *all, most, may, some, few* >, < *always, often, sometimes* >, < *must, should, may* >, employing a similarity – judgment method similar to that proposed by Degen (2015).

Studies of multimodalities and conversational implicature in Indonesian context

The first study is conducted by Pertiwi, Sudana, & Bachari (2023) who investigate the various conversational implicature forms in humorous utterances in the Banyumasan dialect on YouTube. The study adopts a pragmatic approach, drawing from

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Searle's speech act theories and Grice's cooperative principle. The study examines how conversational implicature is employed in humorous content using the *Ngapak* dialect, sourced from videos on the *Koplak Story* YouTube account. Observation techniques involve both visual tools such as observation guidelines, checklists, recordings, and documentation techniques including notes, transcripts, and relevant literature. The analysis follows a three-stage process outlined by Miles & Huberman (1984) involving data reduction, presentation, and drawing conclusions. The results of the study reveal that the structure of speech, the form of implicature, and its intended meaning in humorous utterances can be identified by analyzing their frequency. The study emerges some insights as follows: (1) Humorous speech on YouTube in the Banyumasan dialect often involves illocutionary acts. (2) There's frequent disregard for conversational maxims in Banyumasan humorous utterances on YouTube, often manifesting as flouting maxims to create humor. (3) Utterances convey implicature meanings, representing a form of conversational implicature. The study identified several implicature meanings in Banyumasan humorous utterances, categorized into four functions: assertive, directive, expressive, and commissive.

The second study is conducted by Soekarno (2019) that aims to identify the types and meanings of conversational implicature, particularly in the utterances of presidential candidates during the June 2014 Indonesia Presidential Candidate Debate on Metro TV television. The data collection involved identifying implicatures containing utterances from videos recorded via mobile phones and downloaded from social media platforms, facilitating ease of identification. Subsequently, the identified data were transcribed and analyzed using Yule's theory, supplemented by relevant literature. The analysis concludes that two types of conversational implicature were evident in the Indonesian Presidential Candidate Debate on Metro TV, particularly within the candidates' utterances. These implicatures varied in meaning, including providing information, teasing or rejecting statements, issuing warnings, expressing agreement, and displaying a lack of understanding. In the debate, the prevalent types of conversational implicature were generalized conversational implicature and particularized conversational implicature. It was observed that the candidates predominantly utilized particularized conversational implicature over generalized conversational implicature. This preference likely stems from their aim to present their vision and mission in a manner that encourages the audience to discern their knowledge. Consequently, particularized conversational implicature was employed more frequently to achieve this goal compared to generalized conversational implicature.

The third study is conducted by Asshidiq & Markamah (2023) who analyze the types of speech acts with implicatures found in Atta Verin's short story "Choice of the father" and their relevance to the learning of the Indonesian language. This research employs a descriptive qualitative method, focusing on understanding the process and meaning of the speech acts. Data collection involves reading the short story and recording relevant conversations. The authors adopt a pragmatic approach, which encompasses implicature among its various studies. For data analysis, Searle's speech act classification theory is utilized, which categorizes speech acts into five types: assertive, directive, commissive, expressive, and declarative. The results of the study reveal the presence of speech acts with implicatures, specifically assertive, directive, and expressive acts. A notable similarity between this research and previous studies is the identification of assertive, directive, and expressive implicatures, while no declarative speech acts were identified in either study. Interestingly, this study did not find any commissive implicatures, unlike previous research that managed to identify them. The significance of this research lies in its implications for Indonesian language learning, particularly in the context of text-based learning through short stories.

Studies of multimodalities and conversational implicature in China context

The first study is conducted by Feng, Yu, & Zhou (2021) who address the issue of controversy whether they particularized (PI) and/or generalized implicature (GI) engage in theory-of-mind (ToM) related inferential processes, by employing functional Magnetic Resonance Imaging (fMRI) and transcranial direct current stimulation (tDCS). They argue that for PI and/or GI, a speaker's intended meaning can be inferred from an utterance with or without reference to its context. The participants were presented with single-turn dialogues, wherein the responses were either indirectly implicating PI or GI, or were direct for control conditions (PIC and GIC). The results indicated that comprehension of both PI and GI shared multivariate fMRI patterns associated with language processing. However, the pattern related to Theory of Mind (ToM) was specifically activated during PI comprehension, observed both globally and within the dorsal prefrontal cortex (dmPFC). Additionally, stimulating the right temporoparietal junction (TPJ) exclusively influenced PI comprehension. These findings suggest that grasping PI, but not GI, necessitates ToM-related inferential processes.

The second study is conducted by Li (2021) who delves into the efficacy of employing the conversational implicature theory in pragmatics to teach English majors and enhance their listening comprehension skills. The study aims to identify an effective teaching strategy for conversational implicature. The author argues that in the field of English teaching, educators have consistently emphasized the exploration of effective listening instruction methods to enhance students' listening comprehension skills. To improve the teaching approach for listening comprehension, scholars in both China and other countries have conducted various studies. However, there is a scarcity of research in the effectiveness of conversational implicature in enhancing the listening comprehension ability of English majors. In this experiment, two classes were utilized: one served as the experimental group, while the other functioned as the control group. The experimental class implemented the conversational implicature

teaching strategy, whereas the control class adhered to traditional teaching methods. The findings revealed that the experimental group exhibited significantly better conversational implicature inference abilities compared to the control group. This indicates that implementing conversational implicature teaching strategies can effectively enhance students' listening comprehension skills. The study's outcomes offer valuable insights for the integration of conversational implicature teaching strategies in similar educational settings, along with providing recommendations for enhancing listening instruction for English majors based on the study's results.

The third study is a paper written by Hou, et al. (2022) leverages Grice's cooperative principle, which outlines four maxims of communication, to explore how hedges are translated and how conversational maxims operate in the texts. By examining examples of violations of these maxims, the paper aims to better manage both implicit and explicit information in translation. Additionally, it suggests that analyzing how maxims contribute to meaning construction in fictional texts can aid translators in maintaining the original style and narrative voice. Using children's literature translation as an example, the paper delves into the reasons behind explicitation and implicitation, while also considering children's cognitive abilities and characteristics. By analyzing how maxims influence meaning in the text, translators can uphold the original style while effectively managing implicit and explicit information in translation.

B. **Emerging themes throughout the studies, interpreting the data and articulating comprehensive findings**.

Utilization of pragmatic theories and multimodalities in language learning

Utilizing pragmatic theories in language learning involves focusing on the practical aspects of language use within social contexts. When applied to language learning, pragmatic theories help learners understand how language is used in real life situations, beyond its grammatical structure. Several studies explore the application of Grice's cooperative principles and implicature theory in language learning contexts, particularly in enhancing pragmatic awareness and communication skills (Cezar, 2021; Kwarteng, 2021; Pertiwi, et al., 2023; Soekarno, 2019). Strategies include analyzing dialogue from multimodalities sources such as sitcoms, interviews, debates, short stories, and YouTube videos to illustrate and teach pragmatic aspects of language.

1. *Types of conversational implicature*

Conversational implicature refers to the meaning that arises indirectly through conversation, beyond the literal interpretation of the words spoken (Hou, et al., 2022). Grice outlined the Cooperative Principle, which suggests that in conversation, people generally follow certain rules to ensure effective communication. Implicatures arise when speakers violate or go beyond these rules in a cooperative manner to convey additional meaning. There are four main types of conversational implicature: conventional implicature, conversational maxims, generalized implicature and particularized implicature. The studies reviewed in this paper delve into different types of conversational implicature, such as particularized and generalized implicatures (Feng, et al., 2021), and their manifestation in various context, such as humor, political discourse, and storytelling. Implicatures often involve flouting conversational maxims, especially in humorous speech, debates, and interviews (Pertiwi, et al., 2023; Soekarno, 2019; Asshidiq & Markamah, 2023).

2. *Cultural and contextual consideration*

The implied meaning varies significantly across different cultural and linguistic contexts due to differences in language structure, social norms and communication syles. Studies reviewed in this paper explore how implicatures vary across different cultural and linguistic contexts, such as American English (Cezar, 2021; Kwarteng, 2021; George & Mamidi, 2020), Indonesian dialects (Pertiwi, et al., 2023), and Chinese discourse (Hou, et al., 2022). In American English, implicatures often rely on indirect communication and understanding of cultural references and idiomatic expression (Cezar, 202). Meanwhile, Indonesian dialects, such as Javanese often incorporate politeness markers and honorifics into implicature (Pertiwi, et al., 2023). In Chinese discourse, implicatures can be deeply rooted in cultural values. Indirect communication strategies such as implication and understatement are common (Hou, et al., 2022).

3. *Educational implications*

Teaching pragmatics and conversational implicature in education carries several implications, such as understanding conversational implicature helps students become more proficient communicators, exposes students to the nuances of communication across different cultures, learn to evaluate not only what is said but also what is implied, develop social skills, help students move beyond basic language proficiency to understand the cultural nuances (33). Findings from studies reviewed in this paper have implications for language education, suggesting innovative approaches for teaching pragmatics and enhancing language skills, such as in listening comprehension (Li, 2021) and understanding subtle nuances in communication (Asshidiq & Markamah, 2023).

4. *Pragmatic competence development*

Pragmatic competence refers to the ability to use language appropriately in various social contexts, considering factors such as the relationship between speakers, cultural norms, and the purpose of communication (35). In order to achieve this is by exposing learners to authentic language use, which means providing them with real-life examples of how language is used in different situations. This exposure can occur in both formal settings, such as classrooms or textbooks, and informal settings, such as conversations or media. To facilitate pragmatic competence development, educators utilize multimodal resources, which

incorporate different forms of communication such as videos, audio recordings, transcripts, and images. By engaging with these resources, learners can observe how language is used in various contexts, including non-verbal cues such as body language and facial expressions. The studies reviewed in this paper show an emphasis on the development of pragmatic competence through exposure to authentic language use, both in formal and informal settings. The usage of multimodal resources, including videos and transcripts (George & Mamidi, 2020) aids learners in recognizing and applying pragmatic principles effectively.

C.   Discussion

The studies presented in this paper offer valuable insights into the intersection of multimodalities and conversational implicature across different cultural and linguistic contexts. Through examination of these studies, several emerging themes have been identified, shedding light on the utilization of pragmatic theories and multimodalities in language learning. The study reviewed underscore the importance of incorporating pragmatic theories, such as Grice's cooperative principle and implicature theory, into language learning contexts. By analyzing dialogue from multimodal sources, educators can illustrate and teach pragmatic aspects of language effectively (36). Strategies employed in these studies aim to enhance pragmatic awareness and communication skills among learners, especially in understanding real-life language use beyond grammatical structures.

Conversational implicature, as explored in the reviewed studies, refers to the additional meaning conveyed indirectly through conversation, beyond literal interpretation (37). The studies delve into different types of conversational implicature, such as particularized and generalized implicatures, which manifest across various contexts including humor, political discourse, and storytelling. Often, implicatures involve the flouting of conversational maxims, particularly evident in humorous speech (Gamage & Makangila, 2019), debates (Prasatyo & Kurniyawati, 2021), and interviews (Ayasreh & Razali, 2018).

The implication of conversational implicatures varies significantly across different cultural and linguistic contexts (41). Studies reviewed highlight how implicatures are shaped by language structure, social norms, and communication styles within specific cultural milieus. Whether in American English, Indonesian dialects, or Chinese discourse, implicatures are deeply intertwined with cultural values and linguistic nuances, necessitating a nuanced understanding for effective communication.

Teaching pragmatics and conversational implicature in educational settings carries substantial implications for language education. Understanding conversational implicature aids students in becoming proficient communicators, exposing them to the nuances of communication across cultures, and fostering the ability to evaluate not only explicit statements but also implicit meanings (Ciftlikli & Demirel, 2022). Findings from the reviewed studies suggest innovative approaches for teaching pragmatics and enhancing language skills, particularly in listening comprehension and understanding subtle nuances in communication.

Pragmatic competence development is essential for using language appropriately in diverse social contexts (Namdari & Bonyadi, 2024). The studies emphasize the importance of exposing learners to authentic language use through multimodal resources, facilitating their observation of language in various contexts, including non-verbal cues. By engaging with authentic language use, learners can develop pragmatic competence effectively, moving beyond basic language proficiency to understand cultural nuances and social dynamics in communication (44)

D.   Pedagogical implication

The pedagogical implications could be diverse and significant for both educators and learners in various contexts. (1) Educators can emphasize the importance of multimodal communication, which involves the use of multimodalities such as verbal language, body language, facial expressions, and gestures. (2) By exploring conversational implicature, educators can teach learners to recognize implied meanings in communication beyond the literal interpretation of words. (3) Educators can use insights from the review to foster cultural sensitivity and adaptability among learners. (4) Engaging with the systematic review can promote critical thinking skills among learners. (5) The findings of the review can inform pragmatic instruction and language teaching methodologies.

CONCLUSIONS

The systematic review presented in this paper offers valuable insights into the intersection of multimodalities and conversational implicature across diverse cultural and linguistic contexts. Through an examination of various studies, several emerging themes have been identified, shedding light on the utilization of pragmatic theories and multimodalities in language learning, the types and implications of conversational implicature, cultural and contextual considerations, educational implications, and pragmatic competence development. The studies underscore the importance of incorporating pragmatic theories, such as Grice's cooperative principle and implicature theory, into language learning contexts. Strategies employed aim to enhance pragmatic awareness and communication skills among learners, emphasizing real-life language use beyond grammatical structures. Conversational implicature, as explored in the reviewed studies, refers to additional meaning conveyed indirectly through conversation, beyond literal interpretation. The studies delve into different types of implicature, manifesting across various contexts such as humor, political discourse, and storytelling. Often implicatures involve the flouting of conversational maxims, particularly evident in humorous speech, debates, and interviews. Implications of conversational implicatures vary significantly across different cultural and linguistic contexts. Studies highlight how implicatures are shaped by language structure,

social norms, and communication styles within specific cultural milieus, emphasizing the need for nuanced understanding for effective communication. Teaching pragmatics and conversational implicature in educational settings carries substantial implications for language education. Understanding conversational implicature aids students in becoming proficient communicators, exposing them to the nuances of communication across cultures and fostering the ability to evaluate both explicit and implicit meanings.

Pragmatic competence development is essential for using language appropriately in diverse social contexts. The studies emphasize the importance of exposing learners to authentic language use through multimodal resources, facilitating their observation of language in various contexts, including non-verbal cues. Pedagogical implications are diverse and significant for both educators and learners in various contexts. Educators can emphasize the importance of multimodal communication, teach learners to recognize implied meanings in communication, foster cultural sensitivity and adaptability, promote critical thinking skills, and inform pragmatic instruction and language teaching methodologies. Overall, the systematic review provides a comprehensive understanding of the role of multimodal communication and conversational implicature in cross-cultural pragmatic contexts, offering valuable insights for language education and communication across diverse cultural settings.

REFERENCES
1) Levinson S. Pragmatics. Cambridge University Press; 1983.
2) Yule G. Pragmatics. Oxford: Oxford University Press; 1996.
3) Huang Y. Pragmatics. Oxford: Oxford University Press; 2014.
4) Feng, W., Wu, Y., Jan, C., Yu, H., Jiang, X., & Zhou X. Effects of contextual relevance on pragmatic inference during conversation: An fMRI study. Brain Lang. 2017;171:52–61.
5) Huang Y. Types of inference: entailment, presupposition, and implicature. In: Bublitz, W., & Norrick NR, editor. Foundations of Pragmatics. Berlin: De Gruyter Mouton; 2011. p. 397–424.
6) Grice HP. Logic and conversation. In: Peter Cole and Jerry L Morgan, editor. Syntax and Semantics 3: Speech Acts. Academic Press; 1975. p. 41–58.
7) Clark B. Pragmatics The Basics. New York: Routledge; 2022.
8) George, E. J., & Mamidi R. Conversational implicature in English dialogue: Annotated dataset. Procedia Comput Sci. 2020;171:2316–23.
9) Payrato L. Pragmatics and multimodality. A reflection on multimodal pragmastylistics. In: Giora, R., & Haugh M, editor. Doing Pragmatics Interculturally. Berlin: De Gruyter Mouton; 2017. p. 293–312.
10) Palanques VB. Complaint sequences across proficiency levels: The contribution of pragmatics and multimodality. Universitat Jaume; 2016.
11) Reiter, R. M., Manrique, E., & Cantarutti M. Toward a multimodal pragmatics analysis of ambulant vending on a Buenos Aires trainline. J Pragmat. 2023;210:122–42.
12) Liang M. Pragmatic socialization through gameplay directives: Multimodal conversation analysis of avatar-embodied interactions. J Pragmat. 2021;171:36–48.
13) Company M. The role of Gricean determinacy and the strenght condition in the relevance theory for interpreting implicatures. Unisinos J Philos. 2019;20(3):246–55.
14) Grice P. Logic and conversation. In: P. Grice, editor. Studies in the Way of Words. Cambridge: Harvard University Press; 1989. p. 22–40.
15) Zhang, Z., Bergen, L., Paunov, A., Ryskin, R., & Gibson E. Scalar implicature is sensitive to contextual alternatives. Cogn Sci. 2023;47.
16) Goodman, N. D., & Stuhlmuller A. Knowledge and implicature: Modeling language understanding as social cognition. Top Cogn Sci. 2013;5(1):173–84.
17) Tamburini V. Saying (nothing) and conversational implicatures. Pacific Philos Q. 2023;104:816–36.
18) Alviar, C., Kello, C. T., & Dale R. Multimodal coordination and pragmatic modes in conversation. Lang Sci. 2023;97.
19) Saz-Rubio M. Female identities in TV toiletries ads: A pragmatic and multimodal analysis of implied meanings. J Pragmat. 2018;136:54–78.
20) Sindoni MG. "The time is now": A multimodal pragmatic analysis of how identity and distance are indexed in HIV risk communication digital campaigns in US. J Pragmat. 2021;177:82–6.
21) Carrim, A., & Nkomo SA. A systematic literature review of the feasibility of translanguaging pedagogy in the foundation phase. J Lang Lang Teach. 2023;11(2):195–210.
22) Denyer, D., & Tranfield D. Producing a systematic review. In: The Sage Handbook of Organizational. Sage Publications Ltd; 2009. p. 671–89.
23) Sharma G. Pros and cons of different sampling techniques. Int J Appl Res. 2017;3(7):749–52.
24) Braun, V., & Clarke V. Using thematic analysis in psychology. Qual Res Psychol. 2006;3(2):77–101.

25) Cezar LM. Exploring conversational implicatures in the American sitcom Seinfeld. Brazilian English Lang Teach J. 2021;12(1):1–12.

26) Kwarteng M. Pragmatic analysis of ex-president Donald Trump's interviews and its relation with the Grice's (1975) cooperative principle. J English Lang Teach Appl Linguist. 2021;3(3):19–31.

27) Degen J. Investigating the distribution of some (but not all) implicatures using corpora and web-based methods. Semant Pragmat. 2015;8(11):1–55.

28) Pertiwi, W. E., Sudana, D., & Bachari AD. Conversational implicature forms of Banyumasan humorous utterances on YouTube. J Res English Lang Learn. 2023;4(1):11–7.

29) Miles, M. B., & Huberman AM. Drawing valid meaning from qualitative data: Toward a shared craft. Educ Res. 1984;13(5):20–30.

30) Soekarno A. Conversational implicature in Indonesian president candidates debate on Metro TV. J Ilm Lang Parol. 2019;3(1):34–41.

31) Asshidiq, F. & M. Implicature of selected short stories and their relationships in learning Indonesia language. ICOLAE. 2023;699–706.

32) Feng, W., Yu, H., & Zhou X. Understanding particularized and generalized conversational implicatures: Is theory-of-mind necessary? Brain Lang. 2021;212.

33) Li S. Conversational implicature instruction as a pedagogical strategy for English majors in a Chinese context: A pragmatic-analysis of its effectiveness. Theory Pract Lang Stud. 2021;11(10):1279–87.

34) Hou, C., He, B., Zhang, Z., & Yang Q. Inferring conversational implicature: Managing implicit and explicit information in the translation of English children literature. Int J Educ Humanit. 2022;5(2):296–303.

35) Deda N. The role of pragmatics in English language teaching: Pragmatic competence. Acad J Interdiscip Stud. 2013;2(4):63–70.

36) Rodriguez-Penarroja M. Corpus pragmatics and multimodality: Compiling an ad-hoc multimodal corpus for EFL pragmatics teaching. Int J Instr. 2021;14(1):927–46.

37) Sbisa M. Presupposition and implicature: Varieties of implicit meaning in explicitation practices. J Pragmat. 2021;182:176–88.

38) Gamage, U. P., & Makangila PS. Conversational implicature, humour theory and the emergence of humour: A pragmatic analysis of Udurawana's stories in Sri Lanka. Int J Appl Linguist English Lit. 2019;8(6):67–75.

39) Prasatyo, B. A., & Kurniyawati Y. An analysis of flouting of Maxim in Aiman's talkshow "Tudingan konspirasi di balik korona." Ethical Ling J Lang Teach Lit. 2021;8(1):38–45.

40) Ayasreh, A., & Razali R. The flouting of Grice's conversational maxim: Examples from Bashar Al-Assad's interview during the Arab spring. IOSR J Humanit Soc Sci. 2018;23(5):43–7.

41) Keckskes I. Processing implicatures in English as a lingua franca communication. Lingua. 2021;256.

42) Ciftlikli, S., & Demirel O. The relationships between students' comprehension of conversational implicatures and their achievement in reading comprehension. Front Psychol. 2022;13.

43) Namdari, A., & Bonyadi A. The relationship between EFL students' implicature competence and their English academic success. J Pragmat Res. 2024;6(1):38–51.

44) Celce-Murcia M. Rethinking the role of communicative competence in language teaching. Intercult Lang Use Lang Learn. 2007;41–57.