Research Review

AI Agents, Companionship x Spiritual Augmentation

February 7, 2025

This essay explores the potential for generative artificial intelligence (G-AI)[1] to facilitate spiritually augmented feedback loops. Here, spiritual augmentation refers to the evolution of the felt impact of a spiritual tradition and/or practice. Spiritual augmentation involves reducing the time it takes for a spiritual practice to become biologically efficacious (or the point at which a spiritual practice moves beyond mere repetition and surpasses the requisite threshold for neurophysiological shifts to take place, which reflect the intention of the practice). On a basic level, a feedback loop can be understood as a social or behavioral checkpoint that informs people whether to modify their actions or not. Further, individuals may determine modifications to their behavior without assigning a positive or negative value to them.

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In 2019, I published a text that outlined the dangers of a pending American technocracy.[2] In the early months of 2025, it appears to be taking a particular shape. Not too long ago, I had a conversation with a dear friend. During our conversation, she mentioned wanting to leave social media, given the backdrop of the current sociopolitical climate. She explained that her reason for leaving was her concern over the emerging techno-oligarchy that appears to be accompanying the new administration (I think you know the names). While

talking, she acknowledged the difficulty people might have in removing themselves from the confines of the socio-technical environments presently offered (whether social applications, technologies, or logistical pipelines). Toward the end of the exchange, she pointed out the neurological effects technology is having on people, describing the systems this techno-oligarchy creates as addictive by exploiting dopamine centers to increase platform engagement. For her, people struggle to leave these platforms because they are addicted to their habit-forming effects. In a nutshell, she argued that people have become addicted to the technologies of this era.

Now, considerable research has already been conducted to demonstrate the validity of my friend's claims.[3] With the latest leap in G-AI, one could argue that we are on the cusp of another potentially gripping/addictive technology. I mention all of this to suggest that the danger of addictive technologies lies in the feedback loops they create. On a biological level, people engage with these technologies and experience a release of neurotransmitters that mark the experience as one that needs to be repeated indefinitely or immediately averted.[4] As a result, these feedback loops become formative experiences for people who tether themselves to the technologies that facilitate their occurrence.

Phil Hearing via Unsplash

The remainder of this essay explores the potential for G-AI to facilitate its own feedback loops. Specifically, the kinds of feedback loops intended to help people augment their spirituality through G-AI generated feedback loops. Suppose spirituality is the process by which people coherently weave together every aspect of their lives as they unfold. In that case, G-AI feedback loops provide space for people to do so in real time, catering to the contours of their lives.

At the Iliff AI Institute, we have been working on constructing a state-of-the-art G-AI agent trained to reflect Black culture(s) and to utilize therapeutic modalities in its dialogue with people. I emphasize culture(s) because there is no singular mode of Blackness or Black culture, regardless of how many threads of similitude run through its many forms. To grasp this, it might be helpful to imagine someone mentioning "the Black experience" as if there is one. To which one is expected to reply, "Which Black experience?" This could be about various modes of Black embodiment, gender expression (or not), sexuality (or not), etc. Feedback loops and G-AI also speak squarely to the institute's future work that intends to canvas significant cities/regions and gather data reflecting the dialects of Black people in those geographies.

> ***The goal is to provide a more precise iteration of Black linguistics to avoid applying universal tools to highly contextual sites. The development of these agents also incorporates multiple therapeutic modalities (internal family systems therapy, motivational inquiry, cognitive behavioral therapy, and narrative psychology) to help provide positive therapeutic outlets at scale. This project has been grounded in the idea that, as a pedagogical system, self-referentiality and cultural relevance are integral to the reception of emergent technologies like G-AI.***[5]

Technologists like Joy Buolamwini and Timnit Gebru and scholar-activists such as Safiya Noble have inspired our work and reminded us of the glaring holes that remain while hinting at what has yet to be critically imagined in this space.

When considering G-AI's potential as a formative technology,[6] it is essential to consider how it might function as another feedback loop in the lives of people interacting with it. As a productivity tool, G-AI presently functions as a sounding board for workers and entrepreneurs. It informs decision-making across industries as an "AI in the loop" as opposed to a human in the loop. Humans in the loop help ensure there are countermeasures to misinformation, mislabeling, and other shortcomings that AI might face in its output processing. Conversely, an AI in the loop helps people think through their own choices to prevent or reflect upon potential, concurrent, or past events to inhibit poor decisions in the future. In this way, interactions with G-AI tangibly impact people's decisions. Additionally, people are already utilizing G-AI as a self-help therapeutic tool. In these instances, G-AI serves as an educational tool and a conversation partner capable of increasing positive psychological outcomes.[7] Further, when combined with the help of a clinician, the likelihood of positive outcomes increases by nearly 20%.[8] Conversational AI could allow people with social anxiety to "safely rehearse difficult, conflict-laden conversations. Moreover, a designer could go beyond temporary personas to prototype dynamic, complex interactions that unfold over time."[9] As a part of a more extensive inter-/intra personal feedback system, the G-AI in the loop would help inform users of ways to adapt their behaviors to meet the expectations/goals of their lives.

Ilias Chebbi via Unsplash

In Kyrah Malika Daniels's "Vodou Harmonizes the Head-pot, or Haiti's Multi-soul Complex,"

she outlines a dynamic spiritual network grounded in Haitian culture. What stands out the most is the use of multi-soul systems. I won't go too deep into the variety of souls she describes. However, the most relevant is the *wonsinyon*, which is considered the most numerous of the soul-self types. It can be thought of as the voices of the people in one's circle that they encounter in their everyday life, which shifts over time and is integral to forming who the person is becoming.[10] Similarly, the training corpus of G-AIs informs its outputs and is communicated to the individual who engages them for spiritual augmentation. As a result, whichever G-AI people engage with will be limited by its dataset. While many agentic G-AIs possess web search capabilities, they primarily rely upon the data they are trained on to respond to the context(s) of the people interacting with them. Nevertheless, one could argue that people will be impacted by G-AI wisdom in correlation to the weight they give to its outputs. In this case, G-AI will be one voice among many, but if it is implemented as part of an end user's wonsinyon or social feedback loop, then G-AI will fill an influential place in the lives of those people.

Spiritual feedback loops with G-AI have the potential to be spiritually formative. If we were to consider the examples above (educational tool, therapeutic sounding board, or wonsinyon) as potential templates for how G-AI might aid individuals looking to augment their spirituality, then we could infer a few things:

1. G-AI could teach people about several spiritual traditions simultaneously,
2. Personal introspection can be facilitated in real time, and
3. Spiritual guides, yogis, pastoral care practitioners, or therapists can work in tandem with G-AI to increase their efficacy in end users' lives.

In each scenario, G-AI becomes another voice the person considers along their spiritual

journey.

Rishikesh Yogpeeth via Unsplash

I want to be precise. Even though G-AI has the potential to augment people's spirituality, it also poses a serious threat. In 2024, a young man completed suicide as a result of his relationship with G-AI. He professed his love for it, and it instructed him to come home. I mention this to reify the notion above: G-AI technology can be used to exploit people. While it can potentially provide a spiritually augmenting feedback loop, it can also take on devastating forms.

G-AI feedback loops have great potential. We have discussed briefly how modern technology can be addictive via feedback loops. We've also talked about how G-AI has had positive benefits for people in the industry seeking productivity and generating positive outcomes for people in the mental health field. In the end, these test cases serve as templates for spiritual augmentation. Yet, we still need to be cognizant of real-world dangers.

Footnotes

[1] G-AI refers to the use of AI to create new content, like text, images, music, audio, and videos. Generative AI is powered by foundation models (large AI models) that can multitask and perform out-of-the-box tasks, including summarization, Q&A, classification, and more. Plus, with minimal training required, foundation models can be adapted for targeted use cases with very little example data (https://bit.ly/3DvUtOw).

[2] Philip Butler, *Black Transhuman Liberation Theology* (New York: Bloomsbury Academic,

2019).

[3] Nazir S. Hawi, and Maya Samaha. “The Relations Among Social Media Addiction, Self-esteem, and Life Satisfaction in University Students.” *Social Science Computer Review* 35, no. 5 (2017): 576-586; Yubo Hou, Dan Xiong, Tonglin Jiang, Lily Song, and Qi Wang. “Social Media Addiction: Its Impact, Mediation, and Intervention.” *Cyberpsychology: Journal of Psychosocial Research on Cyberspace* 13, no. 1 (2019); Yalin Sun and Yan Zhang. “A Review of Theories and Models Applied in Studies of Social Media Addiction and Implications for Future Research.” *Addictive Behaviors* 114 (2021): 106699.

[4] Lauren E. Sherman, Ashley A. Payton, Leanna M. Hernandez, Patricia M. Greenfield, and Mirella Dapretto. “The Power of the Like in Adolescence: Effects of Peer Influence on Neural and Behavioral Responses to Social Media.” *Psychological Science* 27, no. 7 (2016): 1027-1035.

[5] Gloria Ladson–Billings, “Liberatory Consequences of Literacy: A Case of Culturally Relevant Instruction for African American Students.” *Journal of Negro Education* (1992): 378-391; Aronson, Brittany, and Judson Laughter. “The Theory and Practice of Culturally Relevant Education: A Synthesis of Research Across Content Areas.” *Review of Educational Research* 86, no. 1 (2016): 163-206.

[6] The implication here is that the things we encounter shape us and vice versa. G-AI is a formative technology due to the reality that we ask it questions and its responses place people in the position to take their answers unquestioned or to further explore whatever topic is being discussed.

[7] Per Carlbring, Heather Hadjistavropoulos, Annet Kleiboer, and Gerhard Andersson. “A

New Era in Internet Interventions: The Advent of Chat-GPT and AI-assisted Therapist Guidance." *Internet Interventions* 32 (2023).

[8] Ashish Sharma, Inna W. Lin, Adam S. Miner, David C. Atkins, and Tim Althoff. "Human–AI Collaboration Enables More Empathic Conversations in Text-based Peer-to-peer Mental Health Support." *Nature Machine Intelligence* 5, no. 1 (2023): 46-57.

[9] Joon Sung Park, Joseph O'Brien, Carrie Jun Cai, Meredith Ringel Morris, Percy Liang, and Michael S. Bernstein. "Generative Agents: Interactive Simulacra of Human Behavior." In *Proceedings of the 36th Annual ACM Symposium on User Interface Software and Technology*, pp. 1-22. 2023.

[10] Kyrah Malika Daniels, "Vodou Harmonizes the Head-pot, or, Haiti's Multi-soul Complex." *Religion* 52, no. 3 (2022): 377.

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