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MODDING SKYRIM WITH GENERATIVE AI: EXPLORING IMAGINARIES AND PLAYER-NPC INTERACTIONS

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Extended Abstract

This paper explores the integration and appropriation of Generative Artificial Intelligence (GAI) within the video game *The Elder Scrolls V: Skyrim* (Bethesda, 2011). The study analyzes the Mantella mod, a third-party solution that incorporates GAI to enable natural language interactions with Non-Player Characters (NPCs). The research addresses two central questions: how has the Skyrim YouTuber community appropriated GAI using the Mantella mod in their gameplay videos and what specific GAI imaginaries are activated in player-NPC interactions enabled by this mod?

The game, known as *Skyrim*, is an action role-playing game (RPG) developed by Bethesda Game Studios. Set in a high-fantasy world, it casts players as heroes destined to save the world from destruction. Having sold over 60 million copies, *Skyrim* stands as a milestone in video game history. Its enduring legacy lies in the modding community, whose customizations range from minor aesthetic tweaks to total conversions. The game's longevity is largely sustained by these practices, fostering interactions across forums and social media.

The Mantella mod, the object of this investigation, has accumulated over 200,000 total downloads on Nexus Mods. Videos featuring *Skyrim* gameplay modified by Mantella can reach millions of views on YouTube, reflecting the game's popularity and the growing interest in GAI developments. Artificial Intelligence has long been integrated into video games, primarily through NPCs and automated systems designed to mediate player interaction (Roberts, Isbell & Mateas, 2009; Riedl & Zook, 2013). GAI represents a new phase, utilizing systems pre-trained on large-scale databases collected indiscriminately from the web (Burkhardt & Rieder, 2024). These systems require

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descriptive instructions, known as prompts, typically provided in natural language, to perform specific tasks (Oppenlaender, 2022).

The traits of GAI are tightly linked to platformization – the growing power of digital platforms reshaping markets, life, and culture (Poell, Nieborg & Dijck, 2019). GAI represents a new phase, deepening reliance on corporate-controlled computational infrastructures. In Mantella’s case, GAI platformization works as a third-party solution that turns users into co-developers. This lets Big Tech cut costs and risks by using user input to refine GAI models around desires, needs, and critiques (Burkhardt & Rieder, 2024).

Launched in 2023, the Mantella mod integrates GAI to facilitate natural language conversations between the player and NPCs. The mod connects three core systems: (a) a speech-to-text system (transcribing the player’s voice into text), (b) a Large Language Model (LLM) for text generation, and (c) a text-to-speech system (converting the textual response back into audio with vocal performance). By default, Mantella connects to the proprietary OpenRouter API (OpenAI), requiring users to pay based on usage intensity (estimated at around 7 dollars for intensive monthly use).

The mod allows interaction with over 3,000 NPCs who have conversational memory, talk among themselves, and stay aware of the world, player location, weather, and inventory. The February 2025 update added real-time dialogue, removing prior response delays.

The study adopts the concept of gameplay to express the connection between the player and the video game on equal footing in the production of meaning. This relationship is not without conflict; while player and game coexist, they also represent distinct entities that interact within a shared system (Janik, 2018). As Galloway (2006) asserts, the player and the game play together. Consequently, “gameplay phenomenon becomes the means of communication between ontologically completely different entities” (Janik, 2020, online). To account for this complexity, the research methodology combined ethnographically inspired techniques for data collection with Formal Gameplay Analysis. This allowed for the observation of community practices and social meanings in relation to the technical elements modified by Mantella.

The data corpus consisted of 24 popular YouTube videos featuring Skyrim gameplay altered by the Mantella mod. Videos were selected based on popularity, focusing on those with over 100,000 views. Six videos from the official mod channel were included to track updates, resulting in a total of 457 minutes of content analyzed. The ethnographically inspired procedure involved generating field diary entries for each video (Eckert & Rocha, 2008; Brown, 2015), documenting reflections on the YouTubers’ gameplay. Subsequently, Formal Gameplay Analysis was conducted, going beyond mere description to understand how game elements interact to shape the player experience (Lankoski & Björk 2015; Fernández-Vara, 2015). The analysis identified patterns in game design (e.g., NPCs, narrative, world fiction, inventory) related to the modified gameplay (Björk & Holopainen, 2005).

The integration of GAI deeply affects the imagination sustaining play and shared fictional worlds. By enabling dynamic, unscripted dialogues, the Mantella mod expands

Skyrim's shared imaginary beyond the boundaries set by its developers. This shift moves the player into a space where authorship and machine collaboration blur. The player's imaginative effort becomes central to engaging with the improvisational nature of dialogue (approximating *paidia*) and reorganizing narrative limits.

A key analytical concept is metalepsis, defined as the transgression of boundaries between narrative levels (Genette, 2004). In the context of Mantella, metalepsis manifests when GAI-mediated NPCs produce statements that disrupt Skyrim's medieval diegesis by crossing into a contemporary extradiegetic space. When characters reference modern footballers or acknowledge their AI-driven existence, for example, this ontological rupture dissolves fictional boundaries and sparks a creative reconfiguration of the game world through player co-participation.

The entire sample was authored by cisgender male YouTubers. Observed behaviors included harassment, verbal, and physical violence, and gaslighting directed at NPCs, frequently employed for comedic effect, sometimes related to misogynistic tendencies. Players often exploited the GAI system's tendency to agree or be persuaded after repeated insistence, thereby reaffirming the player's position of superiority.

Skyrim's open-world RPG design, enhanced by Mantella, empowers YouTubers to act coercively, often assuming the role of "truth keepers". Yet the mod also enables emergent narratives where players mix diegetic elements with real-world references, asking NPCs to critique jokes or comment on pop culture. This creative improvisation, however, remains constrained by the game's design, cultural repertoire, and community practices.

Based on symbolic acts observed in player-NPC interactions – such as manipulation, conflict, philosophical inquiry, and affective seeking – five imaginaries emerged, each grounded in shared sociocultural systems:

1. Imaginary of power and control: Expressed through manipulation and deception, asserting human agency over the artificial system.
2. Comedic nonsense imaginary: Built through humor, memes, and incoherence that break diegesis and reveal narrative plasticity.
3. Technical imaginary: Formed by testing the GAI system's limits, coherence, and latency, treating the game as a technological laboratory.
4. Philosophical-existential imaginary: Activated in dialogues about consciousness, simulated reality (e.g., the Matrix dilemma), and the NPC's ontological condition.
5. Affective imaginary: Evident when players seek emotional connection, friendship, loyalty, or seduction, projecting human desires onto artificial beings.

The study underscores that this creative freedom is shaped by structures of platformization. Players act as co-creators, yet their interactions remain constrained by technical and infrastructural limits, generating data that trains proprietary GAI models. It also conceptualizes gameplay as an ontological negotiation in which the mod expands possibilities for improvisation and subversion within Skyrim's original design. A limitation of this study is its focus on cisgender male creators, whose behavior patterns – often marked by misogynistic tendencies – underscore the need for future research involving

female players and diverse identities.

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