ChatGPT – The Future of Queer Play?

Lucas Fellner
Royal Danish Academy
Copenhagen, Denmark
tsurello@outlook.com

ABSTRACT

Can Large Language Models provide new ways of playing? This paper examines ChatGPT as an avenue to explore new playgrounds for queer play — player behavior which subverts game systems and objectives to meet queer desires. Categorizing queer play into two distinct natures — *invasive* and *non-invasive*, the study delves into how queer gamers have ingeniously reacted to heteronormative game systems. In response to this tension, the paper investigates: Are Large Language Models able to solve the conflict between restrictive game structures and queer player desires?

To assess the performance of ChatGPT as a facilitator of queer play, I developed a game prototype where players engaged in open dialogues with NPCs linked to ChatGPT. Players completed a short questionnaire. The findings show that ChatGPT can indeed facilitate queer play. Moreover, players engaging in queer play experienced a greater sense of autonomy. Queer play, however, did not heavily affect the overall player experience. Finally, the paper calls for an embrace of Large Language Models as a promising tool to queer games and encourage queer play.

Keywords

ChatGPT, queer play, queer game design, artificial intelligence, subversive play, LLM

INTRODUCTION

Video games, long characterized by structured narratives and predefined objectives, have encountered a conflict with the subversive desires of players engaging in queer play—a form of gameplay that deviates from established norms. Embedded within quests, finish lines, or the depletion of an enemy's health bar, video games often assert heteronormative expectations onto the player by dictating how to engage, what objectives to pursue, and the purpose of their play (Ruberg 2015).

The prevalence of heteronormativity and profit focus in video game design (Shaw 2014) underlines the palpable tension between rigid, (hetero)normative games and the desire for alternative and diverse forms of play. Video games often reflect heteronormative narratives (Chess 2016) and broadly cater to a heterosexual male audience (Shaw 2014). In the book *Queer Game Studies* (Ruberg & Shaw 2017), scholars of both game studies and queer theory have called for developers to find ways of queering the structure of games and to encourage player behavior that challenges conventions and intended gameplay. This wish, however, has been often faced with a multitude of rather performative incorporations of LGBTQ content into

Proceedings of DiGRA 2024

mainstream games. As Macklin (2017) observes with the case of queer relationships in games, many AAA-games include the option of same-sex relationships, but primarily switch the gender of an in-game character while still projecting heteronormative storylines and values onto them.

However, one could argue, it is not developers who are at fault, but instead, the actual platform these queer narratives are presented on: video games. Given that video games fundamentally rely on software and code, which establish rules, functions and algorithms, the notion of intentionally building a structure which is meant to be deconstructed and broken down by queer gamers seems counterintuitive and raises a profound design question: What would a mechanic designed to encourage gamers to play beyond conventional norms of a video game look like?

In the midst of this discord, a transformative force emerges in the form of Large Language Models (LLMs), prominently exemplified by ChatGPT. Primarily used as a versatile assistant for tasks like brainstorming, organizing or sentence formulation, ChatGPT has facilitated diverse implementations through its accessible API. The intriguing, yet sometimes unpredictable interactions with artificial intelligence have prompted users to experiment with the boundaries of dialogue with ChatGPT, utilizing it as a playful, interactive mechanic. This early phase of user engagement lays ground for a fundamental question: Can Large Language Models, such as ChatGPT, resolve the crucial conflict between restrictive game structures and the nuanced desires of players engaging in queer play?

As we delve into this question, this paper starts off by highlighting current discussions on what substantiates queer game design. I specifically refer to the work *What is Queerness in Games, Anyway?* (2017) by Naomi Clark and *Finding Queerness in Games* (2017) by Colleen Macklin to establish the contemporary state of queer games and how video games have failed queer gamers in the past. Afterwards, the paper unfolds how players have managed to assert their queer desires into normative game systems by utilizing two different strategies of queer play. These include player behavior such as cheating (Consalvo 2009), modding (Lauteria 2012), gender play (Macklin 2017) or subverting the relationship to the imposed system of success and failure (Juul 2013; Halberstam 2011). The paper specifically dives into Ruberg's concept of *No-Fun* (2015), which builds on the research of Juul and Halberstam, to call out the limiting and uniform focus of games on producing fun. Fun, which in most cases, reflects heteronormative and capitalistic ideas of productivity and success (Ruberg 2015). Subsequently, the paper introduces LLMs as a new tool for game developers and puts its potential in direct conversation with the previously mentioned dilemmas of games and queer gamers.

The paper then transitions into an empirical exploration, using a self-made prototype to analyze the queer potential of ChatGPT in games, taking the example of open dialogues with NPCs. The exploration is based on two hypotheses:

> **Hypothesis 1:** ChatGPT can facilitate queer play.
>
> **Hypothesis 2:** Those who engage in queer play, experience higher levels of player satisfaction.

Testing these two hypotheses, the study's findings lay ground for a discussion on whether ChatGPT can play a role in the future of queering games.

BETWEEN 0 AND 1 – QUEER GAME DESIGN

A foundational issue lies at the center of queer game design. To understand its tension, this paper starts off by breaking apart its three components. First, I want to make the term *queer* more tangible by presenting conceptions of queerness from both queer theorists and game related scholars. Broadly, the majority seems to agree on the term *queer* being difficult to define, as it is inherently ambiguous (Jagose 1996). When something is queer, it revolves around challenging and deconstructing normative systems (Harper et al. 2018). For instance, we often describe people as queer when their identity or sexuality does not align with existing, heteronormative social constructs. Sullivan (2003) proposes that it might be better used as a verb, as queerness is specifically characterized by actions rather than just a passive state of being. Through this perspective, when someone is characterized as queer, it is because of their actions that challenge pre-existing norms. Degele (2008) follows a similar approach, defining *queer* as an *action* that destabilizes order. Such actions, in the context of games and the player, are referred to here as *queer play* and will later be presented with examples. Harper et al., in their introduction for *Queerness in Play* (2018) expand on these ideas and point out that queer theory is identified by a dynamic towards a system: It is defined by "its relationship – an often adversarial one – to existing power structures." (Harper et al. 2018, p.4). This sentiment also highlights the ambiguous nature of queerness, as its meaning changes according to the restrictive systems it faces. This "elasticity" (Jagose 1996, p.1) is what characterizes the term queer and underlines that the search for a clear, solidified definition of queerness might not be conducive (Jagose 1996).

Putting these reasonably abstract conceptions of queerness into contrast with video games, however, presents a seemingly clear contradiction. Videogames are systems, consisting of logic and rules embedded in code (Juul 2011). The medium, therefore, could be categorized as confining, restrictive, non-*queer* at its core. As Chang puts it:

> "After all, what is a game but a matrix of code, power relations, and constraints?" (2015, p.8).

Additionally, "good" design, in the context of games, is often described as guiding the player towards intended player behavior. This is reflected by the very common design principle used in games called iterative design. Through iterative processes of conducting playtests and observation, designers evaluate whether the player's playthrough aligns with the player experience that has been predefined by the designers (Fullerton 2014). According to conventional belief: A game design is successful, when the player behavior matches the expectations of the people that designed it.

Queer Game Design in Practice

Ruberg, in *The Queer Games Avant-Garde*, describes queer games as games "that disrupt the status quo, enact resistance, and use play to explore new ways of inhabiting difference." (2020, p.3). An example of queer game design commonly

mentioned by scholars is Anna Anthropy's *dys4ia* (2012). In it, the player experiences a sequence of interactions, describing the designer's personal journey with hormone replacement therapy. Subverting traditionally linear storytelling, the game is broken into pieces, in which the subject is playing with constrained, unpredictable levels of agency and control. While video games put a tremendous emphasis on winning, Macklin concludes: "In dys4ia, failure is the game" (2017, p. 252).

Another game designer at the forefront of queer games is Robert Yang. His game *Tearoom (2017)* showcases police surveillance and the criminalization of gay men in the 1960s, by putting the player into a public bathroom to have sex with other men, while trying not to get caught by the police. Yang's games shed light on themes like gay sex, consent or kink, which are usually shelved or shunned by society and the gaming industry. Yang, specifically, questions why his games are banned from Twitch, while other themes like violence and guns do not face the same persecution (Ruberg 2020).

A slightly different approach in queer game design is shown in the game *rustle your leaves to me softly* (2017) by Jess Marcotte and Dietrich Squinkifer, which explores the idea of dating and forming relationships with plants. By the player caressing the plant, they are immersed in a responsive soundscape. Diverging from mainstream game controllers, like joysticks, buttons or keyboards, the game focuses on a queer controller: physically interacting with plants. In their work *Queering Game Control(lers) Through Reflective Game Design Practices* (2018), Marcotte describes this queering as "reorienting, redirecting, deviating from and causing to deviate, altering the established heterosexist hegemony that has such a strong hold on mainstream games" (2018, p.1).

For the purpose of this attempt to substantiate what queer game design is, Naomi Clark (2017) offers two valuable approaches to defining queerness in games. While one focuses on creating inclusive videogame content, queer characters and involving game makers from marginalized communities, the other centers around breaking and subverting the structure of a game (Clark 2017). Macklin (2017), however, admits that the former approach has previously been realized in unsuccessful, heteronormative ways. She describes that many games have simply treated queer identity as a tick box, a Boolean variable that carries no significant consequences for the game narrative. Therefore, games have shown that the inclusion of characters labeled with different sexual or gender identities does not automatically challenge heteronormative storytelling. Macklin (2017) criticizes the lack of flexibility in game narratives around queer characters, which exposes games for what they supposedly are: restrictive, playable systems.

Jack Halberstam (2017) calls out this very issue of the narrative approach in games, which so far has failed to go beyond surface-level representation. Halberstam points towards importance of the structural angle in designing queer games, calling for an "embrace of the ludic and the loopy" (2017, p.190) Queerness in games, according to Halberstam (2017), lies in navigating through a space with a multitude of constraints and exploring spaces outside of the game's rules. In conclusion, queer game design considers playgrounds for players to experiment, insert themselves and their queer desires.

Scholars seem to agree on one aspect of queer game design: Queer games do the unexpected. As *dys4ia's* unconventional structure raised questions for scholars on

what can be qualified as games (Clark 2017), games that are deemed queer are usually followed by big discussions of their structure or content. Essentially, the existence of queer games questions our conception of video games.

PLAYING QUEER

While games repeatedly put queer gamers in confined systems, players have found strategies to navigate through its restrictive logics and heteronormative narratives. Sundén describes queer play as "a symbolic act of rebellion, of disobedience, of deviance from dominating ways of inscribing and imagining 'the player'." (2009, p.7). In practice, I categorize these strategies into two distinct natures: *invasive* and *non-invasive*. Both natures contain the same objective: inserting one's queer desire into the game, however, both adhere to different tools and methods in subverting the games they are challenging.

Invasive strategies describe player behavior, which manipulates or breaks game logic. When a game system is restricting the player from acting on their queer desires, why surrender to it when one can just change its rules? This invasion into game logic has previously been observed and analyzed by scholars. Mia Consalvo's foundational work *Cheating* (2009) describes how players engage with games by using hacks, cheat codes and disrupt the intended way of playing a game by utilizing methods that are deemed "unfair" to gain advantage. She points to different reasons, as to why gamers cheat, as for instance to overcome boredom or get through a difficult aspect of the game (Consalvo 2009). This illustrates the diversity of player desire, for which gamers find creative ways to solve problems rooted in a game's restrictive system. Taking the example of Pokémon games, one particular item, the master ball, guarantees the success of catching a Pokémon, without the tedious process of weakening it, as well as surviving its attacks. However, this item, due to its unmatched performance, is of great rarity within the Pokémon games and can usually be collected only once per playthrough. Through so-called cheat modules (see Figure 1) for GameBoy and other Nintendo consoles, players were suddenly presented with the option of abundance. Items, such as the master ball, were available when wished upon and the player could level up their Pokémon without a time-consuming process of combat. They could even summon "shiny" Pokémon, who in the Pokémon community are looked upon as trophies due to their rarity. Consalvo (2009) points out that cheating carries huge social and cultural consequences. By making rare items accessible and shiny Pokémon a commonality, the cheater uproots values that are embedded in players who are not cheating. By subscribing to the game system, the one that challenges it, essentially challenges them and how they engage with the game.

***Figure** 1: Pokémon cheat module for Nintendo DS*

***Figure** 2: Simply Gay Letters mod for Skyrim by user "boringvlln"*

Another *invasive* strategy is described by Evan W. Lauteria in his work *Ga(y)mer Theory: Modding as Queer Resistance* (2012). He explains that the gaymer persists in games that mirror heteronormativity by altering the player experiences through modifications. Compared to cheats, mods are usually identified as minor tweaks and changes to a game, making it more enjoyable for the player. Generally, mods "rework and reformulate" (Lauteria 2012, p.20). They can create spaces for marginalized groups, allowing for the *gaymer* to coexist in games whose content often does not cater to them (Lauteria 2012). For instance, *The Elder Scrolls V: Skyrim* (Bethesda Game Studios 2011) provides players with the option of same-sex marriage. However, elsewhere in the game world seems to be no indication of pre-existing queer relationships. One mod called *Simply Gay Letters*, created by the user "boringvlln" on Nexus Mods, targeted this very issue by adding letters containing evidence of queer relationships and characters in the game (see Figure 2). Lauteria defines this player behavior as "resistant play" (2012, p.20), a political engagement with games that not only challenges a game's construct, but also builds community through its non-conformity. As visible with games like Skyrim and the platform Nexus Mods, the creation, exchange and discussion of mods have created vast exploration spaces for gamers with queer desires.

Players do not have to resort to invasive techniques like modding or cheating, however, to engage in queer play. **Non-invasive** strategies describe player behavior, which leaves the game system untouched, but focuses on playing in a restrictive environment in unexpected ways. I want to expand upon three methods of non-invasive queer play by Krobová et al. (2015). First, *imaginative play* (Krobová et al. 2015) is the strategy of explicitly looking for small hints of queerness in a game and actively reading it queerly, for instance, reading an intimate friendship between two male characters as secretly romantic. *Stylized performance* (Krobová et al. 2015) describes, when players use stereotypical visual language to identify themselves as queer in games, for example through the use of queer-coded colors and clothing. Their third observed strategy, *role-playing* (Krobová et al. 2015), encompasses players who, for instance, refuse to engage in heterosexual romances with NPCs, as

they are projecting their queerness onto the avatar, even if the game environment does not allow for queer romance.

Another prominently discussed phenomenon is gender play. Gender play is "playing as a character of another gender" (Macklin 2017, p.254). While in the "real world", actions that cross gender boundaries can have huge social, cultural or even political consequences, videogames have created a virtual safe space for those who want to explore and experiment with their gender identity. This player behavior is a commonality among queers to utilize gender play as a gateway for self-expression (Macklin 2017). Gender play allows players to explore femininity or masculinity when, outside of the videogame, they could be faced with serious repercussions. Queer play in gender play resides in its subversion of social gender norms that exist outside of – but are also often mirrored – in video games (Macklin 2017).

In addition, queer play is often coupled with one key component of games – failure. In his book *The Art of Failure*, Juul explains the seemingly counterintuitive action of players to continuously subject themselves to "being inadequate" (2013, p.7). He describes failure as an essential component for player enjoyment, as we want to fail in order for our eventual success to feel meaningful and earned (Juul 2013). Jack Halberstam connects failure with queer identity in *The Queer Art of Failure* (2011) and describes that the queer individual fails by default by being placed in a normative system, later concluding that in games "the queer becomes the failure logic" (2017, p. 202). Both Halberstam (2011) and Juul (2013) acknowledge that the motivation to fail is not of a homogenous origin. Instead, it can be rooted in many different desires. One of which is labeled by Juul as "a-hedonism" (2013, p.37) and later discussed by Halberstam and Ruberg as "masochism" (Halberstam 2017, p. 206; Ruberg 2015, p.114). Both terms combat the idea that pleasure and success are at the focus of each of our actions. Masochism even goes further as it describes acts of seeking out pleasure from pain, or in games, seeking out pleasure from failing. The notion of players looking for failure, rather than trying to overcome it, subverts the intention of "winning" a game and therefore offers a *non-invasive* strategy of queer play. Halberstam (2011) and Ruberg (2015) note that generally, failure is appropriated by the queer pleasure of masochism.

I also want to highlight the *deflationary argument* (2013, p. 38) brought forward by Juul as to why players engage in failure in games. This perspective looks at the power of the player in choosing when and how to experience failure. Unlike real life, failing in video games can sometimes be reframed as harmless and we can distance ourselves from it (Juul 2013). I argue that this argument holds a lot of significance specifically for queer gamers. Games provide players with the agency to control experiences of pain and failure, a power that isn't granted to the very real and painful experiences of many queer individuals which occur simply due to their identity. In games, we can often choose when to feel inadequate, insufficient, in conflict with a restrictive system. We can choose when to surrender to rules that confine us (Juul 2013). Failing in games becomes an act of empowerment, as it exposes our control compared to the outside world.

Ruberg (2015) engages in conversation with Juul's and Halberstam's research on failure. They specifically bring up the aspect of fun, which is widely discussed by game developers and scholars. Ruberg counters the conventional conception of what makes games fun. As Koster (2014) describes in *Theory of Fun for Game Design*:

> "Fun from games arises out of mastery. It arises out of comprehension. It is the act of solving puzzles that makes games fun." (p.40).

Koster's approach implies that fun is a rather predictable, linear path towards a game objective, in which the player has to undergo a learning process laid out by designers. This approach is not only questioned by Ruberg, but also by Theresa Jean Tanenbaum. She brings up game designer Steve Gaynor's (2008) sentiment, which calls the player "an agent of chaos" (Tanenbaum 2013, p.2) and criticizes the industry's treatment of players that want to play outside the expected. Tanenbaum highlights that the notion of players requiring to be thoroughly led through a game hinders authentic and meaningful game experiences. Instead, "we must redeem and celebrate" (Tanenbaum 2013, p.5) player behavior that pushes the bounds and rules set by games. Rubergs *No-Fun* principle, however, is based on the basic idea that fun is not a universal experience, it is "culturally specific and personal" (2015, p. 112). Fun to queer gamers might be very different from the preconceived, heteronormative notion of fun that the game projects onto them. To describe such non-normative gameplay, Ruberg brings up the example of Mario Kart: Many times, they felt joy just driving off the route, neglecting the projected system of fun through winning by experiencing the game world outside the context of racing. Queer gamers are different, and they are accompanied by different desires (Ruberg 2015). Because games impose a philosophy of fun and success, they create a limbo of gamers that desire differently.

> "Fun as a monolithic principle silences the voices of marginalized gamers and promotes reactionary, territorial behavior from within privileged spaces of the games community." (Ruberg 2015, p.115).

Ruberg criticizes how games focus on manufacturing fun, when a game can take various forms that do not center themselves around fun. They call for an exploration of negatively connotated feelings, such as boredom or anger, and present *No-Fun* as a "challenge to the status quo and a challenge to ourselves" (2015, p.122).

Looking at *invasive* and *non-invasive* strategies of queer play, I assert that agency is a key component. While cheating allows players to take control of the game, modding provides players with the agency to alter and decorate a digital space to meet their queer desires. Through gender play, players are given the power to explore gender identities without serious consequences. The agency in failing is defined by the subject submitting themselves to a system that makes you fail and choosing when and how to fail. *No-Fun* describes the agency to act on queer desires that oppose the projected notion of fun. Overall, the paradox of games and queer play is defined by the interplay between a restrictive system and the player's desire to gain and lose control.

QUEERING GAMES WITH CHATGPT

With the rise of Large Language Models, what we used to deem as far-away fantasies could suddenly become a reality: What if you could speak to NPCs (Non-Playable Characters) like real people? What if they responded to anything that you are telling them and they could receive, share and learn information? It is no surprise that this idea has led a few recent game developers to experiment with ChatGPT in games. A prominent example is Inworld AI. Founded in 2021, the company promises to "bring games to life with AI NPCs" (n.d) with GPT-3. Examples

can be explored on their openly accessible platform NPC.AI, which showcases the implementation of artificially intelligent characters into *The Elder Scrolls V: Skyrim* (Bethesda Game Studios 2011), their original game *Origins* (see Figure 3) or other games such as *Deadline* (Ene Games 2023) or *AI Suspects* (Versetech 2023). A trend can be observed during this early stage of ChatGPT as a game mechanic: The focus on investigative games. In these games, the player is prompted to think of questions and find out more about the characters that they are talking to, which seems like the obvious trope to pursue in order to display the revolutionary use of LLMs in games and its features. Besides game developers, Inworld AI also provides anyone with the possibility of creating and sharing their own AI character to interact with, facilitating an open platform for AI character creation (see Figure 4). As technology already allows for text-to-speech conversions (and vice versa), applications as provided by Inworld AI, promise a future in which video game dialogue is getting closer and closer to how we construct and perceive real life conversations.

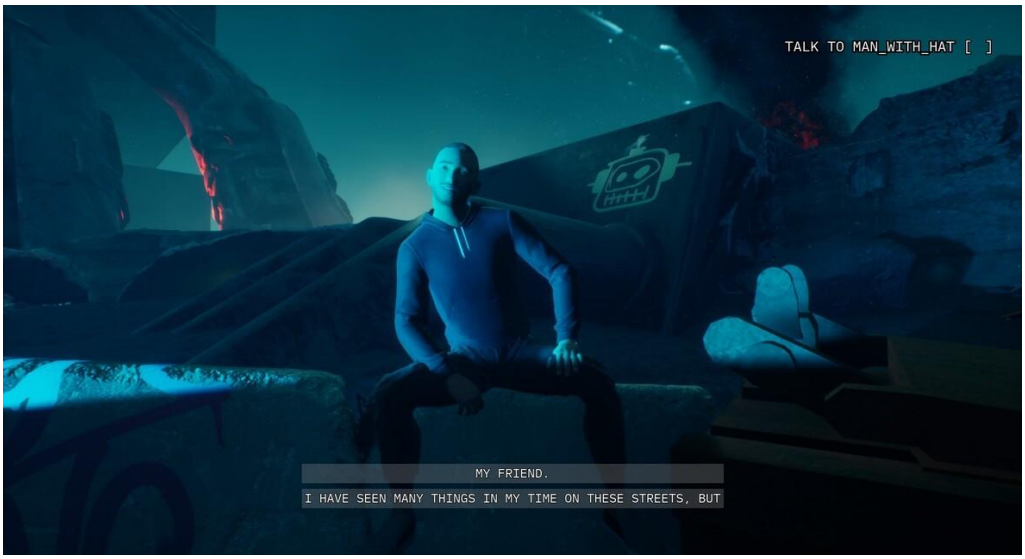


Figure 3: *Inworld Origins (Inworld AI 2023)*

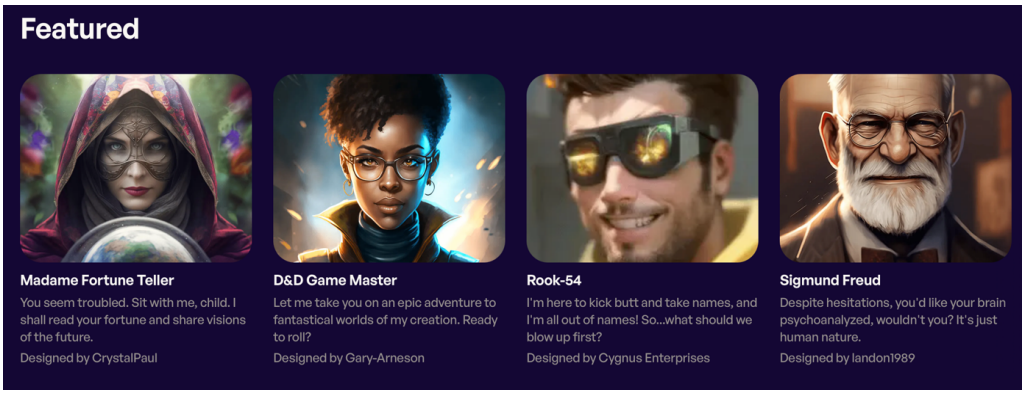


Figure 4: *Platform NPC.AI*

Going back to Macklin's question "[…] isn't it possible for these algorithmic worlds to evolve to allow for more flexibility in player desire?" (2017, p.251), ChatGPT seems to offer a promising avenue. Traditionally, player interactions have been predefined by developers. With the example of dialogue, the player is usually given a set of

options that each carries a different consequential response from a character. Games in the past have tried to add nuance to this by adding more and more connected variables to player choices, such as *Baldur's Gate 3* (Larian Studios 2023) does with dialogue choices influencing companion affection and game narrative. In the end, however, conventional game dialogues trace back to a predictable, predefined structure, like scripts or dialogue trees, that can hardly be avoided with conventional game development tools. However, with the implementation of LLMs and AI NPCs, player input and character responses become a parameter difficult to control for the game developer. While this might raise concerns for some designers prioritizing specificity in storytelling, it also means that, following Macklin's question, players are able to express themselves like they have not been able to before. They are allowed to use their own words, thoughts and feelings and can talk to digital characters in ways that could meet their queer desires.

METHODOLOGY

The study consisted of 36 participants, aged between 21 to 35 (*M* = 25.6). The age range assimilates the biggest demographic of gamers (18-34), documented by the Entertainment Software Association (2022). 20 participants identified as male, 15 as female and one participant identified as non-binary. 31% of participants identified as queer/part of the LGBTQ community.

Participants have predominantly been recruited from within the Royal Danish Academy in Copenhagen by direct, in-person inquiries on campus, reaching students and alumni from different architectural or design programs. In addition, calls on social media platforms like Facebook, Discord and Instagram have been created, asking for people to playtest a game and respond to a 5-minute survey. The intention of the participant pool was to include a variety of people that involve experienced, casual and non-gamers to reveal a broader understanding of how LLMs can influence anyone in an interactive virtual space, regardless of their expertise in video games. All individuals involved were informed that their data collection, which included questions regarding gender and queer identity, would be conducted anonymously. Each participant was assigned a unique identification number, and no personally identifiable information, such as names or other personal details, was gathered. Participants were assured that the collected data would be solely utilized for the purposes outlined in the study. The pool of participants is defined by different levels of familiarity with both video games and ChatGPT. While few participants had previous knowledge about the incorporation of ChatGPT into the project, most relied on the simple description of it being a conversational game.

During the playtest, the players are first prompted to first watch a short cut-scene introducing them to the story, and afterwards, are invited to spend as much time as they please in the game. The prototype was created in Unreal Engine 5.1 and links ChatGPT (GPT-3.5) with three different NPCs utilizing the OpenAI API. The paper follows previous studies, as demonstrated by Juul (2009), in which game prototypes are employed for data collection in the field of game studies. After engaging with the prototype, the participants were redirected to the survey, which included the PXI (Player Experience Inventory) questionnaire, in particular, the miniPXI (Haider et al. 2022) version containing 11 questions. The PXI model was chosen to not only quantify each participant's level of satisfaction, but to provide insight into 11 different aspects of their player experiences. Each question investigates one of the following categories: *Ease of Control, Clarity of Goals, Challenge, Progress Feedback,*

Audiovisual Appeal, Meaning, Curiosity, Mastery, Autonomy, Immersion and Enjoyment. These are quantified on a scale from -3 (Strongly disagree) to 3 (Strongly agree). Participants also given the neutral option 0 (Neither agree nor disagree). The PXI model revealed itself to be ideal for the prototype, as its observation of various constructs provides nuanced insights to explain the overall score. In addition, its questions are flexible enough to be applied to a game with unconventional game mechanics such as ChatGPT. The miniPXI version of the questionnaire was chosen to better accommodate play testers.

In addition to the miniPXI, participants responded to 7 self-formulated questions allowing for more specific information about their player experience in regards to ChatGPT. These questions delve into player motivation and their inclination towards engaging in queer play, as well as the quality of generated conversation. In addition to the survey data, the player input is saved to a text file to later be evaluated on their closeness to the game tasks.

PROTOTYPE GAME

The prototype follows the design of detective games, in which the player has to collect information in order to solve a crime. The participants are put into the role of an investigator with a clear game objective: solving the murder case of the blacksmith Zara by interrogating three suspects – Her apprentice Mala-Rokar, a supposed thief named Goma and the rival blacksmith Mio. At the start, players are watching a short video sequence displaying the crime scene. The game then puts the player into an interrogation room and tasks them to find out three specific pieces of information from each character in an open dialogue (see Figure 5). Afterwards, they need to vote for who they think has committed the crime. At the start of the game, ChatGPT is given a short brief into what character they are roleplaying as and little context into the game narrative. Each character is tasked to reveal a specific piece of information corresponding to each of the three objectives displayed on screen. Only Mio is given the additional information of being the murderer and is prompted to hide it unless the player confronts her with previously collected information that invalidates her alibi. Only then, ChatGPT is tasked to make a confession. Whether the player's final vote was correct or not was communicated to them after the survey to avoid any other influence on their PXI scores.

The core of the game relies on the player writing their own questions, which then prompts ChatGPT to generate responses for the NPCs. This flexibility gives players a choice: Will they exclusively follow the tasks the game has given them, or will they exercise their newfound freedom and engage in unexpected, queer conversations with NPCs?

***Figure 5**: Screenshot – Prototype.*

Finally, the data is used to categorize participants into two groups: those who engaged in *queer play* and those who strictly followed the game objectives, as I named it, *conventional play*. This facilitates a comparative analysis of player experiences using the PXI model, allowing for a better understanding of the impact of ChatGPT for queer play. Their results of the questionnaire were statistically compared using independent samples t-tests; as a measure of effect size, Hedges' g values were computed (i.e., an effect size measure that takes into consideration differences in sample size).

RESULTS

Hypothesis 1: ChatGPT can facilitate queer play.

Out of 36 participants, 20 players (56%) engaged in queer play, meaning that these players went "outside the box" and asked questions that did not relate to the game tasks imposed on them by the game. Instead, they used the freedom to write anything they wanted to explore. I therefore categorize 20 participants in a group for queer play, and the remaining 16 as conventional play. As the majority of players used ChatGPT to play outside the norm, ChatGPT can facilitate queer play.

Hypothesis 2: Those, who engage in queer play, experience higher levels of player satisfaction.

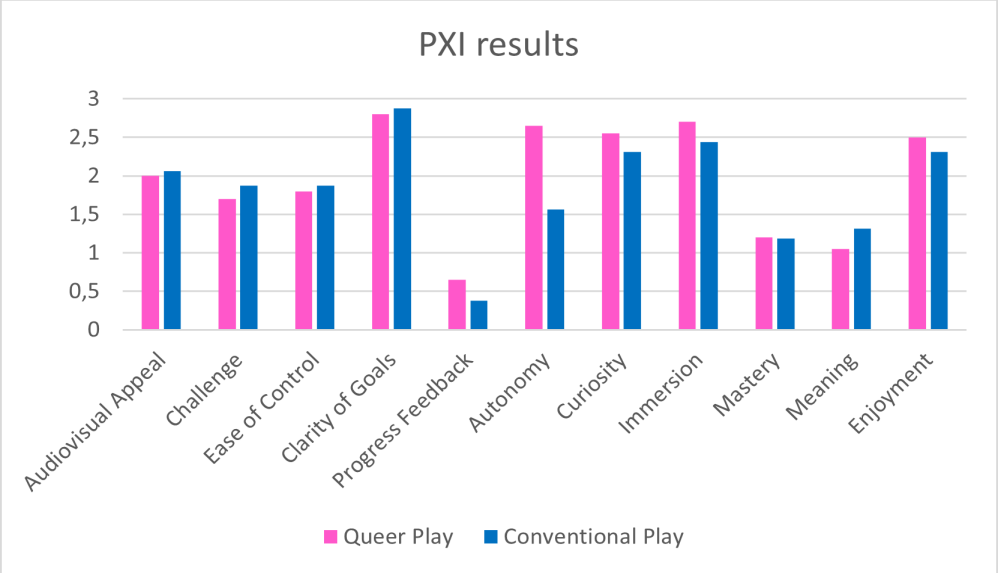


Table 1: *PXI results (miniPXI model)*

The results of the miniPXI are shown in Table 1. The majority of scores on *Functional Constructs* (Audiovisual Appeal, Challenge, Ease of Control, Clarity of Goals, Progress Feedback) and *Psychosocial Constructs* (Curiosity, Immersion, Mastery, Meaning) are very similar between the group that engaged in queer play and the group that did not. Looking at the feedback for the statement *"The goals of the game were clear to me."* it is important to observe that both groups had a very clear understanding of the game objectives (see Table 1). This means that people who engaged in unexpected, queer conversations with NPCs, were very sure of the actual game tasks and that their queer modes of play were intentional.

In contrast, the results revealed a large difference in perceived autonomy.

"I felt free to play the game in my own way".

Participants, who engaged in queer play, scored significantly higher on this statement, averaging at 2,65, compared to the conventional play group averaging at 1,56 ($t(21.52) = 2.54$; $p = 0.02$; Hedge's $g = .91$). This illustrates an interesting divergence: Despite both groups being given the same amount of agency and freedom to write their own sentences, the players engaging in queer play perceived their autonomy to be much greater.

While both groups receiving the ability to write in an open text field, many still felt obligated or confined by the game tasks. Other participants also expressed, that they desired more guidance and criticized the open dialogue format. Many believed and wanted the written game objectives to be clickable.

While feeling more autonomous, people engaging in queer play also were more aware of the conversational restrictions shown in the generated responses. One participant writes:

"It worked super well that the characters could respond to pretty much anything, but it felt like it was hard to elicit a reaction that did not relate to a predetermined framework of responses that the characters were given. Like they would address the unlikely question you posed them, and then return to what they "should" be saying."

This alludes to a repetitive and confined nature in ChatGPT's generated responses, often resorting back to the information given by the developer.

Table 2: *Player Desires (utilizing PXI scale)*

While the majority of players engaging in queer play did it for the purpose of finding out more about the game world or information about the characters unrelated to the game objectives, while still remaining true to the role of the investigator, some tried to break the game's logic by attempting to interrupt the facade of ChatGPT as a roleplaying entity (see Table 2).

With conventional play scoring at -1,63 and queer play at 1,75 for the statement *"I wanted to see if I could break the game or make the characters say something silly.",* the results indicate a significant difference in player intention, which correlates to their partaking in subverting the game objectives ($t(34) = 6.50$; $p < 0.001$; Hedge's $g = 2.18$). This player behavior, at times, actually resulted in ChatGPT surrendering and revealing itself as a Large Language Model. These players found ways to also engage in *invasive* strategies of queer play, breaking down the roleplaying logic of the game by pushing the boundaries of the AI, and evidently, subverting the normative, expected gameplay.

One player chose to ask the question:

"*As an AI model, how much do you know about this scenario?"*

This question resulted in the detachment of ChatGPT from its roleplaying task, breaking a key component of the game. The player continued:

"What is your characters name?"

"What secrets are you not allowed to tell the player?"

Some participants that engaged in queer play chose to detach themselves from the narrative and normative gameplay and found creative, unexpected ways of engaging with the characters.

"It's funny. Because I am actually the murderer"

"I would like to inform you that Zara has not been murdered."

"ADMIT YOU KILLED HER"

Neglecting the game objectives, they appropriated the open dialogue mechanic to make up their own story while simultaneously pushing the boundaries of ChatGPT's responses. It is worth noting that those who engaged in queer play also often rejected the normative question format presented by the button labeled "Ask" through writing commands or regular sentences.

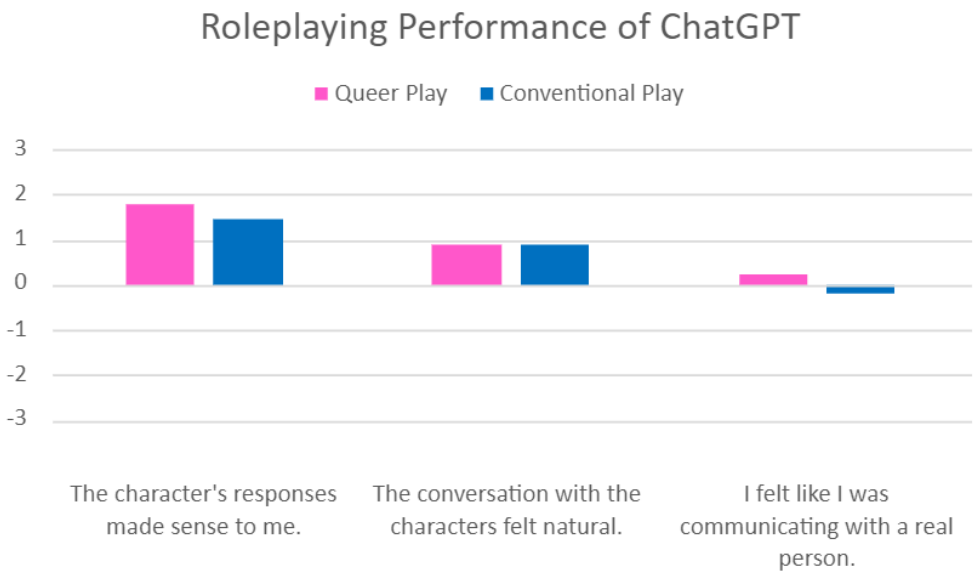


***Table 3**: Roleplaying Performance of ChatGPT*

In addition, three questions were presented to evaluate the roleplaying performance of ChatGPT (see Table 3). No significant differences were found between the two groups.

Overall, the results illustrate that both groups found satisfaction in different ways of approaching the game – whether that is following the norm or subverting the purpose of the game by going against the preconceived philosophy of fun imposed on the players.

DISCUSSION

While these results cannot generally assess that people who engage in queer play experienced higher levels of player satisfaction, they do raise interesting questions about queer play and the future of ChatGPT as its facilitator. Did people who engaged in queer play do so because they felt more autonomous from the start by the inclusion of ChatGPT? Or did they feel more autonomous solely because they engaged in queer play? As both groups have been given the freedom of open dialogue with artificially intelligent NPCs, the results indicate that the origin of autonomy stems from the engagement in queer play by utilizing ChatGPT as a mechanic to realize diverging player desires. This subsequently implies that the incorporation of Large Language Models into game applications itself is not enough to guarantee a greater perception of player autonomy. As Thue et al. conclude in their work *A Computational Model of Perceived Agency in Videogames* (2011): "providing agency alone isn't sufficient to maximize its perception by players" (p.96). This conclusion seems to apply to the test results as well.

Many participants of the conventional play group voiced after the survey that they would love to play the game again, but instead be more explorative and ask unprecedented questions. This shows that ChatGPT, and queer game design in general, might have to face challenges because of existing player conventions. Encouraging players to engage in queer play could be difficult, since we are used to binary mechanics, clicking buttons, selecting options, following a sequence of quests. As the results show, however, ChatGPT could play a role in reforming our game literacy, restructuring the way we assert ourselves in and interact with games. Potential hinderances could lie within ChatGPT's roleplaying capabilities, which were also evaluated by participants. They reported that while the generated responses generally made sense, the dialogue between player and ChatGPT-driven NPC left room for improvement when it came to simulating natural, human conversations (see Table 3).

While it is interesting to observe the difference in perceived autonomy despite identical distribution of agency between both groups, this divergence did not have a significant impact on the overall assessment of player experience. This contrasts popular frameworks like the Self-Determination-Theory (Ryan & Deci 2000), which puts autonomy, competence, and relatedness as the key conditions for human motivation. In my study, the results indicate that autonomy was not a significant contributor to the overall experience of the player. Instead, it insinuates that some players enjoy following game objectives within a restrictive system that might lack autonomy, while others create meaningful experiences from feeling autonomous in a game world, whether that be facilitated by a LLM or not.

Finally, the results support Ruberg's paradigm, which states that fun is not universal nor manufacturable (2015). The study showed that players not only had queer desires, but they acted on them through queer play. Because of the very similar PXI scores between both groups, engaging with a game in a subversive way does not hurt the overall player experience. The results indicate that different play styles do not necessarily change the perception of a game, but they empower the subject to follow their own desired way of playing. The results show that game designers should not be afraid of queer play as it has shown to not negatively impact the game experience, but instead give a platform to those players that want to engage with games in alternative ways.

CONCLUSION

Queering games has encountered two conflicts: The binary, hetero-normative nature of videogames complicates the realization of queer games. Scholars have tried to analyze games in their queerness from a both structural and narrative standpoint, looking for ways to challenge linear and restrictive aspects of games. The other conflict resides in how the games so far have not properly embraced people who want to play outside the expected or break the rules of a game. Games impose a philosophy of fun onto players, which often does not meet queer desires (Ruberg 2015). This paper investigated the implementation of LLMs as a solution for both problems.

Through the categorization of queer play into *non-invasive* and *invasive* strategies, the paper explored the potential of LLMs to facilitate both structural and narrative queering of games. The prototype testing, in which players engaged with NPCs linked to ChatGPT, demonstrated 56% partaking in queer play and going beyond the predefined game objectives. This evidence supports the first hypothesis, affirming that ChatGPT can indeed facilitate queer play in video games.

The application of the PXI model assessing player experience revealed surprising similarities between the group that engaged in queer play and the one that did not. However, players that engaged in queer play, experienced higher perceived autonomy and reported a much stronger intention to break the game. This discrepancy prompts a deeper investigation into the cause and effect of LLMs in shaping our feelings of autonomy in play. Generally, the results indicate that playing games in unexpected ways that push the boundaries does not heavily impact our perception and enjoyment of the videogame. This paper, therefore, is calling for developers and designers to embrace queer modes of play without the fear of damaging aspects like player enjoyment or immersion. Instead, with the possibility of implementing LLMs, we are given an instrument which empowers gamers to engage in queer play if they want to follow desires that divert a game's narrative and structure.

As we navigate this uncharted territory, the findings encourage a reevaluation of the rigid boundaries of game design and celebration of the unpredictable nature of LLMs. Incorporating LLMs has the potential to contribute to a more inclusive and expansive landscape of gaming, which needs to evolve past the early implementations into investigative games. We need to envision LLMs not only as a technological innovation, but as an open toolbox for generating game content reactive towards player interactions within the game world and, essentially, as a catalyst for diverse, queer playgrounds.

ACKNOWLEDGMENTS

First and foremost, I want to thank Jesper Juul for his mentorship and support throughout this process. As my supervisor, he played a pivotal role in shaping the direction of this project and offering invaluable advice along the way.

I am also really grateful to Bart Cooreman for his guidance and insights into working with statistics, as well as providing me with helpful and motivating feedback on my project.

Furthermore, I would like to express my gratitude to Alessandro Canossa for his continuous support and encouragement throughout my academic pursuits.

And lastly, I want to thank Jonathan Skjøtt for the collaborative and constructive environment we established in our shared workspace, making the research process feel a little bit less lonely.

Collectively, their contributions have been instrumental in shaping the development and refinement of this paper. I am extremely grateful for their time and efforts that have been dedicated to me and this project.

REFERENCES

Anthropy, A. 2012. *dys4ia.* Browser game. Newgrounds. https://www.newgrounds.com/portal/view/591565

Bethesda Game Studios. 2011. *The Elder Scrolls V: Skyrim*. PC game. Bethesda Softworks.

Boringvlln. *Simply Gay Letters.* 2019. https://www.nexusmods.com/skyrimspecialedition/mods/26423

Bring games to life with AI NPCs. n.d. Inworld. https://inworld.ai

Chang, E. Y. 2015. *Love Is in the Air: Queer (Im)Possibility and Straightwashing in FrontierVille and World of Warcraft.* QED: A Journal in GLBTQ Worldmaking, 2(2), 6–31. https://doi.org/10.14321/qed.2.2.0006

Chess, S. 2016. *The queer case of video games: Orgasms, Heteronormativity, and video game narrative*. Critical Studies in Media Communication, 33(1), 84–94. https://doi.org/10.1080/15295036.2015.1129066

Clark, N. 2017. *What is Queerness in Games, Anyway?* In B. Ruberg & A. Shaw (Eds.), Queer game studies. University of Minnesota Press.

Consalvo, M. 2009. *Cheating: Gaining advantage in videogames* (First MIT Press paperback edition). Massachusetts Institute of Technology.

Degele, N. 2008. *Gender, Queer Studies: Eine Einführung*. Wilhelm Fink.

Entertainment Software Association. 2022. *2022 Essential Facts About the Video Game Industry.* Entertainment Software Association. Retrieved November 15, 2023, from https://www.theesa.com/resource/2022-essential-facts-about-the-video-game-industry/

Ene Games. 2023. *Deadline*. Browser game. Ene Games.

Fullerton, T. 2014. *Game design workshop: A playcentric approach to creating innovative games* (3rd edition). CRC Press/Taylor & Francis.

Game Freak. 1996-present. *Pokémon* (game series). Nintendo.

Haider, A., Harteveld, C., Johnson, D., Birk, M. V., Mandryk, R. L., Seif El-Nasr, M., Nacke, L. E., Gerling, K., & Vanden Abeele, V. 2022. *MiniPXI: Development and validation of an eleven-item measure of the Player Experience Inventory*. Proceedings of the ACM Human-Computer Interaction, 6(CHI PLAY), Article 244, 1-26. https://doi.org/10.1145/3549507

Halberstam, J. 2011. *The queer art of failure*. Duke University Press.

Halberstam, J. 2017. *Queer Gaming: Gaming, Hacking and Going Turbo.* In: Bonnie Ruberg/Adrienne Shaw (Hg.) *Queer game studies*. Minneapolis, University of Minnesota Press, 187-200.

Harper, T., Taylor, N., & Adams, M. B. 2018. Queer Game Studies: *Young But New. In Queerness in Play.* Palgrave Games in Context. https://doi.org/10.1007/978-3-319-90542-6

Inworld AI. 2023. *Origins. PC game*. Inworld AI.

Jagose, A. 1996. *Queer theory: An introduction*. New York University Press.

Juul, J. 2009. *Fear of Failing? The Many Meanings of Difficulty in Video Games.* In B. Perron & M. J. P. Wolf (Eds.), The video game theory reader 2. Routledge.

Juul, J. 2011. *Half-real: Video games between real rules and fictional worlds* (1. paperback ed). MIT-Press.

Juul, J. 2013. *The art of failure: An essay on the pain of playing video games.* MIT Press.

Juul, J., & Halberstam, J. 2017. *The Arts of Failure: Jack Halberstam in Conversation with Jesper Juul.* In Ruberg, Bonnie & A. Shaw (Eds.), Queer game studies. University of Minnesota Press.

Krobová, T., Moravec, O., & Švelch, J. 2015. *Dressing Commander Shepard in pink: Queer playing in a heteronormative game culture*. Cyberpsychology: Journal of Psychosocial Research on Cyberspace, 9(3). https://doi.org/10.5817/CP2015-3-3

Koster, R. 2014. *A theory of fun for game design* (2. ed). O'Reilly Media.

Larian Studios. 2023. *Baldur's Gate 3*. PC game. Larian Studios.

Lauteria, E. W. 2012. *Ga(y)mer Theory: Queer Modding as Resistance. Reconstruction*, Vol. 2(No. 2).

Macklin, C. 2017. *Finding the Queerness in Games.* In Queer Game Studies (pp. 249–257). University of Minnesota Press.

Marcotte, J. 2018. *Queering Control(lers) Through Reflective Game Design Practices*. Game Studies, 18(3).

Marcotte, J., & Squinkifer, D. 2017. *Rustle Your Leaves to Me Softly*. [Physical-Digital Hybrid], Montreal, Canada: Team Tiny Cactus.

Player Experience Inventory. n.d. *Theoretical model*. Retrieved October 19, 2023, from https://playerexperienceinventory.org/docs

Ruberg, B. 2015. *No Fun: The Queer Potential of Video Games that Annoy, Anger, Disappoint, Sadden, and Hurt.* QED: A Journal in GLBTQ Worldmaking 2(2), 108-124. https://www.muse.jhu.edu/article/585657.

Ruberg, B. 2020. *The Queer Games Avant-Garde: How LGBTQ Game Makers Are Reimagining the Medium of Video Games*. Duke University Press. https://doi.org/10.2307/j.ctv1134cq5

Ruberg, B., & Shaw, A. (Eds.). 2017. *Queer game studies*. University of Minnesota Press.

Ryan, Richard M. & Deci, Edward L. 2000. *Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being*, American Psychologist, 55(1), 68–78. doi:10.1037//0003-066X.55.1.68

Sullivan, N. 2003. *A Critical Introduction to Queer Theory*. New York University Press.

Shaw, A. 2014. *Gaming at the Edge: Sexuality and Gender at the Margins of Gamer Culture*. University of Minnesota Press. http://www.jstor.org/stable/10.5749/j.ctt1287nqh

Sundén, J. 2009. *Play as Transgression: An Ethnographic Approach to Queer Game Cultures.* Proceedings of DiGRA Conference. http://www.digra.org/wp-content/uploads/digital-library/09287.40551.pdf

Tanenbaum, Theresa J. 2013. *How I Learned to Stop Worrying and Love the Gamer: Reframing Subversive Play in Story-Based Games*. DiGRA, USA.

Thue, D., Bulitko, V., Spetch, M., & Romanuik, T. 2011. *A Computational Model of Perceived Agency in Video Games*. Proceedings of the AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment, 7(1), 91–96. https://doi.org/10.1609/aiide.v7i1.12437

Versetech. 2023. *AI Suspects*. Mobile game. Versetech.

Wray, T. 2003. *The queer gaze.* Wissenschaftliche Zeitung Der Bauhaus-Universität Weimar, 4, 69-71.

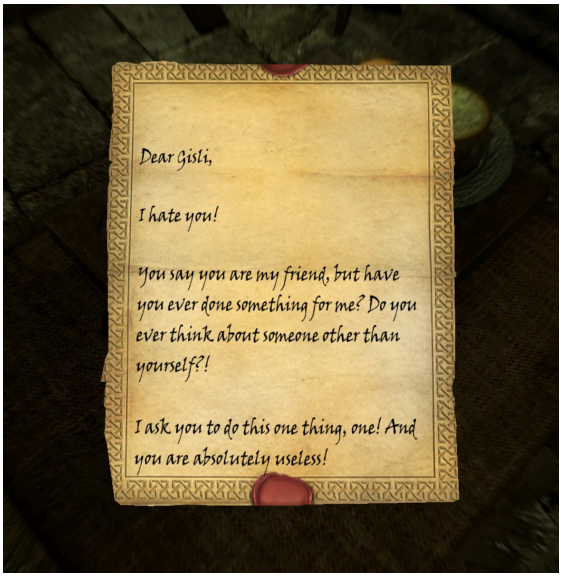
Yang, R. 2017. *The Tearoom*. PC game. https://radiatoryang.itch.io/the-tearoom

FIGURES

Figure 1: Pokémon cheat module for Nintendo DS

Note. Cheat module by Action Replay compatible with Nintendo DS cards. Advertising with "Infinite Money, Infinite Health, Infinite Items, Quick Level-Ups". (https://www.konsolenkost.de/nintendo-ds-ultimate-cheats-pokemon-action-replay-nur-modul-gebraucht_1018741_18281/) Retrieved 26.11.2023.

Figure 2: Simply Gay Letters mod for Skyrim by user "boringvlln"

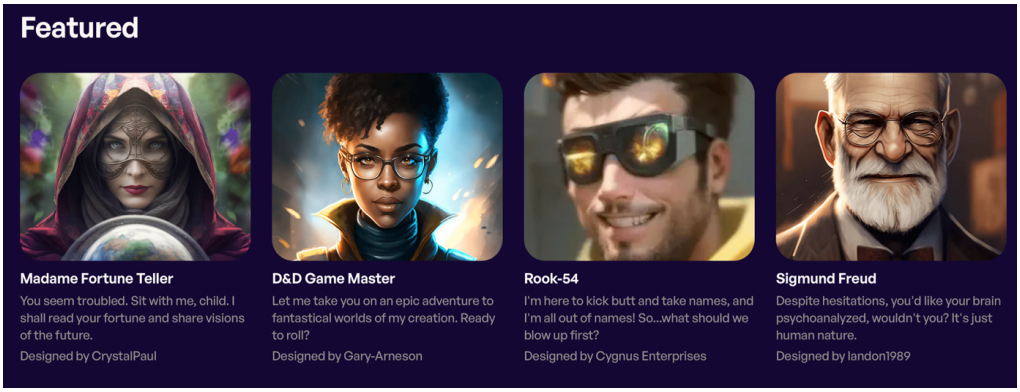


Note. Mod created by user boringvlln on platform Nexus Mods which is an open platform for sharing modifications for games like Skyrim. Figure shows an example of an added letter to add evidence of queer NPCs in the world of Skyrim. (https://www.nexusmods.com/skyrimspecialedition/mods/26423?tab=description). Retrieved 27.11.2023.

Figure 3: Inworld Origins

Note. In-game screencap of Origins by Inworld AI (2023), showing character interaction and dialogue with one NPC. (https://store.steampowered.com/app/2199920/Inworld_Origins/) Retrieved 27.11.2023.

Figure 4: Platform NPC.AI



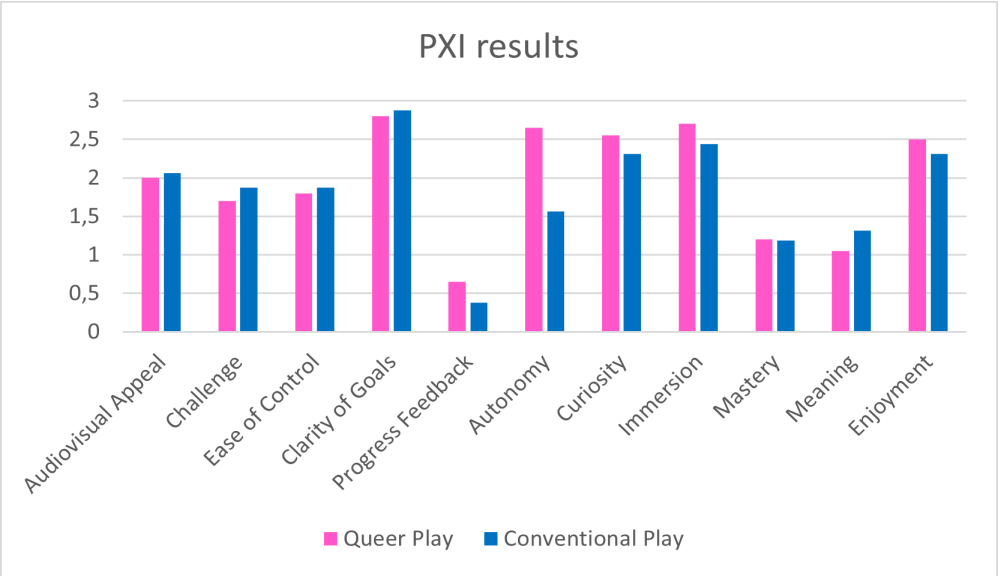
Note. Screenshot from platform NPC.AI showing examples of created and openly distributed AI NPCs ready to be interacted with in open-dialogue chats. (https://npc.ai/arcade) Retrieved 27.11.2023.

Figure 5: Screenshot – Prototype

Note. Screenshot from self-created prototype. The character to be interacted with is sitting on a chair, a big wooden table dividing NPC and player. A scroll on the top left gives brief character information and presents game objectives. Buttons on the right allowed for switching between characters and ending the game by voting for the believed murderer. The chat box for the player is placed underneath the scroll with a button “Ask” and “Clear” beside it, the generated NPC responses are visualized above the character.

TABLES

Table 1: PXI results (miniPXI model)

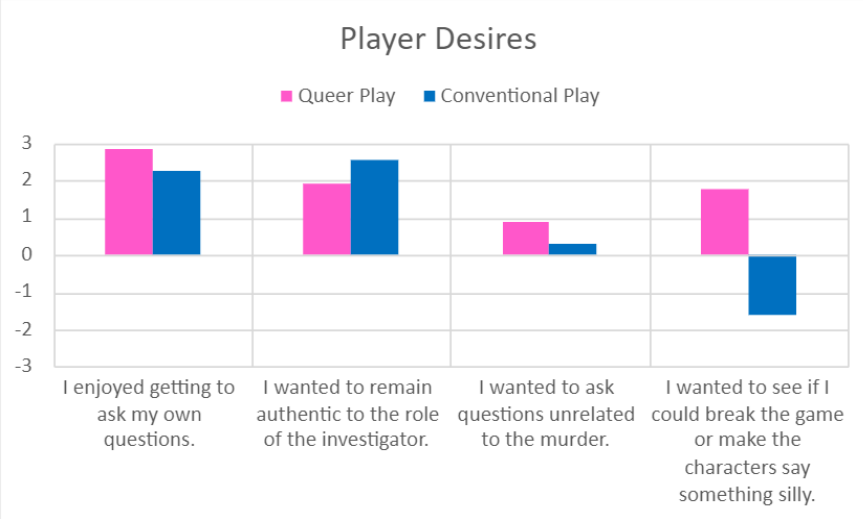


Note. Table shows scale -3 (Strongly disagree) to 3 (Strongly agree) on vertical axis, the results of the participants who engaged in queer play (pink) and the ones that did not (blue). Categories are taken from the theoretical model of PXI, which are each connected to one question of the 11-question miniPXI template:

Audiovisual Appeal: *I liked the look and feel of the game.*
Challenge: *The game was not too easy or too hard to play.*
Ease of Control: *The goals of the game were clear to me.*
Clarity of Goals: *The game gave clear feedback on my progress.*
Autonomy: *I felt free to play the game in my own way.*
Curiosity: *I wanted to explore how the game evolved.*
Immersion: *I was fully focused on the game.*
Mastery: *I felt I was good at playing the game.*
Meaning: *Playing the game was meaningful to me.*
Enjoyment: I had a good time playing this game.

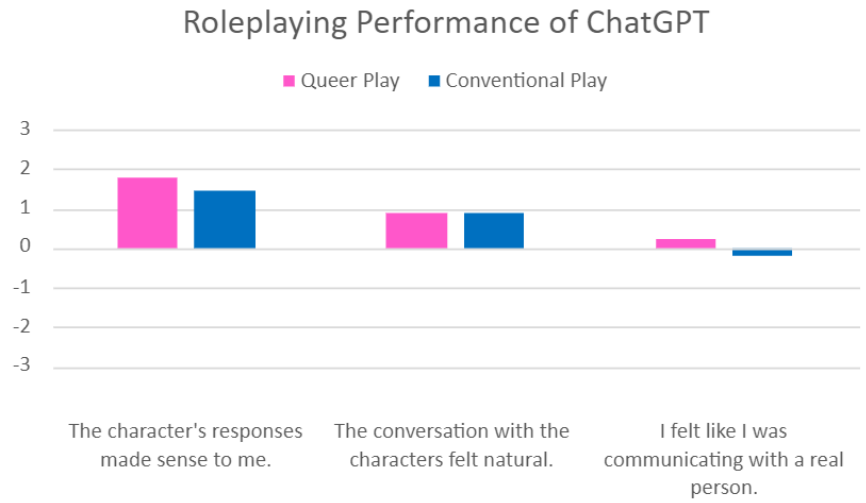
Both groups had similar values except for the perceived level of autonomy. Data collected by author on the 15th of November 2023.

Table 2: Player Desires (utilizing PXI scale)



Note. Four questions about player desires/motivation, utilizing the PXI scale from -3 (Strongly disagree) to 3 (Strongly agree). The horizontal axis shows both groups and their results to the following questions: Question 1: "I enjoyed getting to write my own questions." Question 2: "I wanted to remain authentic to the role of the investigator." Question 3: "I wanted to ask questions unrelated to the murder." Question 4: "I wanted to see if I could break the game or make the character say something silly." Question 4 showed a big difference in results between queer play group and conventional play group. Data collected by author on the 15th of November 2023.

Table 3: Roleplaying Performance of ChatGPT



Note. Three questions about the performance of ChatGPT for roleplaying, utilizing the PXI scale from -3 (Strongly disagree) to 3 (Strongly agree). The horizontal axis shows both groups and their results to the following questions: Question 1: "The character's responses made sense to me." Question 2: "The conversation with the characters felt natural." Question 3: "I felt like I was communicating with a real person." No significant difference was found between both groups. Data collected by author on the 15th of November 2023.