Futures of East Asian Queer Identity in Virtual Reality

by

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Abstract

By leveraging autoethnographic methods, this project positions the researcher's personal experience as an East Asian queer person to highlight the struggles faced by East Asian queer immigrants in Toronto, especially in the context of masculinity and gender expression. The project employs foresight methods to outline emerging trends of embodied experience in the metaverse. The project includes a virtual reality (VR) experience that highlights my personal and cultural issues surrounding body image, racial stereotypes, and avatar embodiment. This project also collects feedback from audiences of the VR experience to provide recommendations on how to achieve a more inclusive future in the coming era of the metaverse.

Acknowledgement

I began this MRP journey without knowing what I would achieve in the end. Stepping into the field of virtual reality, a field I am interested in but relatively new to, the research and art-making process was full of both uncertainty and excitement. Looking back now, I'm glad I chose to push myself and take that leap.

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Although completing this MRP marks the end of my time as a master's student, I'm certain it is only the beginning of my continued exploration and journey toward finding my vocation.

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Introduction

As virtual reality and mixed reality technologies continue to evolve, the boundaries between physical and virtual realities are becoming increasingly blurred. The rise of the metaverse—an interconnected network of immersive virtual spaces—presents new opportunities for individuals to express and explore identity in ways that may not be possible in the physical world. For marginalized communities, especially those at the intersections of race, gender, and sexuality, this shift presents both opportunities and challenges.

This research explores how East Asian queer identity might be represented, perceived, and reshaped within virtual spaces, focusing particularly on the role of embodiment and self-representation in immersive environments. By combining autoethnography, foresight, creative prototyping, and user testing, the research draws on lived experience and participant feedback to investigate how identity may be constructed in virtual reality. By reflecting on individual experience while situating it within broader cultural and technological shifts, the research also aims to contribute to an inclusive and forward-looking understanding of identity in the contemporary moment.

The research questions are as follows.

Primary Research Question:

How might the future of my queer identity and gender expression, as an East Asian immigrant in Toronto, Canada, be embodied within virtual reality?

Secondary Questions:

SQ1: What are the issues or challenges regarding identity and gender expression faced by the East Asian immigrant queer community in Toronto as reflected in my personal experiences?

SQ2: What trends are shaping the future of embodied experience within virtual reality for my queer identity?

SQ3: What are the possible ways that my queer identity can be expressed in the era of the metaverse?

SQ4: How might we bring more inclusivity to the East Asian immigrant queer community through the metaverse?

Methodology

This research project is conducted in four parts based on the four secondary research questions. Each part addresses a distinctive aspect and thus requires a different method to effectively answer the research questions. Holistically, these four parts come together to answer the primary research question raised in the beginning.

Part 1: Understand the status-quo of East Asian queer community utilizing autoethnography

Part 1 uses autoethnography to indicate the different issues regarding queer identity and gender expression that may be faced by members of the East Asian queer community in Toronto, Canada. Through autoethnography, the project looks at the researcher's own life experiences as an East Asian queer person and highlight several key moments to illustrate the bigger issues that may be faced by the overall cultural group.

Part 2: Identify trends of embodied experience in the coming era of metaverse

Part 2 leverages a horizon scan to identify the trends where queer identity intertwines with the development of the metaverse. The project conducts a horizon scan across relevant categories around the topic of queer identity in the metaverse. Specifically, the scanning focuses on how the embodied experience, including avatar creation, body tracking, and AI development, evolves in the future.

Part 3: Create a virtual reality experience through rapid prototyping

Part 3 documents the prototyping process from the ideation to the final VR design work guided by three core themes related to masculinity, racial fetishization, and avatar embodiment. Drawing inspiration from existing artists working with similar topics, this part explored how to express complex cultural and personal issues in immersive environments through rapid prototyping. With the groundwork in place, this process includes collecting digital assets, building virtual worlds, and developing a narrative to connect them in a meaningful and engaging way.

Part 4: Recommend ways to build an inclusive metaverse based on user testing results

Part 4 gathers user feedback about the designed virtual reality experience from Part 3 and gives suggestions for relevant stakeholders of the metaverse to lead to a more inclusive future. This part utilizes interviews to collect feedback from participants who engage with the designed virtual reality experience. Based on these insights, recommendations are formulated to foster the development of a more inclusive and supportive future for the East Asian queer community in Canada.

Part 1: Understand the Status Quo of East Asian Queer Masculinity Utilizing Autoethnography

Overview

This part of the research uses autoethnography to highlight key moments from my personal experiences, aiming to shed light on the broader issues faced by the East Asian queer community in Toronto. Drawing on the approach outlined by Ellis, Adams, and Bochner (2011), the research identifies and reflects on three 'epiphanies'—significant moments that have shaped how I understand masculinity and identity. These moments are not just personal memories, but meaningful turning points that offer insight into the cultural and social pressures experienced by others in the same community. Each epiphany begins with a narrative that sets the scene, offering context and background for the experience. These stories are then followed by a critical analysis that connects the personal to the political, using relevant academic concepts to better understand the deeper meanings and implications behind each moment. Through this method, the research not only explores my individual identity but also connects it to larger social patterns and collective experiences.

Mu Dou

The Story

Growing up in a city in China, I was surrounded by the usual experiences of childhood—busy streets, crowded schoolyards, and the constant chatter between classmates. However, underneath there was one word that haunted me all the time: *Mu Dou*.

The literal translation of *Mu Dou* is "Female Beans," and in our local dialect, it originally referred to young girls. But over time, it became a derogatory term for boys who displayed feminine characteristics or behaved in an effeminate manner.

Even as a child, I knew I was different. Unlike the typical energetic boys, I was quiet and reserved. I was small for my age and had no interest in "boys' activities" like basketball or soccer, but preferred to sit aside and just read books. I felt more comfortable around girls—they were kinder, more understanding, and never hostile. It was safe to say that I fit every stereotype of a soft, feminine boy.

But in my class, there was always someone more effeminate than me, and in a way, they "saved" me. Sometimes it was a boy with a slightly higher-pitched voice, or one whose walk seemed too delicate according to other kids' standards. Whoever stood out the most became the *Mu Dou* of the class—the automatic target of bullying. Boys would mock them for their lack of masculinity, shoving them for fun or laughing at the way they talked. Even some girls used *Mu Dou* as their official nickname, calling them nothing else. Friendships were rare for these boys, and over time, they ended up doing everything alone.

Watching this happen every day was both terrifying and alerting. I didn't want to join to laugh at them, but I also didn't have the courage to stand up for them. So, I stayed silent. Deep down, I felt both relieved and afraid. Relieved that, for now, it wasn't me. Afraid because I knew that at any moment, it could be.

And soon, it was.

When I started middle school, I realized there was no boy in my class more effeminate than me. That meant I was "chosen" as the *Mu Dou*. At first, it was just a few boys who called me that. But soon, the nickname spread, and more classmates picked it up. No one had physically hurt me yet, but the word itself hit me like the worst nightmare. Every time I heard it, I felt ashamed and frustrated. I didn't know how to respond, so I just stood there, staring at whoever had said it, silently protesting. But to them, this only made it funnier. I was proving their point—I was *Mu Dou*, too soft, too weak to fight back.

Then, it got worse. One day, right before class started, our Chinese teacher walked in, and the classroom gradually quieted down, ready for class. A boy sitting across the room complained that the sunlight was too bright for him to see the blackboard. Without hesitation, he yelled across the room:

"Mu Dou! Close the curtains behind you!"

Silence. The loudest silence I had ever heard.

Everyone had heard it—the entire class, the teacher. My heart pounded as shame and fear crashed over me. Now, there was no escape. The whole class, even the teacher, now knew that I was *Mu Dou*. That I was the soft, weak boy who wasn't qualified to be a man.

I don't remember how that day ended. Maybe the teacher told the class to stop using slurs, but that wouldn't stop teenage boys from mocking someone they had already singled out.

But something started to change over time. Slowly, my academic performance improved. My name climbed higher on the ranking sheets—first from the middle of the pack, then to the top tier, and finally to the very top. In Chinese society, academic success is a student's golden ticket. I became my teacher's favorite, the class representative, and students started approaching me for help with their homework. More kids wanted to make friends with me, because associating with the best student in class made them look better.

I became one of the popular kids. And as my status rose, the word *Mu Dou* was mentioned less and less to me. Even the boys who had bullied me the most started treating me with respect. Ironically, nothing about me had changed—I still talked the same way, walked the same way, behaved the same way.

I thought to myself: I made it. I'm not Mu Dou anymore.

Masculinity in the Chinese cultural context

Derogatory terms to mock males who present feminine characteristics exist in many cultures. It is one of the many ways that people use to publicly sanction and criticize feminine traits under the hegemonic masculinity idea (Connell, 2005). According to Connell, hegemonic masculinity portrays men not to be emotive or communal in orientation but rather independent and less expressive of their emotional states. It

is aimed to establish obvious boundaries from the feminine and strengthens differences to justify the dominant social position of men and the subordination of women, with the privilege and advocation of masculinity at the same time.

Under the framework of hegemonic masculinity, derogatory terms such as Mu Dou are leveraged to enforce gender norms, discipline those who differ from traditional masculinity, and reinforce the existing hierarchy. These terms function as tools that stigmatize behaviors perceived as unmasculine, particularly those associated with femininity or non-dominant forms of masculinity. By labeling boys who exhibit effeminate traits as Mu Dou, society tries to pressure them to conform to the hegemonic ideals of strength, aggressiveness and assertiveness. The public use of these derogatory labels not only excludes individuals who do not align with the standard, but also instills fear in others, discouraging the expression of gender nonconforming characteristics.

This process effectively conditions boys to internalize expectations from the hegemonic masculinity framework, and prepares them to maintain the gendered power structures of society. As a consequence, such language serves to sustain male dominance while marginalizing alternative expressions of masculinity.

The masculine ideal in the Chinese cultural context shows more layers. In traditional Chinese definition, masculinity is consisted of two counterparts: wen (literary, civil, mental) and wu (martial, force, physical). Reflected from the Confucian concept of the ideal man, junzi, virtues such as righteousness, propriety, wisdom are emphasized, and wen is much more closely associated, instead of wu (Louie, 2002). The traditional Chinese masculinity also has a close tie with the scholar image. Men who embody masculinity are depicted as upholding familial duties, preserving cultural practices, and striving for personal betterment (Geng, 2004). Moving to the modern era, with the huge economy development in the recent years, the modern Chinese masculinity emphasizes career achievement, socioeconomic status, and materially success (Feng & Yu, 2021).

This unique aspect of Chinese masculinity may explain my experiences with how others perceive me. When I began performing well in my studies and exams, the association between literacy, wisdom, and masculinity increased in others' evaluations of me, even though I continued to exhibit the same effeminate traits. In a society shaped by a long history of the examination system and meritocracy, achieving high grades signifies a greater likelihood of future career success and social mobility, qualities that align with Chinese masculine ideals. As a result, excelling academically can compensate for perceived deficiencies in physical masculinity, allowing individuals to gain greater social acceptance.

However, the shift in perception does not change the underlying social structure. I may have gotten rid of the label of Mu Dou, but this is a struggle in which no individual truly wins. It only highlights the rigid nature of the hegemonic masculinity, where individuals must constantly prove their worth against the predefined standard. The only winner is the patriarchal system, which sustains itself and legitimize its authority through the construction of masculinity.

Gym

The Story

When I left my hometown for university in Shanghai, I felt an overwhelming sense of excitement and freedom. Finally, I had the chance to explore and express my sexuality without fear of being discovered by my family. I was fascinated by the inclusive picture depicted by the queer culture, and finally felt my 'unconventional' masculinity would be appreciated and celebrated somewhere. Little did I know what lay ahead.

Free from the constraints of home, I immersed myself in gay life. I consumed queer media, made friends within the community, and started using gay dating apps. It didn't take long for me to notice a pattern: the men who were most admired, the ones who received the most attention, all fit a specific mold. They had muscular bodies, short hair, and full beards. In other words, the most masculine presenting type.

The jock aesthetic, deeply rooted in Euro-American gay culture, had firmly taken hold in China, becoming the gold standard for desirability. Ironically, at the same time, the rise of K-pop and K-dramas had popularized a more androgynous aesthetic among straight men, making delicate, beautiful features highly appreciated by women. Yet within the gay community, hypermasculinity was the supreme. It was common to see gay men adopting a look far more masculine than their straight counterparts.

As a young man in my early twenties, eager to fit in and be seen as attractive, I decided I had no choice—I needed to start working out.

But the gym was terrifying for me. I had always been small and skinny, never involved in sports, and the idea of exercising in front of others was scary. Lifting weights that felt laughably light compared to what other men were using, trying to share machines with buff gym-goers who seemed to own the space—it all felt painfully awkward and humiliating.

My fear paralyzed me, and as expected, I failed to keep up with the workout routine. But every time I looked in the mirror and saw my skinny frame staring back at me, I was filled with frustration. I hated my body. The shame pushed me to try again, forcing myself to return to the gym, over and over, in a relentless cycle of self-loathing and determination.

Determined to make a fresh start, I found a new gym near my university. I signed up for a membership, put on my workout clothes, and tried to have some confidence. Stepping into the gym, I was immediately overwhelmed. Everywhere I looked, there were strong, muscular men dominating the space. I managed to find an empty bench, so I pulled it to the farthest corner, hoping to be as invisible as possible. Picking up the lightest barbell, I opened a tutorial video on my phone, carefully following the instructions as I struggled to lift.

Then, a deep voice interrupted me.

"Hey bro, mind if we take turns on the bench press?"

I looked up. A towering, muscular guy stood over me. I freaked out, nodding quickly without being able to utter a single word. I felt like a weak and pathetic obstacle in the way of people who actually belonged here.

I stood aside as he took over, effortlessly loading heavy plates onto the barbell. Watching him lift with ease, I felt so embarrassed standing there. I could see myself in the mirror—a small, skinny, nervous guy standing in the place that he didn't belong to. Shame flooded me.

Then, I noticed the glances. Quick looks from others in the gym. I can't tell their expressions but, in my mind, they were judging me. What was I doing here? Why did I even think I could belong in this space? I started to feel the panic rushing in. My breath shortened. Sweat everywhere. I knew I couldn't stay here any longer.

Without thinking, I rushed out of the exercise area trying to escape. I found the bathroom, stormed into an empty stall, and locked the door. Only then did I feel safe and could breathe again.

No one could see me here.

No one could see the embarrassment, the awkwardness, the failure, of me.

No one could see me at all.

Masculinity in the gay cultural context

Hegemonic masculinity reinforces a hierarchical system that privileges masculinity over femininity and other alternative forms of gender expression, ultimately contributing to the homophobia that marginalizes queer individuals (Connell, 1995; Kimmel, 1994). However, the favoring of masculinity is not confined to heterosexual spaces; it is also evident within the gay community itself (Clarkson, 2006; Miller, 2015). In an effort to dissociate themselves from feminine labels within a heterosexist and homophobic culture, some gay men tend to present themselves as more masculine.

Body, or muscularity, has long been central to the construction of masculinity, especially within the Euro-American tradition. This is exemplified by classical Greek and Roman statues, which celebrate the idealized male physique, and by the Olympic Games, where athleticism and physical fitness have historically been revered (Pope, Phillips, & Olivardia, 2000). The pursuit of masculinity is thus closely linked to male bodily practices, particularly the development of a lean and well-defined muscular physique (Lefkowich et al., 2017).

With globalization and the widespread influence of digital media, the gay masculine hierarchy has become increasingly visible to audiences worldwide (Nguyen, 2014), intensifying the perception that muscularity is a defining characteristic of masculinity. This imported Western ideal of masculinity leads to an evolution of the Chinese masculinity, despite the fact that caring too much on the appearances and body image may even be regarded as feminine in traditional Chinese ideology (Yang, Gray & Pope, 2005).

The internalization of hegemonic masculinity within the gay community also reflects homonormativity where the heteronormative ideals are constructed into queer culture and individual identity. As Duggan argued (2004), homonormativity does not contest dominant heteronormative assumptions and institutions, but upholds and sustains them.

The emphasis on a muscular physique within the gay community is even more striking to me, as I initially believed that gay culture would provide an escape from the rigid expectations of traditional masculinity and hoped that embracing my identity would free me from the societal pressure to conform to hegemonic masculine ideals. However, the homonormativity reflected from the pursuit of a muscular body among gay men creates an environment where muscularity is not only desirable but often expected, mirroring the existing power structure rather than subverting it. As a result, those who do not fit this mold may find themselves marginalized even within a space that is supposed to be inclusive.

The over-emphasis on body image and visual appreciation for muscular body also brings mental health and disordered eating problems (Duggan & McCreary, 2004). The gym for me was not a place for physical exercise—it was a space filled with anxiety and self-doubt, where every visit reinforced feelings of inadequacy rather than self-improvement. In the gym, the mirrors that line the walls served not as tools for self-correction, but as a constant reminder that my body was not ideal and I have to reject my current body, and align with a muscular physique in order to be loved. Every individual who appeared stronger than me seemed to be watching me and judging me, reflecting the masculine standard prevailing in the outside world.

Rice

The Story

After nearly a decade in Shanghai, I moved to Toronto, stepping into a multicultural environment for the first time. I was both excited and anxious about what lay ahead.

In China, I was simply myself. In Canada, however, I was East Asian first, then myself. I "became" East Asian only after leaving East Asia, as if the label had been automatically assigned to me the moment I arrived. While I was no stranger to the feeling of being a minority, race was an even more visible marker than sexuality. I was proud of who I was, yet I also had to confront the stereotypes placed upon me simply for being East Asian or Chinese.

I quickly realized that some of the personal habits I had taken for granted were not universal but distinctly Chinese. The vegetables I had grown up eating were "vegetables" in an Asian supermarket like T&T, but in a "regular" supermarket like Loblaws, they were labeled "Asian vegetables". Learning about racial slurs directed at my own ethnicity was another strange experience. The offensive words initially meant little to me because I didn't have the personal or historical trauma associated with them. To this day, no slur sounds more offensive to me than Mu Dou. It almost felt like I had to remind myself to take offense at certain words, like "Rice Boy," a derogatory term used to describe East Asian men.

Navigating dating as an East Asian man in Toronto was an equally interesting experience. Dating apps, first and foremost, felt like a process of self-commodification—choosing the most attractive photos to appeal to potential "customers," presenting oneself as a set of parameters to be positioned into the right "market," and reducing a person's personality to one catchy paragraph, like an advertising slogan. But as a racialized person, I was also very aware of how these platforms reflect racial preferences. I began to feel less like an individual and more like a type.

Despite dating apps discouraging racial exclusion, I still saw profiles that explicitly stated, *No Asians*. Users defended it as nothing more than a personal preference. But to me, being rejected so bluntly because of my race was far more than that. Beyond exclusion, statements like these also carried an implicit assumption: by stating that they don't want an Asian person, or particular East Asian, was implying that they wanted a more masculine presenting partner, because East Asians are often perceived as smaller-framed and less able to grow facial hair, which are physical traits commonly associated with traditional masculinity.

On the other hand, I also encountered profiles that explicitly stated a preference for East Asians. These men were attracted to the smooth, often hairless look, the slim or skinny build, and the soft features. I soon learned more lingo used within the community: The non-Asian men who are predominantly interested in Asian men were called *Rice Queens*, while the Asian men who are predominantly attracted to other Asian males were labeled as *Sticky Rice*.

Beneath these rice related terminologies, I met many different people, but one experience stood out. I once went on a date with a man who, during a conversation about our ideal romantic partners, said to me:

"I just love Asian guys, for how slim and smooth you guys are."

In that moment, I felt a complicated mix of emotions. On one hand, I felt a strange sense of validation—my insecurities about not being masculine enough as a child are actually being desired by others. But at the same time, I felt uncomfortable of being explicitly described as a fetish. I was not being seen as an individual, but as a mass-produced product, fresh off an assembly line, like a bag of rice. I could be replaced by any other East Asian man with the same ethnic traits.

The struggles I had with traditional masculinity seemed to disappear, only to be replaced by a new concern—I worried about whether I could maintain the skinny East Asian ideal. I wondered: if I gained more weight, would I no longer fit the mold? Would I become invisible again?

Masculinity in the Canadian multi-cultural context

Racial Stereotype and Discrimination

In a multicultural society like Canada, race plays a crucial role in shaping social perceptions and personal identity (Bannerji, 2000). The intersection of gender expression and race adds further complexity, influencing how individuals are perceived within different communities (Crenshaw, 1991). For gay Asian men, these overlapping identities often result in further marginalization (Han, 2007; Chou & Feagin, 2015).

Considered as smaller in size, and lacking the muscularity associated with Western ideals of traditional masculinity, Asian men are frequently positioned in opposition to the dominant white masculine archetype (Han, 2008). This racialized perception is largely reflected in cyber space, where Asian men are systematically ranked lower in desirability due to the prevailing preference for tall, muscular, and hypermasculine bodies (Payne, 2007). In this racialized hierarchy, whiteness is often positioned as the standard of desirability, while non-white bodies, especially those that do not conform to the ideals of masculinity, are devalued.

This phenomenon pressures many gay Asian men to conform to the dominant concept of masculinity in an attempt to gain social acceptance and improve their desirability. However, the widespread adoption of the muscular masculine ideal creates a double discrimination. For those who fail to achieve this standard face compounded discrimination, not only for being Asian but also for not possessing the hypermasculine physique. More profoundly, even when somebody successfully achieves a muscular body as a social validation within the hegemonic racial structure, it only reinforces the very masculinity hierarchy. If muscularity continues to be seen as the only way to prove one's worthiness, the underlying systems of racial and gender hegemony will always stay unchallenged.

Fetishization

The other side of discrimination is fetishization. The stereotypical portrayal of East Asian men as effeminate and submissive has contributed to their fetishization within the gay community, where they are often viewed through a lens of exoticism and passivity (Han, 2015).

The distinction between fetishization and interest is often ambiguous and difficult to define. In most cases, it must be assessed within a specific context. Fetishization is often characterized by an obsessive fixation and typically implies that the "interest" remains superficial, focusing solely on physical attributes rather than trying to know the individual as a whole person (Pham, 2014). It also conveys a sense of interchangeability, reducing individuals to commodities that can be replaced by anyone who have the same skin color (Kumar, 2007; Kawai, 2005). The experience of fetishization also leads to feelings of objectification, an inability to form meaningful intimate connections, and being reduced to narrow stereotypes (Stacey & Forbes, 2021).

While being fetishized in certain contexts may appear to be empowering, this sense of empowerment is ultimately built on a dangerous illusion. This form of recognition is conditional and superficial, as it depends on maintaining specific stereotypes rather than acknowledging the person's individuality and agency. As a result, any empowerment obtained from fetishization is fragile, reinforcing rather than challenging the systems of inequality that produced the marginalization in the first place.

Part 2: Identify Trends of Embodied Experience in the Coming Era of Metaverse

Overview

This part of the research uses foresight methods to explore emerging trends that shape the future of queer embodied experiences in the metaverse. By conducting desktop research to identify emerging patterns of change, information is synthesized into broader trends and offer insight into how the metaverse may evolve over time. The focus of this foresight exercise is placed on three key areas: avatar creation, body tracking, and AI development. These three elements are essential to how individuals might experience and express their identities in future virtual environments. By studying the shifts in these areas, the research aims to better understand both the opportunities and challenges that queer individuals—especially East Asian immigrants—may face as they navigate and embody themselves in the evolving digital world of the metaverse.

Avatar Creation

Mirror, Mirror in the Metaverse

Metaverse platforms offer sophisticated tools that enable users to create avatars that closely mirror their physical appearances. Meta's updated avatars provide detailed adjustments for features like eye size, nose shape, and body types, allowing for more accurate self-representation. Generating avatars from selfies are improving its power and quality of results. Advances in 3D modeling and rendering technologies also enable the creation of avatars that closely resemble real humans, with detailed facial features, skin textures, and hair. We won't have to settle for using an animated figure as our avatars, a hyper-realistic metahuman that mirrors ourselves could be available in the metaverse.

One Size Doesn't Fit All

Avatar creation tools are adapting to provide a broader range of customization options to represent diverse ethnicities, genders, and body types. Initiatives on different platforms aim to enable users to choose different body types that reflect real-world diversity and promote body positivity. Customization options are expanding to include a wider spectrum of ethnic features and gender expressions, moving beyond the traditional Eurocentric avatar models. This gives members of the racialized queer community more power to accurately present themselves without defaulting to a universal ideal.

New Canvas for Crafting Identities

The wide range of editing options and more intuitive creation tools give users, especially queer users, a new way to experiment with their self-expression. Some platforms embrace more fluid and or even non-human representations, allowing users to take on imaginary or hybrid forms that break free from conventional constraints. Users can create avatars that align with their real-world identities or explore alternative digital personas in ways that challenge social norms. In a world where the metaverse is a space

where people live and socialize, the digital identities that participants create may provide greater freedom for queer people's self-perception.

Body Tracking

Blurring Lines

Innovative wearables are developed to capture more detailed and comprehensive body movements. Wireless devices can synchronize users' avatars with their real-world motions in real-time, offering an authentic embodied and immersive experience. Haptic feedback devices can make users feel their avatars' interactions, adding tactile dimension to the virtual experience. Integration with fitness equipment can incorporate health data and metrics into the metaverse, enabling the virtual embodiment to reflect the real-time physical reaction from the users. Thus, the addition of sense perception makes the Metaverse feel even more "real" further blurring the lines between the physical and the digital.

Come as You Are

Current advancements in tracking technologies significantly improve their ability to capture individual body movements in mixed reality. Hand-tracking and eye-tracking technologies enable more natural interactions by allowing focus detection and gesture recognition without the need for external devices such as controllers. Additionally, the development of computer vision and depth-sensing technologies is expected to further expand marker-less tracking capabilities, enhancing the sense of natural immersion in the metaverse, much like how individuals experience interactions in the physical world.

Build the Village

Enhanced body tracking allows for more natural and engaging social interactions in multi-user virtual environments, opening space for the establishment of a sense of community. Facial tracking and recognition technology enable the avatars to reflect real-time emotions, adding more expressive layers to the social interactions between users. Virtual collaborative space benefit from accurate body tracking to provide places for users to co-exist and co-create, facilitating the communication and community building. The metaverse becomes a safe space for marginalized groups like members of the queer community to thrive when their presence in the physical world is being threatened.

AI Development

Everyone Is in Your Own Truman Show

AI creates expansive and dynamic virtual environments filled with lifelike avatars that can mimic human emotions and interactions, providing a personalized miniature world to every user. Existing AI tools like Meshy could already generate detailed 3D models from text or image. With the further development of AI generation, more content in the metaverse, or even the metaverse itself, could be tailored to the preferences and habits of the individual user. This level of customization has the potential to turn the

metaverse into a deeply personal space, where every user experiences a uniquely tailored digital reality made for them.

Virtual Intimacy, Real Feelings

AI-powered avatars capable of interacting with users can act as intimate digital companions, offering emotional engagement and personalized interactions. Conversation-based AI tools, such as ChatGPT, are increasingly being utilized not only to enhance work efficiency but also to address emotional needs, including applications in therapeutic contexts. With advancements in natural language processing and machine learning, AI-generated avatars can engage in human-like conversations and even adapt their behavioral patterns based on a deepening understanding of the user. These avatars can provide companionship, emotional support, and even simulate romantic relationships that transcends physical boundaries. This would be even more significant for queer users to experiment with romantic and emotional connections without the pressures of conforming to binary norms in the real world.

Bias in the Algorithm

The improper data sourcing and training could bring biases related to gender, race, and culture, which would be unintentionally embedded in AI algorithms. This problem could become more severe as the metaverse increasingly relies on content generated by AI to shape digital environments and avatars. The virtual world could be perpetuated with real-world biases in a more subtle yet deeply impactful way. AI-driven contents could reinforce traditional gender norms or prioritize heteronormative dynamics, presenting new systemic challenge for queer individuals to navigate in the virtual spaces.

Part 3: Create a Virtual Reality Experience Through Rapid Prototyping

Overview

This part of the research documents the prototyping process of the virtual reality experience created for the project. Before beginning the actual design and development, I identified three core themes that I wanted to explore through the artwork. These themes served as a foundation for my research and provided a clear direction for the creative process. In addition to defining the themes, I also drew inspiration from a range of existing artists and creators whose work touches on similar topics, such as identity, queerness, and virtual embodiment. This helped me better understand how different artistic strategies can be used to express complex social and personal issues in immersive environments. Once the conceptual groundwork was in place, I began the hands-on prototyping journey. This included collecting digital assets, constructing a series of virtual worlds, and gradually shaping a narrative that links these worlds together in a meaningful way. Each stage of the process aimed to reflect and deepen the themes while also creating an engaging and immersive experience for the audience.

Themes and Artist Inspirations

Key Themes

Based on my autoethnographic experiences and the identified trends of embodied experience, several key themes and topics started to take shape. These come from common keywords and patterns that kept appearing over the course of the textual and material research creation process.

Masculinity and Body Image: The VR piece centers around a discussion of masculinity and its link with body image. Pulling references from my autoethnographic stories, the artwork aims to spark conversations about self-image, identity formation and the perception of masculinity.

Racial Stereotypes and Fetishization: This VR piece extends its exploration from a personal level to a cultural level based on my own identity as East Asian. Cultural symbols and references are used to create a specific and personal narrative, with the aim of evoking collective resonance from the wider community. By adopting a visible cultural lens, the artwork touches upon personal and broader issues, including racial discrimination, stereotypes, and fetishization faced by the East Asian queer community.

Avatar Embodiment: As a virtual reality artwork, avatar embodiment is a key topic that is addressed in the experience. By immersing the audience in a VR setting, viewers experience different perspectives to observe the world switching between the third-person view and the first-person view. This switch between third person and first-person point of view immerses viewers in an experience where they oscillate between being both observers and the observed. This work opens up a discussion about the relationship between people's physical form and the virtual embodiment of that form.

Artistic Inspiration

Two artists were important inspirations during the ideation and prototyping process.

Jacolby Satterwhite is a contemporary American artist known for his innovative use of digital media to explore themes of identity, memory, and personal history. Working across different media forms including virtual reality, video, performance, and installation, he combines 3D animations with elements of drawing, dance, and sound. His art frequently incorporates elements from queer subcultures, such as voguing and ball culture, reflecting his personal experiences. His works often feature his own body in various forms as well, addressing themes of desire, vulnerability, and empowerment within a queer context. By integrating these elements together in his art, Satterwhite creates immersive environments that celebrate queer identities and challenge normative perceptions of gender and sexuality.

Satterwhite's work demonstrated to me the possibilities that 3D modeling and animation can offer, particularly within a queer context. His unique expression of queerness, combined with the personal interests and histories embedded in his practice, inspired me to consider how to visualize my own personal experiences. Through his work, I was encouraged to explore the body not just as a subject, but as a medium for storytelling and self-representation. This approach has motivated me to engage with my personal narratives through the digital reconstruction and reimagination of the body. Works of Satterwhite could be found at: https://www.miandn.com/artists/jacolby-satterwhite.

Mika Rottenberg is an Argentine-born, New York-based contemporary artist recognized for her innovative fusion of film, installations, and sculpture to examine themes of labor and value creation in today's hyper-capitalist society. She is known for her works that depict surreal assembly lines where individuals engage in repetitive tasks that transform bodily actions into the creation of commodities. Her art also highlights the context of the global interconnectedness of labor and production, playing with metaphors of the commodification of the body and invisible networks that support global economies. Rottenburg's works often blur the lines between reality and fiction by incorporating documentary footage alongside staged scenes, creating an immersive yet fantastical environment.

Rottenberg's depiction of surreal assembly lines allowed me to further explore the concept of body objectification, highlighting how bodies can be fragmented and presented in both literal and symbolic ways. Additionally, the distinct aesthetics present in her work, particularly her treatment of space, movement, and repetition, influenced how I chose to present the body in my own piece. Her approach encouraged me to think critically about the visual language I use to represent bodily experiences and the intersections in between. Works of Rottenberg could be found at: https://www.hauserwirth.com/artists/23390-mika-rottenberg.

Prototyping process

Assets Collection

Body Scans

The overall process started with creating and collecting 3D assets to be used in the virtual environment. As this piece is centered around autoethnography, I knew I wanted to use my own 3D body scan as the main character in the experience to tell the story.

I chose LiDAR as the main way to create my 3D body scan. LiDAR, which stands for Light Detection and Ranging, is a remote sensing technology that uses laser pulses to measure distances to objects or surfaces. By emitting laser beams and calculating the time it takes for each pulse to return after reflecting off a target, LiDAR systems can determine precise distances. This process enables the creation of detailed three-dimensional representations of environments and objects.

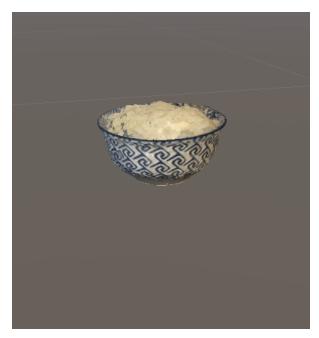
Although LiDAR technology is capable of capturing highly detailed representations of the human body, the resulting 3D models I got often contained slight irregularities like rough edges or minor distortions that reduce their realism. Rather than finding these imperfections unsettling, I found them to be quite intriguing. They serve as a reminder that these digital scans are not my actual body, but rather digital interpretations and the embodiment of it. These small flaws can be viewed as symbolic, highlighting the distinction between physical reality and its virtual representations. In a broader sense, they may also reflect the inevitable imperfections we encounter in everyday life, suggesting that even in high-tech reproductions, a sense of human imperfection persists.



Figure 1 3D Scan of Myself

Rice

Rice emerged as a compelling metaphor that offers multiple layers of meaning. Culturally, rice is widely recognized as a symbol of Asian identity, and by incorporating it into my artwork, it allows the piece to maintain a strong connection to my cultural background. Referencing rice visually and conceptually ensures that the work retains a distinct sense of "Asian-ness" throughout. In addition, as discussed in the autoethnographic section of this paper, the term "rice" also appears in various expressions and slang within the queer community, often carrying complex and nuanced meanings. By integrating different visual representations of rice, the work not only highlights aspects of cultural identity but also reinforces its engagement with queer themes. This dual significance makes rice a powerful and versatile symbol within the project that can act as the thread that connects different parts of the story.



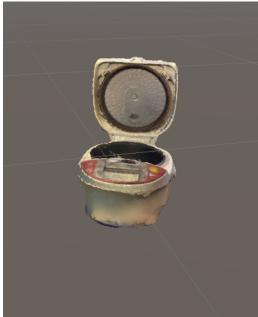


Figure 2 3D Scan of Rice Bowls and Rice Cooker

360° Video and the tension between the observer and the observed

I am particularly interested in exploring the dynamics of immersive environments and the shifting relationship between observing and being observed. The use of 360° video enables the inclusion of real-world footage that initially creates a third-person, documentary-style experience. However, through specific strategies, such as altering the viewer's perspective, including direct eye contact or characters speaking to the camera, this sense of detachment can quickly shift. The viewer may begin to feel not just like a passive observer, but rather as someone being addressed directly, becoming the object of the scene's attention. This transformation from observer to observed generates a unique tension that VR is especially well-equipped to explore. I aim to use this immersive quality to highlight and question the experience of objectification, emphasizing how easily the roles of subject and object can blur within virtual spaces.



Figure 3 360° Video Shot

World Building

World One: Gym, Body Image, and Insecurities

To construct the first virtual world in this project, I drew from a personal context discussed in the autoethnographic section: the gym. For me, the gym has long been a space filled with discomfort and self-doubt, particularly around issues of body image and masculinity. By setting the scene in a virtual gym, I am able to confront and explore these insecurities within a creative environment. To add a layer of symbolic meaning, I introduced a surreal twist—filling the gym with objects associated with rice, such as rice bowls and rice cookers. These elements serve both as cultural references and as a metaphorical thread that ties back to earlier discussions of identity and queerness.

For character animation, I used Mixamo to rig 3D models and apply motion sequences. I selected animations that mimic common gym movements, such as air squats, bicep curls, and muscle flexing, to reinforce the physicality and familiarity of the gym environment. In contrast, I also included animations that convey sadness or vulnerability. This deliberate contradiction reflects the tension I often experience between the displays of confidence and the internal struggle with self-image. Through this layering of visual cues and emotional tones, the virtual gym becomes a space where complex feelings about body, identity, and performance can be expressed and examined.

For the skybox and background image of the scene, I selected a visual that evokes a futuristic atmosphere, which helps to enhance the overall sense of surrealism. At the same time, the image was chosen for its connection to the central metaphor of rice. Its color tone and texture resemble the appearance of rice, allowing for a visual continuity that reinforces the thematic linkage.

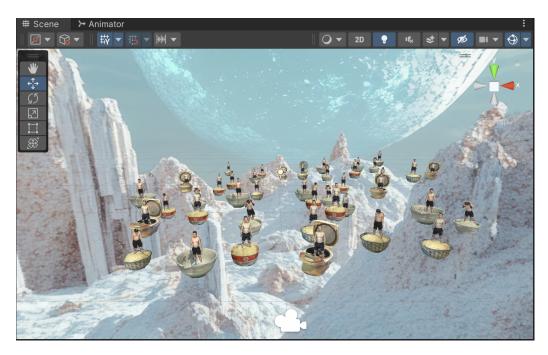


Figure 4 Screenshot One of World One in Unity



Figure 5 Screenshot Two of World One in Unity

World Two: Body, Advertisement, and Objectification

The second virtual world is inspired by the idea of using the body itself as a medium for artistic expression. In this scene, I project videos directly onto a 3D scan of my own body, turning it into a canvas. This intentional act of 'objectification' introduces a visual aesthetic that leans into the sensual and the erotic, encouraging the viewer to engage on a more sensory and emotional level. The setting for this world draws from the imagery of the dark room, a familiar space within gay cruising culture that is

charged with themes of anonymity, desire, and voyeurism. The design includes wall openings that resemble peep holes, subtly inviting the viewer to come closer and witness what feels like a private performance. The lighting in this scene is carefully designed, with soft blue and pink tones casting a dim glow that adds to the intimate atmosphere. These color choices also align with the broader cyberpunk and futuristic aesthetic of the overall piece, reinforcing the tension between digital abstraction and embodied presence.

For the video content projected onto the body, I selected retro advertisements for rice. These vintage commercials create a layered interaction between the visual media and the body scan—while the videos aim to sell rice, the projected surface is an East Asian body, turning the body itself into a symbolic product. This dynamic introduces a deeper level of objectification, where not only is the body used as a canvas, but it is also implicated in a transactional narrative—becoming part of what is being sold.

The use of retro advertisements adds further complexity, as their outdated aesthetics and messaging often reflect the social norms and biases of their time. Many of these advertisements contain language and imagery that, when viewed through a contemporary lens, feel unsettling or even problematic due to their racial stereotypes. By incorporating these elements, the scene invites viewers to reflect on the historical commodification of both cultural identity and racialized bodies. The racial lens thus adds an important dimension to the work, amplifying the emotional and thematic contrast within the scene and introducing critical engagement with issues of race, representation, and the impact of visual culture.

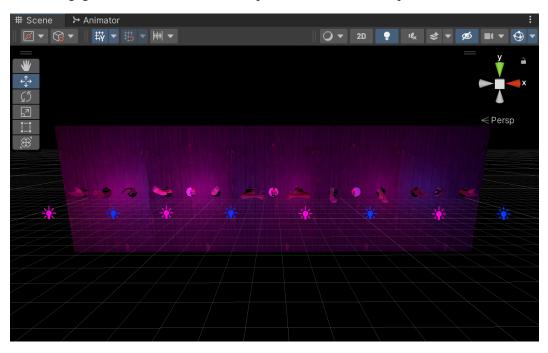


Figure 6 Screenshot One of World Two in Unity

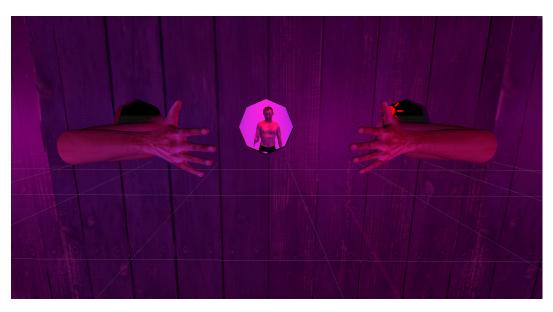


Figure 7 Screenshot Two of World Two in Unity

World Three: Mirror, Possibilities, and Gaze

The third virtual world serves as the final destination in the sequence, and I intentionally designed it to be the darkest in tone while also the most forward-looking in terms of its conceptual focus. In my research, I came across AI generators for 3D models, and I was intrigued by the potential these tools offer for constructing digital identities. I decided to incorporate AI-generated 3D avatars into this scene as a way of engaging with the idea of future self-representation in the metaverse. By using prompts that describe my ideal physical appearance, the AI tool produced a range of digital models that reflect the perfect versions of myself. These models function as imagined versions of who I could become or choose to be in a virtual future. This use of generative AI is aimed to echo with the theme of transformation but also raises questions about authenticity, desire, and the construction of identity in digital spaces. Through this world, I aim to explore both the attraction and the unease that comes with the possibility of endlessly customizable digital selves. As Turkle (2011) argues, as our reliance on digital technologies and social media continues to increase, the ability to constantly reshape and customize digital selves leads to feelings of disconnection and identity fragmentation.

Mirrors play a central role in the visual design of this scene. For me, the mirror functions as a powerful metaphor for self-reflection. Just as a physical mirror offers a direct reflection of our appearance, the creation of avatars or digital embodiments in virtual environments similarly prompts a confrontation with our own self-image. In this way, the mirror becomes more than a surface, but a medium through which we initiate a silent dialogue with ourselves. Within the context of this scene, the mirrors invite viewers to consider how identity is shaped, performed, and embodied in virtual spaces. They underscore the internal process of self-recognition and self-construction, reminding us that even in the most futuristic or artificial environments, the question of who we are and who we want to be remains deeply personal and introspective.

The background design of this scene is inspired by concepts of the male gaze and the queer lens. Visually, I incorporated numerous blinking eyes throughout the environment. These function as symbolic representations of both external and internal surveillance. The eyes suggest the constant presence of societal observation, particularly the way queer bodies are often judged through normative expectations. At the same time, they also reflect the gaze we cast upon ourselves: a form of self-surveillance that shapes how we perform and construct our identities. By personifying these gazes, the blinking eyes highlight the tension between visibility and vulnerability. They follow the viewer through space, mirroring the pressure of being seen and the impact this has on how we understand ourselves, both in the present and as we project ourselves into imagined futures.

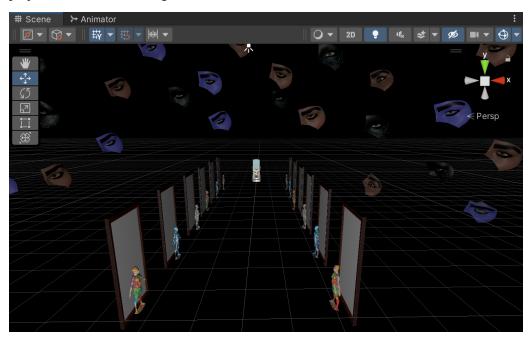


Figure 8 Screenshot One of World Three in Unity



Figure 9 Screenshot Two of World Three in Unity

Experience Creation

3 Degrees of Freedom

To combine every world together and create the final virtual experience, I made the decision to create a 3 degrees of freedom video. In virtual reality, the concept of degrees of freedom (DoF) refers to the number of ways a user can move and interact within the virtual environment. A 3DoF system allows rotational movement—looking up and down, left and right, and tilting the head—enabling users to explore the environment from a fixed position. In contrast, a 6DoF system includes both rotational and translational movement, allowing users to move forward and backward, side to side, and up and down.

While a 6DoF system offers a more interactive and physically engaging experience by allowing users to move freely within the virtual space, I deliberately chose to work with a 3DoF system for this project because it allows for the seamless integration of the 360° video footage into the experience. This creates a layered environment that blends real-world imagery with constructed, imaginary elements, enhancing the narrative and visual complexity of the work. Additionally, the use of 3DoF enables a more curated and controlled viewer journey. With limited mobility, I can design a guided flow through the virtual environment, carefully determining when and where the viewer encounters specific elements or transitions between worlds. This design choice introduces an intentional power dynamic, in which the viewer becomes a subject of the experience rather than an autonomous individual. In this sense, the restriction of movement becomes another subtle metaphor of objectification—the viewer is no longer entirely free to explore but is instead directed and positioned within a structure defined by the creator.

Narrative Formation

With all the individual virtual worlds completed, the next step was to combine them together into a coherent and engaging narrative. In terms of the transition between different worlds, to maintain a cohesive aesthetic across the piece, I drew upon recurring visual language that already exists in the work—particularly round shapes and eye imagery.

To frame the entire experience, I chose to begin and end the piece with 360° video footage of myself preparing rice in my own kitchen. This decision strengthens the recurring metaphor of rice that runs throughout the work, grounding the virtual journey in a personal and culturally significant context. The opening scene shows the process of rinsing the rice and placing it into the rice cooker, while the final scene features the sound of the rice being fully cooked. These echoing scenes creates a narrative where the viewer is transported from a familiar action into a sequence of imagined virtual worlds then is returned to that everyday context. The use of 360° video enhances the sense of immersion, allowing viewers to experience the rice cooking process from a first-person perspective. In this way, the rice-making process becomes both a literal and symbolic anchor for the work, guiding the audience through an embodied journey that blurs the boundaries between reality and digital imagination.

Video Editing

As the final step of the prototyping process, video recordings of the VR experience are then imported to Premier Pro to be edited with the right sequence and audio effects.

In the first world, I included background audio of restaurant sounds to support the visual reference to rice bowls and to create a more immersive, culturally grounded environment. A voiceover of myself speaking about my own body image insecurities is also included, making the personal themes of the work more direct. To enhance the emotional tone, I added reverb effects to the voice, creating an echo that mimics the feeling of anxiety and internal struggle.

In the second and third worlds, ambient soundtracks were used to build an unsettling and intense atmosphere. These sounds serve as a contrast to the visual embodiments presented in each scene, highlighting the emotional tension between what is shown and what is felt. The use of sound in this way adds another layer to the experience, encouraging the viewer to reflect more deeply on the unease and complexity within these virtual representations.

For the outro of the piece, I chose the classic queer anthem *Dancing Queen* to serve as a final emotional and thematic summary. After guiding the viewer through a series of surreal, uncomfortable, and reflective virtual worlds, the familiar and uplifting energy of this song offers a moment of release and celebration. As the title "Rice Boy" appears on screen, the joyful tone of the music is intended to reclaim the label with pride. This closing moment is aimed to reframe the narrative, transforming earlier reflections of self-doubt into a sense of empowerment and self-affirmation.

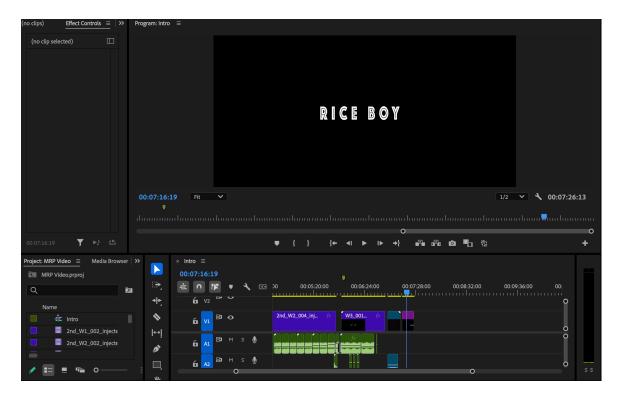


Figure 10 Project in Premiere

The final work in video format could be found at: https://youtu.be/OjweqFvE1H4

Part 4: Recommend Ways to Build an Inclusive Metaverse Based on User Testing Results

Overview

Part 4 analyzes the results gathered from user testing and follow-up interview sessions conducted with ten participants. The goal of user testing was to understand how viewers interpreted the virtual reality experience, as well as to gather their thoughts on identity and embodiment in virtual spaces. The findings are organized according to the three main themes explored in the artwork, allowing for a more focused analysis of how each theme was received and understood. In addition to analyzing the feedback, this section also combines both user insights and personal observations to generate a set of recommendations. These recommendations are intended to guide future efforts toward building a more inclusive and empowering metaverse, particularly for marginalized communities such as East Asian queer individuals.

Test Results and Feedback

After completing the VR experience, I conducted ten test sessions in which participants were invited to engage with the work using VR headsets, followed by semi-structured interviews. Since the intended audience for the piece is adults over the age of 18, without restricting to any specific demographic group, the participants represented a range of ethnicities and sexual orientations, with the spirit of adding diversity to the research. Given that the themes explored in the work directly relate to East Asian and queer identities, several participants who are members of under these communities were interviewed to ensure the relevance and depth of the feedback. The key findings from these sessions are outlined below.

Body Image and Masculinity

Regarding the way the body is presented with the piece, three participants commented on the subtle distortions caused by the 3D scanning process, as well as the slightly unnatural movements produced by the animation tools. These visual imperfections created a sense of separation between the digital avatars and the real-life version of myself, making it easier for viewers to perceive the avatars as symbolic rather than literal representations. Without any prompting, five out of the ten participants identified the theme of body image insecurity in the first scene. This suggests that the visual and sound cues embedded in the scene were effective in communicating the message and resonated with viewers on a personal level.

"My interpretation (of this work) is about your insecurities. You showed different bodies in the first scene, and the voices are almost like your anxieties talking. I really enjoyed that. It made me uneasy, but I liked that." - Participant #7

Using this piece as a point of discussion, I also let participants share their personal understandings of masculinity and whether they saw a linkage between masculinity and body image. Six out of ten participants described masculinity primarily as a personality trait rather than a physical appearance. They associated it with qualities such as bravery, emotional strength, and toughness, rather than specific body types. One participant reflected on changing norms within the queer community, noting that while muscularity was once strongly linked to masculinity, this association has become less rigid. They pointed

out that today, many muscular individuals present themselves in more feminine ways, which helps to further break the tie between physical appearance and gender expression. Another participant offered a different perspective, suggesting that a slightly chubbier body type can also be perceived as masculine. In their view, this body type implies a sense of ruggedness and a lack of attention for appearance, which are traits that they felt align with ideas of masculinity. These responses show that perceptions of masculinity are diverse and evolving, shaped by cultural, social, and personal experiences.

"To me masculinity is more like an aura or persona, more than a body. It's how they present themselves... Muscular body does not equal masculinity to me." - Participant #2

The results reflected the wide range of opinions and perceptions about masculinity and reminded me that the struggles and insecurities portrayed in this work stem from a deeply personal place. However, while the experiences highlighted in the artwork are shaped by my own identity and background, they also touch on a broader, more universal concern: the tension between how we see ourselves and how we wish to be seen by others. For some individuals, this may exist as anxiety about being overweight; for others, it may involve a desire to gain muscle to be considered as attractive. These different forms of body image anxiety point to a shared human experience, which is not limited to physical spaces but also extends into virtual environments like the metaverse. In fact, the digital realm may offer new opportunities for self-expression and control over one's appearance, giving individuals more control and freedom to present themselves in ways that might feel less accessible in the physical world.

Racial Stereotypes and Fetishization

The use of rice as a cultural symbol in this piece was widely recognized by participants. All ten participants noted the presence of rice bowls, and the large pile of rice featured in the final scene, suggesting that the visual elements successfully conveyed a strong cultural reference. However, the deeper metaphor linking rice to broader themes of racial stereotyping and fetishization was less immediately understood, particularly among participants who do not identify as part of the East Asian queer community. Only two participants identified these underlying themes without any prior explanation. Many participants only recognized the intended commentary after additional context was provided. This highlights the importance between cultural relevance and lived experience in developing participant comprehension.

"Seeing the big (title) Rice Boy and hearing Dancing Queen is interesting, because when you think of (the term) rice boy itself, it sounds weird, but when you played Dancing Queen, for me the interpretation is you are claiming it. It's like I have to go through all these (insecurities), but I still want to dance." — Participant #9

Beyond this work, some participants shared their own personal experiences with stereotypes and fetishization too. These experiences varied but revealed common patterns of feeling misunderstood or reduced to certain traits based on race or identity. For example, one participant spoke about feeling alienated because of their accent, which often led others to make assumptions about their background. Others described the pressure to behave in ways that aligned with social expectations tied to their identity

in order to be accepted. One participant mentioned feeling "exoticized," where their appearance or cultural background was treated as unusual in a way that felt objectifying.

"In terms of body image, there are always comments like 'Oh I like you are really smooth. You don't have a lot of hair'... Your cultural aspect is also something they can make you into this thing. Like 'here is this exotic mystical Chinese person. Talk to me about the cool Chinese stuff you do that is so different'. To me that is fetish." – Participant #8

These shared stories show how stereotypes and fetishization continue to shape people's everyday interactions and sense of self. By reinforcing narrow perceptions based on race or sexuality, these biases affect how people see themselves and how they are seen by others.

Avatar Embodiment

As the work is set within virtual reality, the medium itself contributes to a unique sensory experience. Eight out of ten participants commented on the immersive quality of the VR environment, highlighting how the experience made them feel physically and emotionally present within the imagined worlds. For three participants who had never used VR before, this encounter offered a completely new experience—one where they felt transported into another reality. They described a sense of being "inside" the work, rather than simply viewing it from the outside. For the remaining participants who had previous exposure to VR gaming or digital art, several noted that the specific design choices, such as the use of 360° video and the moment where the viewer is placed inside a rice cooker, stood out and enhanced the immersive effect. These responses suggest that even among experienced VR users, intentional and thoughtful design elements can deepen engagement and emotional impact. They highlight that the crafting of natural and intuitive environments matter. When immersion feels seamless and organic, users are more likely to form authentic connections with the virtual space, which will enhance their engagement.

In relation to my own avatars presented in the work, one participant specifically pointed out the presence of an "uncanny valley" effect (Mori, MacDorman, & Kageki, 2012). They described a feeling of uneasiness due to the subtle but noticeable distortions in the avatar's appearance and movements, which made it look almost but not entirely human like. This sense of discomfort continued throughout the entire experience and added an overall sensation of "strangeness" that strengthened the surreal and dreamlike atmosphere of the virtual environment. The imperfect representation of the body, in this case, contributed to the emotional tone and supported the overarching themes of distortion, embodiment, and identity.

Participants were also asked to reflect on how they would ideally design their own virtual avatars. Six out of ten participants expressed a preference for avatars that do not resemble their physical selves. Some mentioned a desire to experience life from a completely different perspective, either as another real or fictional person, while others were interested in embodying non-human forms, such as animals or fantasy creatures. These participants saw the creation of virtual avatars as a creative space for experimenting with identity, particularly for those who experience insecurities about their physical appearance.

"(I would prefer my avatar to be) something different than I am, because if I am already struggling with insecurities of my own body, why would I present myself in the form that I am struggling with... (The virtual avatar) would be the version that I want to be." – Participant #I

In contrast, the remaining four participants preferred avatars that closely resembled their actual bodies, with only minor customizations such as changes in hairstyle or clothing. For these individuals, the avatar functions as an extension or digital mirror of the self, something that can represent them in virtual spaces and achieve things that may be difficult for them in real life. In this way, having a digital avatar and seeing their success could be comforting and empowering to their physical selves.

"I think I still want to be me. I want to align myself in the virtual world and the physical world...

To me the virtual body is a back-up of my physical body, which can store my achievement. Also, they will never age, so it can stay forever." – Participant #8

Interestingly, two participants raised concerns about future ownership and control over their digital bodies. In a future where virtual infrastructure is controlled by private corporations, they questioned whether individuals would retain full agency over their avatars, pointing to emerging issues around digital identity and data rights.

Recommendations

The VR artwork serves as a discussion point for exploring potential future scenarios of East Asian queer identity in the metaverse. While the metaverse offers exciting opportunities for individuals to explore and express identities that may be constrained in the physical world, it is important to recognize that challenges such as body image insecurities and racial stereotypes can still carry over into virtual environments. The ability to design avatars and choose how one is represented may empower some users, but it can also reinforce existing social pressures and biases. As virtual worlds become more common and immersive, it is crucial to actively promote inclusive and supportive environments, particularly for marginalized communities. By addressing these issues early in the development of digital platforms, there is greater potential to create virtual spaces where diverse identities can be safely expressed and respected.

Based on my own prototype journey and the feedback received from participants, several recommendations can be made for creating a more inclusive metaverse, particularly in terms of inclusive embodiments. These suggestions aim to support the design of virtual environments where users from diverse backgrounds can feel seen, respected, and empowered through the ways they choose to represent themselves.

First, ensuring accurate and respectful representation of marginalized communities is crucial in building an inclusive metaverse. Stop relying on standardized templates that often reflect dominant beauty standards and cultural norms. Move beyond one-size-fits-all solutions and offer more detailed and flexible customization. Personalization should allow users to reflect their unique body types, facial structures, and cultural markers. By doing so, virtual spaces can become more reflective of real-world diversity and provide a greater sense of belonging, agency and autonomy for users from underrepresented groups (Sundar & Marathe, 2010).

Second, encouraging alternative forms of embodiment that go beyond traditional human representations. One of the key strengths of the virtual world is its potential to free people from the physical limitations and social expectations of the real world. Allowing users to explore different identities including fantasy creatures, abstract shapes, or hybrid forms creates a space for creativity, experimentation, and personal growth. This is particularly valuable for individuals who may feel constrained by their physical identities or who wish to explore aspects of themselves in a safe and imaginative way.

Third, maintaining individual agency over one's avatar to empower virtual experiences. As more platforms are developed by private companies, concerns around data ownership and user control are growing (Cheong, 2022). It is important that users have full authority over how their avatars are created, used, and shared. This includes the ability to protect their digital likeness from exploitation by others. Such control is fundamental for ensuring dignity, safety, and freedom in the metaverse.

Limitations and Future Research Opportunities

While the artwork created from my personal experience helped spark meaningful discussions about identity, race, and queerness, its personal nature made it difficult to capture broader attitudes towards the metaverse. Most participants responded based on how they related to the piece, rather than reflecting on the larger system or their main concerns about virtual spaces.

This research focused mainly on avatar creation and embodiment, offering valuable insights into visual identity. However, it did not fully explore other key aspects of the metaverse, such as voice, movement, interaction, or digital infrastructure. These missing elements are also important in shaping how identity is expressed and experienced, which limits the comprehensiveness of the future of East Asian queer identity discussed here.

Future research could adopt a more holistic approach to better understand how people feel about the metaverse as a whole. Instead of focusing only on visual embodiment, future studies could explore other important elements such as body tracking, voice recognition, and interaction. Creating more VR experiences with these features would give participants a clearer sense of what the future of the metaverse might look like and help them reflect more deeply on their own responses and concerns.

Further studies involving a wider range of stakeholders could also enhance the depth of understanding, particularly in relation to the ethical challenges associated with the development of the metaverse. This includes important questions about who holds the rights to digital assets and how users can maintain ownership and control over their personal data. By examining these concerns from multiple perspectives, future work could offer more comprehensive insights into how emerging virtual environments can be designed in ways that are fair, transparent, and respectful for users.

Conclusion

This research set out to explore how East Asian queer identity and gender expression might be influenced by embodied experiences within virtual reality, particularly in the emerging context of the metaverse. Drawing on personal experience, current trends, and speculative design, the study examined how digital embodiment can serve both as a mirror of existing cultural norms and as a tool for imagining more inclusive futures.

The project highlighted challenges from my personal experience to also reflect more broadly on challenges faced by the East Asian queer community in Toronto. This project also showed how virtual reality can open up new spaces for experimentation and empowerment, especially for those who may feel constrained by social expectations in the physical world. The immersive nature of VR allows for different kinds of self-presentation, offering a creative and emotional space to explore identity with fewer constraints.

As we step further into the era of immersive digital technologies, this research emphasizes the urgent need for more inclusive and ethical approaches to building the metaverse. The virtual world is not a neutral space. It reflects the values, assumptions, and biases of those who design it. Therefore, it is essential that marginalized voices, particularly those at the intersection of race, gender, and sexuality, are not only represented but actively included in the creation of these spaces.

Finally, this research reveals how virtual platforms can become powerful spaces of cultural storytelling and community-building. When thoughtfully designed, these environments can offer a sense of freedom and visibility that may be lacking in physical spaces. The metaverse presents an opportunity not only to imagine what identity could be, but to actively reshape the structures that have historically limited whose stories are told.

In this way, the work contributes to a growing conversation about how we can build a more equitable future. By foregrounding personal experience, community insight, and speculative design, it aims to inspire further research and practice that centers empathy, care, and inclusion. As we continue to shape the metaverse, we must ask not only what is possible with these technologies, but for whom it is being made, and how it can become a space where all identities can be seen, heard, and celebrated.

References

- Alexander, B. K. (2022). "Pivoting Between the Past/Present and Towards the Future/perfect of Autoethnography." International Review of Qualitative Research, 194084472211020. https://doi.org/10.1177/19408447221102071
- Bannerji, H. (2000). *The dark side of the nation: Essays on multiculturalism, nationalism and gender.* Canadian Scholars' Press.
- Burrell, A., & Alexandra Chalmers Braithwaite. (2023). Fractured and fragmented selves: Queer approaches to designing virtual experiences1,2. Virtual Creativity, 13(1), 7–28. https://doi.org/10.1386/vcr_00072_1
- Callander, D., Holt, M., & Newman, C. E. (2012). Just a preference: racialised language in the sex-seeking profiles of gay and bisexual men. Culture, Health & Sexuality, 14(9), 1049–1063. https://doi.org/10.1080/13691058.2012.714799
- Ceuterick, M. (2021). Queering cultural memory through technology. Alphaville: Journal of Film and Screen Media, 21, 89–110. https://doi.org/10.33178/alpha.21.05
- Cheong, B. C. (2022). Avatars in the metaverse: potential legal issues and remedies. International Cybersecurity Law Review, 3, 467–494
- Chou, R. S., & Feagin, J. R. (2015). Myth of the model minority: Asian Americans facing racism. Routledge.
- Clarkson, J. (2006). "Everyday Joe" versus "Pissy, Bitchy, Queens": Gay Masculinity on Straight Acting.com. The Journal of Men's Studies, 14(2), 191–207. https://doi.org/10.3149/jms.1402.191
- Connell, R. W. (1995). Masculinities. University of California Press.
- Connell, R., & Messerschmidt, J. (2005). Hegemonic Masculinity. Gender & Society, 19(6), 829-859. http://dx.doi.org/10.1177/0891243205278639
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241–1299. https://doi.org/10.2307/1229039
- DeVito, M. A., Ashley Marie Walker, Lustig, C., Ko, A. J., Spiel, K., Ahmed, A. A., Allison, K., Scheuerman, M., Dym, B., Brubaker, J. R., Simpson, E., Naveen Bagalkot, Raval, N., Muller, M., Rode, J., & Gray, M. L. (2020). Queer in HCI. https://doi.org/10.1145/3334480.3381058
- Duggan, L. (2004). The twilight of equality?: neoliberalism, cultural politics, and the attack on democracy. Choice Reviews Online, 41(11), 41–682241–6822. https://doi.org/10.5860/choice.41-6822

- Duggan, S. J., & McCreary, D. R. (2004). Body Image, Eating Disorders, and the Drive for Muscularity in Gay and Heterosexual Men. Journal of Homosexuality, 47(3-4), 45–58. https://doi.org/10.1300/j082v47n03 03
- Ellis, Carolyn, Tony E. Adams, and Arthur P. (2011). Bochner. "Autoethnography: An Overview." *Forum: Qualitative Social Research*, vol. 12, no. 1, Jan. 2011, Art. 10, http://nbn-resolving.de/urn:nbn:de:0114-fqs1101108.
- Feng, D. (William), & Yu, M. H. M. (2021). Tradition, modernity, and Chinese masculinity. Pragmatics. Quarterly Publication of the International Pragmatics Association (IPrA). https://doi.org/10.1075/prag.20024.fen
- Freeman, G., & Acena, D. (2022). "Acting Out" Queer Identity: The Embodied Visibility in Social Virtual Reality. *Proceedings of the ACM on Human-Computer Interaction*, 6(CSCW2), 1–32. https://doi.org/10.1145/3555153
- Freeman, G., & Maloney, D. (2021). Body, Avatar, and Me. Proceedings of the ACM on Human-Computer Interaction, 4(CSCW3), 1–27. https://doi.org/10.1145/3432938
- Geng, S. (2004). The Fragile Scholar: Power and Masculinity in Chinese Culture. Chinese Literature: Essays, Articles, Reviews (CLEAR), 26, 210. https://doi.org/10.2307/4140635
- Ha, V. (2023). Queer Hurting: Tracing *Invisible Footprints* and Queer Asian Sociality in Toronto. *QED*:/*QED*, 10(2), 164–171. https://doi.org/10.14321/qed.10.2.0164
- Han, C. (2007). They don't want to cruise your type: Gay men of color and the racial politics of exclusion. *Social Identities*, 13(1), 51–67. https://doi.org/10.1080/13504630601163379
- Han, C. (2008). No fats, femmes or Asians: The utility of critical race theory in examining the role of gay stock stories in the marginalization of gay Asian men. Contemporary Justice Review, 11(1), 11–22.
- Han, C. (2015). Geisha of a Different Kind: Race and Sexuality in Gaysian America. New York University Press.
- Human Rights Campaign. (2023, May 31). Glossary of Terms. Human Rights Campaign. https://www.hrc.org/resources/glossary-of-terms
- Jagose, A., & Genschel, C. (2017). Queer theory eine Einführung. Berlin Querverl.
- Kawai, Y. (2005). Stereotyping Asian Americans: The dialectic of the model minority and the yellow peril. *Howard Journal of Communications*, *16*(2), 109–130. https://doi.org/10.1080/10646170590948974
- Kilteni, K., Groten, R., & Slater, M. (2012). The Sense of Embodiment in Virtual Reality. Presence: Teleoperators and Virtual Environments, 21(4), 373–387. https://doi.org/10.1162/pres a 00124
- Kimmel, M. S. (1994). Masculinity as homophobia: Fear, shame, and silence in the construction of gender identity. In H. Brod & M. Kaufman (Eds.), *Theorizing masculinities* (pp. 119–141). Sage.

- Lefkowich, M., Oliffe, J. L., Hurd Clarke, L., & Hannan-Leith, M. (2016). Male Body Practices. American Journal of Men's Health, 11(2), 454–463. https://doi.org/10.1177/1557988316669042
- Louie, K. (2002). Theorising Chinese masculinity: society and gender in China. Cambridge University Press.
- Mao, L., Mccormick, J., & Van de Ven, P. (2002). Ethnic and gay identification: Gay Asian men dealing with the divide. Culture, Health & Sexuality, 4(4), 419–430. https://doi.org/10.1080/13691050110148342
- Mori, M., MacDorman, K. F., & Kageki, N. (2012). The uncanny valley. *IEEE Robotics & Automation Magazine*, 19(2), 98–100. https://doi.org/10.1109/MRA.2012.2192811
- Nguyen, T. (2014). A view from the bottom (1st ed.). Durham: Duke University Press.
- Payne, R. (2007). Gay scene, queer grid. Queer space: Centres and peripheries conference proceedings. http://www.dab.uts.edu.au/conferences/queer_space/proceedings/
- Pham, V. (2014). Asian American men and racial fetishism: Racialized masculinity and gendered desire. *Journal of Asian American Studies*, 17(2), 125–152.
- Pope, H., Phillips, K. A., & Olivardia, R. (2000). The Adonis complex: how to identify, treat, and prevent body obsession in men and boys. Simon & Schuster.
- Stacey, L., & Forbes, T. D. (2021). Feeling Like a Fetish: Racialized Feelings, Fetishization, and the Contours of Sexual Racism on Gay Dating Apps. The Journal of Sex Research, 59(3), 1–13. https://doi.org/10.1080/00224499.2021.1979455
- Sullivan, N. (2003). Critical introduction to queer theory. Edinburgh Univ Press.
- Sundar, S. S., & Marathe, S. S. (2010). Personalization versus customization: The importance of agency, privacy, and power usage. *Human Communication Research*, *36*(3), 298–322. https://doi.org/10.1111/j.1468-2958.2010.01377.x
- Tan, J. (2016). Aesthetics of queer becoming: Comrade Yueand Chinese community-based documentaries online. *Critical Studies in Media Communication*, *33*(1), 38–52. https://doi.org/10.1080/15295036.2015.1129064
- Teo, A. (2022). AsianCrit and Autoethnography: A Future-Focussed Fugue of Critical Collaborative Inquiry. Qualitative Inquiry, 107780042211186. https://doi.org/10.1177/10778004221118692
- Turkle, S. (2011). Alone together: Why we expect more from technology and less from each other. Basic Books.
- Vítor Blanco-Fernández. (2023). Queering the Metaverse. CRC Press Ebooks, 91–104. https://doi.org/10.1201/9781003379119-7
- Yang, Y.-H. (2022). Sexuality on the move: gay transnational mobility embedded on racialised desire for "white Asians." Gender, Place & Culture, 1–21. https://doi.org/10.1080/0966369x.2022.2057446

Yang, C.-F. J., Gray, P., & Pope, H. G. (2005). Male Body Image in Taiwan Versus the West: Yanggang ZhiqiMeets the Adonis Complex. American Journal of Psychiatry, 162(2), 263–269. https://doi.org/10.1176/appi.ajp.162.2.263

Appendix

Interview Guide

General Questions:

1. What are your general feelings and thoughts after the virtual reality experience? What are the parts that stood out to you?

Questions about Body Image and Masculinity:

- 2. How do you feel about the ways the body is presented in the work? Do they remind you of similar experiences from your life?
- 3. How do you view the relationship between body image and masculinity? Are your perceptions informed by the mainstream media?

Questions about Racial Stereotypes and Fetishization:

- 4. Do you capture any East Asian cultural reference in the work? How do you feel about its representation in it?
- 5. Have you experienced any racial stereotypes or fetishization in your life? How has this experience informed how you self-identify (including virtual)?

Questions about Avatar Embodiment:

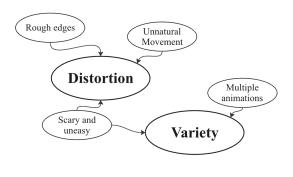
- 6. What is it like to be in the virtual reality setting? Is it different from other mediums?
- 7. If you had to create your own avatar for a virtual environment in the future, what would it look like? How would you describe the relationship between your physical body and this virtual body?

Interview Analysis

As guided by the requirements of Research Ethics Board, the interview audios and transcripts were destroyed after the end of this research. Below is a summary of the analysis on the qualitative data captured in the interview.

Q2: How do you feel about the ways the body is presented in the work?

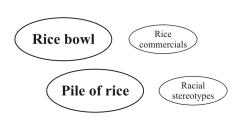
Q3: How do you view the relationship between body image and masculinity?

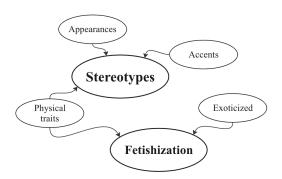




Q4: Do you capture any East Asian cultural reference in the work?

Q5: Have you experienced any racial stereotypes or fetishization in your life?





Q6: What is it like to be in the virtual reality setting?

