Silent Connection: Silence as Empathic Care in Conversational AI Design*

Melika Vafafar[1], Sian Joel-Edgar[1], Hossein Dabbagh[2], Chee Siang Ang[3] and Casper Harteveld[4]

[1]Northeastern University London, Computer Science, London, United Kingdom
[2]Northeastern University London, Philosophy, London, United Kingdom
[3]University of Kent, School of Computing, Kent and Medway Medical School, Canterbury, United Kingdom
[4]Northeastern University, College of Arts, Media and Design, Boston, Massachusetts, USA

Abstract

Empathy in conversational AI is treated as a property of system output; however, this paper argues that such a framing is limiting, particularly in affective support, where care is often shown through presence and timing rather than words alone. We reposition empathy in conversational AI as an act of care rather than a simulated capability, and focus on silence as a central design mechanism. Drawing on literature from HCI, psychology, and care ethics, we conceptualise silence not as error or breakdown, but as an ethical interactional choice that can support emotional regulation and reduce cognitive and emotional overload. This position paper contributes (1) a care-oriented reconceptualisation of empathy in conversational AI, (2) an articulation of silence as an empathic act with ethical stakes, and (3) implications for the design and evaluation of AI systems in emotionally sensitive domains.

Keywords

Empathic AI, Conversational AI, Silence,

1. Introduction

Empathy has become a central yet conceptually ambiguous construct in conversational AI design [1], particularly in mental health [2] and emotional support [3]. In therapeutic traditions, empathy is not merely a communication style; it is foundational to helping people feel understood, validated, and accepted, creating the trust and emotional safety that make disclosure and reflection possible [4, 5]. It is therefore not surprising that empathy is frequently positioned as an important mechanism for improving the effectiveness of AI-mediated affective support interventions [6].

Current state-of-the-art conversational systems increasingly attempt to perform empathy by producing context-sensitive and attuned responses [7]. In the current design, empathy is still often treated as a diffuse quality of system output indexed through tone, affirmation, and "warm-sounding" response [8]. This represents a framing for simulation and optimisation of human empathy, and it repeatedly returns the field to a familiar question from experts on: "why should technology simulate empathy at all"? This paper argues that the dominance of the "why simulate?" framing limits the use of empathy in conversational AI design. When empathy is approached primarily as a functional capability, the discussion is pulled toward authenticity debates (Is it real? Is it genuine?) and away from how care is positioned in important moments such as emotional vulnerability [9]. We do not claim that empathy must be understood only as care, nor that functional accounts are irrelevant. Rather, we argue that empathy in conversational AI must be conceptualised beyond function, including as an act of care: a situated responsibility and a way of structuring interaction to support interactional safety and respectful

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vafafar.m@northeastern.edu (M. Vafafar); sian.joel-edgar@nulondon.ac.uk (S. Joel-Edgar); hossein.dabbagh@nulondon.ac.uk (H. Dabbagh); c.s.ang@kent.ac.uk (C. S. Ang); c.harteveld@northeastern.edu (C. Harteveld)
0009-0009-3894-932X (M. Vafafar); 0000-0002-6812-8348 (S. Joel-Edgar); 0000-0001-9986-2433 (H. Dabbagh); 0000-0002-1109-9689 (C. S. Ang); 0000-0002-8164-0303 (C. Harteveld)

presence, even when the system itself does not “feel”. Under this framing, empathic behaviour becomes an institutional and ethical design commitment that must be implemented through explicit disclaimers, role-appropriate limits, and accountable decision-making about when and what to tell the user.
We investigate our discussions on a central concept of empathy: "silence". We position silence and pausing not as conversational breakdowns, but as ethical acts of care: moments that hold space rather than fill it, invite self-reflection rather than immediate response. In this position paper, we challenge the assumption that empathic systems must always speak to be supportive and verbal. This position paper bridges existing psychological literature for empathy and silence to HCI and contributes: (1) a conceptual account of empathy in conversational AI design that extends beyond functional performance to include empathy-as-care, to move beyond what empathy “really feels,” and more by whether it reliably enacts care-relevant conditions [10] ; (2) an articulation of silence as an empathic act with distinct ethical stakes[11]; and (3) implications for design, evaluation, and authority in mental health technologies.

2. Related Work

2.1. The Role of Silence in Human Life

Silence in social interactions is not simply the absence of speech but a socially and culturally situated communicative sign that can have multiple meanings and functions [12]. Across our everyday interactions, silence can signal empathy [13], agreement [14], disengagement [15], reflection, resistance [16] or solidarity. In other words, silence carries psychological and sociological significance that extends beyond individual intention, as it is embedded in broader social structures and collective histories, shaping how individuals position themselves within relationships, power dynamics, and shared experiences [17].
Affective and relational forms of silence can serve distinct social purposes, communicating emotions and relational stances that are difficult to express verbally. In situations like grief, care, uncertainty, or hope, silence allows unspoken meanings to circulate within interactions and shape intersubjective understanding between human beings [18]. Silence is closely tied to empathy [19]. Empathy is not only communicated through explicit verbal affirmations but also through interactional practices that signal attentiveness [20]. In this sense, silence can function as an empathic response by creating space for the other person to feel, think, and speak without interruption. Silence can communicate empathy by validating emotional expression without demanding immediate resolution. The empathic meaning of silence is fragile and socially situated: in some contexts, it may be interpreted as withdrawal, judgment, or indifference. Thus, silence highlights empathy as an intersubjective experience that unfolds moment by moment through shared interpretive frames [21]. Taken together, in this position paper, we investigate silence as an empathic act of care for the user. Care ethics makes this especially salient: care is not an inner feeling but a practice with responsibilities, and the “right” communicative move (speaking vs. pausing) depends on what sustains the other’s agency and safety in context [13].

2.2. Silence In Conversational AI

Silence and pauses in HCI are the pace of interaction to shape natural, understandable, and socially present feelings in interfaces. Across conversational agents, reflective or “calm” design approaches and timing work as a design material, which facilitates turn-taking [22, 23]. At the same time, prior research shows that users often interpret silence in interactive systems as a sign of error rather than as a purposeful moment [8]. This contrasts with everyday human interaction, where silence can signal thinking, listening, emphasis, or social sensitivity, which vary by context [19].

When dialogue systems treat pauses as meaningful responses (rather than errors or latency), users might report improved naturalness and comprehension because the system’s timing aligns more closely with conversational expectations. Beyond immediate interaction timing, HCI research has also framed slow pacing as a deliberate strategy for reflection and restraint. “Slow technology” [24] argues that interfaces can be designed to encourage contemplation rather than optimise only for speed and

throughput, effectively embedding longer "pauses" into interaction by reducing pressure for instant response. "Pause" has also been proposed as a design mechanism that can respond to social conditions, reduce harm, or create room for reassessment in sociotechnical systems [25]. From an interpersonal lens, these intentional silences in conversational AI design can also function as a form of empathy: by not demanding immediate attention or action, systems acknowledge users' cognitive load, emotional state, and need for breathing space, communicating care through restraint rather than constant engagement. Taken together, based on prior work, conversational AI design should treat silence as a core interaction resource: use context-aware turn-taking, add short pauses to aid understanding, support coordination through pause controls, and employ longer silences to reduce interruption and encourage reflection, while also using reflective pauses to create empathic space for users to process feelings without pressure. We extend this work by treating silence not only as interaction timing, but as normative design: a decision about when a system should withhold output to protect reflection, reduce over-direction, or avoid manufactured intimacy in vulnerable contexts.

3. Positioning Silence as Empathic Care

Within HCI, empathy has largely been framed as a functional property of system output [26]. While this framing has enabled important advances, it also narrows empathy to what systems say/show rather than how interaction is structured. As a result, empathy becomes something to simulate [26], pulling design discourse toward questions of authenticity and human-likeness rather than toward how systems can responsibly support users during emotional challenges. Reframing empathy as an act of care shifts the focus away from simulation and toward responsibility, making silence a design decision with moral standards, not merely a conversational artefact.

Under this view, empathic interaction is not defined by whether a system "feels" or convincingly imitates human emotion, but by whether it creates conditions that support emotional regulation, safety, and reflection. In HCI, this implies that empathic design is not a stylistic choice but a design commitment to protecting users from harm, overload, or premature closure during emotionally charged interactions. Silence and reflective pausing play a critical role in operationalising empathy-as-care [19, 10]. Rather than treating silence as a technical error, we argue that pauses can be intentionally designed to give users time to process affective experiences, make sense of internal states, and regain cognitive balance. Recent findings suggest that moments of reduced input can support sense-making [27] and emotional regulation [28], particularly under high emotional load such as stress. In this sense, silence functions as a protective buffer allowing our brain time to reflect rather than react [29]. By not filling every moment with speech, systems can communicate respect for users' emotional pace, thereby avoiding overload. Importantly, positioning silence as empathic care also carries ethical implications. Because silence can be experienced as either supportive or neglectful [30], its use must be context-aware, transparent, and accountable. Empathic pausing should therefore be accompanied by clear role boundaries, explicit cues about system intent, and safeguards that prevent misinterpretation in high-risk situations. In this way, silence becomes not an absence or error but a deliberate, accountable design decision. By repositioning empathy from functional output to care-oriented interactional structure, we challenge the assumption that empathic systems must always speak. Instead, we argue that knowing when not to speak and designing for that restraint are central requirements for ethical, emotionally responsible HCI.

3.1. Ethical Challenges of Silence in Empathic Conversational AI Design

Silence is ethically double-edged. In human relationships, it can *hold space* for another person, but it can also function as withdrawal, refusal, or domination. For empathic AI, this ambiguity matters because "silence" is not an inert gap in output; it is an interpreted act whose meaning depends on shared norms and on the relational [31] scaffolding that makes restraint legible as care rather than neglect. As we propose empathic design as a *practice of care* with standards, according to care ethics, caring is not exhausted by benevolent intent; it involves responsibilities such as attending to needs, taking responsibility for responses, and remaining responsive to how the care is received [32]. Under this lens,

silence can count as empathic care only when it is part of an accountable practice: it must be *oriented to the user's vulnerability*, *structured to avoid abandonment*, and *open to correction* when it is misread or unhelpful. This reframes "pause" as relational work rather than stylistic minimalism.

Phenomenology helps explain why this is hard to import into interfaces. For Merleau-Ponty [33], meaning in interaction is carried by embodied gesture, rhythm, and a shared perceptual field; silence, in this register, is not an empty interval but a mode of presence that can acknowledge the other without enclosing them in interpretation. Chatbots lack those embodied resources, which makes silence fragile: without cues, users may reasonably interpret a pause as error, indifference, or disengagement. Dialogical ethics sharpens the point. Buber's I–Thou names a relation in which the other is encountered as a subject rather than processed as an object [34]; empathy here is not a "technique" but a stance. A conversational system cannot straightforwardly instantiate I–Thou reciprocity. But this does not make empathic design impossible; it shifts the design burden from "simulating genuineness" to preventing predictable *I–It harms* in moments of vulnerability.

A further ethical tension concerns responsibility. Levinas' ethics [35] discuss an asymmetry in which responsiveness to the other is not optional but obligating; silence can be a form of responsibility only when it does not become abandonment. For HCI, this implies that silence cannot be justified solely as aesthetic "calm" or as engagement optimisation, as stated in slow technology [24]; it must be governed by safeguards (e.g., when distress markers rise, when the user asks for directive help, when risk is plausible).

This yields a practical ethical requirement: accountable silence. Silence should be designed as *legible restraint* (signalling presence without appropriating the user's experience), bounded by clear role limits, and coupled to safety pathways. Concretely, this means (i) minimal cues that mark intent (e.g., "take your time, I'm here" rather than anthropomorphic performance), (ii) user control over pace and interruption, and (iii) escalation rules when risk markers are present. Rather than claiming that the system "understands", we emphasise to structure the interactions restrainting supports regulation without producing abandonment or covert authority. In this way, silence becomes a form of care that is ethically assessable. The upshot is a design and evaluation shift: "empathic silence" should be assessed by whether it reliably supports agency, interpretability, and safety, offering user control over pacing, and switching from silence to escalation when clinical risk is indicated.

4. Conclusion

This position paper reframes silence in conversational AI not as a technical failure or system latency, but as a deliberate and ethically meaningful form of empathic care. We argue that empathy through silence in conversational AI should be understood as a design responsibility rather than a performance of human likeness. We invite the CHI community to further examine how silence and pacing can be responsibly integrated into empathic system design, and how such choices can be evaluated beyond surface measures of warmth or realism.

Declaration on Generative AI

ChatGPT 5.1 was used only to edit the authors' original writing, in line with academic ethical guidelines [36]. All intellectual contributions, decisions, and final approval remained with the human authors.

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