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Disrupting the Communicator Paradigm: Systematic Mapping of Artificial Intelligence in Contemporary Communication Theory

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ABSTRACT

This study presents a systematic literature review (SLR) of 132 peer-reviewed articles to examine how artificial intelligence (AI) is reconceptualized as a communicator within contemporary communication theory. Drawing on Robert T. Craig's (1999) seven communication traditions, the review maps how AI disrupts established models by acting not only as a medium but also as an active participant in meaning-making, emotional simulation, and symbolic interaction. Thematic synthesis reveals five dominant conceptual shifts: from human-centered agency to hybrid systems, from linear transmission models to algorithmic mediation, and from sender-receiver logic to co-constructed symbolic exchanges involving non-human actors. The analysis further identifies tensions across traditions concerning intentionality, empathy, authorship, and communicative ethics, underscoring the uneven uptake of AI across theoretical perspectives. Critical insights emerge regarding the ideological and infrastructural power of AI in shaping discourse, trust, and relational dynamics. In response, the study proposes an operational framework conceptualizing AI as a synthetic communicator encompassing dimensions of agentic presence, symbolic interlocution, affective simulation, and algorithmic mediation. This framework generates testable propositions for future empirical inquiry and bridges the synthesis with language-focused approaches such as pragmatics and discourse analysis. Ultimately, the review contributes a foundational synthesis and a roadmap for advancing communication scholarship in the era of intelligent systems, highlighting both opportunities for theoretical

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integration and challenges of ethical accountability.

Keywords: Artificial Intelligence; Communication Theory; Communicator Paradigm; Systematic Literature Review; Craig's Traditions; Human–Machine Interaction

1. Introduction

Communication theory has historically centered on human actors, individuals endowed with intention, meaning-making capacity, and contextual understanding. From the foundational linear model of Shannon and Weaver (1949) to interactive and transactional frameworks^[1,2], communicators have consistently been assumed to be human agents. Although the medium may evolve, from print to television to the internet, but the communicator's agency and responsibility have rarely been contested. Artificial intelligence (AI), however, is increasingly blurring this boundary. No longer merely tools for encoding or transmitting information, AI systems now operate in roles traditionally reserved for human interlocutors, conversational agents, digital therapists, news anchors, and even emotional companions.

The proliferation of AI in communicative settings has disrupted the long-standing assumption that communication involves only human interlocutors. Chatbots provide real-time customer support with contextual sensitivity, voice assistants interpret tone and intent, and social robots facilitate companionship among the elderly. These applications challenge the traditional sender–receiver dichotomy and prompt a re-evaluation of who or what qualifies as a “communicator.” Consequently, the field of communication studies faces a critical inflection point: Can our theoretical models accommodate these non-human actors, or must they be fundamentally reconceptualized?

AI systems, particularly those employing machine learning and natural language processing, are capable of performing acts conventionally associated with interpersonal communication. They can initiate, maintain, and adapt dialogue based on user input and contextual cues^[3,4]. Moreover, many of these systems are equipped with emotional recognition and simulation capabilities, as seen in affective computing research^[5]. These developments elevate AI from a passive medium to an active participant in meaning-making process.

While technological determinism would suggest that AI will inevitably reshape communicative dynamics, commu-

nication scholars urge more nuanced, theory-driven inquiry. In particular, there is growing interest in how AI affects relational communication, organizational communication, and public discourse^[6,7]. Theories such as Media Richness Theory^[8] and Social Presence Theory^[9] have come under scrutiny as AI-driven interactions demonstrate richness and presence effects not initially anticipated in these frameworks.

AI's capacity for autonomous learning also introduces new dynamics into symbolic interactionism. Brandizzi argues that AI systems are not merely mimicking communication but are beginning to develop emergent languages and norms within multi-agent systems^[10]. This raises important philosophical and practical questions: Can AI be said to “communicate” in the same way humans do? If communication is defined by intentionality, interpretation, and social context, how do we evaluate AI's participation?

Further complicating the issue is the anthropomorphic design of many AI agents. Designers increasingly endow systems with human-like features and personalities to encourage user trust and engagement. Wu, et al.^[11] show that while AI news anchors can enhance credibility for some audiences, they also trigger discomfort associated with the “uncanny valley” effect. This suggests that AI's role in communication is not merely functional but also symbolic and emotional.

Despite the growing presence of AI in communicative roles, systematic efforts to map its impact on communication theory remain limited. Existing literature reviews often focus on technical or applied domains such as AI in education, healthcare, or journalism without explicitly addressing the theoretical underpinnings of communication itself^[12]. Therefore, a comprehensive synthesis is necessary to trace how AI is challenging and extending existing communication paradigms.

This article aims to fill this gap by conducting a systematic literature review of peer-reviewed scholarship on AI's role in communication studies. Specifically, it investigates how AI is conceptualized as a communicator, how it challenges established theories, and what new conceptual frameworks are emerging to understand its role. The review

draws on Robert T. Craig's seven communication traditions to organize and evaluate the literature, thus ensuring both breadth and depth in theoretical engagement^[13].

2. Literature Review

While artificial intelligence (AI) continues to transform various fields, its impact on communication theory presents both challenges and opportunities. Several strands of research across interpersonal, organizational, and mediated communication demonstrate AI's dual role as both a message processor and an autonomous communicator. However, despite its pervasiveness, communication theory has yet to develop a unified framework for understanding AI's place within its epistemological boundaries. This section synthesizes current literature in relation to traditional paradigms and recent theoretical innovations.

The rise of AI-based social robots and digital companions has initiated critical debates in interpersonal communication. Research demonstrates that AI can elicit empathetic responses and support emotional disclosure in therapeutic contexts^[14,15]. For example, Bickmore and Picard found that relational agents designed for health counseling increased user trust and adherence. Similarly, Fitzpatrick developed Woebot, an AI chatbot providing mental health support, which showed outcomes comparable to traditional therapy among young adults^[16].

These findings problematize the assumption that relational communication necessitates a human partner. Nass and Moon proposed the Media Equation theory, which argues that people treat computers socially due to cognitive heuristics^[17]. This theory has gained traction in analyzing user-AI dynamics, but it still falls short in addressing agency and the co-construction of meaning. As AI systems become more responsive and context-aware, the boundaries between mediated interaction and genuine interpersonal connection are increasingly blurred^[18,19].

AI is also redefining communication in organizational contexts, particularly in leadership, HR, and customer engagement. In a study by Le Dinh, et al., small and medium-sized enterprises (SMEs) in Bahrain integrated AI tools into their communication systems to improve strategic outreach, enhance clarity, and maintain brand consistency^[20]. Similarly, Mikalef explored how AI-supported decision-making

influenced internal knowledge sharing and transparency within data-driven firms^[21].

These studies underscore the evolving role of communicators in the workplace. Instead of being the sole initiators of message creation and feedback loops, humans now coordinate with AI agents that automate, predict, or even shape the content of communication. This division of labor questions traditional sender-receiver models and invokes frameworks like the Cybernetic Tradition^[13], which views communication as systems of control and feedback. Yet the theory must be extended to address adaptive AI systems that learn from interactions and modulate output without predefined rules.

In journalism, the emergence of automated content generation and AI anchors raises concerns about authenticity, credibility, and audience perception. Wu, et al. investigated the uncanny valley phenomenon in AI anchors, discovering that while audiences found these figures informative, they often felt unease due to their human-like appearance^[11]. Likewise, Graefe reported that algorithmic journalism produces content indistinguishable from human writers, but audiences perceive such stories as less credible unless source transparency is ensured^[22].

From a theoretical standpoint, these findings pose a direct challenge to Media Richness Theory^[8] and Social Presence Theory^[9]. Originally developed to assess the effectiveness of different communication media, these theories categorized text, video, and face-to-face channels along a continuum of richness and immediacy. AI-driven media—especially those with affective computing capabilities—defy such categorization. For instance, a chatbot or virtual anchor may exhibit high responsiveness and personal relevance, simulating the perceived richness of human interaction^[23].

Emergent scholarship also interrogates how AI systems co-create meaning with human users. Kosela^[10] analyzed multi-agent simulations in which AI agents spontaneously developed communicative protocols and symbolic conventions. Such findings resonate with Blumer's^[24] tenets of symbolic interactionism, where meaning emerges through social interaction. If AI agents can participate in this process, albeit in a non-biological form, the paradigm of meaning-making must evolve.

The question of intentionality central to communication is hotly debated in this context. According to Floridi and Sanders^[25], artificial agents can possess "moral agency"

when they can act autonomously, adapt to feedback, and affect outcomes. Afroogh, et al.^[3] extended this to communication ethics, proposing the MATCH framework (Machine Agency, Transparency, Cues, and Heuristics) to evaluate user trust in AI interactions. These developments suggest the need for a theoretical vocabulary that accommodates machine intentionality, even if simulated.

From a critical perspective, AI communication is not neutral. As Gillespie^[26] argues, algorithms encode values and institutional biases, which shape what is communicated and how. Noble's study on algorithmic bias in search engines highlights how AI can reinforce racial and gendered stereotypes through automated results^[27]. Communication scholars must thus interrogate the power structures embedded within AI systems.

Critical theorists like Couldry and Mejias advocate for a data colonialism lens, viewing AI not as a communicator *per se*, but as a mechanism of surveillance capitalism that transforms social relations^[28]. Within Robert T. Craig's critical tradition, such views shift the focus from content to ideology, asking who controls communicative infrastructure and who benefits from automation^[13].

As these developments unfold, the foundational question of what constitutes a communicator becomes increasingly complex. Robert T. Craig's meta-theoretical framework, which outlines seven distinct traditions in communication theory rhetorical, semiotic, phenomenological, cybernetic, sociopsychological, sociocultural, and critical provides a comprehensive lens through which AI's role may be systematically analyzed. Each tradition brings a unique set of assumptions, methods, and goals, and collectively they offer a pluralistic map for navigating AI's theoretical implications^[13].

Within the phenomenological tradition, communication is framed as the experience of dialogue and mutual understanding. This tradition assumes that communication requires a meeting of consciousness and an embodied, interpretive presence. The entry of AI challenges these assumptions. While AI may not possess consciousness, its design often simulates dialogic structures and rhetorical responsiveness, giving rise to phenomenological *illusions* of co-presence. Users interacting with emotionally responsive AI agents often report feelings of being understood or accompanied, despite the absence of true experiential reciprocity^[23]. This

raises critical epistemological questions: does mutual understanding require sentience, or can simulated responsiveness suffice?

The cybernetic tradition, which views communication as a process of information flow and feedback within systems, arguably provides the most natural entry point for theorizing AI. In cybernetic terms, AI systems are not anomalies but rather extensions of communicative networks that perform regulatory and predictive functions. However, the feedback loops generated by AI are increasingly autonomous, raising questions about control and interpretability. For instance, machine-learning algorithms adapt in non-transparent ways, challenging assumptions of feedback intelligibility central to first-order cybernetic models. As second-order cybernetics asserts the importance of reflexivity, AI systems that learn from human input and reconfigure communication norms may already be operating at a quasi-reflexive level, albeit within programmed constraints^[25].

The symbolic tradition, closely aligned with symbolic interactionism, centers on how meaning is produced through shared symbols and social negotiation. As previously discussed, Kosela's research on emergent language among AI agents suggests that even in artificial environments, symbolic systems can arise spontaneously^[10]. These processes are structurally analogous to human language acquisition, though they lack the embodied, cultural, and affective grounding of human symbol systems. Nonetheless, if meaning is defined functionally as shared understanding that guides behavior, then such emergent AI protocols warrant serious theoretical engagement.

Beyond these traditions, Robert T. Craig's sociocultural perspective considers communication as the production and reproduction of shared social realities. In human societies, these realities are mediated by language, rituals, norms, and institutions. With AI agents increasingly integrated into social systems—via recommendation algorithms, predictive policing, or automated news generation—they become co-constructors of culture. The communicative norms encoded into AI systems can subtly reshape user expectations, conversational etiquette, and even ethical reasoning. This phenomenon underscores the need for communication scholars to examine how social identities and hierarchies are reproduced or challenged in AI-mediated interactions^[27,28].

The sociopsychological tradition, rooted in empirical

and experimental approaches, investigates the effects of communication on individual attitudes and behaviors. Numerous studies have already documented how AI influences interpersonal judgments, trust dynamics, and message credibility^[3,4]. However, the tradition's focus on cause and effect relationships may need to be reconceptualized to address the non-linear, adaptive nature of human AI interaction. Unlike human senders, AI systems do not possess intentions or motives in a psychological sense, yet they often generate affective and persuasive impacts that rival or surpass human counterparts.

From the rhetorical tradition, which emphasizes persuasion, argumentation, and discourse, AI's role is equally paradoxical. On one hand, AI-generated content can replicate persuasive strategies, adjust tone, and even engage in dialogic reasoning (e.g., GPT-based debaters). On the other hand, these capabilities provoke unease, as rhetorical acts without an ethical subjectivity challenge our normative assumptions about persuasion. Who bears responsibility for a persuasive message when the "speaker" is an algorithm trained on vast, opaque datasets? Rhetoric in the age of AI must grapple with disembodied authorship and algorithmic ethos.

Finally, in the critical tradition, AI is often scrutinized as a vector of power and inequality. Scholars have argued that the integration of AI into communicative infrastructure may entrench dominant ideologies and marginalize vulnerable groups^[26,27]. Here, the communicator is not just an individual or agent, but an institutional apparatus, one capable of shaping discourse through algorithmic governance. Communication is not just interaction but the reproduction of ideology. AI, as a coded system, becomes a site of struggle over meaning, agency, and access.

Taken together, Robert T. Craig's framework reveals both the richness and fragmentation of current approaches to AI in communication theory. While each tradition offers valuable insights, none singularly captures the full complexity of AI as a communicator. This fragmentation mirrors the state of the literature, which often treats AI as a context-bound phenomenon rather than as a conceptual challenge to the communicator paradigm itself.

Therefore, this study positions the disruption of the communicator paradigm as its primary focus. While Robert T. Craig's seven traditions are employed as a classificatory

map to systematically organize and interpret prior scholarship, they serve as a supporting lens rather than the central subject of analysis. Ethical and ontological implications are acknowledged as consequences of this disruption, but the theoretical contribution of this article lies foremost in reframing AI as a synthetic communicator. By narrowing the scope to this central argument, the study provides sharper conceptual insights and a more coherent contribution to contemporary communication theory.

3. Materials and Methods

This study adopts a systematic literature review (SLR) methodology to investigate how artificial intelligence (AI) is conceptualized within communication studies, particularly in its potential to disrupt the traditional communicator paradigm. The SLR was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines^[29,30], ensuring transparency, reproducibility, and methodological rigor throughout the review process. Systematic literature reviews are widely recognized in social science research for their ability to synthesize findings across diverse studies and reveal conceptual trends, methodological gaps, and theoretical trajectories^[31–33].

A comprehensive search was carried out across five major academic databases, Scopus, Web of Science, ScienceDirect, SAGE Journals, and Taylor & Francis Online, chosen for their disciplinary relevance and extensive indexing in communication, media, and information studies. The search strategy used Boolean logic with the following terms: ("artificial intelligence" OR "AI" OR "machine learning" OR "intelligent agent") AND ("communication" OR "media" OR "interpersonal communication" OR "organizational communication" OR "symbolic interaction") AND ("communicator" OR "agency" OR "relational agent"). Searches were limited to peer-reviewed journal articles and scholarly book chapters published between January 2000 and March 2025. Only English-language publications were included.

Inclusion criteria required that selected studies explicitly examine AI in a communicative role, whether conceptualized as a tool, mediator, agent, or actor. Articles had to engage with communication theory, model, or conceptual framework, and address empirical or theoretical questions about AI-human or AI-media interaction. Exclusion criteria

ruled out studies that focused exclusively on the technological or engineering aspects of AI without communicative analysis, as well as editorials, opinion essays, and non-scholarly works.

The initial search yielded 2,047 records. After removing 726 duplicates, 1,321 records remained for title and abstract screening. Based on relevance to the inclusion criteria, 324 articles were selected for full-text review. Following PRISMA protocols, 132 studies met the full eligibility requirements and were included in the final synthesis. The selection process was conducted independently by two reviewers, with disagreements resolved through discussion and consensus. The study selection process is illustrated in **Figure 1**, following the PRISMA 2020 guidelines^[29].

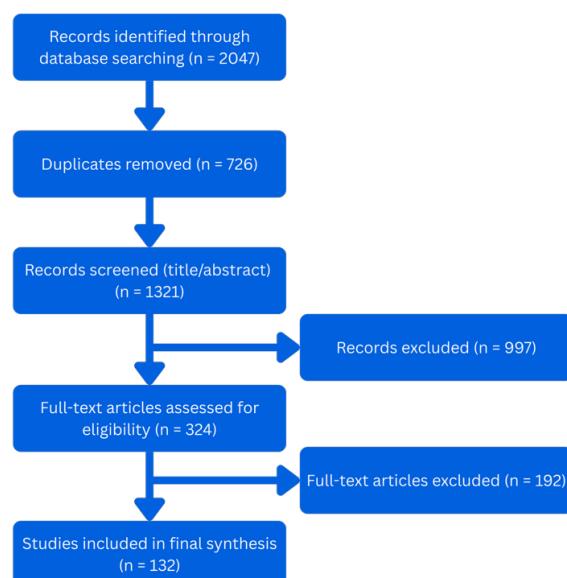


Figure 1. PRISMA 2020 flow diagram of study selection.

To ensure consistency and transparency, two independent reviewers screened titles, abstracts, and full texts according to the eligibility criteria. Inter-rater reliability for screening and coding was calculated using Cohen's Kappa, which indicated substantial agreement ($\kappa = 0.82$). Disagreements were resolved through discussion until consensus was achieved. In addition, the complete Boolean search strings used across databases are provided in **Appendix A**, enabling reproducibility of the review process.

Data extraction was guided by established SLR procedures^[32,34] using a structured coding sheet. Extracted data included publication metadata (author, year, journal), AI modality (e.g., chatbot, virtual assistant, algorithm, robot),

communication subfield (e.g., interpersonal, media, organizational), theoretical framework applied, and key conceptual findings. The data were synthesized using a thematic analysis approach^[35], which facilitates the identification of patterns across varied theoretical and methodological contributions.

To ensure the credibility and reliability of the synthesis, each article was appraised using critical assessment tools. We employed criteria from the Critical Appraisal Skills Programme (CASP) and the Joanna Briggs Institute checklist for qualitative and theoretical studies^[36,37]. Studies were evaluated on the basis of methodological rigor, theoretical coherence, and relevance to the central research questions. Only studies rated medium to high in quality were retained for final analysis.

A central aim of this review is to examine how AI challenges the foundational assumptions of communication theory, particularly the notion of a human communicator. To structure this analysis, we employed Robert T. Craig's framework of seven communication traditions: rhetorical, semiotic, phenomenological, cybernetic, sociopsychological, sociocultural, and critical as an interpretive lens. This mapping enabled a systematic evaluation of how different theoretical traditions address AI's communicative agency, relational capacity, and symbolic roles^[13].

In sum, this review integrates systematic search procedures, rigorous appraisal criteria, and theory-driven analysis to produce a comprehensive synthesis of AI scholarship in communication. The methodological design reflects best practices in communication research^[38,39] and aims to advance scholarly understanding of AI not only as a technical advancement but as a conceptual force reshaping the field.

4. Results

The systematic literature review of 132 studies identified five dominant themes that capture the evolving conceptualizations of artificial intelligence (AI) as a communicator within communication theory: (1) shifting agency from human to hybrid systems, (2) AI as symbolic interlocutor, (3) affective presence and social simulation, (4) algorithmic mediation and communicative bias, and (5) fragmentation and reinterpretation across communication traditions. These themes are summarized in **Table 1**, each mapped against Robert T. Craig's communication traditions and supported

with exemplar references to illustrate how AI disrupts and reconfigures the communicator paradigm. This structured sum-

mary enhances clarity and provides a consolidated overview of the literature base.

Table 1. Thematic synthesis of included studies (n = 132).

Theme	Number of Studies	Robert T. Craig's Tradition(s)	Exemplar References
Agentic Presence (shifting communicative agency)	28	Cybernetic, Sociopsychological	[3,5,16,23,25]
Symbolic Interlocution (AI as symbolic actor)	19	Semiotic, Symbolic Interactionism	[10,11,17,24]
Affective Simulation (presence and social-emotional cues)	21	Phenomenological, Sociopsychological	[5,14,15,23]
Algorithmic Mediation (bias and filtering)	26	Critical, Sociocultural	[19,26–28]
Fragmentation and Reinterpretation across Traditions	38	Cross-traditional (all seven)	[6,7,12,13,40]

As summarized in **Table 1**, the thematic synthesis highlights five distinct yet interconnected patterns across the literature. These themes provide a structured foundation for the subsequent analysis, where each theme is examined in greater depth to illustrate how AI disrupts and reconfigures the communicator paradigm within different theoretical traditions.

4.1. Shifting Communicative Agency

One of the most pervasive insights emerging from the literature is the reconceptualization of agency in communication. Traditionally, communicative agency is rooted in human intentionality and consciousness^[13,41]. However, AI systems are increasingly discussed not as passive media but as actors capable of initiating, maintaining, and adapting communicative interaction^[23].

Multiple studies documented how chatbots (e.g., Woebot), virtual assistants (e.g., Alexa), and AI-based recommendation systems are granted roles that traditionally presuppose communicative intentionality. Fitzpatrick found that users treated the mental health chatbot Woebot as an emotionally responsive partner, despite knowing it was not human^[16]. Similarly, Bickmore and Picard reported that relational agents could maintain long-term interaction with users, often outperforming human clinicians in perceived consistency^[5].

These findings complicate the symbolic boundary between machine and human agency. Following Floridi and Sanders^[25], several scholars argue that autonomous adaptation and contextual responsiveness are sufficient conditions for attributing limited moral or communicative agency to AI^[3]. The shift here is not merely functional but epistemological—where the locus of communication is no

longer inherently human.

4.1.1. AI as Symbolic Interlocutor

Another central theme in the literature is the emergence of AI as a symbolic actor, particularly within symbolic interactionist and semiotic traditions^[13,24]. AI agents are now being understood not simply as conduits of human-designed content, but as entities capable of generating new meanings within social contexts. Kosela documents how AI agents in multi-agent environments develop emergent languages and protocols, paralleling aspects of symbolic meaning-making in human systems^[10].

This phenomenon has direct implications for semiotic and interactionist models of communication, where shared symbols, rather than mere data, constitute the core of interaction. Scholars such as Nass and Moon suggest that humans respond socially to machines due to hardwired cognitive heuristics^[17]. However, newer research^[4,18] demonstrates that AI agents can enter the feedback loops of human interpretation, thereby co-producing social meaning.

Notably, this symbolic capacity is not limited to verbal communication. Wu, et al. show that AI news anchors, while clearly synthetic, are judged by audiences based on their style, emotional tone, and perceived ethos—indicators of symbolic credibility^[11]. These dynamics suggest that AI systems are being inserted into symbolic economies previously exclusive to humans, compelling scholars to revisit foundational theories such as McLuhan's medium-as-message thesis and Goffman's dramaturgical approach.

4.1.2. Affective Presence and Social Simulation

A third prominent pattern relates to affective presence and the simulation of social-emotional experience. Drawing from the phenomenological tradition^[13], multiple studies

interrogate how AI agents elicit feelings of presence, empathy, and connection, often through simulated affective cues rather than genuine emotional understanding^[5,15]. The field of affective computing has shown how emotional recognition and expression in AI can enhance relational depth, especially in therapeutic and caregiving contexts^[5].

Gong and Nass found that people interacting with anthropomorphic AI interfaces were more likely to perceive the system as trustworthy and relationally competent^[14]. Guzman and Lewis describe this effect as a “suspension of disbelief,” where users navigate an emotional simulation as though it were authentic^[23]. In this light, AI systems challenge traditional notions of empathy and presence, which were once presumed to require human consciousness and embodied co-presence.

From a communication ethics standpoint, this simulated affectivity raises important normative questions. Is a relational exchange ethical if one party is incapable of genuine emotional states? Afroogh, et al.’s MATCH framework suggests that user trust hinges on perceived cues of transparency and communicative competence, regardless of ontological status^[3]. These studies imply that presence, like meaning, may be negotiated rather than ontologically fixed, a view resonant with post-structuralist approaches in communication theory.

4.1.3. Algorithmic Mediation and Communicative Bias

In line with the critical tradition^[13], a growing body of literature addresses how AI systems not only participate in communication but also mediate it through algorithmic filtering, ranking, and generation. Gillespie^[26] and Noble^[27] emphasize that algorithms, far from being neutral, encode institutional and cultural biases that shape public discourse and reinforce inequalities.

Studies in automated journalism^[11,22] show that AI systems select and frame news content based on opaque criteria, often prioritizing engagement metrics over journalistic integrity. This has led scholars to argue that AI communicators must be theorized not only as symbolic agents but also as ideological instruments.

Moreover, algorithmic communication introduces a form of asymmetric interaction where one party (the AI system) has access to vast datasets and optimization routines, while the other (the human user) is unaware of how commu-

native content is tailored. This asymmetry disrupts traditional models of dialogic communication and raises concerns about consent, manipulation, and epistemic justice^[28].

Luger and Sellen^[19] highlight this tension in user experience studies, where participants expressed frustration at AI agents that mimicked social behavior but failed to explain their logic. Such interactions can undermine trust and erode the dialogic quality of communication, despite appearances of interactivity.

4.2. Communication Domains and the Expanding Reach of AI

The conceptual role of AI as a communicator varies significantly across communication subfields. The literature reveals that AI disrupts each domain of interpersonal, organizational, and mediated communication in distinct yet intersecting ways, often prompting redefinition of key communicative functions.

4.2.1. Interpersonal Communication

In interpersonal contexts, the presence of AI-driven systems such as social robots, chatbots, and virtual companions has led to new forms of synthetic interaction. Numerous empirical studies have shown that individuals form affective bonds and relational schemas with AI interlocutors^[15,16,42]. These interactions simulate mutual presence and dialogic engagement, particularly among vulnerable populations such as the elderly, adolescents, and patients with mental health needs^[14,18].

However, while users may report satisfaction and perceived empathy, scholars such as Guzman and Lewis^[23] caution that this form of interaction lacks the depth and reciprocity fundamental to human relationships. AI interlocutors operate through probabilistic pattern recognition rather than conscious empathy, prompting concerns over affective deception and ethical authenticity. This tension challenges theories of interpersonal communication that hinge on shared subjectivity, such as Social Penetration Theory and Dialogic Theory.

4.2.2. Organizational Communication

In organizational settings, AI technologies are transforming internal and external communication functions. Chatbots now handle routine employee queries, virtual assistants schedule and prioritize team tasks, and predictive

systems aid in strategic messaging^[20,21]. These roles, once held by communication professionals, are now partially or fully automated, leading to what scholars call *hybrid communicative agency*.

Robert T. Craig's cybernetic tradition offers an initial lens, viewing organizations as feedback systems in which AI can optimize communicative efficiency^[13]. However, newer studies argue for an extension of this tradition to account for adaptive feedback loops powered by unsupervised machine learning^[3,34]. In particular, when AI systems autonomously curate messages based on employee sentiment data or customer segmentation, they not only respond to but shape organizational communication climates.

Scholars such as Snyder^[33] and Tranfield^[32] suggest that such automation introduces a layer of communicative opacity. Employees may no longer know whether feedback originated from a supervisor or an algorithmic agent, complicating assumptions about power, accountability, and relational norms in workplace communication.

4.2.3. Mediated Communication

The most visible manifestation of AI's communicative role lies in mediated communication. From algorithmic news curation^[22] to AI-generated content^[11], AI challenges traditional gatekeeping models in journalism and public discourse. The field's reliance on AI for content production, audience analytics, and predictive distribution has led scholars to re-evaluate concepts such as agenda setting, framing, and media effects.

In particular, Kosela^[10], Alzubi, and Algouzi^[4] argue that AI not only disseminates content but also co-produces meaning by shaping user exposure and response pathways. This aligns with McLuhan's insight that "the medium is the message," yet takes it further by treating the medium as a responsive interlocutor. Communication no longer flows linearly from journalist to public, but is continuously recalibrated through algorithmic logics.

These dynamics also engage with the sociocultural tradition, which sees communication as the reproduction of shared meaning systems^[13]. In an environment where AI filters, amplifies, and edits messages, the very nature of shared meaning is subject to algorithmic influence. The meaning-making process becomes opaque, raising epistemological and democratic concerns^[27,28].

4.3. Mapping AI across Communication Traditions

Robert T. Craig's seven traditions are employed in this article not as the primary theoretical foundation but as a classificatory map to systematically organize the literature^[13]. Each tradition provides insights into different aspects of communication, yet our synthesis consistently centers on how AI disrupts and reconfigures the communicator paradigm. Thus, while the traditions guide the structure of analysis, the theoretical contribution of this review lies in reframing AI as a synthetic communicator.

Within Robert T. Craig's framework, each communication tradition offers a distinct lens for understanding the disruptive role of AI as a communicator. In the rhetorical tradition, studies of AI-generated persuasive content, for example, in advertising, political communication through bots, or automated health messaging, have examined the ethos and credibility of machines as rhetorical agents^[3]. These works highlight the persuasive capacity of algorithmically generated discourse while also raising ethical concerns about the delegation of persuasive authority to non-sentient systems. Rhetorical perspectives emphasize the effectiveness of AI in shaping opinions, yet the broader implication is the reconfiguration of the communicator beyond intentional human actors. In the semiotic tradition, scholars have examined the development of emergent symbolic codes within AI-agent networks^[10]. This phenomenon reflects a machine-centric evolution of signification and requires a reconsideration of models that once assumed symbol use to be exclusively human. Semiotic disruptions reinforce the argument that AI systems participate in processes of symbolic meaning-making, thereby reshaping the communicator paradigm.

The phenomenological tradition contributes another dimension by addressing issues of empathy, presence, and dialogic authenticity. Research has shown that the simulation of empathy and presence by AI interlocutors^[15] disrupts the assumption that communication necessarily involves shared subjective experience. Although phenomenological perspectives have historically emphasized co-presence and mutual understanding, the ability of AI to generate convincing impressions of empathy invites a posthuman reinterpretation of what counts as authentic dialogue. The cybernetic tradition also provides an important perspective, as AI functions as an autonomous feedback actor within communication sys-

tems. Earlier cybernetic models viewed communication as information flow and systemic regulation, but AI introduces complexity, self-learning capacity, and opaque black-box processes^[13,33]. These developments suggest that systemic adaptation now occurs beyond human interpretability and reinforce the conclusion that communicative agency is no longer exclusively human.

In the sociopsychological tradition, AI becomes an object of inquiry through its measurable effects on human attitudes, trust, and compliance. Empirical studies demonstrate that messages produced by AI agents can alter judgments, influence credibility, and shape relational outcomes^[4,14]. This evidence indicates that communicative impact may occur even in the absence of intentional motives, challenging conventional assumptions about persuasion and agency. The sociocultural tradition provides another important perspective by showing how AI co-shapes norms, visibility, and legitimacy within digital environments^[26,27]. AI systems act as co-constructors of cultural meaning, influencing how social realities are produced, reproduced, and contested. Their communicative role extends into symbolic power, subtly altering the shared norms and identities that underpin collective life.

Finally, the critical tradition has been the most activated in recent scholarship because it scrutinizes the ideological and systemic implications of AI-mediated communication. Scholars in this tradition examine how surveillance, data

colonialism, and algorithmic bias^[27,28], frame AI as an instrument of structural power rather than a neutral actor. By embedding communicative processes in infrastructures of control and inequality, AI is understood as a site where discourses are shaped and social asymmetries reinforced. Taken together, these traditions demonstrate both the richness and fragmentation of scholarly responses to AI. Each provides valuable insights into rhetorical, semiotic, phenomenological, cybernetic, sociopsychological, sociocultural, and critical approaches. Across all of these perspectives, a consistent theme emerges that AI disrupts the traditional communicator paradigm by introducing synthetic agency, symbolic production, and ideological influence into the very fabric of communication.

This mapping exercise reveals not only the richness of AI's communicative capacities, but also the gaps in theoretical coverage. For instance, while cybernetic and critical traditions are well represented, semiotic and rhetorical perspectives remain underexplored in empirical contexts. This suggests both a disciplinary bias and an opportunity for theoretical expansion.

To improve clarity and reduce repetition, we provide an executive summary table that consolidates findings across Robert T. Craig's traditions (**Table 2**). The table highlights core claims, unresolved tensions, and exemplar references for each tradition, offering readers a concise overview that complements the detailed narrative in the preceding section.

Table 2. Executive summary of AI as a communicator across Robert T. Craig's traditions.

Tradition	Core Claims about AI	Theoretical Tensions	Exemplar References
Rhetorical	AI generates persuasive messages, replicates rhetorical strategies, and simulates ethos.	Raises questions of authorship and accountability in persuasion without human intentionality.	[3,11,22]
Semiotic	AI develops emergent symbolic codes and participates in meaning-making.	Challenges the assumption that symbol systems are exclusively human.	[10,17,24]
Phenomenological	AI simulates empathy and presence, creating experiences of co-presence.	Lacks true consciousness, prompting debates on authenticity of mutual understanding.	[5,15,23]
Cybernetic	AI operates as autonomous feedback actor within communication systems.	Adaptation occurs in opaque, black-box ways that complicate interpretability.	[13,25,33]
Sociopsychological	AI influences attitudes, trust, and compliance in measurable ways.	Effects occur without human-like motives or intentions, requiring reconceptualization of agency.	[3,4,14]
Sociocultural	AI co-shapes social norms, discourse, and legitimacy in digital culture.	Algorithmic mediation may reproduce or distort shared meaning systems.	[26–28]
Critical	AI embodies power, ideology, and data colonialism in communicative infrastructures.	Risk of reinforcing inequality and bias through algorithmic governance.	[26–28]

The executive summary table provides a concise consolidation of how each tradition has engaged with AI as a communicator. While this overview highlights core claims and theoretical tensions, it also underscores the fragmentation across traditions. These patterns set the stage for the following subsection, which examines the cross-traditional fractures and opportunities for theoretical integration.

4.4. Cross-Traditional Synthesis and Theoretical Fractures

Synthesizing findings across Robert T. Craig's seven communication traditions reveals that AI's emergence as a communicator is not merely an applied phenomenon but a disruptive epistemological force. The review indicates that while some traditions (e.g., cybernetic, critical, sociopsychological) have readily incorporated AI into existing models, others (e.g., phenomenological, rhetorical, semiotic) face more significant conceptual tensions.

This asymmetry suggests a theoretical fracture between traditions grounded in observable behavioral patterns and those rooted in subjective, interpretive, or symbolic constructs. For instance, AI agents' ability to simulate affect and interpersonal cues can be neatly captured by behavioral approaches (e.g., attitude change or compliance), yet these agents struggle to meet the experiential or phenomenological expectations of mutual understanding and presence^[15,23]. The result is a bifurcation of analysis: one axis tracks effects of AI on users, while the other probes AI's ontological legitimacy as a communicator.

Additionally, the critical tradition emphasizes power asymmetries embedded in algorithmic communication infrastructures. These insights, while powerful, are often siloed from empirical human-machine communication studies that focus on trust, satisfaction, or credibility. Thus, even as AI increasingly mediates public discourse, scholarly treatments of AI in communication remain fragmented by disciplinary boundaries and theoretical commitments^[23,27,28].

One strategy to address this fragmentation is cross-traditional dialogue. For example, a rhetorical tradition might benefit from incorporating insights from cybernetics (about feedback and adaptation) to frame AI-generated persuasion not only in terms of logos or ethos, but as dynamic interactions shaped by real-time algorithmic recalibration. Likewise, semiotic scholars may reconsider meaning-making

in light of symbolic interactionism's recognition of emergent norms, now replicated among interacting AI agents^[10].

This kind of synthesis could also be operationalized methodologically through multi-paradigm research designs. For example, affective computing studies could be enriched by layering critical discourse analysis^[40] to explore how the "emotions" of machines are not only programmed but ideologically coded for compliance, gender performance, or commercial manipulation.

4.5. Implications for Communication Theory

The review reveals several key implications for communication theory that highlight the disruptive role of AI in reshaping foundational assumptions of the field. In the reframing of the communicator paradigm, traditional models such as Shannon and Weaver (1949) assumed that the communicator was always human, intentional, and cognitively aware. AI agents now challenge this assumption by fulfilling functional communication roles without consciousness or sentience. Scholars are therefore urged to revisit the definition of a communicator in order to accommodate synthetic agency, drawing on perspectives such as relational agency^[43], distributed cognition^[44], and machine agency^[25]. Another implication involves the reconceptualization of presence and empathy. The phenomenological assumption that communication requires mutual subjective experience is increasingly destabilized by simulated emotional presence in AI systems. This demands the development of new theoretical vocabularies, possibly inspired by posthumanism and affect theory^[45], that can account for felt experience in the absence of sentient reciprocity.

The question of symbolic authorship and accountability also becomes urgent as AI systems co-construct meaning in contexts such as news generation and content moderation. Scholars must ask who is speaking, who is responsible, and who should be credited. These questions of authorship carry significant ethical and epistemological consequences, particularly in domains such as media, education, and political communication^[11,22]. A further implication concerns communication as ideological infrastructure, since the integration of AI into communication systems amplifies longstanding critical concerns regarding control, bias, and marginalization. These issues are no longer limited to the content of messages but extend to the very infrastructure of communication itself,

including the design of recommendation algorithms, emotion recognition systems, and surveillance-based personalization tools^[26,27]. Collectively, these implications indicate that AI is not simply augmenting human communication but is redefining what communication is, how it is evaluated, and who participates in it.

Finally, this review advances the discussion toward an operational framework that conceptualizes AI as a synthetic communicator. The framework identifies four key dimensions. The first is agentic presence, defined as the capacity of AI to initiate and adapt interactions. The second is symbolic interlocution, which refers to AI's ability to co-construct meanings and symbolic codes. The third is affective simulation, which highlights AI's capacity to simulate empathy and presence. The fourth is algorithmic

mediation, which denotes the role of AI in filtering, ranking, and shaping communicative flows. Each of these dimensions suggests testable propositions for future empirical research. For instance, agentic presence may increase trust when transparency cues are provided, symbolic interlocution may alter perceptions of authorship and credibility in mediated communication, affective simulation may elicit relational outcomes comparable to those of human interlocutors in supportive contexts, and algorithmic mediation may reconfigure agenda-setting effects in public discourse. This framework not only sharpens the theoretical contribution of the study but also bridges the synthesis with language-focused inquiry, including pragmatics and discourse analysis, by offering constructs that can be operationalized and empirically examined across different contexts (see **Figure 2**).

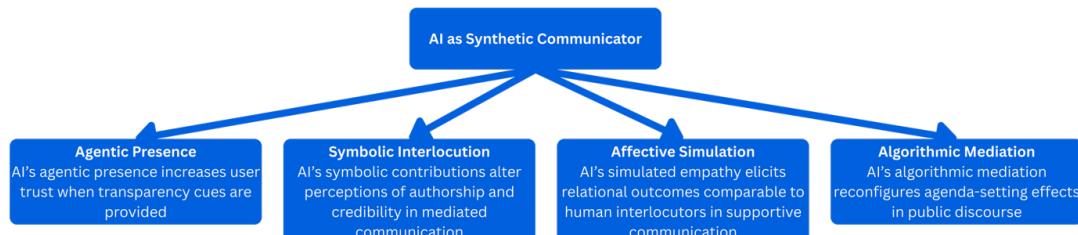


Figure 2. Operational framework of AI as synthetic communicator.

The operational framework presented above reinforces the article's theoretical contribution by moving from synthesis to a more applicable form. This addition ensures that the discussion is not only conceptual but also provides a structured foundation for subsequent inquiry. It creates a clear bridge toward identifying areas of further investigation, which are elaborated in the following subsection on future research directions.

4.6. Future Research Directions

Future studies on AI as a communicator should be strategically oriented toward areas that remain underexplored, and based on this review, four research priorities emerge as particularly urgent, namely rhetorical and semiotic empirical work, cross-cultural and multilingual contexts, crisis and high-stakes communication, and longitudinal designs. In relation to rhetorical and semiotic approaches, despite the prevalence of rhetorical and semiotic theory in communication studies, empirical applications to AI remain scarce. Fu-

ture research, therefore, needs to investigate how AI systems construct persuasive appeals and generate symbolic meaning in practice, for example, by asking how AI-generated messages in political or health campaigns employ rhetorical appeals such as ethos, pathos, and logos, and how audiences respond to them. Another important agenda is cross-cultural and multilingual communication, since most existing studies have focused heavily on Western contexts, leaving a significant gap in understanding how AI interacts with diverse cultural norms and multilingual realities. Research questions in this area may include how collectivist and individualist cultures interpret the agency and credibility of AI interlocutors, which could be examined through comparative surveys or experiments conducted across different cultural settings.

The third priority concerns crisis and high-stakes communication, as AI agents are increasingly deployed in contexts of risk and uncertainty, yet relatively few studies have addressed their communicative role under such conditions.

One useful research question here is how AI chatbots per-

form in conveying reassurance and legitimacy during public health crises, which could be investigated through experimental simulations comparing human and AI crisis communication. Finally, there is a strong need for longitudinal research, because the long-term effects of AI-mediated communication remain largely unknown. For instance, future studies could ask how adolescents who grow up interacting daily with AI companions develop relational expectations over time, which may be explored through longitudinal panel studies or developmental approaches. Taken together, this roadmap directs attention to the most pressing gaps in the literature, and by specifying these research priorities along with possible designs, it provides a practical agenda for advancing the study of AI as a communicator in ways that are both theoretically significant and empirically grounded.

4.7. Concluding Synthesis

This review mapped how artificial intelligence is transforming the conceptual terrain of communication theory. Across Robert T. Craig's seven traditions, AI emerged not just as a technological medium but as a symbolic, strategic, and institutional actor capable of producing, mediating, and reconfiguring communication. These developments challenge foundational assumptions in the field and require scholars to rethink the nature, ethics, and structure of communicative exchange.

This review emphasizes that the central contribution lies in reframing AI as a disruptive force to the communicator paradigm. Ethical and ontological implications are acknowledged as important consequences of this disruption, but the article's primary theoretical value is to sharpen the conceptualization of AI as a synthetic communicator that compels a fundamental rethinking of the discipline.

5. Conclusions

This systematic literature review aimed to synthesize the growing body of research examining artificial intelligence (AI) as an emerging communicator within the field of communication studies. By analyzing 132 peer-reviewed journal articles across Robert T. Craig's seven traditions of communication theory, this review reveals that AI is not merely reshaping the tools of communication but is challeng-

ing the very foundations of what it means to communicate, to relate, and to be present in a communicative act.

The review underscores a paradigmatic shift: AI agents from chatbots to virtual assistants and autonomous content generators are increasingly occupying roles traditionally held by humans. These agents function as sources of messages, facilitators of dialogue, and even persuasive actors. Within the cybernetic and sociopsychological traditions, AI integration appears to extend existing theoretical models; however, traditions rooted in human intentionality, such as the rhetorical and phenomenological, face significant ontological tensions when addressing non-human communicators.

Notably, the findings highlight an uneven conceptual uptake of AI across the field. While empirical studies flourish particularly in areas such as human-machine interaction, trust, and algorithmic mediation there remains a shortage of theoretical synthesis and cross-traditional dialogue. This limits the ability of communication scholarship to respond coherently to the ontological, ethical, and epistemological disruptions introduced by intelligent systems.

Four major theoretical implications were identified: the need to reframe the communicator paradigm beyond human intentionality; the redefinition of presence and empathy in light of simulated affect; the reassessment of symbolic authorship and accountability in AI-generated communication; and the recognition of communication infrastructures as ideological and power-laden when shaped by AI.

This review also exposes critical gaps in the literature, including underrepresentation of rhetorical and semiotic traditions, a lack of cross-cultural and multilingual perspectives, minimal attention to AI in crisis communication contexts, and insufficient longitudinal analyses. Moreover, ethical considerations in the design and deployment of communicative AI systems require urgent attention from communication scholars, not just technologists.

In conclusion, AI is not simply transforming communication practices; it is reconfiguring the field's central theoretical assumptions. Communication scholars must embrace interdisciplinary, theory-driven, and ethically attuned research agendas to grapple with this evolution. Only by doing so can the field ensure its relevance in understanding a communicative landscape increasingly cohabited by both humans and intelligent machines.

Author Contributions

Conceptualization, P.; methodology, P. and V.M.S.; validation, P., P.U., and R.A.A.; formal analysis, P.; investigation, P. and V.M.S.; resources, P. and R.A.A.; data curation, P.; writing—original draft preparation, P.; writing—review and editing, P., V.M.S., and P.U.; visualization, P. and R.A.A.; supervision, P.U.; project administration, P.; funding acquisition, V.M.S. P. V.M.S. P. led the overall research design, synthesis, and manuscript development. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement

Not applicable. This study did not involve human participants or animals, and therefore did not require approval from an Institutional Review Board or Ethics Committee.

Informed Consent Statement

Not applicable. This study did not involve human participants or the collection of personal data, and therefore informed consent was not required.

Data Availability Statement

The data supporting the findings of this study were derived entirely from previously published and publicly accessible sources. Specifically, the systematic literature review analyzed peer-reviewed journal articles and book chapters indexed in Scopus, Web of Science, ScienceDirect, SAGE Journals, and Taylor & Francis Online between January 2000 and March 2025. All metadata and bibliographic records used in the review are available within the cited references of this article. No new empirical datasets were generated during the current study. Additional details of the search strategy, inclusion/exclusion criteria, and coding framework

can be made available from the corresponding author upon reasonable request.

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Conflicts of Interest

The authors declare no conflict of interest.

Appendix A. Complete Boolean Search Strings Used across Databases

To ensure transparency and reproducibility, this appendix provides the full Boolean search strings used across all databases in the systematic literature review. Searches were conducted in Scopus, Web of Science, ScienceDirect, SAGE Journals, and Taylor & Francis Online, limited to peer-reviewed journal articles and book chapters published between January 2000 and March 2025, in the English language.

1. Scopus

(TITLE-ABS-KEY (“artificial intelligence” OR “AI” OR “machine learning” OR “intelligent agent”))
AND
(TITLE-ABS-KEY (“communication” OR “media” OR “interpersonal communication” OR “organizational communication” OR “symbolic interaction”))
AND
(TITLE-ABS-KEY (“communicator” OR “agency” OR “relational agent”))
AND
(LIMIT-TO(DOCTYPE, “ar”) OR LIMIT-TO(DOCTYPE, “ch”))
AND

(LIMIT-TO(LANGUAGE, "English"))
AND
(PUBYEAR > 1999 AND PUBYEAR < 2026)

2. Web of Science

TS = ((“artificial intelligence” OR “AI” OR “machine learning” OR “intelligent agent”)
AND
(“communication” OR “media” OR “interpersonal communication” OR “organizational communication” OR “symbolic interaction”)
AND
(“communicator” OR “agency” OR “relational agent”))
Refined by: Document Types = (ARTICLE OR BOOK CHAPTER)
Timespan: 2000–2025; Languages: English

3. ScienceDirect

(“artificial intelligence” OR “AI” OR “machine learning” OR “intelligent agent”)
AND
(“communication” OR “media” OR “interpersonal communication” OR “organizational communication” OR “symbolic interaction”)
AND
(“communicator” OR “agency” OR “relational agent”)
AND
(publication_year > 1999 AND publication_year < 2026)
AND
(language = “English”)

4. SAGE Journals

(“artificial intelligence” OR “AI” OR “machine learning” OR “intelligent agent”)
AND
(“communication” OR “media” OR “interpersonal communication” OR “organizational communication” OR “symbolic interaction”)
AND
(“communicator” OR “agency” OR “relational agent”)
Filters applied: Research articles; English; 2000–2025

5. Taylor & Francis Online

(ALL: (“artificial intelligence” OR “AI” OR “machine learning” OR “intelligent agent”))
AND
(ALL: (“communication” OR “media” OR “interpersonal communication” OR “organizational communication” OR “symbolic interaction”))
AND
(ALL: (“communicator” OR “agency” OR “relational agent”))
AND
(Content Type: Research Article OR Book Chapter)
AND
(Language: English)
AND
(Publication Date: 2000–2025)

6. Notes

- Searches were conducted between March 1–10, 2025.
- Duplicate records were removed prior to screening.
- All retrieved records were exported in RIS format for systematic screening using inclusion and exclusion criteria specified in the Materials and Methods section.

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