

Hello everyone, thank you for joining me today. I'm excited to share my research on the ethical concerns surrounding representation and diversity in the metaverse. As an AR enthusiast, I've been fascinated by the potential of this technology, but as I delved deeper into the field, I became increasingly aware of the ethical implications that arise from its development and implementation. While there has been significant discussion about the need for representation in the metaverse, it prompts us to ask ourselves what we truly mean and desire from representation. While there are many different forms of representation, in my project, I am specifically focusing on cultural representation, which refers to the accurate and respectful portrayal of different cultures, their values, beliefs, practices, and identity. In my presentation today, I will pose a series of questions to get you thinking about what cultural representation truly means in the context of the metaverse.

So, there are a number of questions we must ask when discussing cultural representation. First, what is culture and why is it important? Second, how is culture depicted visually or in other modalities present in the metaverse? Third, what sort of questions might we need to answer, and/or complications might we encounter in working to represent all cultures? Despite being simple, these questions are crucial in comprehending how AR technology affects representation. Today I will discuss each of these in turn, spending the most time on the third: what sort of questions and complications must we address before realizing the ideal of cultural representation?

Let's start off with the first question – What is a culture and why does its representation matter? [We can understand culture as a system of shared beliefs, ways of being, and forms of expression shared by a community – I'd point out that this usually corresponds to a particular community with geographical origins but need not to.] Cultural representation is important because this provides an opportunity for individuals from diverse cultural backgrounds to come together and share their unique perspectives allowing for greater inclusivity and diversity. When people see themselves represented in the virtual world, they feel a sense of belonging and validation. This is particularly important for underrepresented groups who may not have had the opportunity to see themselves reflected in mainstream media or culture. Moreover, this platform has the potential to break down barriers between people from different cultures by providing a shared virtual space where cultural differences can be celebrated and appreciated.

Now going back to my point on how culture is more than just the geographical division. We as a society are surrounded by various subcultures such as gaming culture or art culture. How does representation look for them? These subcultures are also defined by shared beliefs, values, and practices that are unique to a particular group or community. For example, gaming culture refers to the practices and values that are shared among gamers, such as the importance of skill, competition, and community. Art culture encompasses the practices and values that are shared among artists, such as the importance of creativity, self-expression, and innovation. So it is evident that failing to represent these values accurately in the virtual world can perpetuate negative stereotypes and reinforce discrimination. For example, if

gaming culture is represented as a predominantly male, white, and heterosexual community, it can reinforce gender, racial, and sexual orientation biases. Similarly, if art culture is represented as a predominantly elite, Eurocentric, and academic community, it can reinforce class and cultural biases.

This brings us to the second question, how will culture be represented in the Metaverse?

Visual and auditory representation can take many forms, from virtual exhibitions to avatars to immersive experiences. By visually representing a culture, we make choices regarding what to incorporate, what to exclude, and how to present it and this goes far far beyond how an avatar looks or the color of their skin. It is inclusive of their music, their language, their costumes, and their interactions within a community! Individuals want to see their cultural identities reflected in the metaverse, which helps to create a sense of community. It accounts for self-expression as well as a sense of belonging. Such choices can not only prevent the marginalization of individuals who do not see themselves accurately represented in the metaverse but also greatly influences our perceptions and understanding of various cultures and how we engage with them.

This leads the path to our final question –what sort of questions and complications must we address when we talk about cultural representation: Let us start by reflecting on this- Once we have features of a particular culture available as part of the repertoire of representation (e.g. attire, language, music..), should individuals who are not a member of that particular culture be responsible for creating or designing avatars for individuals from that culture? Whose decision is that? Could this lead to cultural appropriation, where elements of one culture are taken by another without permission or respect for their cultural significance? For instance, in the metaverse, this can take the form of appropriating traditional clothing or cultural practices without understanding their significance or context.

This further raises the question of whether representing cultures visually can perpetuate and reinforce existing stereotypes – For instance, one study published in the journal of Cyberpsychology, Behavior, and Social Networking found that avatars that were designed to represent African American and Hispanic individuals were more likely to be perceived as aggressive and less competent than avatars designed to represent white individuals. Another study published in the journal of Information, Communication & Society, found that East Asian avatars are often represented as hyper-sexualized or subservient, reinforcing harmful stereotypes about Asian women. Female avatars are also less likely to be represented in positions of power or authority. So, Research has shown that people tend to rely on visual cues to categorize others into different groups, and these visual cues can lead to stereotyping and discrimination. How are we going to combat this problem in the metaverse? Are we taking appropriate steps to safeguard and protect these cultures in the metaverse?

Yet another question is - Should certain cultures not be represented due to their historical / current association with oppressive or discriminatory issues that may/may not have been addressed today, such as the representation of women in certain cultures? And my heart really goes out to this one as there are women in certain parts of the world rn who are still fighting for their basic rights to freedom and self-expression at the risk of being killed for their beliefs

Their struggle is a reminder that representation is a deeply sensitive topic and we must do everything in our power to support freedom on all platforms - virtual or live!

On this note, I would like to leave you with one last question - As is known, Nearly half of the world's population, or 3.6 billion people, still lack access to the internet, which highlights the fact that internet access remains a privilege that is not yet enjoyed by a significant portion of the global community. This gap of 3.6 billion people leaves out many cultures. How do we then account for the representation of the invisible on the virtual platform? Would representing them give way to our previous concerns regarding appropriation and biases of certain groups? Or would excluding them from the virtual world further exacerbate the social inequalities and the digital divide?

In conclusion, cultures are complex and multifaceted. These are difficult questions, and there's no one-size-fits-all answer. But there is a need to address them before we fully embrace the metaverse and its potential impact on different facets of our lives. By posing these questions and considering their implications, we can develop a better understanding of the impact of AR technology on cultural representation and work towards a more inclusive and respectful virtual world. Thank you for your attention, and I'd love to hear any thoughts or reflections you have in the QandA session!