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Original Article

AI-Mediated Intercultural Communication: A Scoping Review of Ethics, Education, Language, and Global Connectivity

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ABSTRACT*: Artificial intelligence is increasingly reshaping intercultural communication by mediating how people write, translate, learn, interpret, and exchange meaning across linguistic and cultural boundaries. This scoping review examines how AI-mediated intercultural communication operates across ethics, education, language, and global connectivity. The study applies a scoping review design to map recent interdisciplinary literature on artificial intelligence, intercultural communication, language learning, translation, AI literacy, trust, bias, and governance. The review synthesises evidence from recent scholarly sources published in the Scopus database from 2022 to 2026. The findings show that artificial intelligence can support intercultural communication by reducing language barriers, enabling real-time translation, personalising language learning, providing automated feedback, and creating opportunities for pragmatic rehearsal and intercultural education. In higher education, AI tools can strengthen intercultural communicative competence when they are integrated with reflection, human guidance, and culturally responsive pedagogy. In language and translation contexts, AI expands multilingual access but may also flatten cultural nuance, misrepresent dialects, and produce fluent yet culturally inadequate communication. The review further shows that ethical issues are central rather than secondary. Bias, privacy, transparency, authenticity, disclosure, unequal access, and institutional accountability determine whether AI expands intercultural participation or reinforces dominant linguistic and cultural norms. The study concludes that AI-mediated intercultural communication is best understood as governed co-mediation, in which humans, AI systems, datasets, institutions, interfaces, and audiences jointly shape communicative outcomes. Its main implication is that responsible AI use requires critical AI literacy, cultural sensitivity, human oversight, and ethical governance.*

KEYWORDS: *Artificial İntelligence; İntercultural Communication; Language Learning; AI Literacy*

1. INTRODUCTION

Intercultural communication has always been mediated by language, social norms, institutional settings, historical relations, and technologies of representation. In face-to-face interaction, speakers interpret not only words but also silence, gesture, politeness, relational distance, social hierarchy, and culturally embedded expectations. Digital communication has intensified this mediation by introducing platforms, search engines,

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social media feeds, translation applications, learning management systems, and video-conferencing tools into everyday intercultural encounters. The recent expansion of artificial intelligence (AI), however, marks a more profound shift because AI no longer functions merely as an external channel through which communication travels. It increasingly participates in the production, transformation, recommendation, translation, evaluation, and circulation of messages. AI now drafts emails, suggests replies, translates speech, supports multilingual interaction, simulates conversation partners, personalizes language-learning tasks, evaluates writing, and provides cultural explanations. These functions are especially significant in intercultural communication because they intervene in the very processes through which people negotiate meaning across linguistic, cultural, and institutional differences.

Recent literature shows that AI is becoming deeply embedded in education, language learning, translation, global communication, and intercultural collaboration. Foundational work on AI-mediated communication defines this phenomenon as interpersonal communication in which an intelligent agent modifies, augments, or generates messages on behalf of a communicator (Hancock et al., 2020). Subsequent studies have extended this view by showing that AI-generated or AI-suggested language can influence interpersonal evaluations, perceived closeness, cooperation, and trust (Hohenstein et al., 2023). In educational contexts, AI has been associated with personalized learning, automated feedback, adaptive instruction, and new opportunities for multilingual and intercultural engagement (Klimova & Chen, 2024; Xia et al., 2024b). Scopus-indexed literature further indicates that AI is now being examined in relation to intercultural communication education, multilingualism, translation, hybrid pedagogy, bilingualism, museum communication, Arabic language processing, and global learning (Dervin & R'boul, 2025; Yang & Mustafa, 2024; Al-Shaboul et al., 2025; Huot & Phin, 2026; Simon, 2026). Together, these studies suggest that AI-mediated intercultural communication is no longer a marginal technological issue but an emerging interdisciplinary field that connects communication studies, applied linguistics, education, translation studies, ethics, and governance.

Despite these developments, the central research problem is that AI is often discussed as a neutral instrument for improving efficiency, accessibility, and connectivity, while its role in shaping intercultural meaning remains insufficiently theorized. In many educational and professional settings, AI is valued because it reduces language barriers, accelerates text production, supports real-time translation, and provides immediate feedback. However, intercultural communication depends not only on accuracy or fluency but also on pragmatic appropriateness, cultural sensitivity, relational trust, identity negotiation, and ethical responsibility. A fluent AI-generated message may sound polite but still erase cultural nuance. A machine translation may be grammatically acceptable but fail to preserve irony, indirectness, politeness, or culturally specific meanings. A chatbot may provide useful practice but also reproduce stereotypes if its responses are based on culturally imbalanced datasets. Thus, the main problem is not whether AI can assist intercultural communication, but under what conditions such assistance enhances or undermines human agency, cultural plurality, and mutual understanding.

A general solution proposed across the literature is to move beyond the instrumental view of AI and treat it as a mediating actor within intercultural communication. This means that AI should not be understood only as a tool that helps users communicate faster. Rather, it should be examined as a system that participates in selecting words, framing cultural knowledge, translating meanings, standardizing language, and shaping how speakers are perceived by others. Dervin and R'boul (2025) argue that AI and intercultural communication education must be approached reflexively because AI can both support innovative learning and reproduce dominant epistemologies, reductive cultural narratives, and algorithmic bias. Similarly, Chendeb (2025) conceptualizes the current transformation as an "algorithmic turn" in which AI becomes an active co-author of intercultural narratives and semantic transfer. These perspectives point to the need for a critical, ethical, and culturally responsive framework that recognizes AI as part of the communicative process rather than as a neutral substitute for human judgment.

Specific solutions have been advanced in language education and intercultural communicative competence. AI-supported learning environments can provide personalized instruction, adaptive feedback, conversational practice, and immersive simulations that help learners rehearse culturally situated communication. Klimova and Chen (2024) show that AI and ICT tools, including chatbots and virtual reality simulations, can support university students' intercultural communication competence when they are integrated carefully and accompanied by human oversight. Chen and Wei (2025) further demonstrate that AI learning environments can positively influence engineers' intercultural communication competence, with learning adaptability acting as a mediating factor. Similarly, Xia et al. (2024b) present a cross-cultural intelligent language-learning system that uses AI to facilitate language-learning strategies across cultural backgrounds. These findings suggest that AI may support intercultural learning when it is designed not only to improve linguistic performance but also to foster reflection, adaptability, interaction, and culturally informed communication.

Another specific solution concerns AI-assisted translation, multilingual communication, and pragmatic mediation. Real-time translation systems, neural machine translation, speech recognition technologies, and AI-powered mobile applications are increasingly used in business, education, healthcare, tourism, museums, and international collaboration. Giri et al. (2025) argue that AI-driven real-time language translation can reduce

barriers in cross-cultural communication, although challenges remain in handling colloquial language, cultural nuance, privacy, and data security. Yang and Mustafa (2024) show that AI and multimodal mediation can enhance museum translation and visitor engagement, but they also emphasize the importance of cultural differences, emotional factors, and contextual specificity. Al-Shaboul et al. (2025) similarly report that AI tools can support Arabic language learning, translation, and speech recognition, yet they struggle with dialectal variation, complex linguistic structures, and culturally specific expressions. These studies indicate that AI translation must be evaluated beyond technical accuracy; it must also be assessed in relation to cultural appropriateness, semantic depth, dialectal diversity, and communicative accountability.

Closely related literature also highlights the educational, ethical, and equity dimensions of AI-mediated intercultural communication. AI can scaffold hybrid pedagogies, Collaborative Online International Learning, virtual exchange, and global learning by supporting adaptive feedback, intercultural dialogue, digital literacy, and global competence (Huot & Phin, 2026; Simon, 2026). AI can also contribute to sustainable education by promoting global citizenship, continuous learning, collaborative learning, and international communication (Bagherimajd & khajedad, 2025). However, the same literature warns that AI may reproduce inequality through uneven access, digital literacy gaps, mainstream-language bias, data privacy risks, and insufficient cultural responsiveness (Jesudas, 2025; John et al., 2026; Ncube et al., 2025). This creates a clear research gap. Although existing studies examine AI in language learning, translation, higher education, and intercultural competence, the field still lacks an integrated synthesis that explains how AI mediates intercultural communication across ethics, education, language, and global connectivity. The literature remains fragmented across disciplines, technologies, and contexts, making it difficult to identify shared mechanisms, risks, and governance principles.

Therefore, this scoping review aims to synthesize recent scholarship on AI-mediated intercultural communication by mapping how AI shapes intercultural meaning-making in education, language learning, translation, ethical practice, and global connectivity. Its novelty lies in treating AI not simply as an educational technology or translation tool but as a form of intercultural co-mediation in which human communicators, AI systems, institutions, datasets, interfaces, and audiences jointly produce communicative outcomes. This review is justified by the rapid expansion of AI applications after 2022 and by the growing need to understand their cultural, pedagogical, linguistic, and ethical implications. The scope of the study includes recent peer-reviewed and Scopus-indexed literature on AI-mediated communication, intercultural communicative competence, AI literacy, machine translation, hybrid pedagogy, language learning, trust, bias, privacy, and governance. By doing so, the review develops an argumentative foundation for understanding when AI expands intercultural participation and when it risks standardizing communication around dominant languages, values, and epistemologies.

2. METHODOLOGY

This study employed a scoping review design to examine the development, scope, and conceptual structure of recent scholarship on AI-mediated intercultural communication. A scoping review was considered appropriate because the field is still emerging, interdisciplinary, and methodologically diverse. Research on AI and intercultural communication is distributed across communication studies, applied linguistics, translation studies, language education, educational technology, human–AI interaction, ethics, and governance. As a result, the available literature does not yet form a sufficiently homogeneous body of evidence for a systematic review or meta-analysis focused on pooled effects. Instead, the primary purpose of this review was to map the breadth of existing research, identify dominant themes, clarify conceptual relationships, and determine key gaps for future investigation.

The review was guided by the understanding that AI-mediated intercultural communication cannot be reduced to a single technology, method, or disciplinary tradition. AI may operate as a translation tool, writing assistant, dialogue partner, language-learning system, automated feedback mechanism, cultural recommender, institutional analytics tool, or communication platform. Each of these functions shapes intercultural interaction differently. Therefore, the review adopted an interpretive and thematic mapping approach rather than a narrowly evaluative design. This approach allowed the study to synthesize both direct evidence on AI-mediated intercultural communication and mechanism-supporting evidence from related domains such as AI-assisted language learning, machine translation, intercultural communicative competence, AI literacy, human–AI trust, and algorithmic bias.

2.1. Search Strategy

The supplementary literature search focused on recent studies published from 2022-April 2026. Searches were conducted using combinations of keywords related to artificial intelligence, intercultural communication, language learning, translation, education, ethics, and governance. The search string. *("artificial intelligence" OR "ai" OR "machine learning" OR "deep learning") AND ("intercultural communication" OR "cross-cultural communication"*

OR "cultural exchange" OR "cultural interaction") AND ("mediation" OR "facilitation" OR "support" OR "enhancement") AND ("technology" OR "tools" OR "platforms" OR "applications")

These terms were combined using Boolean operators to identify studies directly related to AI-mediated intercultural communication as well as studies that explained mechanisms relevant to intercultural meaning-making. The flow of identification, screening, eligibility assessment, and final inclusion is presented in Figure 1.

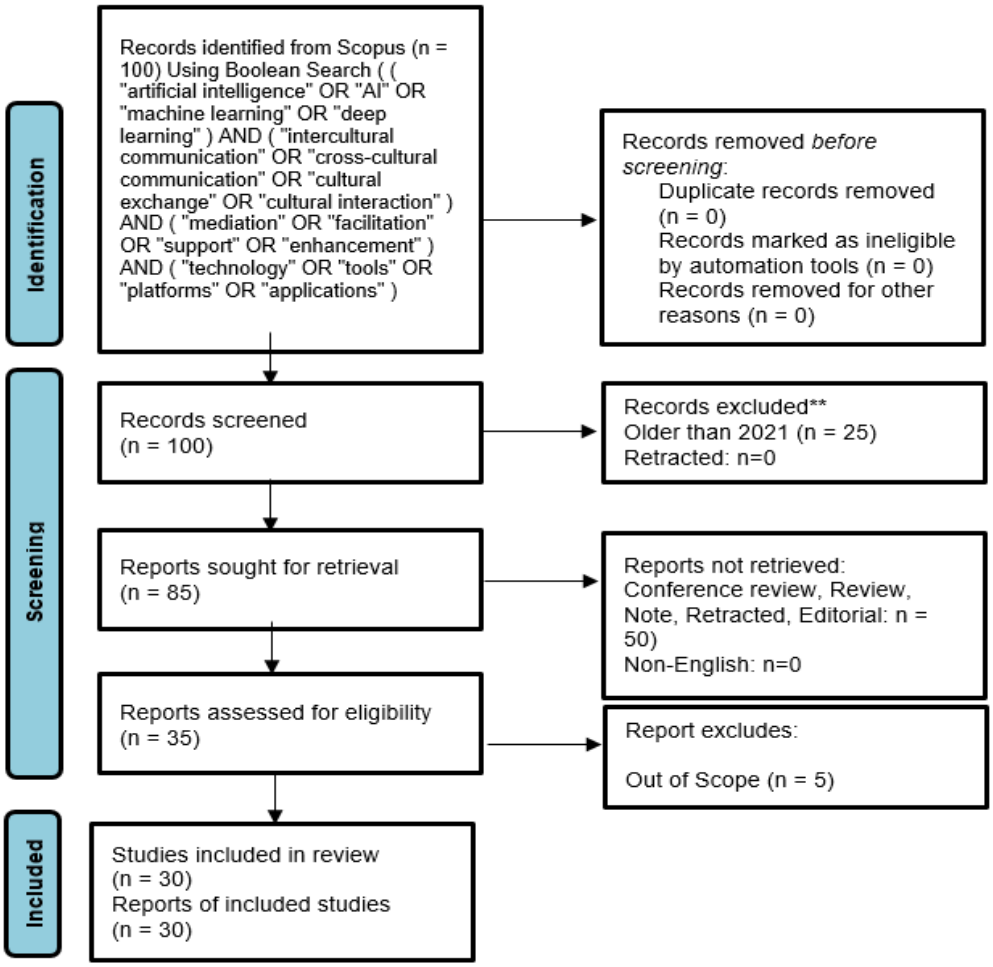

Figure 1. PRISMA-style flow diagram of the literature identification, screening, eligibility assessment, and inclusion process for the scoping review.

2.2. Inclusion Criteria

Studies were included when they met four main criteria. First, the source had to be published in English. Second, it had to be a peer-reviewed journal article. Third, the source had to be relevant to at least one of the review domains: AI-mediated communication, intercultural communication, language learning, translation, education, ethics, trust, bias, AI literacy, or governance. Fourth, newly added sources were limited to publications from 2022 onward in order to capture recent developments in generative AI, large language models, AI-assisted learning, and AI-mediated communication.

Older sources already present in the seed manuscript were retained when they provided foundational or contextual value. For example, pre-2022 references were retained if they contributed to the conceptual definition of AI-mediated communication, human responses to computers, or AI literacy. This decision was made to preserve theoretical continuity while ensuring that the expanded synthesis reflected recent scholarship.

2.3. Exclusion Criteria

Sources were excluded when they did not contribute directly or indirectly to the research focus. Studies were excluded if they focused exclusively on technical AI development without clear relevance to communication, language, education, ethics, translation, intercultural interaction, or governance. Non-scholarly commentary, unsupported opinion pieces, conference abstracts without sufficient research detail, preprints without peer

review, and sources lacking traceable bibliographic information were not included as new evidence. Studies were also excluded when their primary focus was outside the conceptual boundaries of the review, even if they mentioned AI or digital technology in general terms.

The exclusion process was necessary to maintain conceptual coherence. Because AI is now used across many sectors, an unrestricted search would have produced a large volume of technically relevant but interculturally unrelated literature. The review therefore prioritized studies that contributed to understanding how AI affects meaning-making, language mediation, educational interaction, cultural representation, communicative trust, or ethical accountability.

2.4. Screening and Eligibility Assesment

The screening process was conducted in stages. First, records were reviewed by title to determine whether they were potentially relevant to AI, communication, language, education, translation, ethics, or interculturality. Second, abstracts were examined to assess whether each study addressed AI-mediated communication directly or contributed mechanism-supporting evidence. Third, full-text relevance was assessed where sufficient information was available. During this stage, studies were evaluated based on their contribution to the review questions and their alignment with the four main domains of ethics, education, language, and global connectivity.

Eligible studies were then grouped according to their primary contribution. Some studies provided direct evidence on AI-mediated intercultural communication, such as research on AI and intercultural communicative competence or AI use in multicultural university environments. Others provided evidence supporting the mechanisms, such as studies on AI chatbots in language learning, machine translation, algorithmic bias, AI literacy, user trust, privacy, and disclosure. This distinction allowed the review to include a broader but analytically controlled evidence base.

The literature identification and screening process resulted in a final review corpus of 32 included studies, as presented in the manuscript's PRISMA-style flow diagram. The records were screened for relevance, language, publication type, and scope. Records that were retracted, non-English, unavailable, or outside the conceptual focus of the review were removed before final inclusion. The final corpus was therefore appropriate for narrative and thematic synthesis rather than statistical aggregation.

2.5. Data Extraction

Data were extracted using a structured thematic matrix. The extraction process focused on publication year, source type, research design, study population or corpus, technology examined, intercultural relevance, key findings, ethical implications, and contribution to the review questions. Particular attention was given to how each source conceptualized AI: whether as a tool, mediator, partner, tutor, translator, recommender, evaluator, or governance challenge.

The extracted data were also categorized according to the communicative mechanism addressed by each study. These mechanisms included message generation, automated translation, pragmatic scaffolding, language-learning personalization, automated feedback, virtual exchange, cultural representation, trust calibration, disclosure, algorithmic bias, privacy, access, and institutional governance. This coding structure enabled comparisons across disciplinary boundaries and the identification of recurring themes in how AI shapes intercultural communication.

3. RESULT AND DISCUSSION

3.1 Descriptive Profile of the Evidence Base

The reviewed literature shows that research on AI-mediated intercultural communication has expanded rapidly (Fıgure 2), particularly after the wider public adoption of generative AI tools. The evidence base is strongly concentrated in education, language learning, translation, AI literacy, and ethical governance. This concentration reflects the fact that educational institutions, multilingual learning environments, and digitally mediated communication platforms are among the most visible contexts in which AI now shapes intercultural interaction. Studies on generative AI in education identify recurring themes such as student perceptions, writing support, automated feedback, assessment, teacher workflows, self-regulated learning, academic integrity, and AI literacy (Ali et al., 2024; Crompton & Burke, 2023; Fu et al., 2025; Labadze et al., 2023; Law, 2024; Li et al., 2025; Montenegro-Rueda et al., 2023; Xia et al., 2024a). These themes are directly relevant to intercultural communication because classrooms, universities, online learning platforms, virtual exchanges, and language-learning environments are important sites where intercultural competence is developed, assessed, and institutionalized.

Mulawarman Journal of Social Sciences
Original Article

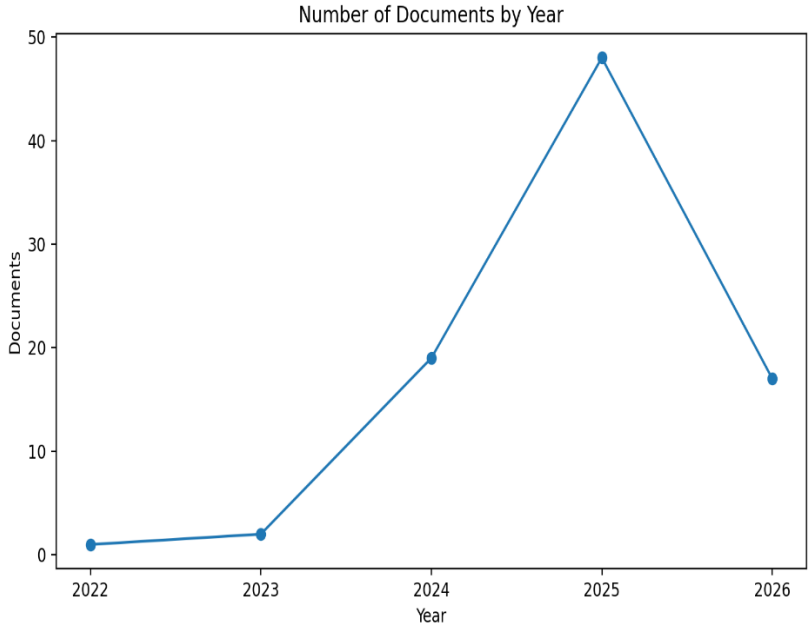

Figure 2. Publication Trend by Year

Although the broader literature is expanding, direct empirical studies on AI-mediated intercultural communication remain relatively limited. Sarwari et al. (2024) provide one of the clearest empirical contributions by surveying 115 postgraduate students from nine countries and showing that 93% of participants had already used AI in daily life. Their findings indicate that students generally perceived AI as useful for connecting cultures and reducing linguistic and cultural barriers. Hohenstein et al. (2023) offer experimental evidence that algorithmic response suggestions influence both language production and interpersonal evaluation. Their two randomized experiments show that AI-generated suggestions can increase communication speed, positive emotional expression, perceived closeness, and cooperation, while suspected AI use may produce less favorable judgments. Chan and Hu (2023), through a survey of 399 university students, similarly report positive perceptions of generative AI alongside concerns about accuracy, privacy, ethics, and personal development. Damiano et al. (2024) also identify mixed early perceptions of ChatGPT in higher education, while Zhang and Zhou (2023), in a meta-analytical review of 56 studies involving 4049 students, show that technology-assisted interventions can produce a positive intermediate effect on intercultural competence.

These empirical anchors are important because they prevent the discussion from treating AI enthusiasm as sufficient evidence. The literature suggests that AI can support communication, learning, and cross-cultural participation, but the strength of evidence varies across contexts. Many studies focus on perceptions, acceptance, perceived usefulness, or short-term educational outcomes. Fewer studies examine long-term intercultural competence, identity negotiation, relational trust, pragmatic development, or ethical accountability. Therefore, the evidence base is promising but not yet mature. It supports the view that AI has significant potential as a mediator of intercultural interaction, while also showing the need for stronger longitudinal, cross-cultural, and mixed-method research designs.

The literature on intercultural communicative competence provides a useful bridge between earlier technology-assisted learning and newer AI-mediated communication. Telecollaboration, e-tandem exchange, virtual exchange, and online intercultural learning predate generative AI and offer tested concepts for evaluating digitally mediated intercultural encounters. Gutierrez-Santiuste and Ritacco-Real (2023) examine intercultural communicative competence through behavioral, affective, and cognitive dimensions in videoconferencing. Canals (2024) demonstrates that virtual exchange can generate substantial interaction without automatically producing intercultural understanding. Zhang and Zhou (2023) similarly show that technology-assisted interventions can improve intercultural competence, but their effects vary according to modality, pedagogical design, and measurement strategy. These findings caution against the assumption that increased AI-mediated interaction necessarily produces better intercultural communication. The quality of reflection, feedback, task design, human facilitation, and ethical awareness remains decisive.

3.2 AI as Intercultural Co-Mediation

The central conceptual finding of the review is that AI should be understood as a form of intercultural co-mediation. In earlier communication technologies, platforms primarily transmitted messages between human

users. In AI-mediated communication, however, intelligent systems can participate in generating, modifying, translating, recommending, evaluating, or interpreting messages. Hancock et al. (2020) define AI-mediated communication as interpersonal communication in which an intelligent agent modifies, augments, or generates messages on behalf of a communicator. This definition is especially useful for intercultural contexts because it highlights that AI does not merely support communication from outside the interaction. It can become part of the meaning-making process itself.

In intercultural communication, AI mediation is particularly consequential because language and cultural meaning are rarely transparent. AI may select a language, simplify an expression, formalize a tone, normalize politeness, remove ambiguity, translate metaphors, suggest culturally appropriate greetings, or explain what a speaker from another community might mean. These actions are not only technical operations; they are communicative interventions. A student using ChatGPT to prepare for an intercultural dialogue is not simply retrieving information but rehearsing a version of culture shaped by prompts, training data, and model defaults. A multilingual professional using an AI writing assistant to communicate with a global team is not merely saving time but delegating aspects of tone, clarity, politeness, and emotional labor to a system whose norms may reflect dominant corporate and linguistic conventions (Van Quaquebeke & Gerpott, 2024). A user relying on machine translation is not only crossing a language barrier but trusting AI to preserve pragmatic force, register, identity, and cultural reference.

The concept of co-mediation helps avoid two inadequate positions. The first is technological determinism, which assumes that AI will automatically connect cultures by reducing friction. The second is technological rejection, which assumes that AI necessarily weakens authenticity or human agency. The reviewed evidence supports neither extreme. Hohenstein et al. (2023) show that AI-generated response suggestions can improve efficiency, positivity, perceived closeness, and cooperation, but they also show that suspicion of AI use can produce negative evaluations. Pan et al. (2024) find that perceptions of AI agency and language subjectivity shape trust, liking, and perceived chat quality. Carter et al. (2024) further argue that meaningful communication, rather than superficial anthropomorphism, supports human–automation trust calibration. These findings indicate that AI effects depend not only on technical performance but also on social interpretation.

Intercultural contexts intensify this interpretive complexity. Participants may already be uncertain about indirectness, silence, humor, apology, refusal, disagreement, hierarchy, or face-saving practices. If AI makes a message more fluent, the recipient may overestimate the sender's communicative competence. If AI makes a message more generic, the recipient may perceive it as polite but emotionally distant. If AI use is disclosed, recipients may appreciate transparency or question sincerity. If AI use is hidden, recipients may later perceive the interaction as deceptive. Therefore, AI-mediated intercultural communication requires context-specific norms for disclosure, consent, responsibility, and acceptable assistance. AI should be treated neither as an invisible substitute for human effort nor as an inherently illegitimate form of support. Its value depends on whether it strengthens or weakens culturally situated human agency.

3.3 Language, Translation, and Pragmatic Meaning

Language is the most visible domain of AI-mediated intercultural communication, but the review indicates that the central issue is not grammar alone. Intercultural communication depends on pragmatics: how speakers use language to perform social actions such as apologizing, refusing, disagreeing, requesting, showing respect, expressing empathy, managing disagreement, and negotiating relational distance. Erdogan and Kitson (2025) identify implicature, inference, presupposition, speech acts, and discourse maxims as areas in which AI can support young English learners. Related studies on generative AI in language learning show that AI is increasingly used for content generation, writing support, feedback, self-regulated learning, and language practice (Boudouaia et al., 2024; Chang & Sun, 2024; Kohnke et al., 2023; Law, 2024; Li et al., 2024; Li et al., 2025; Mohebbi, 2024; Yang & Li, 2024; Yan & Zhang, 2024). These findings suggest that AI can function as a pragmatic rehearsal space, enabling learners to compare expressions, revise tone, practice culturally sensitive responses, and receive immediate explanations.

This potential is strongest when AI is used interactively and critically. Learners can ask chatbots to compare two refusals, explain why a phrase sounds too direct, simulate workplace or service encounters, or evaluate register in a cross-cultural message. Adaptive systems such as the cross-cultural intelligent language learning system developed by Xia et al. (2024b) seek to personalize language learning according to learners' linguistic and cultural backgrounds. Speech-recognition chatbots and AI-assisted feedback systems can increase exposure and practice opportunities, especially in contexts where human interlocutors, expert teachers, or international exchange opportunities are limited. Evmenova et al. (2024) further suggest that generative AI can support diverse learners, including students with disabilities and English learners, by providing accessible and flexible scaffolding.

However, the same technologies also carry significant cultural risks. Neural machine translation and multilingual AI systems have expanded dramatically. NLLB Team (2024) reports neural machine translation

across 200 languages, while SEAMLESS Communication Team (2025) reports joint speech and text translation for up to 100 languages. These systems are transformative because they reduce the transaction cost of cross-language communication. Son and Kim (2023), Liu and Zhu (2023), and related work on machine translation show that users increasingly compare large language models with conventional neural machine translation systems. Yet linguistic scale does not guarantee cultural adequacy. Translation systems may flatten politeness, erase dialectal identity, mishandle culturally dense metaphors, or impose standardized forms on minoritized varieties. Low-resource languages remain particularly vulnerable because they often have less parallel data, weaker digital representation, and limited institutional investment.

The review therefore supports three principles for AI-supported language and translation. First, AI language support should be evaluated at the level of discourse and social action, not only sentence-level fluency. Second, translation quality should include cultural appropriateness, register, pragmatic equivalence, and preservation of identity. Third, learners and users should be trained to interrogate AI output rather than consume it passively. AI may help users notice alternatives and expand linguistic options, but intercultural judgment remains a human responsibility. For this reason, AI literacy and intercultural competence are inseparable in language education.

3.4 Education and Intercultural Communicative Competence

Education is the most developed context for intentionally designing AI-mediated intercultural communication. Intercultural communicative competence includes knowledge, attitudes, skills, critical cultural awareness, and the ability to communicate appropriately and effectively across difference. AI can support these dimensions through simulation, adaptive feedback, multilingual scaffolding, role-play generation, content adaptation, translation, and reflective prompts. Klimova and Chen (2024) synthesize research on AI and ICT tools in university-level intercultural competence and emphasize both their potential and the need for human oversight. Zhang et al. (2025) propose AI-driven frameworks for enhancing intercultural competence in technical higher education. McCallum (2024) shows how AI tools can support telecollaboration task design and completion. At the same time, Gutierrez-Santiuste and Ritacco-Real (2023) and Canals (2024) demonstrate that virtual interaction requires pedagogical structure if it is to become meaningful intercultural learning rather than mere contact.

The broader literature on generative AI in education provides the institutional context for these findings. Chan and Hu (2023) show that students recognize the benefits of generative AI for personalized learning, brainstorming, writing support, and research assistance, but they also express concerns about accuracy, privacy, ethics, personal development, and social values. Kasneci et al. (2023) frame large language models as both opportunities and challenges for education, with implications for teachers, learners, interfaces, access, and responsible use. Labadze et al. (2023) review AI chatbots in education, while Crompton and Burke (2023) map the broader state of AI in higher education. These studies indicate that AI-assisted learning cannot be understood merely as a matter of efficiency. It changes the relationships among learner, teacher, task, text, assessment, and institution.

For intercultural education, these changes have four major implications. First, AI can personalize examples and learning materials, but personalization must not become stereotyping. Prompts asking AI to explain "how Japanese people communicate" or "how Arab students think" may produce essentialist generalizations if users do not critically evaluate the output. Second, AI can provide repeated practice, but practice without guided reflection may reinforce superficial competence. Third, AI can assist teachers in designing scenarios, role plays, feedback, and comparative cases, but teachers need AI literacy to evaluate cultural accuracy and pedagogical appropriateness. Fourth, AI can improve access for learners facing language barriers, disabilities, geographical isolation, or limited mobility, but only if institutions address infrastructure, cost, privacy, and digital literacy.

The AI literacy literature offers an important response to these challenges. Allen and Kendeou (2024) propose an interdisciplinary framework that emphasizes knowledge, evaluation, collaboration, contextualization, autonomy, and ethics. Lintner (2024) reviews AI literacy scales, while Dominguez Figaredo and Stoyanovich (2023), Cox (2024), Southworth et al. (2023), and Sullivan et al. (2024) argue for responsible, stakeholder-centered, and curriculum-integrated AI literacy. In intercultural education, AI literacy should include the ability to ask whose culture is represented, which assumptions are embedded, which sources are absent, when AI use should be disclosed, and which forms of assistance strengthen rather than replace learning. Thus, responsible AI integration in intercultural education requires not only access to tools but also critical, reflective, and ethically grounded use.

3.5 Ethics, Bias, Trust, and Authenticity

Ethics emerges as the underlying infrastructure of AI-mediated intercultural communication. Without governance, AI may make intercultural communication faster while making it less accountable. The reviewed literature identifies six major ethical dimensions: cultural bias, disclosure, privacy, authenticity, dependence, and

institutional responsibility. These dimensions are closely connected because intercultural communication depends on trust, cultural representation, and responsible interpretation.

Cultural bias is central because AI systems are trained on unequal digital worlds. Tao et al. (2024) show that large language models can exhibit cultural values resembling particular national and cultural clusters and that cultural prompting may improve alignment for many countries and territories. Fang et al. (2024) identify bias in AI-generated news content. Warra et al. (2025) examine implicit bias in large language models and discuss implications for education. Zhu et al. (2024) demonstrate that language and cultural bias can appear in domain-specific settings and argue for localized models. Yogarajan et al. (2024) frame debiasing large language models as an important research agenda. Although these studies do not all focus directly on intercultural communication, they are essential because intercultural communication depends on fair and context-sensitive representation of cultural knowledge, social identities, and linguistic diversity.

Disclosure and authenticity are equally important. Hohenstein et al. (2023) show that AI suggestions can improve relational evaluations but that suspected AI use can lead to negative judgments. Porsdam Mann et al. (2023) argue that generative AI creates a credit–blame asymmetry in which users may claim credit for high-quality outputs while shifting blame for harms to AI systems. Van Quaquebeke and Gerpott (2024) discuss the need for workplace communication policies because AI copilots complicate trust in interpersonal messages. Schlagwein and Willcocks (2023) examine ethical issues in the use of generative AI in research and science. In intercultural contexts, authenticity is not simply a personal preference. It is linked to face-work, relational sincerity, effort, and expectations about responsibility. A message may be fluent and culturally appropriate but still be perceived as inauthentic if the recipient believes the sender did not meaningfully participate in its construction.

Trust research clarifies this issue. Carter et al. (2024) argue that meaningful communication, rather than superficial anthropomorphism, supports trust calibration. Lee and Cha (2024) analyze transparency and trust in ChatGPT, while Pan et al. (2024) show that AI agency and language subjectivity affect trust, liking, and perceived chat quality. These findings imply that institutions should not rely on simple rules that either require disclosure in all cases or prohibit AI assistance entirely. Instead, disclosure norms should be sensitive to communicative stakes. Low-stakes spelling or grammar support may not require disclosure. AI-generated substantive content, cultural advice, translated official messages, assessment feedback, or workplace communication that affects decisions should require disclosure or documentation.

Privacy and misinformation create additional risks. AI-mediated intercultural communication often involves sensitive linguistic, ethnic, religious, educational, professional, or institutional data. Users may enter private messages, cultural misunderstandings, conflict narratives, or personal reflections into systems with unclear data policies. Menczer et al. (2023) warn about the harms of AI-generated inauthentic content, while Shin et al. (2024) examine how users process AI-generated misinformation. In global contexts, misinformation can move across cultural and linguistic boundaries quickly, and translation can make false content more persuasive in local languages. Therefore, ethical AI-mediated intercultural communication requires accountable co-agency. Humans remain responsible for selecting, checking, adapting, and disclosing AI assistance. Institutions remain responsible for policy, training, data protection, and appeal mechanisms. Developers remain responsible for documentation, cultural evaluation, and bias mitigation.

3.6 Global Connectivity and Unequal Access

The strongest positive claim in the literature is that AI can expand global connectivity. Sarwari et al. (2024) report that postgraduate students in a multicultural university environment perceived AI as helping connect cultures and reduce language and cultural barriers. Machine translation systems reinforce this possibility by supporting communication across many languages (NLLB Team, 2024; SEAMLESS Communication Team, 2025). AI chatbots and language-learning tools can also support users who lack access to expert teachers, native-speaker interlocutors, or international mobility. Research on virtual exchange and telecollaboration shows that digitally mediated interaction can develop intercultural competence when it is structured through intentional tasks, reflection, and facilitation (Canals, 2024; Gutierrez-Santiuste & Ritacco-Real, 2023; McCallum, 2024; Zhang & Zhou, 2023).

However, connectivity should not be equated with equality. Access to AI depends on devices, bandwidth, language coverage, cost, institutional permission, data protection, and digital literacy. Many AI systems perform best in English and other high-resource languages, while performance remains weaker in low-resource languages, dialects, and culturally specific domains. A system that translates widely but unevenly may increase participation for some users while producing misrecognition for others. This problem is particularly important for Global South contexts and minoritized-language communities. Ethical AI for intercultural communication cannot be designed only from dominant centers of data, infrastructure, and governance.

This distinction can be clarified by separating access to AI from access through AI. Access to AI means having the tools. Access through AI means gaining genuine communicative agency in contexts previously restricted by language, disability, geography, social position, or institutional barriers. The second form of access is more

important for intercultural equity. It requires culturally responsive datasets, multilingual evaluation, human review, locally appropriate policy, and education that teaches users how to question AI outputs. AI can connect cultures only when the connection is reciprocal, intelligible, and accountable.

3.7 Implications for Research, Education, and Policy

The synthesis points to several implications for future research. First, studies need to connect micro-level language effects with macro-level intercultural outcomes. Many current studies measure attitudes, perceived usefulness, acceptance, or short-term performance. Fewer studies examine long-term intercultural competence, cultural humility, trust, identity negotiation, or relational repair. Future research should combine experiments, longitudinal classroom studies, discourse analysis, cross-cultural surveys, and computational audits. Researchers should report sample size, cultural and linguistic backgrounds, AI system version, prompt conditions, language pairs, and disclosure practices. Without these details, findings are difficult to compare or accumulate.

Second, education should integrate AI as a reflective partner rather than as a hidden shortcut. Teachers can use AI to design intercultural role plays, compare pragmatic alternatives, generate culturally diverse scenarios, and support multilingual feedback. Students can use AI to rehearse difficult conversations, ask for explanations of indirect meaning, and receive feedback on tone or register. However, each use should be accompanied by critical reflection. Learners should ask what the AI assumed, what it omitted, which cultural perspective it privileged, and how a human interlocutor might interpret the output. This approach aligns with both AI literacy and intercultural pedagogy, which emphasize judgment, reflection, accountability, and ethical awareness (Allen & Kendeou, 2024; Cox, 2024; Lintner, 2024; Yi, 2021).

Third, institutional policy should develop tiered norms for AI disclosure. Low-stakes language polishing may not require disclosure. By contrast, AI-generated substantive content, cultural advice, translated official communication, assessment feedback, or workplace messages that affect decisions should require disclosure, documentation, or human review. Institutions should also protect sensitive intercultural data, clarify acceptable AI use in assignments, ensure equitable access, and provide appeal mechanisms when AI-mediated decisions or interpretations harm users. Workplace policies should address responsibility for AI-assisted communication, especially in multicultural teams where misunderstanding may affect inclusion, performance, and trust (Van Quaquebeke & Gerpott, 2024).

Finally, developers should treat culturally responsive design as more than the addition of languages. AI systems should be evaluated for pragmatic appropriateness, stereotype avoidance, dialect sensitivity, register, uncertainty communication, and cultural plurality. Where model confidence is low, the interface should signal uncertainty instead of producing fluent but unreliable advice. Cultural prompting may improve alignment in some cases, but it cannot replace diverse data, local evaluation, participatory design, and accountable governance (Tao et al., 2024; Zhu et al., 2024). A system that speaks many languages but cannot represent cultural plurality remains an unreliable intercultural mediator.

3.8 Research Agenda

The review indicates five priorities for future research on AI-mediated intercultural communication. First, scholars should define the unit of analysis more precisely. AI may function as a translation tool, writing assistant, dialogue partner, learning environment, recommender system, assessment tool, or governance infrastructure. These functions produce different communicative effects and ethical risks. Treating them as a single category obscures important differences.

Second, future studies should move beyond technology acceptance. Acceptance models are useful for understanding adoption, but intercultural communication requires evidence of competence, trust, mutual understanding, reflective capacity, and ethical awareness. Measures should include behavioral, affective, and cognitive dimensions of intercultural communicative competence, as well as discourse-level analysis of pragmatic appropriateness.

Third, researchers should compare disclosure conditions. Intercultural communication is highly sensitive to authenticity, sincerity, and relational expectation. Experiments should examine whether recipients evaluate messages differently when AI assistance is disclosed, partially disclosed, or hidden. They should also investigate whether disclosure effects vary across cultural contexts, communication purposes, and levels of relational closeness.

Fourth, multilingual and cultural audits should become routine. Bias should not be evaluated only through English-language stereotypes or generalized fairness metrics. Models should be tested across language families, dialects, cultural value systems, politeness norms, and low-resource settings. Researchers should also publish negative findings, limitations, and cases where AI performs poorly.

Fifth, the field should adopt participatory and local methods. Intercultural AI systems should be evaluated by the communities they claim to support. Teachers, students, translators, minoritized-language speakers,

migrants, international students, and multilingual workers should participate in design and evaluation. This shift would help move the field from AI for cultures to AI with cultural communities.

4. CONCLUSION

This scoping review concludes that AI has become a significant mediator of intercultural communication rather than a merely supportive communication tool. The reviewed literature shows that AI can reduce language barriers, support translation, personalize language learning, provide pragmatic feedback, scaffold intercultural education, and expand opportunities for global connectivity. However, these benefits remain conditional. AI-mediated communication may also obscure authorship, weaken authenticity, reproduce cultural bias, flatten local meanings, marginalize low-resource languages, and intensify inequalities in access and digital literacy.

The main contribution of this study is its synthesis of AI-mediated intercultural communication as a process of governed co-mediation. This perspective clarifies that intercultural outcomes are jointly shaped by human users, AI systems, datasets, interfaces, institutions, and audiences. Therefore, responsible AI use requires more than technical accuracy; it requires cultural sensitivity, transparency, human oversight, ethical governance, and critical AI literacy.

The study contributes to existing knowledge by integrating fragmented research from communication studies, education, language learning, translation, and AI ethics into a coherent intercultural framework. Future research should examine long-term intercultural competence, disclosure practices, multilingual bias, low-resource language contexts, and participatory AI design involving culturally diverse communities. Its significance lies in showing that AI can support intercultural understanding only when it strengthens, rather than replaces, human judgment and accountability.

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