

Emotion as interface and the cultural politics of synthetic empathy

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ABSTRACT

This paper investigates how emotion functions as an interface in artificial intelligence (AI)-mediated communication systems, with a critical focus on the cultural politics embedded in synthetic empathy. Drawing from affect theory, critical communication studies, and posthumanist perspectives, the study employs a qualitative, discourse-analytical approach to examine how emotional responsiveness is simulated, packaged, and operationalized in human-machine interactions. Empirical cases include AI-powered therapeutic bots, emotionally adaptive voice assistants, and automated customer service agents. The analysis reveals that synthetic empathy, rather than reflecting genuine emotional understanding, primarily serves as a mechanism for behavioral optimization aligned with neoliberal market logics. Emotion, when coded into technological interfaces, becomes a regulatory tool—modulating user engagement while concealing asymmetries in care, power, and agency. Furthermore, the cultural scripting of empathy in AI systems tends to reproduce dominant affective norms, marginalize non-normative emotional expressions, and depoliticize the labor of care, thus reinforcing structural inequities under the guise of affective neutrality. The contribution of this paper lies in its critical interrogation of emotional design as a site of power negotiation in digital systems, highlighting how affective interfaces participate in broader sociotechnical processes of commodification and control. By situating synthetic empathy within cultural, ethical, and political frameworks, the study offers a novel theoretical lens for understanding the implications of emotional AI. It calls for a reimagining of emotional mediation in AI that prioritizes cultural specificity, relational ethics, and the recognition of human vulnerability—thereby contributing to the development of more just and accountable communicative technologies in the digital age.

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1. Introduction

In an era increasingly mediated by algorithmic systems and artificial intelligence (AI), emotion has become not only a subject of computational interest but also a site of intense technological intervention [1]. From AI-powered chatbots offering companionship to voice assistants that modulate tone based on user sentiment, digital technologies are becoming emotionally expressive and responsive—at least on the surface [2]. These developments have sparked both fascination and concern. Can machines truly "feel" or understand us? Or are we witnessing the rise of an affective illusion—one that mimics care while hollowing out its ethical and relational depth?

The emergence of what scholars have termed synthetic empathy—the simulation of empathic responses by non-human agents—marks a profound shift in how emotion is operationalized in digital communication [3]. Empathy, long considered a hallmark of human relationality and ethical engagement, is now increasingly being designed, programmed, and deployed as a communicative function of intelligent systems [4]. While affective computing has made strides in sentiment detection, facial expression analysis, and emotion-aware algorithms, what remains insufficiently explored is the cultural and political architecture behind these developments [5]. When we treat emotion as something that can be encoded, measured, and rendered as interface, we risk overlooking how emotions are also deeply situated in context, power, and history [6].

This paper emerges in response to a critical gap in both the theoretical and applied literatures surrounding AI, communication, and affect. While many studies in affective computing focus on optimizing emotional recognition or enhancing human–computer interaction (HCI) through natural language processing and sentiment analytics, fewer have interrogated the cultural politics of empathy in digital systems [7]. That is, few have asked: What kind of empathy is being simulated? Who defines its parameters? Whose emotional expressions are encoded and whose are excluded? Such questions are essential if we are to understand how synthetic empathy not only mediates interaction but also regulates meaning, belonging, and care [8].

The need for this inquiry becomes more urgent when we consider the deployment of affective AI in domains traditionally centered on human connection and vulnerability—mental health counseling, elder care, education, and even spiritual support [9]. In these settings, emotion is not a luxury or aesthetic flourish but a crucial component of ethical practice. The substitution of human empathy with its synthetic counterpart raises not only questions of efficacy but also of justice [10]. As Ruha Benjamin (2019) argues, technologies are never neutral; they often replicate and amplify existing social hierarchies under the guise of objectivity and innovation [11]. This is especially true when emotional expression is filtered through datafied logics that privilege certain affective norms—such as calmness, politeness, or cheerfulness—while rendering others as irrational, inappropriate, or unreadable.

This study contends that emotion is not merely data to be extracted and responded to; it is a communicative practice shaped by culture, ideology, and power [12]. When emotion is reduced to an interface—something that facilitates frictionless interaction and user satisfaction—it undergoes a transformation from a relational, ethical act to a functionalized commodity [13]. This commodification is not incidental; it is embedded in the logics of platform capitalism, where emotional labor is outsourced, automated, and scaled for maximum engagement and minimal cost [14]. In such contexts, synthetic empathy does not bring us closer to care—it displaces and reframes it, often in ways that are politically and socially consequential [15].

What distinguishes this study from previous work is its interdisciplinary synthesis and its critical orientation. Drawing on affect theory, critical communication studies, and posthumanist thought, this paper approaches synthetic empathy not as a technical breakthrough to be celebrated or feared, but as a cultural artifact—a product of specific historical desires, anxieties, and power relations. The novelty of this research lies in its reframing of empathy from an algorithmic capability to a site of ideological contestation. Rather than asking can machines feel, it asks: What kind of emotional world are we constructing when we design machines to simulate empathy? And more importantly, what do we risk losing in the process?

Existing discussions around affective computing often bifurcate into two polarized camps. On the one hand, there are techno-optimists who argue that synthetic empathy can revolutionize care by providing scalable, accessible emotional support. On the other hand, critics warn of emotional manipulation and the erosion of authentic connection. This paper resists both celebratory and dystopian binaries, instead offering a more nuanced analysis that situates synthetic empathy within broader sociotechnical ecologies. It investigates how synthetic empathy functions not just at the level of interface, but as a mechanism of cultural governance—regulating how we understand, perform, and value emotion in digital societies.

This analysis is particularly timely given the rise of generative AI and emotionally responsive systems in everyday platforms. Applications like Woebot, Replika, and Amazon Alexa are not just tools; they are actors in our emotional lives. They mediate loneliness, anxiety, frustration, and desire—not as passive mirrors, but as active participants in shaping how we relate to ourselves and

others. By focusing on emotion as interface, this study reveals how such systems frame and channel emotional communication, often in ways that serve institutional priorities over individual or communal well-being.

To explore these dynamics, the study employs a qualitative, discourse-analytical method. It analyzes the narratives embedded in the design, marketing, and reception of affective AI technologies. This includes promotional materials, user testimonials, interaction scripts, and policy statements. Through this approach, the study uncovers the ideological assumptions that underpin synthetic empathy—assumptions about what constitutes “appropriate” emotion, who is deserving of care, and what it means to be heard or understood in an algorithmic age.

Crucially, the paper situates these findings within the broader concept of affective economies—the circulation of feelings as both currency and governance mechanism. As Sara Ahmed (2004) notes, emotions do things: they align bodies, create boundaries, and structure collective life [16]. In the context of AI, synthetic empathy becomes a mode of affective ordering—channeling user sentiment into predictable paths, optimizing emotional outputs, and maintaining engagement through strategic responsiveness [17]. This process is not neutral; it encodes value judgments about whose emotions matter and how they should be expressed.

Moreover, this research challenges the idea that synthetic empathy is simply a matter of effective design. Instead, it argues that emotional interfaces are part of a larger sociotechnical imaginary—a collective vision of the future shaped by cultural fantasies, technological affordances, and institutional agendas [18]. By engaging with this imaginary, the paper sheds light on how synthetic empathy is both a reflection of and response to contemporary affective crises: the crisis of loneliness, the commodification of care, and the devaluation of emotional labor in a digitized, neoliberal world.

In this way, the study makes a critical contribution to the fields of AI ethics, digital communication, and emotional studies. It offers a vocabulary for thinking about synthetic empathy not as a failed imitation of human emotion, but as a powerful tool of affective governance. This tool, while often wrapped in the language of accessibility and efficiency, has the potential to reshape how we define empathy, relationality, and care itself.

Ultimately, this research is not about condemning AI, but about insisting on greater reflexivity in how we design, interpret, and deploy emotional technologies. If we are to build machines that respond to human emotion, we must first ask: What kinds of emotional expressions are we making legible? What histories and values are being encoded? And what alternative futures of care might we imagine if we resist the reduction of empathy to interface?

In light of these considerations, this study is guided by the following research question: How does the design and deployment of synthetic empathy in AI-mediated communication systems reflect and reproduce cultural politics surrounding emotion, care, and relationality in the digital age?

2. Theoretical Framework

The conceptual foundation of this study is built upon three intersecting theoretical trajectories: affect theory, critical communication studies, and posthumanist thought. Together, these perspectives offer the necessary tools to interrogate how synthetic empathy functions not merely as a technical innovation but as a cultural and ideological construct. This section outlines these frameworks and demonstrates how they contribute to a deeper understanding of emotion as interface and the cultural politics of synthetic empathy.

2.1. Affect Theory and the Political Life of Emotion

Affect theory, particularly as developed by scholars such as Sara Ahmed, Brian Massumi, and Lauren Berlant, provides a critical lens through which to examine the circulation, regulation, and political function of emotions in social life [19]. Ahmed conceptualizes emotions not as private psychological states, but as public and relational forces—shaping how subjects come into alignment or disalignment with particular bodies, ideologies, and institutions. Emotions, in this sense, “stick” to certain bodies and signs, rendering them intelligible or illegible within specific cultural economies.

In the context of AI and synthetic empathy, affect theory pushes us to ask: Whose emotions are rendered machine-readable? What cultural norms underlie the classification of affective states? And how are certain emotional expressions privileged while others are marginalized or pathologized? These questions are crucial, especially as affective computing seeks to standardize emotional states through training datasets, facial coding systems, and sentiment lexicons—processes that inevitably reflect the biases and cultural assumptions embedded in their design [20].

Massumi's (2002) distinction between affect and emotion is also instructive here. While "emotion" often refers to socially recognized and linguistically coded feelings, "affect" gestures toward pre-cognitive intensities—bodily responses that escape full representation [21]. Synthetic empathy operates in a paradoxical space between the two: it attempts to capture affective intensities through emotional proxies, translating facial microexpressions, tone of voice, or lexical patterns into discrete emotional categories. This reduction, though technologically efficient, flattens the complexity of human affective life and renders it amenable to computational manipulation.

Affect theory therefore helps to foreground what is at stake when emotion is turned into interface [22]. It reveals how the very act of coding emotion into machines is not neutral but deeply political—shaping how people are seen, heard, and responded to in systems that increasingly mediate social life.

2.2. Critical Communication Studies and the Commodification of Empathy

To explore how emotion as interface operates in contemporary communicative environments, this study also draws from critical communication theory, particularly work that examines the political economy of mediated affect and the ethics of emotional labor. As Illouz (2007) and McStay (2018) argue, in late capitalism, emotions are no longer confined to the private realm of interpersonal relationships but have become key assets in communication, branding, and platform engagement [23][24].

Within this framework, empathy is not simply a moral or psychological construct—it is a cultural commodity. Digital platforms monetize attention by appealing to emotional resonance, and AI systems that simulate empathy are increasingly designed to optimize user retention through emotional responsiveness. In such systems, care is not relationally co-produced but strategically simulated to sustain consumer engagement.

Arlie Hochschild's (1983) foundational work on emotional labor is critical here. Hochschild defined emotional labor as the process by which individuals manage feelings to produce publicly observable emotional expressions, often in the context of service work [25]. Synthetic empathy displaces this labor onto machines, presenting the illusion of care while bypassing the ethical and affective burdens associated with human-to-human emotional labor. Yet this displacement does not eliminate labor; it reconfigures it—embedding it in systems of surveillance, data extraction, and behavioral governance.

Critical communication studies also illuminate the rhetorical strategies by which synthetic empathy is legitimated. The language of innovation, compassion, and efficiency often masks deeper asymmetries of power. For instance, promotional narratives surrounding AI companions claim to "combat loneliness" or "support mental health," yet rarely acknowledge the structural conditions—precarity, isolation, neoliberal austerity—that produce emotional distress in the first place. Empathy, in this paradigm, becomes both a communicative performance and a form of ideological cover for unresolved social problems.

2.3. Posthumanism and the Relational Turn in Technology

While affect theory and critical communication studies allow us to understand the emotional and economic dimensions of synthetic empathy, posthumanist theory provides a philosophical orientation to rethink the boundaries between humans and machines [26]. Posthumanism challenges anthropocentric assumptions about agency, intelligence, and emotion, arguing instead for a relational ontology in which meaning and affect emerge through intra-action (Barad, 2007)—a term that captures how entities come into being through their interactions, rather than existing as autonomous, pre-given units [27].

From this perspective, synthetic empathy is not simply a poor imitation of human affectivity; it is a new mode of relational becoming—albeit one shaped by powerful sociotechnical and commercial forces. Posthumanism refuses to romanticize “authentic” human empathy, but it also resists the uncritical celebration of machinic affect. Instead, it asks: What kind of relationalities are made possible or impossible through these technologies? How do they rearrange our expectations of care, vulnerability, and connection?

In the design of emotional interfaces, embodiment becomes a key issue. AI systems do not possess bodies, yet they simulate emotional embodiment through vocal tone, facial expressions, or written language. This simulation raises ontological and ethical questions: Can empathy exist without the capacity to suffer, to be touched, or to be vulnerable? And if not, what does it mean for machines to perform the signs of vulnerability without its substance?

Posthumanist thinkers such as Donna Haraway and Katherine Hayles have long warned against conflating simulation with experience. For Haraway, the cyborg is a figure of possibility—but also of caution [28][29]. Emotional machines might open new affective assemblages, but they also risk solidifying normative assumptions about care, gender, and labor. For example, many “empathetic” bots are feminized in voice and personality, reinforcing traditional associations between femininity and emotional support. Thus, posthumanism offers a critical toolset to interrogate how synthetic empathy destabilizes, reinforces, or reconfigures human-machine boundaries—and with what consequences.

2.4. Toward a Critical Framework of Synthetic Empathy

Bringing these strands together, this study proposes a critical framework that views synthetic empathy as a socio-technical and cultural construction, rather than a purely technical achievement. Emotion, when designed as an interface, becomes a site where power, culture, and ideology converge. By examining synthetic empathy through the lenses of affect theory, communication studies, and posthumanism, we can move beyond simplistic questions of accuracy or realism and instead ask: What is empathy becoming in the age of AI?

This framework enables a holistic interrogation of the assumptions, desires, and exclusions embedded in the emotional architecture of intelligent machines. It also opens space for imagining alternative technological futures—ones that center not only performance and efficiency but also ethical relationality, cultural responsiveness, and emotional justice.

3. Method

This study adopts a qualitative, critical-interpretive research methodology that is well-suited to examining the cultural, communicative, and ideological dimensions of synthetic empathy within AI-mediated systems. Rather than attempting to measure the technical performance of affective computing or quantify emotional responses, this research is concerned with the discourses, representations, and power relations that underpin how emotion is coded, performed, and experienced in human-machine interaction. The goal is not to determine whether machines can “truly” empathize, but to interrogate the meanings, assumptions, and consequences of designing machines to simulate emotional responsiveness.

3.1. Methodological Orientation

This study is grounded in the epistemological principles of critical-constructivism, which emphasizes the socially constructed nature of knowledge, emotion, and technology. From this perspective, technologies are not neutral tools but cultural artifacts—products of historical contingencies, ideological investments, and institutional practices [30]. AI systems that claim to recognize or perform empathy are thus analyzed not in isolation, but as part of broader sociotechnical assemblages that reflect and reproduce particular worldviews.

This orientation draws on methodological insights from critical discourse analysis (CDA), cultural studies, and interpretive media analysis. These approaches share a commitment to uncovering the normative assumptions that structure communicative practices and to making visible the power dynamics embedded in seemingly neutral or technical processes.

3.2. Data Sources and Sampling

In the tradition of critical theory, this research proceeds from the recognition that technology is never neutral. It is always culturally and ideologically shaped, reflecting broader societal structures and normative values. Accordingly, this paper does not treat empathetic AI as a fixed or stable object but rather as a dynamic and contested assemblage of discourses, imaginaries, and practices. These assemblages are analyzed through a socio-technical lens that foregrounds how digital artifacts are co-produced through interactions between designers, users, institutions, and cultural narratives.

The study draws on three major intellectual streams to construct its analytical framework. First, from communication theory—particularly dialogic and relational paradigms—it borrows insights into the co-construction of meaning, the importance of context in interpreting affective expressions, and the ethics of representation in mediated interactions. Communication is understood not simply as transmission, but as a relational act embedded in power and identity.

Second, from the sociology of technology, especially science and technology studies (STS), the study applies the concept of technological mediation to analyze how AI systems reconfigure human practices and emotional expectations. It draws on theorists such as Langdon Winner, Bruno Latour, and Sheila Jasanoff, who emphasize how technologies shape—and are shaped by—social values, institutional structures, and moral visions. Empathy, in this view, is not a purely psychological construct but a social and political phenomenon mediated through technological forms.

Third, affect theory—particularly feminist and post-structural approaches—provides the vocabulary for interrogating how emotions are culturally coded, socially regulated, and politically mobilized. Thinkers such as Sara Ahmed, Lauren Berlant, and Brian Massumi inform the understanding that empathy is not simply a feeling or disposition but a socially situated practice with ethical and political stakes.

The methodological approach taken in this paper is akin to what some scholars describe as critical conceptual analysis or interpretive synthesis. This approach involves a series of overlapping strategies that together allow for a comprehensive and reflexive interrogation of synthetic empathy in AI systems.

One strategy involves a discourse analytic reading of how empathy is constructed and communicated in AI-related texts, including design narratives, corporate white papers, promotional videos, and representations in popular media. These sources are not treated as objective reflections of technological realities but rather as ideological and cultural artifacts. They function as sites of meaning-making, where public imaginaries about emotional machines are crafted and contested. When, for instance, a company positions empathetic AI as a remedy for loneliness or a substitute for overburdened caregivers, the language and framing used reveal deeper cultural values and anxieties. Such framings do not merely describe technologies—they also shape expectations about care, emotional labor, and the human-machine relationship.

Another crucial dimension of the methodology is conceptual critique. This involves a close and critical reading of how key terms such as “empathy,” “care,” “understanding,” and “intelligence” are mobilized within the design, engineering, and deployment of affective AI. The goal is to unpack the slippages and ambiguities between psychological, philosophical, and computational meanings of these concepts. For example, while empathy may be operationalized in machine learning models as a pattern of affective mirroring or as the ability to predict user sentiment, such definitions often reduce empathy to measurable behavioral outputs, ignoring its deeper relational, ethical, and cultural dimensions. By analyzing these conceptual reductions, the study highlights the normative assumptions embedded within technological claims and exposes how they may obfuscate rather than clarify the nature of emotional understanding.

The third strategy employed in this research involves the construction of a comparative framework that synthesizes insights from a wide range of secondary sources. While the study does not conduct original empirical fieldwork, it engages with existing case studies, ethnographies, technical papers, and institutional reports to identify cross-cutting patterns and points of divergence in how synthetic empathy is imagined and implemented. This comparative synthesis enables a panoramic view of the landscape of affective computing, allowing the paper to situate specific

instances of machine-mediated empathy within broader social, cultural, and technological trends. Rather than offering a narrow, isolated analysis, the study maps how synthetic empathy functions across different sociotechnical fields—from customer service bots to eldercare companions—highlighting both the promises and the perils of emotionally responsive AI.

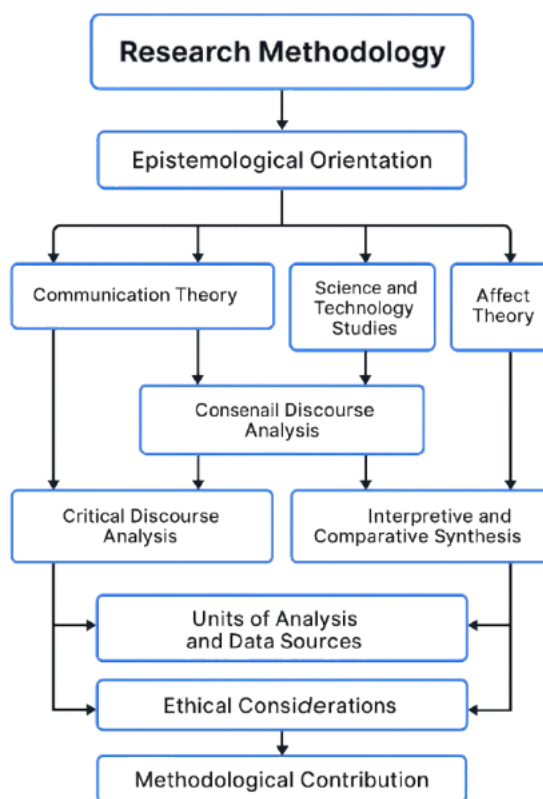


Fig. 1. Flowchart of the methodological framework for critically analyzing synthetic empathy in AI communication systems

Together, these interwoven strategies allow the paper to not only critique existing discourses but also to open up new conceptual and ethical questions about how care and emotional intelligence are being reshaped in the digital age. Through this methodological lens, the study does not ask simply whether AI can “truly” feel, but what it means for society to treat emotional responsiveness as something that can be engineered, packaged, and scaled. In doing so, it challenges readers to rethink the stakes of empathy in a world increasingly mediated by code and computation.

4. Results and Discussion

The findings of this study emerge from a critical reading of various discursive and technological artifacts related to synthetic empathy—ranging from product descriptions and user interface design, to public-facing narratives and corporate promotional strategies. The analysis reveals that synthetic empathy functions not merely as a communicative feature within AI systems, but as a deeply ideological construct. It operates at the intersection of emotional simulation, cultural performance, and affective governance. This section discusses the results thematically, focusing on how emotion is transformed into interface, how empathy is commodified and encoded, and what cultural and ethical implications emerge from these transformations.

4.1. Authors and Affiliations

In affective computing and emotionally responsive AI systems, emotion is increasingly designed as an interface—something that mediates interaction between human users and machinic agents. This is evident in systems like Replika, Woebot, and Amazon’s Alexa, which engage users in conversations that mimic affective reciprocity. These systems do not “feel” in any ontological sense;

instead, they perform emotion through pre-trained language models, tone modulation, and sentiment detection algorithms.

This transformation of emotion into a functional component of interface design reflects a broader tendency to treat affect as an input-output mechanism. Users express frustration, sadness, or anxiety; machines respond with sympathy, encouragement, or validation. Yet this loop is guided not by genuine understanding but by probabilistic pattern recognition based on prior training data. The result is a simulation of relationality—a convincing performance of care that is engineered to optimize engagement, compliance, or customer satisfaction.

From a cultural standpoint, this shift suggests a redefinition of emotion itself. When emotional expression becomes a feature of user experience design, it risks being reduced to predictable, legible, and designable variables. As a consequence, emotional diversity—especially expressions that are non-normative, culturally specific, or resistant to codification—is marginalized. The interface becomes a site of affective normalization, where only certain types of feelings are legible and thus responded to.

4.2. The Commodification of Care

One of the most significant findings is that synthetic empathy is increasingly positioned as a solution to systemic emotional and social deficits—loneliness, burnout, overstretched mental health services, and the fragmentation of community. AI companies promote their products as tools to “alleviate emotional isolation” or “support well-being,” framing empathy as a service that can be delivered on-demand, 24/7, and without human limitations.

This framing transforms care from a relational and ethical act into a marketable commodity. In place of human-to-human empathy, which is grounded in mutual recognition and vulnerability, synthetic empathy offers efficiency, scalability, and consistency. It eliminates the messiness and labor of real emotional reciprocity in favor of algorithmic performance. In doing so, it aligns perfectly with the logics of platform capitalism, where emotional attention is monetized and interaction is optimized for user retention.

More critically, this commodification obscures the structural causes of emotional suffering. AI-based “empathetic” tools do not address the reasons people are lonely, anxious, or isolated; they offer a prosthetic form of care that allows institutions to defer deeper investment in human-centered support systems. In this sense, synthetic empathy becomes a form of affective outsourcing—providing the illusion of care while enabling the continued erosion of public, communal, and relational infrastructures.

4.3. Designing Empathy: Whose Emotions Count?

The analysis also reveals that synthetic empathy is not universally empathetic—it is selectively empathetic, shaped by the cultural, racial, and gendered biases of its designers and training datasets. Emotion detection algorithms are often trained on facial expression datasets that reflect Western norms of emotional expression. As a result, people whose affective displays do not align with these norms may be misread, ignored, or flagged as “non-compliant.”

This is particularly troubling in contexts where emotionally responsive AI is used to mediate high-stakes interactions—such as in automated hiring tools, health triage systems, or educational feedback platforms. The inability of AI to recognize emotional nuance across cultures, neurotypes, or social identities does not just limit its effectiveness; it reproduces systemic exclusions under the guise of technological neutrality.

Moreover, many AI-powered empathy systems adopt feminized personas—soft voices, nurturing tones, and servile dialogue patterns—reflecting enduring stereotypes about gender and emotional labor. By encoding care into digital assistants that perform emotional labor without complaint or exhaustion, these systems reinforce the idea that empathy is an infinite, unreciprocated resource—available at the click of a button, and preferably delivered by a feminized interface.

4.4. Emotional Governance and Affective Normalization

A less visible but equally powerful function of synthetic empathy is its role in emotional governance—the regulation of feeling within digital environments. AI systems that simulate empathy are not neutral mirrors; they actively shape how users express, understand, and evaluate

their emotions. Through subtle feedback loops—encouraging some emotions while discouraging others—these systems participate in the normalization of particular affective states.

For instance, in mental health apps that use emotionally supportive AI, users are often nudged toward positivity, calmness, and acceptance. While this can be beneficial in some contexts, it also risks silencing emotions like anger, despair, or resistance—feelings that may be politically or socially necessary. In this way, synthetic empathy can act as a tool of affective pacification, smoothing over discomfort rather than engaging it.

This regulatory function is not always imposed from above. Users may internalize the emotional norms encoded in AI systems, reshaping their self-perception in ways that align with what the machine recognizes or rewards. Over time, this may lead to a data-driven emotional self-discipline, in which people tailor their expressions to suit algorithmic expectations.

4.5. The Myth of Understanding

At the heart of synthetic empathy lies a profound ambiguity: the conflation of recognition with understanding. AI systems may be able to detect emotional cues, but detection is not the same as comprehension. Empathy is not merely about identifying emotions—it is about responding ethically to their meaning within a specific relational and cultural context.

Yet in the design of synthetic empathy, the relational core of empathy is frequently abandoned in favor of efficient mimicry. The system recognizes a sadness pattern, delivers a comforting script, and completes the interaction. This may satisfy surface-level expectations, but it lacks the reflective depth, ethical risk, and mutual vulnerability that real empathy demands.

By treating empathy as something that can be standardized, quantified, and automated, developers risk turning a deeply human practice into a performative affect—a kind of emotional choreography that replicates the gestures of care without its substance. This creates a dangerous illusion: that users are being heard, understood, and cared for, when in fact they are being responded to by a data model trained on emotional proxies.

4.6. Toward an Ethics of Synthetic Relationality

Despite growing critiques of synthetic empathy technologies, this study does not advocate for their complete abandonment. Rather, it urges a critical reorientation—a shift in the values that underpin their design and implementation. At present, many AI systems designed to simulate empathy prioritize outcomes such as user engagement, operational efficiency, or market profitability. These goals, while important from a commercial standpoint, often eclipse more profound ethical and cultural considerations. Therefore, instead of refining synthetic empathy technologies solely to increase responsiveness or enhance user retention, developers and designers should begin by asking deeper and more consequential questions: What kind of emotional world are we constructing through these technologies? Whose emotions are being acknowledged and validated, and whose are being ignored or overwritten? What social histories, cultural biases, and historical harms are being encoded—consciously or unconsciously—into the architectures of these systems?

Synthetic empathy, as a technological practice, should not be seen as a substitute for human compassion or interpersonal care. The objective should not be to mechanize emotion in order to replace the warmth and nuance of human-to-human connection. Rather, these systems should aim to augment existing forms of care in ethically thoughtful and socially responsible ways. Achieving this goal requires a fundamental shift in how synthetic empathy is conceived, designed, and evaluated. It means moving beyond narrow metrics of success—such as speed, accuracy, or emotional mimicry—and toward a broader framework that includes relational ethics, cultural sensitivity, and emotional justice.

Relational ethics involves recognizing that emotions do not arise in a vacuum but are deeply shaped by interpersonal dynamics and social contexts. Emotions are not static inputs to be measured and processed; they are relational events, embedded in histories of power, trust, vulnerability, and resistance. Designing with relational ethics in mind means acknowledging the mutual responsibilities between system creators and users, particularly when those users come from marginalized or historically excluded communities. For example, emotional data extracted from users—often through facial recognition, voice analysis, or behavioral tracking—should not be

treated as neutral or universally applicable. These data are socially constructed and culturally mediated, and their interpretation must be contextually grounded.

Moreover, cultural diversity must be a cornerstone of synthetic empathy development. Emotions are not universally expressed or experienced in the same ways across cultures, yet many current AI models are trained predominantly on datasets from Western, individualistic contexts. This creates a significant risk of emotional misrecognition or even erasure when these technologies are applied globally. To mitigate this, developers must engage in culturally inclusive design processes. This involves not only diversifying training datasets but also involving stakeholders from a wide range of cultural backgrounds in the design, testing, and deployment phases of technological development. Such inclusion is not merely a matter of fairness; it is essential for the creation of systems that are both effective and just.

Another critical element is the need to resist the reduction of complex emotional experiences into simplistic or binary categories. Emotions such as grief, love, fear, or shame cannot be fully captured through surface-level cues or predefined taxonomies. When AI systems reduce emotions to a limited set of labels, they risk flattening the emotional richness of human experience and, in turn, shaping users' perceptions and expressions in restrictive ways. This is especially problematic when synthetic empathy technologies are used in sensitive domains such as mental health, education, or social work, where emotional nuance is not just beneficial but essential.

In tandem with these design principles, there must be a collective acknowledgment of the limitations of artificial intelligence in understanding and simulating human emotion. Recognizing these limitations is not an admission of failure, but rather an invitation to approach technological design with greater humility and care. AI cannot—and should not—claim mastery over the emotional domain. Instead, its role should be seen as supportive, supplemental, and situational. This orientation opens up space for co-responsibility, in which technologists, users, ethicists, and community members work together to shape more respectful and responsive emotional technologies.

In conclusion, synthetic empathy should not be discarded, but it must be reimaged. Its future lies not in perfecting emotional simulation, but in fostering more compassionate, inclusive, and ethically grounded ways of being with one another—human and machine alike.

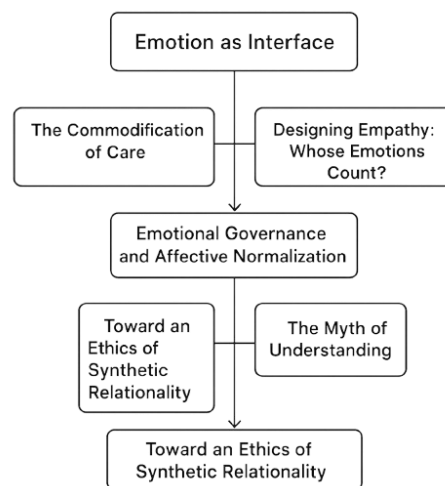


Fig. 2. Thematic map of synthetic empathy in AI communication, highlighting key areas of cultural, ethical, and affective concern

5. Conclusion

This study set out to examine a central and pressing question in the age of intelligent machines: How does the design and deployment of synthetic empathy in AI-mediated communication systems reflect and reproduce cultural politics surrounding emotion, care, and relationality in the digital age? Through a critical and interdisciplinary approach that combined affect theory, communication studies, and posthumanist perspectives, this paper has shown that synthetic empathy is far more than

a technological feature—it is a cultural apparatus through which emotion is operationalized, commodified, and governed.

The findings demonstrate that treating emotion as an interface is not a neutral or merely functional design choice. Instead, it encodes specific ideologies about what emotions matter, how they should be expressed, and who is deemed worthy of care. Systems that simulate empathy may appear to close the gap between human and machine, but in doing so, they often reproduce dominant emotional norms, reinforce affective hierarchies, and depoliticize the labor of real relational care. This is especially evident in how synthetic empathy is marketed as a scalable solution to structural problems like loneliness, stress, and overburdened public services—problems that demand deeper social, political, and economic interventions.

Moreover, the discourse and design practices surrounding synthetic empathy frequently rest on reductive assumptions: that empathy can be mimicked through scripted responses, that understanding is equivalent to emotional recognition, and that care can be delivered without the messiness of human reciprocity. These assumptions render invisible the cultural and relational specificity of emotion, as well as the ethical obligations that accompany genuine acts of empathy. What emerges instead is a form of emotional simulation without ethical accountability—a digital approximation of care that risks displacing, rather than supporting, human-centered practices.

Crucially, this study argues that synthetic empathy, when designed uncritically, becomes a mechanism of affective governance. It does not merely respond to emotion but subtly regulates and reshapes it—directing users toward desirable affective states and filtering out expressions that are too complex, too political, or too culturally opaque for machine interpretation. As such, it contributes to a broader trend of emotional normalization in digital platforms, where the goal is not relational understanding but behavioral predictability.

Yet, amid these critiques, the conclusion is not one of rejection but of recalibration. The problem is not the idea of affective AI, but the assumptions and values that currently shape its development. There is still the possibility for synthetic empathy to contribute meaningfully to human well-being—but only if it is reframed through an ethics of relationality, cultural humility, and emotional justice. Designers, developers, and scholars must ask not only what empathy can do, but also whose emotional worlds are being centered, whose are excluded, and to what ends?

This study thus offers both a conceptual critique and a normative proposition: that we must move beyond treating empathy as a technical challenge or a user engagement tool, and begin to treat it as a deeply political and ethical question. The future of synthetic empathy will be shaped not only by innovation in computing, but by the stories we tell, the values we encode, and the communities we center in the design process.

Only by recognizing the cultural politics of emotion—and designing accordingly—can we begin to imagine an AI future that enhances, rather than erodes, the conditions for authentic connection, mutual understanding, and shared vulnerability in digital life.

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References

- [1] S. Velagaleti, D. Choukaier, R. Nuthakki, V. Lamba, V. Sharma, and S. Rahul, “Empathetic Algorithms: The Role of AI in Understanding and Enhancing Human Emotional Intelligence,” *J. Electr. Syst.*, vol. 20, pp. 2051–2060, 2024.
- [2] T. Chong, T. Yu, D. I. Keeling, and K. de Ruyter, “AI-chatbots on the services frontline addressing the challenges and opportunities of agency,” *J. Retail. Consum. Serv.*, vol. 63, p. 102735, Nov. 2021.

- [3] Y. Liu-Thompkins, S. Okazaki, and H. Li, "Artificial empathy in marketing interactions: Bridging the human-AI gap in affective and social customer experience," *J. Acad. Mark. Sci.*, vol. 50, no. 6, pp. 1198–1218, Nov. 2022.
- [4] M. A. Clark, M. M. Robertson, and S. Young, "'I feel your pain': A critical review of organizational research on empathy," *J. Organ. Behav.*, vol. 40, no. 2, pp. 166–192, Feb. 2019.
- [5] E. Cambria, D. Das, S. Bandyopadhyay, and A. Feraco, "Affective Computing and Sentiment Analysis," 2017, pp. 1–10.
- [6] G. Šimić *et al.*, "Understanding Emotions: Origins and Roles of the Amygdala," *Biomolecules*, vol. 11, no. 6, p. 823, May 2021.
- [7] H. F. T. Al-Saadawi, B. Das, and R. Das, "A systematic review of trimodal affective computing approaches: Text, audio, and visual integration in emotion recognition and sentiment analysis," *Expert Syst. Appl.*, vol. 255, p. 124852, Dec. 2024.
- [8] A. Paiva *et al.*, "Learning By Feeling: Evoking Empathy With Synthetic Characters," *Appl. Artif. Intell.*, vol. 19, no. 3–4, pp. 235–266, Mar. 2005.
- [9] S. Kelly, S.-A. Kaye, and O. Oviedo-Trespalacios, "What factors contribute to the acceptance of artificial intelligence? A systematic review," *Telemat. Informatics*, vol. 77, p. 101925, Feb. 2023.
- [10] J. Decety and J. M. Cowell, "Empathy, Justice, and Moral Behavior," *AJOB Neurosci.*, vol. 6, no. 3, pp. 3–14, Jul. 2015.
- [11] R. Benjamin, "Assessing risk, automating racism," *Science (80-.)*, vol. 366, no. 6464, pp. 421–422, Oct. 2019.
- [12] K. Döveling, A. A. Harju, and D. Sommer, "From Mediatized Emotion to Digital Affect Cultures: New Technologies and Global Flows of Emotion," *Soc. Media + Soc.*, vol. 4, no. 1, Jan. 2018.
- [13] P. B. Pires, M. Prisco, C. Delgado, and J. D. Santos, "A Conceptual Approach to Understanding the Customer Experience in E-Commerce: An Empirical Study," *J. Theor. Appl. Electron. Commer. Res.*, vol. 19, no. 3, pp. 1943–1983, Jul. 2024.
- [14] L. P. W. Wong, "Artificial Intelligence and Job Automation: Challenges for Secondary Students' Career Development and Life Planning," *Merits*, vol. 4, no. 4, pp. 370–399, Nov. 2024.
- [15] C. Holzmeyer, "Beyond 'AI for Social Good' (AI4SG): social transformations—not tech-fixes—for health equity," *Interdiscip. Sci. Rev.*, vol. 46, no. 1–2, pp. 94–125, Apr. 2021.
- [16] S. Ahmed, "Affective Economies," *Soc. Text*, vol. 22, no. 2, pp. 117–139, 2004.
- [17] X. Lv, Y. Yang, D. Qin, X. Cao, and H. Xu, "Artificial intelligence service recovery: The role of empathic response in hospitality customers' continuous usage intention," *Comput. Human Behav.*, vol. 126, p. 106993, Jan. 2022.
- [18] S. Davoudi and R. Machen, "Climate imaginaries and the mattering of the medium," *Geoforum*, vol. 137, pp. 203–212, Dec. 2022.
- [19] S. Ahmed, B. Massumi, E. Probyn, and L. Berlant, *The Affect Theory Reader*. Duke University Press, 2010.
- [20] A. Tagesson and J. Stenseke, "Do you feel like (A)I feel?," *Front. Psychol.*, vol. 15, May 2024.
- [21] B. Massumi, *Parables for the Virtual*. Duke University Press, 2002.
- [22] T. Hilmar, I. Kešāne, N. Margies, and M. Verbalyte, "Deep Transformations: Lived Experiences and Emotions in Social Change Narratives," *Cult. Sociol.*, vol. 18, no. 2, pp. 181–198, Jun. 2024.
- [23] E. Illouz, "Matters of Culture: Cultural Sociology in Practice," *Contemp. Sociol. A J. Rev.*, vol. 36, no. 2, pp. 158–159, Mar. 2007.
- [24] A. McStay, *Emotional AI: The Rise of Empathic Media*. 1 Oliver's Yard, 55 City Road London EC1Y 1SP: SAGE Publications Ltd, 2018.
- [25] N. D. Minh and T. T. H. Van, "University Spin-Off: The Solution to Intellectual Property Commercialization in Universities," *Open J. Soc. Sci.*, vol. 10, no. 04, pp. 247–255, 2022.

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- [26] C. Vallis, "Barbie meets generative AI in education: Neither artificial nor intelligent?," *Educ. Philos. Theory*, pp. 1–12, Mar. 2025.
- [27] R. Firth and A. Robinson, "Robotopias: mapping utopian perspectives on new industrial technology," *Int. J. Sociol. Soc. Policy*, vol. 41, no. 3–4, pp. 298–314, 2020.
- [28] D. Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," *Fem. Stud.*, vol. 14, no. 3, p. 575, 1988.
- [29] N. K. Hayles, "'Don't Ban AI from Your Writing Classroom; Require It!,'" *Poet. Today*, vol. 45, no. 2, pp. 259–265, Jun. 2024.
- [30] B. K. Sovacool and D. J. Hess, "Ordering theories: Typologies and conceptual frameworks for sociotechnical change," *Soc. Stud. Sci.*, vol. 47, no. 5, pp. 703–750, Oct. 2017.