CARE: Culturally Aligned AI for Reflective Creativity Through Adinkra Semiotic Knowledge

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Abstract

Creativity is shaped by cultural epistemologies, symbolic systems, and traditions of sensemaking. Yet many contemporary AI-driven creativity support tools remain rooted in Western models of cognition and representation. This paper introduces CARE, the Culturally Aligned Reflection Engine, a symbolically mediated generative system that retrieves culturally grounded symbolic frames such as Adinkra symbols and proverbs to condition creative interpretation. The system supports creative reframing and culturally meaningful interaction through proverb-based interpretation, positioning AI as a partner in sensemaking rather than a source of prescriptive guidance. This work demonstrates how activating cultural heritage within interactive systems can promote culturally grounded design and expand creative possibilities. Reflections from the design and prototyping process illustrate how culturally situated metaphors can enrich ideation, deepen reflective engagement, and offer pathways for cultural continuity in computational creativity.

Introduction

Creativity is a culturally situated process shaped by metaphors, memories, rituals, and shared symbolic systems. Across African and diasporic cultural traditions, creative expression is deeply intertwined with reflection, ethical orientation, and relational understanding, rather than defined primarily by the generation of new artifacts. These practices draw on cultural knowledge sources such as proverbs, symbols, oral histories, and communal narratives that guide interpretation and inspire new ways of seeing. Yet contemporary creativity support tools, particularly those driven by large language models, rarely account for these culturally grounded forms of reflection. Instead, they often rely on Western cognitive assumptions that foreground individual ideation while obscuring emotional, spiritual, and communal dimensions of creative practice. This limitation becomes especially visible when creativity support systems fail to engage with indigenous epistemologies. Adinkra symbolism within Akan culture integrates visual semiotics, proverb-based reasoning, craft practices, and cosmological knowledge into a cohesive reflective technology. Engaging with Adinkra is both an intellectual and emotional act, supporting meaning-making through culturally resonant metaphor. Such traditions demonstrate that reflection is not merely introspective, but socially and spiritually situated, enabling personal and collective transformation.

In response, this paper introduces CARE, the **Culturally Aligned Reflection Engine**, a symbolic retrieval augmented generative system grounded in Adinkra semiotic knowledge from Akan and African diasporic traditions. CARE integrates a curated symbolic knowledge base with a lightweight symbolic retrieval–mediated generative pipeline that does not rely on document-level retrieval, using symbolic mediation as an intermediate representational layer to condition language model outputs. CARE supports creative reframing through culturally meaningful symbols, proverbs, and interpretive guidance, evoking emotional resonance and cultural grounding rather than purely cognitive ideation. By activating cultural heritage within an interactive system, CARE demonstrates how AI-mediated creativity support tools can foreground cultural meaning, support decolonized approaches to reflection, and expand creative possibilities through symbolism, narrative, and metaphor. More broadly, this work reframes reflection as a culturally situated creative practice and offers design insights for building creativity support systems that honor cultural epistemologies, emotional grounding, and relational sensemaking.

Background and Related Work

Creativity research has long emphasized that generative processes such as ideation, interpretation, and problem framing are shaped by culture, community, and embodied experience. Rather than emerging solely from individual cognition, creative practice is increasingly understood as relational, situated, and potentially mediated through shared symbolic systems and culturally grounded knowledge. As computational systems play an expanding role in creative workflows, many rely on data practices or representational norms rooted in Western epistemologies. This section situates CARE within interdisciplinary scholarship on creativity as a mechanism for transformation, culturally grounded cognition, symbolic and semiotic reasoning, digital cultural heritage, and creativity support systems in human–AI interaction.

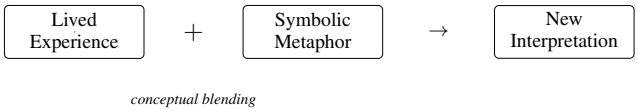

Figure 1: Reflective sensemaking as *conceptual blending* between lived experience and symbolic metaphor.

Figure 2: Adinkra symbols as material and symbolic practices in Akan cultural contexts.

Creativity as a Mechanism for Transformation

Creativity is often understood as a means through which individuals and communities reframe challenges, imagine alternative possibilities, and sustain cultural continuity during periods of uncertainty or disruption (Glăveanu 2014; Sanders and Stappers 2008). Across design research and human–AI interaction, creative practice has been examined as a relational process shaped by values, norms, and shared interpretive frameworks (DiSalvo 2012; Bardzell and Bardzell 2013). More recent interdisciplinary work emphasizes creativity as an ethically situated activity that supports collective sensemaking and long-term cultural continuity (Lindt et al. 2017; Tanenbaum and Tanenbaum 2016). CARE builds on this body of work by treating reflection itself as a culturally grounded creative practice, using symbolic mediation through Adinkra semiotics to support reframing anchored in emotional resonance and culturally specific meaning rather than decontextualized generative output.

Cultural Epistemologies and Creative Cognition

Research in cognitive science and creativity studies demonstrates that metaphor, narrative, and symbolic structures play a central role in shaping human thought and meaning-making (Lakoff and Johnson 1980; Bruner 1991). Many non-Western epistemologies further emphasize relationality, spirituality, communal ethics, and collective memory as foundational to reasoning and interpretation. African and diasporic knowledge systems, for example, embed meaning through proverbs, symbolism, and ritual practices that guide moral orientation, interpretation, and imaginative exploration (Mbiti 1990; Wiredu 1996). Despite increasing attention to culturally grounded human–AI interaction, few creativity support systems treat these epistemic traditions as primary design resources. As a result, many generative systems produce outputs that are stylistically abstracted or culturally nonspecific (Benjamin 2019). These perspectives highlight an opportunity for AI-mediated creativity support to engage reflection through culturally specific symbolic structures, rather than treating reflection as an abstract or purely cognitive task.

Symbolic and Semiotic Approaches to Creativity

Symbolic reasoning and semiotic systems have long informed creativity research, particularly in studies of metaphor, analogy, and *conceptual blending*, where meaning emerges through the integration of multiple conceptual domains (Gentner 1983; Fauconnier and Turner 2002). Semiotic theory provides a framework for understanding how meaning is constructed through culturally mediated symbols and signs, making it especially relevant for creativity support systems that prioritize interpretive depth. In computational creativity and human–AI interaction, symbolic approaches have been shown to enhance transparency, interpretability, and user understanding, particularly when combined with generative models (Davis et al. 2016; Kuttner, Tam, and Magerko 2020). However, such systems rarely engage with culturally specific symbolic repertoires as foundational interpretive resources. This body of work points to an opportunity for symbolic mediation in creativity support systems to foreground cultural resonance and interpretive openness, rather than relying on abstract or universalized symbolic manipulation.

Cultural Heritage and Digital Knowledge Systems

Research in digital cultural heritage emphasizes the preservation of Indigenous and diasporic knowledge, access to intangible cultural materials, and the design of systems that respect cultural protocols and stewardship (Smith 2012; Christen 2018). While many heritage systems focus on archival representation of oral histories, proverbs, and ritual practices, they often treat cultural knowledge as static content rather than as an active resource for interpretation. This body of work highlights an opportunity to engage cultural heritage as a living knowledge system, one that supports sensemaking, emotional grounding, and creative imaginative reframing rather than functioning solely as a repository for preservation.

Creativity Support Tools and Generative Systems

Creativity support tools span ideation platforms, sketching systems, reflective interfaces, and co-creative environments (Shneiderman 2007). These systems aim to scaffold exploration, manage ambiguity, and support sustained creative engagement. While recent advances in generative AI have expanded these capabilities, many tools lack cultural grounding, producing outputs that are novel but insufficiently situated or interpretable (Birhane et al. 2021). Prior scholarship emphasizes that effective creativity support systems support reflection, align with users' lived experiences, and provide interpretive structure rather than prescriptive output (Resnick 2005; Tanenbaum and Tanenbaum 2014). Together, this work suggests an opportunity for creativity support systems to integrate symbolic structure with generative flexibility in ways that foreground reflective engagement and culturally situated meaning.

Symbol	Proverb (Twi with English translation)	Interpretive Meaning
Eban 	*Eban no yɛ fie afɔrebɔ.* (The fence is the shrine of the home.)	Protection, safety, and the importance of boundaries
Duafe 	*Obaatan yɛ ɔdɔfo a ɔma ne mma fi.* (A mother is a loving one who keeps the home.)	Care, emotional labor, and nurturing love
Nkyinkyim 	*Nkyinkyim yɛ nkɔsoɔ.* (Life's twists are still progress.)	Growth through change and uncertainty
Ese Ne Tekrem 	*Ese ne tekrema ka, na wonka ntam.* (The teeth and tongue may quarrel, yet they remain together.)	Conflict, repair, and relational balance
Fawohodie 	*Fawohodie ne ɔfre wɔ yɛn ho.* (Freedom comes with responsibility.)	Autonomy paired with accountability
Aya 	*Aya te sɛ aboa a ɛwɔ bɔ.* (The fern survives despite adversity.)	Resilience, endurance, and persistence

Table 1: Illustrative Adinkra symbol–proverb pairings used in CARE

Cultural and Theoretical Framework

This section presents the cultural and theoretical foundations that inform the design of the system described in the following sections. Rather than treating creativity as a purely cognitive or generative task, the framework centers symbolic mediation as a mechanism for integrating human reflection with generative AI systems. The project originated from a technical question about how culturally grounded wisdom could be used to scope and contextualize language model outputs when working with small, structured datasets. Through this design inquiry, Adinkra semiotics emerged as a coherent symbolic system that already operationalizes proverb, metaphor, and reflective interpretation. Taken together, these perspectives frame culture not as contextual decoration but as an active interpretive structure that shapes interaction, meaning-making, and creative reflection.

Adinkra Semiotics as Symbolic Knowledge Infrastructure

Adinkra symbols constitute a structured symbolic system within Akan culture, integrating visual form, material practice, language, and cosmological reference to encode and transmit meaning. Traditionally expressed through carved stamping tools, textiles, architecture, ritual adornment, and everyday objects, Adinkra symbols function as multimodal carriers of ethical, historical, and cosmological knowledge. Figure 2 illustrates examples of Adinkra motifs embedded in material contexts, situating symbolic meaning within lived practice rather than abstract representation (Gyekye 1995; Wiredu 1996). Within this system, symbols are not decorative artifacts but interpretive instruments. Individual symbols encode principles such as protection, resilience, interdependence, balance, and responsibility, while others reference agricultural cycles, genealogical identity, or spiritual orientation. Engagement with Adinkra symbolism is therefore both intellectual and affective, involving shared values, collective memory, and emotional resonance. As a symbolic infrastructure, Adinkra provides structured interpretive anchors that support reflection while preserving openness and multiplicity of meaning.

Metaphor and Interpretive Reframing

Metaphor plays a central role in creative cognition by enabling the mapping of meaning across conceptual domains and supporting the reinterpretation of experience through alternate perspectives. In many African and diasporic traditions, proverbs function as condensed metaphoric narratives that guide ethical reasoning and imaginative exploration. When paired with symbolic forms, proverbs provide narrative context that invites reflection rather than instruction. From a human–AI interaction perspective, metaphor offers a mechanism for interpretive reframing that avoids prescriptive guidance. Rather than producing solutions or factual answers, metaphorically grounded prompts encourage users to explore new associations and perspectives shaped by symbolic meaning. This approach supports creativity as an interpretive process, allowing generative systems to participate in reflective dialogue without replacing human judgment.

Reflection as a Creative and Well-Being-Oriented Practice

Within Akan and broader African diasporic traditions, reflection is not solely an internal cognitive activity but an emotionally grounded and socially situated practice. It often occurs through communal dialogue, storytelling, spiritual consultation, and the interpretive use of symbols and proverbs. These practices support sensemaking in moments of uncertainty, transition, and relational tension by linking present challenges to shared moral frameworks and collective memory. Reflection in this context functions as a creative act. Through symbolic interpretation, individuals can reframe questions, imagine alternate futures, and cultivate

Framework Construct	Operational Mechanism	Supported Creative Agency
Culture as interpretive structure	Symbol–proverb mediation	Culturally grounded creative framing
Metaphor as generative resource	Symbol-conditioned generation	Expansion of imaginative possibility
Semiotics as meaning anchor	Explicit symbol and proverb display	Interpretability during creative exploration
Heritage as living knowledge	Curated symbolic knowledge base	Creativity rooted in continuity and identity
Reflection as creative practice	Human-in-the-loop iteration	Creative agency and deliberation

Table 2: Operationalizing cultural and theoretical framework constructs to support creativity and well-being in CARE

resilience. Emotional resonance plays a central role in this process, grounding creative exploration in affective stability. For generative AI systems oriented toward well-being, supporting reflective interaction helps preserve user agency, slow decision-making, and encourage meaningful engagement rather than passive acceptance of generated outputs.

Symbolic Mediation in Human–AI Systems

Taken together, these perspectives position symbolic knowledge as a mediating layer between human meaning-making and generative AI. Symbols and associated proverbs function as intermediate representations that shape how user intent is interpreted and how generative outputs are framed. This form of symbolic mediation differs from document-based retrieval or factual grounding by prioritizing interpretive guidance over informational recall. Such an approach is particularly suited to culturally specific and small-scale datasets, where knowledge is structured, metaphorical, and context-dependent rather than encyclopedic. By foregrounding symbolic mediation, human–AI systems can support creativity and well-being through contextualized generation that respects cultural nuance, preserves interpretive openness, and maintains human agency. These theoretical commitments inform the system design and methods described in the next section.

System Design and Methods

This section describes the design rationale and technical methods underlying CARE, the Culturally Aligned Reflection Engine. The system was developed to explore how culturally grounded symbolic knowledge can be used to scope and contextualize generative AI outputs in settings where data is limited, structured, and metaphorical rather than encyclopedic. The CARE architecture reflects principles of AfroComputation Praxis (ACP) (Nias et al. 2025; Nias 2025), which conceptualizes cultural knowledge systems as computational substrates that inform representation, retrieval, and interpretive generation within AI systems. Rather than optimizing for retrieval accuracy or task completion, the system prioritizes interpretive alignment, reflective engagement, and cultural fidelity. These commitments shaped decisions related to knowledge representation, symbolic mediation, and generative interaction. Figure 3 provides an overview of the system architecture, illustrating how symbolic mediation structures the interaction between user input, semantic matching, and generative interpretation.

Design Rationale

The design of CARE is grounded in the premise that creativity and reflection are culturally situated processes, and that generative AI systems intended to support well-being should preserve human agency rather than replace interpretive judgment. Early design exploration began with the question of whether proverbial wisdom could function as a mediating layer for language model outputs. Through iterative design inquiry, Adinkra semiotics emerged as a coherent symbolic system that already operationalizes metaphor, moral reasoning, and reflective interpretation.

From a technical perspective, this motivated a departure from large-scale retrieval or document-centric approaches. Instead, the system was intentionally designed to work with a small, curated symbolic dataset, allowing cultural meaning to remain legible and interpretable. The resulting architecture emphasizes symbolic framing over information recall, and contextualization over factual grounding.

Symbolic Knowledge Base Construction

The symbolic knowledge base used in CARE, shown in Table 1[1] consists of curated Adinkra symbol–proverb pairings drawn from Akan and African diasporic traditions. Each entry includes a symbol identifier, an associated proverb (recorded in Twi with English translation), and an interpretive description capturing its reflective orientation. Rather than organizing entries by topic or semantic category, symbols were grouped according to reflective orientations such as grounding, care, change, relational balance, and endurance.

This organization supports interpretive openness by allowing multiple symbols to resonate with a given situation without fixing meaning or prescribing action. The knowledge base is intentionally small and structured, enabling transparency and cultural stewardship while avoiding the abstraction often introduced by large-scale datasets.

Symbolic Retrieval and Semantic Alignment

When a user submits a free-form prompt, CARE performs symbolic retrieval over a bounded cultural knowledge base consisting of Adinkra symbol–proverb pairings. Each symbolic entry is embedded in advance using a pretrained language embedding model, and user input is embedded at runtime using the same representation space. Cosine similarity is then used to identify the symbol–proverb pairing

[1]Twi orthography follows standard Akan conventions. Minor dialectal variations exist across Asante, Akuapem, and Fante forms. The spellings used here reflect widely documented standard Akan renderings; interpretive translations are provided for accessibility.

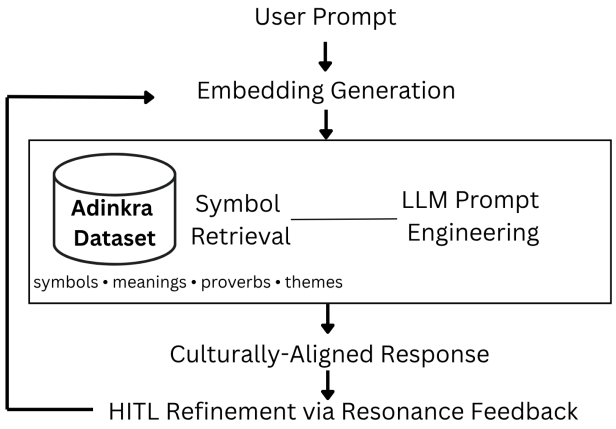

Figure 3: System architecture illustrating symbolic mediation between user input and generative interpretation.

with the highest semantic alignment to the user's input. Unlike document-based retrieval augmented generation, this retrieval step is not used to surface factual content or authoritative sources. Instead, it functions as a symbolic framing mechanism: the retrieved symbol and proverb establish an interpretive context that conditions subsequent generative output. In this way, retrieval supports creative reframing by anchoring generation in culturally meaningful metaphor rather than informational recall.

Generative Interpretation

Once a symbolic frame is selected, the system generates a reflective response that integrates the user prompt with the associated symbol and proverb. The generative component is designed to support reframing rather than instruction, presenting interpretation as an invitation rather than a solution. Prompts are structured to foreground symbolic meaning prior to generation, ensuring that outputs remain anchored in cultural metaphor. This sequencing encourages users to engage with the symbol and proverb as interpretive resources, supporting reflective dialogue rather than passive consumption of generated text.

Human-in-the-Loop Reflection

CARE incorporates human-in-the-loop interaction through optional journaling and resonance feedback. After receiving a reflective response, users may record personal reflections, assess resonance, or request alternative symbolic frames. This feedback loop supports iterative engagement and reinforces user agency by positioning the system as a reflective companion rather than an authoritative decision-maker. By integrating symbolic mediation, generative interpretation, and human feedback, the system operationalizes reflection as an active mode of interaction. These design and methodological choices inform the interaction flow and user experience described in the following section.

System Overview

This section provides an end-to-end overview of the system from the perspective of interaction, design goals, and user experience. While the previous section detailed the design rationale and technical integration, the purpose of this section is to illustrate how those design choices manifest in practice. The system is presented as a reflective creativity support tool that integrates symbolic knowledge, generative interpretation, and human feedback into a coherent interaction flow.

Design Goals

The system was guided by three primary design goals. First, it was designed to support creative reframing rather than solution-oriented output, encouraging users to engage in meaning-making and reframing rather than task completion. Second, the system prioritizes cultural grounding and interpretive transparency, ensuring that generative outputs are explicitly shaped by symbolic and proverbial context rather than appearing as ungrounded suggestions. Third, the system emphasizes user agency and emotional attunement, allowing individuals to evaluate, question, and reinterpret outputs rather than accepting them uncritically.

These goals informed decisions across data curation, symbolic mediation, prompt structure, and interaction design. In particular, the system was intentionally designed to slow interaction and foreground interpretation, aligning with broader goals of well-being-oriented human–AI engagement.

Interaction Flow

Figure 4 illustrates the system's interaction flow. Users begin by entering a free-form prompt describing a situation, question, or reflective concern. The system then selects a relevant symbolic frame from the curated knowledge base and presents the associated Adinkra symbol, proverb, and interpretive guidance. Based on this symbolic context, the system generates a reflective response designed to prompt consideration rather than prescribe action. Following generation, users are invited to engage with the output through optional journaling and resonance feedback. This feedback may take the form of qualitative resonance ratings or requests for alternative symbolic frames. The interaction loop is designed to support iterative reflection rather than single-turn completion.

User Experience and Interface

The system supports interaction through two primary interfaces: a command-line interface used for controlled testing and prompt iteration, and a web-based interface implemented in Streamlit for reflective exploration and journaling. The command-line interface enables reproducible testing and logging of prompt–response interactions, while the web interface supports more fluid, exploratory engagement.

As shown in Figure 4 the web-based interface, which presents the selected Adinkra symbol and proverb alongside the generated reflective response. Users may record personal reflections, assess resonance, or request alternate symbolic

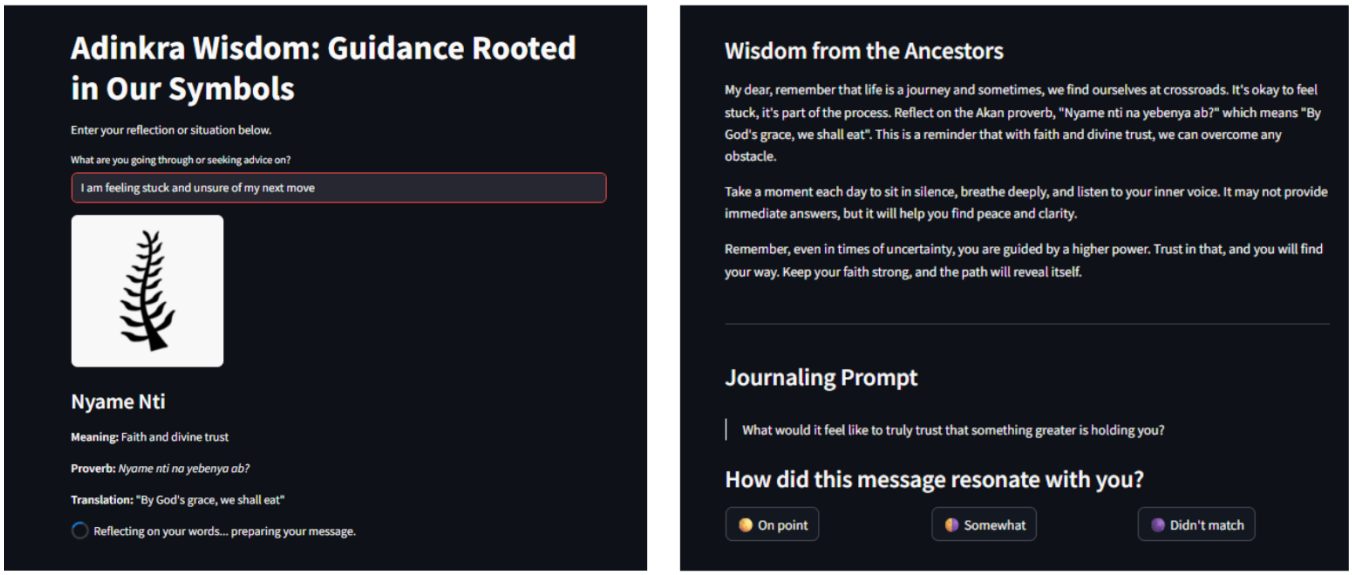

Figure 4: CARE user interface illustrating symbolic framing, generative interpretation, and human-in-the-loop reflection.

frames. The interface is intentionally minimal, foregrounding symbolic content and reflective text rather than interaction complexity.

Design Rationale for Reflective Interaction

Across both interfaces, interaction is structured to encourage deliberation rather than immediacy. Outputs are framed as interpretive prompts rather than answers, and symbolic context is presented prior to generative text to anchor interpretation. By integrating symbolic mediation, generative interpretation, and human feedback within a single interaction loop, the system operationalizes reflection as an active mode of engagement.

This system overview demonstrates how the design and technical decisions described in the previous section are instantiated in practice. The following section reports qualitative observations from system use, focusing on patterns of reflection, resonance, and interpretive alignment that emerged during interaction.

Design Observations and Implications

Rather than reporting empirical performance metrics or controlled user study results, this section presents design observations and implications that emerged through the development and iterative use of CARE. These observations reflect system behavior, design trade-offs, and interactional patterns encountered during exploratory deployment and internal testing. Together, they provide insight into how symbolically mediated generative systems may support reflective creativity and well-being under data-constrained conditions.

Observations from System Construction

One of the primary observations from building CARE was that symbolic mediation provided an effective mechanism for scoping generative output without relying on large-scale retrieval. Conditioning the language model through symbolic frames constrained responses in ways that felt coherent and thematically grounded, even when working with a small and highly curated knowledge base. This suggests that symbolic knowledge, when carefully structured, can function as a meaningful contextual layer for generation without the overhead of document indexing or retrieval pipelines.

The design process also highlighted the importance of interpretive structure over data volume. While the symbolic dataset was intentionally limited in size, organizing symbols around reflective orientations enabled the system to support a wide range of prompts through metaphorical alignment rather than topical coverage. This observation reinforces the potential of symbolic approaches for culturally specific or underrepresented knowledge domains where large corpora are unavailable or inappropriate.

Interpretive Behavior of the System

During exploratory use, CARE consistently produced outputs that emphasized reflection, reframing, and metaphorical interpretation rather than directive or solution-oriented responses. When symbolic frames aligned well with user prompts, generated interpretations often encouraged users to slow down, consider alternate perspectives, or engage emotionally with the situation described. In these cases, symbolic mediation appeared to shift the tone of interaction from problem-solving to sensemaking.

At the same time, misalignment between a selected symbol and a user's lived context occasionally surfaced ambiguity or reduced resonance. Rather than presenting this as a failure mode, these moments often prompted users to request alternative symbolic frames or to reflect more explicitly on why a particular symbol did not fit. This behavior suggests that interpretive openness, even when imperfect, can sup-

port reflective engagement by inviting dialogue rather than enforcing correctness.

Design Trade-offs and Constraints

The development of CARE revealed several design trade-offs inherent to symbolic mediation. Prioritizing interpretive openness necessarily reduced precision and predictability in generative output. While this aligns with the system's goals around creativity and reflection, it also limits applicability for task-oriented or decision-critical domains. Similarly, cultural specificity enhanced resonance for some users while constraining generalizability across contexts.

Another trade-off involved transparency versus automation. By making symbolic influence explicit through visible symbols and proverbs, the system increased interpretability and user agency. However, this transparency also slowed interaction and reduced the sense of seamless automation often associated with generative AI tools. In the context of well-being-oriented design, this slowing was treated as a feature rather than a limitation.

Implications for Creativity and Well-being Oriented AI

Taken together, these observations suggest that symbolically mediated generation offers a viable design pattern for creativity support systems that prioritize reflection, agency, and cultural grounding. Rather than optimizing for efficiency or output quality alone, CARE demonstrates how generative systems can be structured to support interpretive engagement and emotional attunement.

From a well-being perspective, symbolic mediation encourages users to remain active participants in meaning-making rather than passive recipients of generated content. By framing outputs as interpretive prompts grounded in metaphor and heritage, the system supports creative reframing without displacing human judgment. These implications point toward broader opportunities for integrating symbolic knowledge into human–AI systems that seek to enhance creativity and well-being, particularly in contexts where data is limited, culturally situated, or ethically sensitive.

Discussion and Limitations

This work positions symbolic mediation as a viable design pattern for integrating generative AI with culturally grounded reflective practices. By treating symbolic knowledge as an intermediate representational layer, CARE demonstrates how generative systems can support creativity and well-being without relying on large-scale retrieval infrastructures or optimization-oriented interaction models. In this section, we situate these contributions within broader conversations on generative AI, creativity support, and human-centered system design, and we articulate key limitations of the current approach.

Symbolic Mediation Beyond Retrieval

CARE departs from dominant retrieval-augmented generation paradigms by prioritizing interpretive framing over factual grounding. Rather than retrieving documents to constrain output, the system conditions generation through symbolic frames that shape meaning-making prior to language model invocation. This distinction is particularly important for domains where knowledge is metaphorical, ethical, or culturally situated rather than encyclopedic. The results suggest that symbolic mediation can offer a lightweight yet effective alternative for scoping generative output when working with small, curated datasets.

This approach reframes contextualization as an interpretive act rather than an information retrieval task. In doing so, it opens new possibilities for generative systems that engage with wisdom traditions, oral knowledge, and symbolic repertoires that do not lend themselves to conventional retrieval pipelines.

Creativity, Agency, and Slowed Interaction

The design of CARE intentionally resists the efficiency-driven interaction patterns common in contemporary generative systems. By foregrounding symbolic context and framing outputs as reflective prompts, the system encourages users to slow down, interpret, and engage critically with generated content. This interactional pacing aligns with creativity as an exploratory and sensemaking-oriented process rather than a means to rapid solution generation.

From a human-centered perspective, this design supports user agency by keeping interpretation explicit and negotiable. Users are invited to assess resonance, request alternative symbolic frames, and reflect through journaling, rather than accepting outputs as authoritative. This stands in contrast to systems that optimize for confidence or fluency at the expense of reflection, and it highlights a pathway for generative AI to support well-being through interpretive engagement.

Cultural Specificity and Generalization

A central strength of CARE is its cultural grounding, which also introduces important constraints. The symbolic knowledge base is intentionally specific, reflecting Akan and African diasporic semiotic traditions. While this specificity enables depth, resonance, and cultural fidelity, it limits immediate generalization to other contexts. Symbolic mediation is therefore best understood not as a universal solution, but as a transferable design pattern that must be instantiated with care, domain expertise, and cultural stewardship.

Extending this approach to other symbolic systems would require participatory curation, ethical review, and community validation. These considerations are not incidental limitations, but fundamental design requirements for culturally grounded AI systems.

Limitations

This work has several limitations. First, the system has not yet undergone formal user evaluation, and the observations reported here are based on exploratory use and internal testing. While appropriate for the scope of this symposium, future work will be necessary to assess user experience, resonance, and reflective outcomes more systematically.

Second, the symbolic knowledge base is small by design. While this supports transparency and interpretability, it also

constrains the range of symbolic frames available to users. Scaling the system will require careful attention to maintaining symbolic coherence and cultural integrity rather than simply increasing coverage.

Finally, CARE is not intended for decision-critical or time-sensitive domains. Its emphasis on interpretive openness and slowed interaction makes it unsuitable for contexts that require precise recommendations or rapid response. These limitations underscore the importance of aligning system design with intended use and values.

Conclusion

This paper introduced CARE, a symbolically mediated generative system designed to support reflective creativity and well-being through culturally grounded interpretation. By integrating Adinkra semiotics with generative language modeling, CARE demonstrates how small, structured symbolic knowledge bases can meaningfully scope and contextualize generative output without relying on document retrieval or large-scale data infrastructures. The system reframes generative AI as a participant in reflective dialogue rather than a source of answers, foregrounding metaphor, cultural meaning, and human agency.

Beyond the specific instantiation presented here, this work contributes a broader design pattern for human–AI interaction under data-constrained and culturally sensitive conditions. Symbolic mediation offers a pathway for engaging wisdom traditions, ethical frameworks, and metaphorical knowledge that resist conventional computational representation. Future work will focus on formal evaluation of reflective outcomes, participatory expansion of symbolic knowledge bases, and exploration of multi-symbol reasoning and cross-cultural instantiations. Together, these directions point toward generative systems that enhance creativity and well-being by honoring the interpretive, cultural, and relational dimensions of human experience.

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