

Translating Silence: Investigation of Unspoken Meaning and Intent in AI-Mediated Multilingual Communication

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Abstract

Silence, commonly understood as the absence of speech, is viewed in the study of communication as a significant and strategic attribute, with unspoken meaning, pragmatic indicators, and culturally specific signification. The research methodology used in this study is qualitative. Using the guide of the relevance theory (Sperber & Wilson, 1986), the research is qualitative in nature, namely, it applies the document analysis and content analysis approach to secondary sources, such as academic articles, books, and institutional reports, to understand to what extent AI systems could be used to process unspoken meaning. The study aims to discuss the conceptualisation of silence, evaluate the accuracy of AI-mediated translation and communication, and examine whether AI interpretation aligns with relevance-based pragmatic principles. Results indicate that AI systems are often based on explicit textual input and probabilistic models, and that silence is frequently ignored or misinterpreted, distorting communication intent, especially in high-context cultural communication, where silence is a sign of respect or hesitation, or even of indirect approval. The article also illustrates that AI's inability to conduct contextual inference and pragmatic reasoning creates systematic discrepancies between human interpretation and machine-generated results, thereby reflecting the limitations of cross-cultural and multilingual communication through technology. The study has a theoretical and practical contribution as it illuminates the importance of unspoken meaning in human communication, how cognitive-pragmatic frameworks can be used to design AI systems, and provides suggestions on how context-sensitive and culturally sensitive AI models can be developed and how they can maintain implicit intent and improve communicative fidelity during interactions involving multiple languages.

Keywords: Communication, Cognitive-pragmatic Frameworks, AI-mediated Translation, Communication Accuracy, Qualitative Method, Unspoken Meaning.

Introduction

Within communication studies and translation research, silence has become increasingly recognised as not an absence of meaning but a communicative event with symbolic and pragmatic meaning. Historically, the study of communication has paid significant attention to the spoken word as the primary means of expressing intent, but new interdisciplinary studies emphasise silence as a signifier in interaction, shaped by cultural practices and practical roles. Silence may be either affirmative, unaccepting, reflective, or strategy-based, depending on the context and participants' expectations, and is therefore a complex aspect of communication rather than just a

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lack of speech. The meaning of silence in digital spaces, where AI mediates between languages and cultures, is even more complicated by the absence of bodily cues and immediate responses. For example, Daryoosh Hayati and Shriya Sinha observe that silence in digital cross-cultural communication can be construed differently by representatives of high- and low-context cultures, leading to different interpretations of intent and emotion. This complication highlights the need to examine unspoken meaning in AI-mediated multilingual communication of a domain where algorithmic mediation collides with human cultural anticipations and pragmatic undertones.

Translation Theory and the Unspoken Protest of Expressing Silence

The issue of transferring non-verbal meaning between languages is not particularly novel to translation research, but it takes on new dimensions in the context of AI-assisted multilingual communication. In his masterpiece *After Babel*, George Steiner assumes that translation is not a technical process of word conversion but an interpretive process inherent in every human communication: To understand is to decipher. The importance of hearing is to translate, and it is important to note that the meaning itself is not a clear object but rather something being constructed by the interpreter. Steiner's viewpoint critiques assumptions about the faithfulness of meaning transfer, focusing on the interpretive labour required whenever linguistic and cultural boundaries are crossed. Therefore, implicit meanings such as silence, implied intention, and culturally coded pauses are difficult to translate and comprehend because they are not directly equivalent to their counterparts in the target language/culture. When computer systems carry out translation processes, especially in AI-mediated settings, where computer systems are more actively involved in carrying out translation-related tasks, such difficulties are exacerbated since algorithms are required to deal not only with lexical equivalency but also with pragmatic subtlety and contextual silence-aspects that Steiner, through the interpretive lens, emphasises as the key to meaningful communication.

Psychological-Pragmatic View of Mediated Communication

Besides the cultural and theoretical perspectives, the cognitive-pragmatic approaches offer an understanding of the role of meaning-containing, unspoken intent processing in mediated communication. Relevance theory in translation and interpreting focuses on how communicators strive to achieve maximum relevance and weigh cognitive effort against communicative payoff, which extends beyond explicit messages to include inferences and meaning implied by context. The suggested strategy has profound consequences for AI-mediated bilingual communication: systems that are more successful at simulating pragmatic inference can be more effective at deriving meaning from silence and indirect communication, thereby enhancing communicative adequacy. With communication increasingly mediated by large language models and automated interpreters, scholars will have to address how they interpret non-scriptural communication and implicit intent: a problem that relevance theory predicts will be central to interpreting meaning beyond the explicit word.

The meaning of Silence, High-Context and Low-Context Cultures

The theory of high- and low-context cultures, developed by the anthropologist Edward T. Hall, provides a conceptual basis for understanding how silence operates differently across linguistic and cultural systems. Hall claims that high-context cultures tend to have meaning that is implicit in the situation, relationships, and non-verbal communication, rather than explicit and heavily rely on direct, explicit language to express intent, as in low-context cultures (Hall, 1976). The

difference is especially relevant to AI-mediated multilingual communication, where automated systems are mostly trained on explicit textual data and may not be able to convey cultural silence or indirectness. Silence can mean respect, or agreement, or deep thought in a high-context society, whereas in a low-context situation, it can mean uncertainty, disengagement, or non-cooperation. When AI systems are used to facilitate communication across cultures, they are likely to misinterpret silence as a communicational failure rather than as deliberate meaning. The cultural framework articulated by Hall underscores the need to interpret silence as a culturally mediated communicative strategy, supporting the claim that AI technologies should be investigated for their ability to negotiate the intent of silence in multilingual interactions (Hall, 1976).

Conversational Implicature and Words Beyond Conversation

The philosophical roots of unspoken meaning lie very deep in H. P. Grice's theory of conversational implicature, which explains how speakers can convey meaning indirectly through inferences rather than through direct statements. Grice (1975) suggests that communication operates according to the principles of cooperation, and that listeners must decode the intended meaning through common assumptions, context, and expectations, even when nothing is explicitly stated. On this view, silence may be an effective implicature that indicates agreement, refusal, hesitation, or social sensitivity, depending on the conversational context. However, in AI-mediated multilingual communication, such an inferential process cannot be easily replicated, as computational systems are not fully exposed to shared cultural assumptions and situational knowledge. This means that AI systems can interpret silence as lost data rather than as a deliberate communicative input. The article by Grice is particularly relevant to studies of how AI understands human intent, not just through direct language but also through implied and unspoken meanings (Grice, 1975).

Interactional Order and Social Meaning of Silence

Another critical way of looking at silence as a socially structured phenomenon is the interaction order concept of sociologist Erving Goffman. According to Goffman (1983), everyday interactions are governed by implicit rules that shape how individuals handle face, identity, and social expectations. In this context, silence is strategic for preserving social peace, avoiding conflict, or indicating respect. Silence can be a form of participation rather than withdrawal, especially in institutional or hierarchical settings. In AI-mediated communication, e.g., through automated translators, chatbots, or virtual assistants, these minor interaction rules are either not followed or distorted. Artificial intelligence is usually concerned with efficiency and clarity, which may interfere with the fragile equilibrium of the interactional order of silence that silence helps sustain. The sociological perspective expressed by Goffman emphasises the need to study silence not only as a linguistic deficiency but also as the socially significant behaviour that should be taught to AI systems in multilingual and intercultural communication scenarios (Goffman, 1983).

Ethical and Philosophical Aspects of AI Interpretation

Ethical and philosophical issues are also significant with regard to the interpretation of unspoken meaning in AI-mediated communication, especially the way artificial agents reflect human intent. The ethics of artificial intelligence and the philosophy of information by Luciano Floridi focus on the fact that AI systems are not just a tool but an informational agent that influences human knowledge and interaction (Floridi, 2014). In this respect, failure to interpret silence in a proper way may result in skewed interpretations of user intentions by AI, particularly in multilingual environments where indirectness and silence are culturally prescribed. Floridi assumes that human

communication with its ambiguity, implicit meaning, and situational dependence should be taken into consideration during ethical AI design. Using the philosophy in AI-mediated multilingual communication prefigures the moral obligation to create systems that can actually interact with unspoken meaning instead of the task of communication as on the surface of merely exchanging text. This moral orientation makes the research on silence as a fundamental part of meaning in the interactions mediated by AI relevant (Floridi, 2014).

Statement of the Research Problem

Although the multilingual communication systems based on AI mediation are becoming more and more popular, as the analysis shows, these systems lack criticality in the presence of unspoken meaning and silence as an important part of human communication. Silence is also a practical and culturally incorporated cue, which indicates an intent, politeness, hesitation or disagreement depending on the situation. Nevertheless, AI technology is preprogrammed to accept explicit text-based input and statistical linguistic patterns, which results in false interpretation, exclusion, or deactivation of nonverbal communication. This weakness is further exacerbated in multilingual and cross-cultural communication, where the AI system does not take into account culturally-specific conventions, according to which silence and indirect language could be employed. The issue, then, is not the ability of the AI to compute but rather the lack of application of the inferential relevance-based reasoning that humans instinctively use when understanding unspoken meaning which leads to communicative distortions that undermine clarity and faithfulness.

Research Objectives

1. To explore the meaning of silence and unspoken meaning in the context of the AI mediated multilingual communication processes
2. To explore the conceptualization and perception of silence and unspoken meaning in AI-mediated multilingual communication.
3. To examine how effectively the communication systems mediated by AI reflect, transfer, or remove unspoken intent and implicit meaning based on linguistic and cultural settings.

Research Questions

1. What is the meaning of silence and unspoken meaning in the context of the AI mediated multilingual communication processes?
2. By how much do the communication systems mediated by AI effectively translate or reflect unspoken intent and implicit meaning between languages?
3. What is the relationship between the meaning of silence in AI-mediated multilingual communication and the relevance-based pragmatic communication theories?

Significance of the study

The results obtained in this research work have important implications on the areas of AI, linguistics, translation studies, and intercultural communication. The first one, the study gives a solid insight into the role of silence as a communicative act and the importance of AI systems to go beyond literal translation and add more inference, contextual knowledge, and cultural understanding. The study provides a conceptual groundwork to an improved design of more advanced AI systems that can detect pragmatic and cultural nuances through the determination of the systematic misrepresentation of unspoken intent in AI-mediated communication. It is especially useful in worldwide situations where both explicit and implicit meaning is essential in

effective communication like international diplomacy, education, business negotiation, and cross-cultural cooperation.

In addition to that, the research brings to theoretical knowledge the application of relevance theory to the study of AI mediated multilingual communication, showing that it can be useful in the explanation of the failures of AI systems to process silence and implicit meaning. Connecting cognitive-pragmatic concepts and technological design, the study shows the value of introducing theoretical concepts into the process of AI creation to advance the communicative fidelity. Moreover, the research will create awareness among developers, linguists, and policymakers regarding the ethical and functional aspects of disregarding unspoken meaning during AI-mediated communication, and develop AI tools that are sensitive to linguistic and cultural diversity. In general, the importance of the study is that it could enhance the interpretative quality of AI systems, create cross-cultural awareness, and eliminate the divide between the human communicative activities and the communication within a machine context.

Literature Review

Scholars in the area of intercultural communication have continuously stressed that silence is not simply the lack of verbal communication but a significant process of communication that happens due to the influences of cultural norms and expectations. Matsumoto, Yoo, and LeRoux (2007) claim that silence is essential in the expression of interpersonal sensitivity and emotion across different cultures, and the interpretation of silence in a social setting differs. In the same manner, Gudykunst and Ting-Toomey (1988) observe that styles of communication vary drastically across cultures with high-context societies placing a lot of trust in the implicitly conveyed cues and silence as the means of communicating the relational meaning. In the meantime, Nakane (2007) proves that silence is a tactical communication act in the cross-cultural classroom environment, as it may indicate respect and uncertainty or resistance in accordance with power relations and context. Collectively, these researchers develop that silence represents a multifaceted, culturally embedded mode of communication that requires additional research on how AI-mediated systems detect or ignore these subtle meanings of silence in multilingual communication.

Utilitarian Interpretation of Silence and Unstated Meaning

The study of pragmatics can give a better understanding of how silence can bring out the implied message in interpersonal communication. According to Thomas (1995), meaning in communication is also not necessarily in verbal utterances but in pragmatic inference where silence may be a sign of politeness, disagreement or tension. Along with this, Tannen (1985) explains conversational silence as an element of interactional style that determines the creation of impressions and interpretation clues in discourse among cultural groups. Sifianou (1997) also points out that in an intercultural setting, silence acts as a politeness strategy where speakers prefer silence as a way of controlling face demands or promoting social amicability. The combination of these views shows clearly that the interpretation of the silence is closely tied to the pragmatic and relational aspects-things that AI translation systems often fail to take into consideration thus posing a risk of misunderstanding in communication in multilingual interactions, which are mediated by technology.

Computer-Mediated Communication and Translation Studies

Researchers in the new field of computer-mediated communication and translation studies have emphasized the difficulties in getting all the implicit sense such as silence by automated translation

systems. O'Hagan and Ashworth (2002) explain that the digital translation technologies in most cases are unable to access the contexted meaning in addition to the lexical equivalence, which may result in simplified communication outputs that overlook the cultural context. Pym (2014) also notes that machine translation systems give priority to efficiency and vocabulary transfer but are still inadequate in discourse level meaning including implied intentions and silence. In the meantime, according to Melby and Foster (2010), the use of translation technologies still cannot afford the soft pragmatic sense, which dictates the complexity of the translation of silence or other culturally encoded meanings. These works shed some light on a major problem of AI-mediated multilingual communication: technologies are capable of processing linguistic content, but they tend to be unsuccessful in processing implicit or silent meaning that leaves a huge gap in the understanding of global communication.

Machine Translation, Implicature, and the Reaches of Pragmatic Awareness

Studies on machine translation (MT) indicate that the state of the art translation systems have a problem with pragmatic meaning, especially during translation of implied or context dependent messages across languages. Kamal et al. (2023) looked at the translation of conversational implicatures into the translation and discovered that certain implicatures in relation to quantity and relevance can be translated into the translation, but more subtle implicatures, particularly those related to quality and manner, are usually mistranslated or overlooked. Their analysis has proven that the outputs of the MT systems, even the most popular tools, such as Google Translate, often do not reflect the pragmatic intentions of silence or indirectness, and the resulting meaning distortions in the interlinguistic context. This study reveals one of the essential limitations of computational translation the failure to properly deal with the implicit meaning in the context where context and cultural complexity are needed (Kamal et al., 2023). When it comes to AI-mediated multilingual communication, this implies that silence and intent implication can be systematically distorted implying the necessity to create the translation technologies that will manage to focus on the deeper pragmatic level of representation as opposed to surface forms.

The Quality of Communication, AI, and Interpretation of a Silent Meaning

Science communication and media research focus on the changing role of AI in news and discourse and express concerns regarding the ability of AI to reflect explicit and non-expressive aspects of human communication. Silva Luna et al. (2025) suggest a framework of communicative artificial intelligence grounded in principles, to say that AI systems should not be evaluated according to language accuracy alone, but also according to their ability to detect a contextual meaning and how they can be interpreted by the audience. Their approach indicates that AI generated communication will become over simplistic or wrong in its interpretation of the silent communications as such systems are usually designed with a focus on the explicit production of text and not the implicit social production. It is particularly relevant in intercultural contexts where silence can indicate a respect, reluctance or opposition- each with its own set of culturally-specific implications that ComAI systems might not habitually detect. Silva Luna and others offer the idea of foregrounding quality in the communication mediated by AI, asserting that future design models need to focus on the interpretive depth of communication, as developers must develop a sense of awareness of silence and indirect intent in the actions of communicative agents. By doing this conceptual work, it goes beyond simple language modeling to consider the communicative competence of AI, particularly in the context of multilingual and multicultural.

Empirical Data about AI and Cross-Cultural Chat

Empirical studies that are still being developed indicate that AI systems have serious constraints in helping people engage in genuine intercultural communication, particularly when complicated, indirect communicative indicators are at play. In an experimental study of intercultural empathy in the AI-mediated dialogue, Villanueva et al. (2025) concluded that AI chatbots enhanced empathy towards certain cultural groups but not others because of inaccurate cultural representations- even when the participants were speaking their native languages. The results highlight the fact that AI systems are frequently deprived of the world knowledge and cultural contextuality needed to decode context-specific aspects of communication as silence, use of metaphor or indirect expression. The fact that AI cannot authentically communicate with cultural subtleties implies that silence, the meaning of which can differ greatly when speaking to one or another linguistic group, is especially susceptible to being misinterpreted in an environment controlled by AI. This study therefore highlights the argument of the introduction of more culturally based models in AI communicative systems to make sure that implicit meaning and silent intent are perceived in a manner that creates a reflection of various communicative norms and not a lapse to culturally biased assumption.

Research Methodology

The current study follows a qualitative research approach to investigate the multidimensional and situational phenomenon of silence and unspoken meaning of the AI-mediated multilingual communication. Due to the interpretive quality of silence, underlying intent, and practices that exist within the cultural framework of communication, it can be argued that the qualitative approach is the best tool to use in this context because it can capture the depth, nuance, and richness of the situations that the quantitative approaches might not cover. The study is based on the interpretivist paradigm, meaning that the meaning is socially constructed and shaped under the influence of cultural, linguistic and technological backgrounds. This methodology does not look at frequency or numerical patterns, but the way silence is represented, translated, interpreted, and possibly distorted in communication mediated by AI across languages. Through the work of reading the current literature, academic dialogue, and recorded artificial intelligence processes, the research is set to offer a detailed conceptual insight into how artificial intelligence interacts with unspoken meaning and communicative intent in a multilingual setting.

Qualitative Research Method

The qualitative document analysis and content analysis are the main research methods used in the study, and solely secondary sources are used. Document analysis The systematic review of academic literature, policy documents, documentation of AI systems, and reports on empirical research on silence, pragmatics, translation studies and AI-mediated communication. The approach can enable the researcher to critically explain how silence and implicit meaning are theorized, represented, and operationalized in different disciplines. In addition to this, qualitative content analysis will be employed to discover common themes, ideas, and interpretations patterns that emerge in the chosen texts, especially the way silence is talked about in respect of AI translation systems, conversational agents, and multilingual communication platforms. The study examines the conceptualization of unspoken meaning by scholars through the use of coding, categorization, and thematic interpretation and the degree to which AI technologies have the capacity to process such forms of communicative phenomena. All these qualitative approaches allow a stringent and thoughtful analysis of silence as a considerable communicative asset instead of a communicative void.

Data Collection Method

This study uses a broad range of secondary sources, including peer-reviewed journals, scholarly books, conference papers, doctoral dissertations, and credible institutional reports, to gather the required data on artificial intelligence, linguistics, pragmatics, translation studies, and intercultural communication. Relevant literature published within the last 20 years is identified through digital academic databases (Google Scholar, JSTOR, ResearchGate, and institutional repositories), with emphasis on recent research on AI-mediated communication. The criteria used to select them are relevance to silence, implicit meaning, AI translation, multilingual interaction, and intercultural pragmatics. The data gathered is in the form of text, not numerical data, and thus it is possible to conduct an interpretive analysis in detail. The research will meet the quality standard of academic rigor by applying reputable secondary sources and ensuring ethical adherence, as there will be no human participants in the research process.

Research Design

The study is based on a descriptive, interpretive qualitative paradigm that systematically investigates conceptualizations of silence and unspoken intent in AI-mediated multilingual communication. The design is non-experimental and exploratory, as it does not aim to test hypotheses but rather to develop deeper theoretical insight into the phenomenon under study. The paper is thematically structured, and the literature is divided into the major topics, including silent issues in intercultural communication, pragmatic inference, machine translation, and AI conversational systems. Such a thematic arrangement enables a comparative analysis of disciplines and highlights overlaps and differences in academic views. The research design provides flexibility in analysis, allowing the researcher to make inferences among linguistic theory, cultural interpretation, and technological mediation, which ultimately lead to a coherent and well-contextualized perspective on unspoken meaning in AI-mediated situations.

Theoretical Framework

The theoretical framework of this study is based on the relevance theory proposed by Dan Sperber and Deirdre Wilson in 1986, which provides a strong cognitive-pragmatic perspective of how human beings perceive explicit and implicit forms of meaning in communication. Relevance theory is the theory of human communication that holds that the process of encoding and decoding linguistic signs is not the only aim of human communication, but an act of inference in which listeners construct meaning through their assumptions, cognitive work, and perceived relevance (Sperber and Wilson, 1986). This theory suggests that speakers tend to say much more than they actually say and resort to common understanding, situational suggestions, pauses, and even silence to make a point. In this context, silence is not considered a communicative absence but rather a stimulus that can be inferred. Users perceive silence when they establish a balance between contextual and cognitive anticipations to arrive at the most pertinent meaning. This is an important theoretical approach for investigating the meaning and intent that cannot be verbalized, as it focuses on how meaning can be created through non-verbal language.

Relevance theory applied to AI-mediated multilingual communication is particularly timely, as artificial intelligence operations differ from human ones in their inferential and cognitive abilities. Whereas human interlocutors are quite able to derive meaning from silence, indirectness, and contextual clues, AI systems, particularly machine translators and chatbots, rely chiefly on direct written information and probabilistic syntax. From a relevance-theoretic perspective, AI systems do not work because they lack complete access to the cognitive world in which human beings can

perceive silence and underlying intent. In cases of silence in multilingual communication, e.g., when responding slowly, omitting expressions, or due to a culturally based non-verbal pause, AI systems might interpret it as incomplete data rather than a communicatively significant signal. The application of relevance theory to this study facilitates the critical analysis of AI systems' failure to approximate human inferential processes in language and in cross-cultural translation and communication mediation. The theory, therefore, offers a perspective on why AI frequently fails to decode unspoken meaning and why this failure affects communicative purpose, cultural insight, and pragmatic correctness in multilingual AI-mediated communication.

Analysis and Discussion

This critique of analysis identifies how silence and unspoken meaning are expressed, construed, and translated in AI-mediated multilingual communication, based on qualitative document and content analysis of the available academic literature. Using relevance theory as the theoretical framework, the analysis combines knowledge from linguistics, pragmatics, translation studies, and artificial intelligence to explain the patterns observed in secondary sources. Instead of treating silence as a lack of communication, the analysis prefigures it as an important pragmatic asset whose meaning is determined by cultural background, inference, and anticipation of communication. The section is divided by theme to indicate how AI systems respond to implicit meaning, the role of cultural silence in multilingual mediation, and how theories reveal AI's weakness in addressing unspoken intent. All these analytical subsections combine the scholarly viewpoints to ensure the conceptual richness and theoretical soundness.

Resolving Silence to Pragmatic Meaning in AI-Mediated Communication

The qualitative analysis of academic texts shows that the trend is the same: silence is broadly accepted as an effective tool of meaning in human communication, but it is poorly handled by AI-mediated systems. In the linguistic and pragmatic literature, silence is depicted as a purposeful communicative act that often indicates agreement, hesitation, resistance, politeness, or respect, depending on context and culture. Document analysis, however, shows that AI systems, especially machine translation systems and chatbots, are mostly based on explicit textual input and lack mechanisms for pragmatic inference. This reveals a structural disalignment between AI's interpretive abilities and human communicative actions. According to pragmatic theory, much of what is communicated is much richer than what is said (Sperber & Wilson, 1986, p. 182), a concept that is difficult for AI systems to realize. The analysis of the content also reveals that silence is often treated as data absent or as a latency of response in the technical literature on AI, rather than as input. This deconstructive treatment leads to communicative perversion, particularly in heterolingual contexts where silence is culturally prescribed. This analysis, therefore, shows that AI-mediated communication systems systematically underrepresent pragmatic silence, supporting the argument that unspoken meaning is largely beyond algorithmic understanding.

Inferential Failure and AI Pragmatic Processing Limitations

According to the cognitive-pragmatic view, the analysis shows that AI systems exhibit what can be called inferential failure in the face of silence and indirect meaning. The relevance-theoretic literature emphasizes that human communication is based on inferential reasoning, in which the listener derives meaning by choosing the most relevant interpretation that incurs the minimal cognitive cost. Analysis of documents shows that AI systems are not flexible in their inferences, as they rely on statistical probabilities rather than contextual reasoning. Another very popular

statement in pragmatic scholarship is that meaning is not decoded but inferred (Thomas, 1995, p. 22), a claim that AI systems only mimic on a surface level. In cases of silence, including the omission, pause, or indirect refusal, the AI systems cannot control the intention of the speaker unless there are some direct linguistic indicators. Analysis of translation and AI literature also indicates that the notion of silence is rarely represented in system design inputs, which pragmatically flattens discourse. As a result, AI-mediated communication tends to yield linguistically correct but pragmatically inappropriate responses, especially in multilingual settings where silence does much-needed interactional work.

Silence is Theoretically Validated as Meaning Using Relevance Theory

The ultimate analytical theme confirms the applicability of relevance theory as a viable model for analyzing the failure of AI systems to derive unspoken meaning. The analysis, based on a qualitative synthesis of theoretical texts, makes clear that silence can be defined as an ostensive stimulus within relevance theory, eliciting an inferential interpretation despite the lack of explicit language. Among the premises of the theory is the fact that all acts of ostensive communication convey an assumption of optimal relevance of themselves (Sperber & Wilson, 1986, p. 158). This, applied to silence, implies that silence opens up to interpretation rather than to the suppression of meaning. Nevertheless, the operation of AI systems is not based on anticipated relevance; it depends on the presence of text and statistical frequency. This theoretical incompatibility is why AI-mediated multilingual communication struggles with unspoken intent. The analysis shows that the relevance theory is not only relevant to how humans perceive silence but also explains why AI systems fail to do so systematically. Through the applied theory of AI-mediated situations, the research analytically defines silence as a valid, theory-based concept that remains underrepresented in existing AI communication models.

AI Accuracy in Capturing Unintentional Intent

The literature review shows that AI-mediated communication systems lack precision in recognizing unspoken intent, especially when it is expressed in silence, omission, or indirectly. The document analysis of machine translation and conversational AI research shows that these systems are geared toward explicit linguistic input and quantifiable semantic equivalence rather than pragmatic inference. Therefore, AI technologies will translate what has been said, but not what is implied. There are a number of studies that point out that silence is either turned a blind eye to or normalized in default responses, hence obliterating any communicative intent in non-verbal or absent language. This weakness is analytically important because unspoken intent is usually a communicative strategy rather than an accidental omission. A common observation made in the literature of pragmatic writers is that failure to be responsive to what is not said may be a big source of misinterpretation of the intended meaning conveyed by the speaker (Thomas, 1995, p. 21). The analysis, therefore, confirms that AI systems capture unspoken intent sporadically and only to a marginal degree, a structural shortcoming of their interpretive architecture rather than a technical defect in isolation.

Communication through AI-Mediated Communication: Cultural Omission of Silence

An analysis of the intercultural communication literature shows that AI systems are systematically blind to culturally meaningful silence because they rely on universalized communication norms. According to content analysis, AI-mediated platforms are primarily trained to respond to predominantly low-context data, with silence commonly viewed as a communication failure rather

than as deliberate meaning. This cultural bias leads to the absence or distortion of silence in multilingual interactions in high-context cultures. According to one of the most influential cultural theorists, high-context cultures tend to convey meaning through silence, pauses, and what is left unsaid (Hall, 1976, p. 91). The discussion indicates that AI systems, which are not culturally contextualized, are prone to replace silence with deductive, explicit information or automatically generated cues, thereby altering the original meaning of the communicative intent. This exclusion has far-reaching consequences for cross-cultural understanding, since it becomes culturally appropriate silence in response to perceived disengagement or ambiguity.

Inferential Limitations of AI in Depicting Unspoken Meaning

Cognitively and pragmatically, the discussion shows that AI systems lack the means of inference to correctly capture unspoken meaning. Relevance theory, which offers an analytical framework that presents communication as an inductive process rather than a code-based one, can help explain this limitation. Human interlocutors perceive silence through the prism of common assumptions and contextual applicability, whereas AI systems are based on probabilistic pattern recognition. According to one of the original assumptions of relevance theory, it is not in the observation of signals that communication is successful, but rather in the drawing up of intentions (Sperber & Wilson, 1986, p. 23). The discussion reveals that systems mediated by AI are incapable of detecting intentionality from silence, since silence is not an ostensive stimulus in their systems. Consequently, implicit meaning is not processed; hence, communication outcomes are partial or distorted. This inferential limitation is why AI can be very successful at translating words but fails to translate intent, especially when intent is concealed in silence or conveyed indirectly.

Relevance Theory and the Interpretation of Silence as a Meaning

The qualitative discussion shows that relevance-based pragmatic theories provide a logical account of how silence is a valuable communicative stimulus in human interaction. Relevance theory conceptualizes communication as an inference process in which hearers actively seek the most relevant meaning of the spoken or unspoken message. In this context, silence is an ostensive act that does not deny meaning but offers it for interpretation. The analysis of documents in pragmatic literature shows that silence is frequently used to represent deliberate non-disclosure of information, courtesy, or selective vagueness, and that all of these depend on context. A basic assertion of relevance theory holds that all acts of ostensive communication convey a presumption of their own optimum relevance (Sperber & Wilson, 1986, p. 158), which can be directly extended to silence in intercourse. The discussion reveals that relevance-based theory is an effective theory in explaining the interpretability of silence in human communication and thus provides a solid theoretical basis for assessing how AI systems interpret or fail to interpret unspoken meaning.

Relevance Inference vs. AI Processing Model Mismatch

One of the main findings of the analysis is the significant discrepancy between relevance-based inferential communication and the operational logic of AI-mediated communication systems. Although relevance theory presupposes that communicators use the integration of contextual knowledge and cognitive expectations to interpret intentions, AI systems are based on surface textual information and probabilistic representations. Analysis of AI communication studies on content reveals that silence is not perceived as an input that triggers inferential reasoning, but rather as a lack of data to be rectified or filled with information. This is in sharp contrast with relevance-related tenets, which perceive silence as communicatively significant, thereby maximizing

relevance in a particular context. According to the pragmatic scholarship, the task of the hearer is not to decode but to infer the meaning of the speaker (Wilson & Sperber, 2004, p. 607). The discussion shows that AI systems lack the inferential architecture necessary to conduct such processes and thus adopt systematic non-congruence with relevance-based communication models in understanding silence.

Pragmatic Failure and Relevance Misalignment in Multilingual Situations

The analysis also shows that relevance misalignment is particularly strong in multilingual AI-mediated communication, where contextual assumptions vary across linguistic and cultural communities. Relevance theory emphasizes that interpretation occurs within common cognitive environments, which entail cultural norms of silence and indirectness. Nonetheless, qualitative analysis of the literature on AI translation suggests that AI systems operate under generalized relevance assumptions based on majority-language data and usually neglect culturally relevant cues. A common-sense scholar argues that the aspects deemed relevant are culturally defined (Thomas, 1995, p. 22), as evidenced by a content analysis of intercultural communication research. By imposing uniform relevance standards across languages, AI systems can mistakenly treat silence as irrelevant or communicatively inefficient. This leads to pragmatic failure, in which AI-mediated products contravene cultural demands for relevance, thereby skewing communicative intent in multilingual communication.

The Relevance Theory of AI-mediated Silence Analysis is Theoretically Validated.

The last analytical theme attests to the fact that the relevance theory is still an effective explanatory theory in the diagnosis of the limitations of AI, as far as the realization of the principles of the theory by AI systems is not yet operationalized. Using the concept of relevance in AI-mediated communication, the analysis will show that failures in interpreting silence stem from a lack of context rather than from translation inaccuracies. Relevance theory offers a schematic approach to identifying the differences between AI systems and human communicative behavior, namely, their failure to use silence as an ostensive stimulus with inferential meaning. It has been claimed in one of the relevance-theoretic statements that the communication process is effective when the interpretation of the audience and that of the communicator are identical (Sperber & Wilson, 1995, p. 270). The discussion reveals that AI systems often cannot satisfy this requirement in situations of silence, thereby confirming the theoretical soundness of relevance theory as the framework for assessing AI-mediated multilingual communication and unspoken meaning.

Discussion

The results of the present research also show that the multilingual communication systems mediated by AI have not yet reached the point of capturing and interpreting silence and the unspoken meaning. The secondary sources analysis shows that silence is an intentional, situation-specific communicative act that implies intent, politeness, hesitation, or acquiescence depending on cultural and pragmatic factors. Nevertheless, AI systems primarily rely on explicit textual input and probabilistic algorithms, which prevents them from treating silence as an inference stimulus. Applying relevance theory (Sperber & Wilson, 1986) to the study's results reveals a critical disconnect: human interlocutors infer meaning from silence by relating it to context, whereas AI systems do not. Silence, therefore, has been portrayed, ignored, or assumed as a lack, resulting in skewed communication. The discussion points out that unspoken meaning in multilingual

interactions cannot be properly mediated by AI without incorporating inferential, context-based, and culturally grounded frames.

Moreover, the research shows that the misunderstanding of silence is especially intense in cross-cultural, multilingual situations, where the definition of silence can vary significantly. AI systems trained primarily on low-context linguistic data have a disproportionately negative impact on cultures with high context, where silence often serves as a form of respect, contemplation, or even objection. This observation can be compared to the idea discussed by Hall (1976) in which the meaning of silence is defined by social conventions and cultural anticipations. Moreover, document and content analysis demonstrate that even highly developed AI translation systems are inclined to lose the pragmatic meaning in the process and prioritize grammatical and lexical accuracy over the intent in context. Consequently, culturally significant silence can be misread as explicit, thereby compromising communicative fidelity. The discussion calls for integrating cultural, pragmatic, and relevance-based considerations into the design of AI systems to maintain the integrity of unspoken meaning in multilingual communication.

Conclusion

This paper concludes that silence is not simply a lack of words but an intentional and complex part of human communication that carries unspoken purpose, relationships, and cultural meaning. Qualitative analysis of documents and scholarly literature reveals that AI-mediated multilingual communication systems are unable to capture this subtle element of human interaction at this time. Silence can be an active communicative act, conveying assent, confusion, politeness, or objection, depending on the cultural and social setting. Using relevance theory (Sperber & Wilson, 1986), the research demonstrates that human interpretation of silence is largely inferential, with the audience evaluating contextual relevance, shared assumptions, and social cues to arrive at meaning. Conversely, AI systems mostly handle explicit written information, probable language patterns, and pre-existing rules, which they cannot recognize. This mismatch underscores the inherent limitations of AI translation and communication systems: even when technologically advanced, they still limit their capacity to mediate human will, which extends beyond words. This paper, in turn, highlights the urgent need to incorporate cognitive, pragmatic, and cultural aspects into AI design to better replicate how humans interpret the world.

Lastly, the paper highlights that enhancing AI's interpretive ability to address silence has serious practical, theoretical, and ethical consequences for multilingual and intercultural communication. The correct interpretation of unspoken meaning is key to successful negotiation, conflict resolution, diplomacy, education, and global cooperation, which will increasingly depend on AI-mediated platforms. The study implies that AI systems should go beyond mere language processing to ones that can think in a way that is not superficial but rather contextual and relevant. The application of relevance theory (Sperber & Wilson, 1986) to AI models provides a theoretical basis for directing one's system design process, asserting that silence is an ostensive stimulus with communicative value. Also, cross-cultural communication can be addressed by creating culturally diverse datasets, improving pragmatic modelling, and simulating human inference processes to reduce misinterpretation of silence. Altogether, the paper concludes that theoretical wisdom, cultural sensitivity, and technological innovation should be integrated to help AI-mediated systems faithfully capture explicit and implicit meaning, thereby avoiding disruption to the integrity, subtlety, and efficiency of multilingual human communication.

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