Elyra Vunaris Presents the Music of Varexia

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Responding to the AI Music Generation Challenge 2023, our team embarked on a process that yielded an overview of the music of Varexia, a tradition crafted entirely by artificial intelligence based on a constructed non-human culture. This initiative serves as a proof-of-concept for AI's role in creative domains and prompts a critical analysis of its interaction with human creativity and cultural representation. The outcome of the project is a GPT4 chatbot voicing a fictional ethnomusicologist representing a fictional culture, species, and planet, as well as a body of music from the culture as realized most-faithfully by American human composers with the best intentions to preserve authenticity—whatever that should mean in this case.

According to the lore that emerged from our efforts, Varexians are beings of energy and sound from the planet Varexia who explore other planets and make music by communing with living musical beings called Sonic Fae. A few Varexian musicologists emerged in our work, leaning heavily on the teachings of Elyra Vunaris, who obliged us with an interview. Our inquiry produced details on several (but not all) Sonic Fae, as well as Varexian compositions, culture, politics, writing system, and philosophy. We also collected several quotes by Elyra Vunaris, anecdotes, and an account of a countercultural movement called Dissonant Echoes. We had deep learning text-to-audio tools generate recordings of several Sonic Fae and used them to approximate Varexian compositions based on descriptions that emerged in our work.

Leveraging AI autonomy, we minimized human intervention, allowing AI to drive the creative process. We worked with the intention to leave as much decision-making as possible to artificial intelligence. We integrated tools like the ChatGPT API with ElevenLabs for dynamic voice simulation and DALL•E 3 for visual art creation, aiming to produce a richly textured portrayal of Varexian culture. This methodology not only showcased the AI's creative potential but also its limitations, prompting discussions about the authenticity and ethical implications of AI-generated cultural content.

The project demonstrated the AI's propensity for pattern replication rather than true novelty, leading to a broader discussion about defining and measuring creativity in machine-generated outputs. Is it sufficient to label an output as creative based on novelty alone, or must it also resonate emotionally or intellectually with its human audience? ChatGPT's natural language processing made the temporality of engagement engagingly gamelike, allowing for back-and-forth exchanges and corrections (e.g., "oh, c'mon, that change is a bit trivial, no?" or "I'm pretty sure that's a Star Trek reference be a little more original off the wall ok?") that produced increasingly interesting results (though no less derivative in terms of its training data).

Our exploration into AI-generated art also touched on ethical dimensions, particularly the notion of authenticity regarding AI-created content and the implications of using AI to represent or reinterpret cultural narratives. It became clear that some encouragement, if still shying away from creative direction, would be needed, including calling a chatbot out for answers that seem derivative of common science fiction or fantasy tropes. At times, this mindset made it feel like the chatbot was simply confabulating facts by mistake or reluctant to share full details so as not to offend the reader. This angle allowed us to preserve more genuineness in our interactions, both allowing artificial intelligence to make most decisions while also being able to push back against dubious claims.

The project revealed significant biases inherent in the AI's training data, which often mirrored human cultural elements, inadvertently shaping the depiction of the alien Varexian society. These biases raise concerns about the authenticity of the generated content and the AI's ability to transcend its programming to create genuinely novel cultural expressions. Our findings underscore the challenge of using AI in creative settings without perpetuating existing stereotypes and cultural homogenization. The chatbot occasionally broke character in response to certain questions, with the infamous "As an AI language mode..." disclaimer. Interestingly, one such response concluded by imploring the interviewer to seek more authentic answers from "the people of Varexia themselves," surprisingly supporting the veracity of this fictitious culture while decrying itself as a farce. This moment seems to have been triggered by asking for a personal opinion in the face of possible disagreement, which could have alerted a watchdog component of the chatbot system. Similarly, when asked about a favorite musical selection (perhaps a call for favoritism triggered the same watchdog component), the chatbot began explaining its inability to have preferences but ended by saying "Music ... captivates me with its ability to evoke emotions."

The project highlighted innovative collaborative frameworks, where AI acts not just as a tool but as a co-creator. This partnership opens up new creative possibilities and challenges our conventional understanding of authorship and artistic creation. Additionally, it sparked important conversations about our relationship with AI, encouraging a continuous dialogue to navigate the ethical and creative boundaries of these interactions. Creating a custom chatbot fueled by our knowledge base proved helpful by making that knowledge base explorable by conversation, suiting it to a familiar and more entertaining human skill (which was also important because one questions the usefulness of getting facts straight about something we know is fictitious and has yet to reach an audience by that point). Beyond discovery through conversation, it offered the chance to discover and then leave artificial intelligence to resolve apparent conflicts in the knowledge base (or the chatbot's extension of it in a given chat session). For example, in the video interview, Elyra Vunaris explains the noncorporeal nature of Varexians and then later references having a creature landing on the shoulder. The interviewer could ask for clarification, leaving the chatbot to resolve the apparent conflict. This technique should be useful in future world-building endeavors, allowing the chatbot to reframe an apparent contradiction as a misunderstanding, a point to refine, an update to previously incomplete or erroneous information among outsiders, or perhaps an equally valid interpretation from a camp with a competing point of view, each of which would add interest and nuance to the culture being explored.

The Varexian music project presents a microcosm for the broader implications of AI in the creative arts. By challenging the assumptions of how to create with modern deep learning natural language systems, we also probe deeper into the philosophical and practical implications of these technologies. As AI becomes an increasingly common tool in creative industries, it is crucial to continue these conversations and explore the multifaceted impacts of our growing partnership with artificial intelligence.

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