

Ethical Considerations of Social Interactions in the Metaverse

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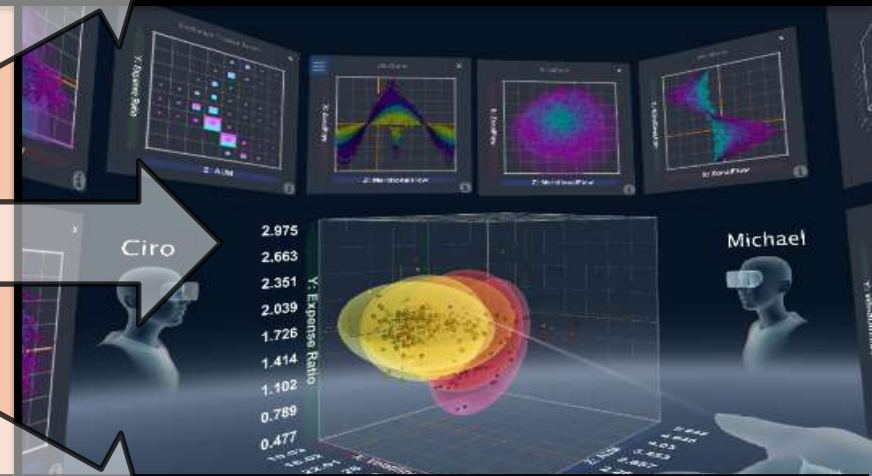
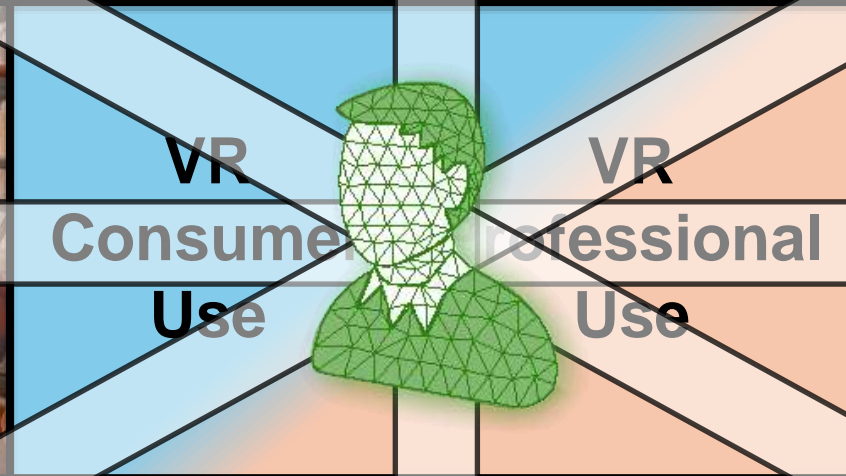
Beyond Compliance 2024

Context: The “Metaverse”



VR Chat





The Challenges of the “Metaverse”

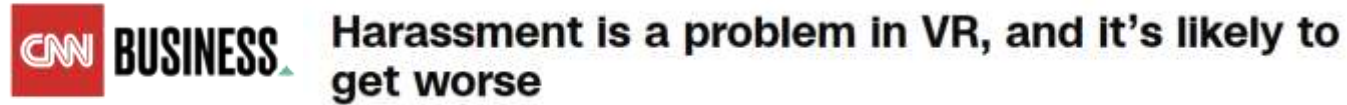
- Technological
 - Interoperability, power consumption
- Economical
 - Business model, sustainability
- Privacy and security
 - Tracking, identity theft
- Law and regulation
 - Jurisdiction, moderation
- Social
 - Digital divide, mental health



AI generated

What is META-TOO?

- Investigating inappropriate social interactions in the Metaverse



By Rachel Mertz, CNN Business
9 minute read · Updated 10:01 PM EDT, Thu May 5, 2022



Police investigate virtual sex assault on girl's avatar

7 January 2024

By Chris Vallance, Technology reporter, BBC News

Share

Disturbing reports of sexual assaults in the metaverse: 'It's a free show'

By Adriana Diaz

Published May 27, 2022 | Updated May 27, 2022, 2:24 p.m. ET

Virtual Reality Promised us a New World. Instead, It's Become a Breeding Ground for Harassment.

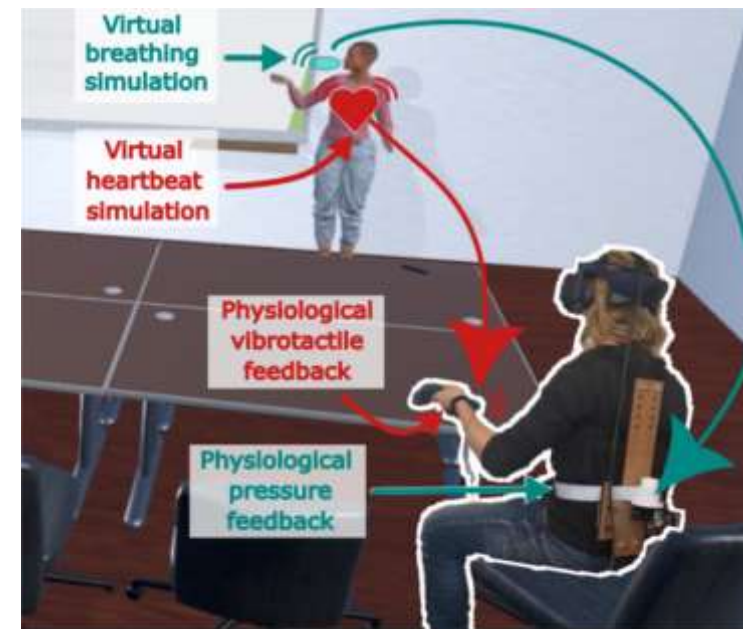
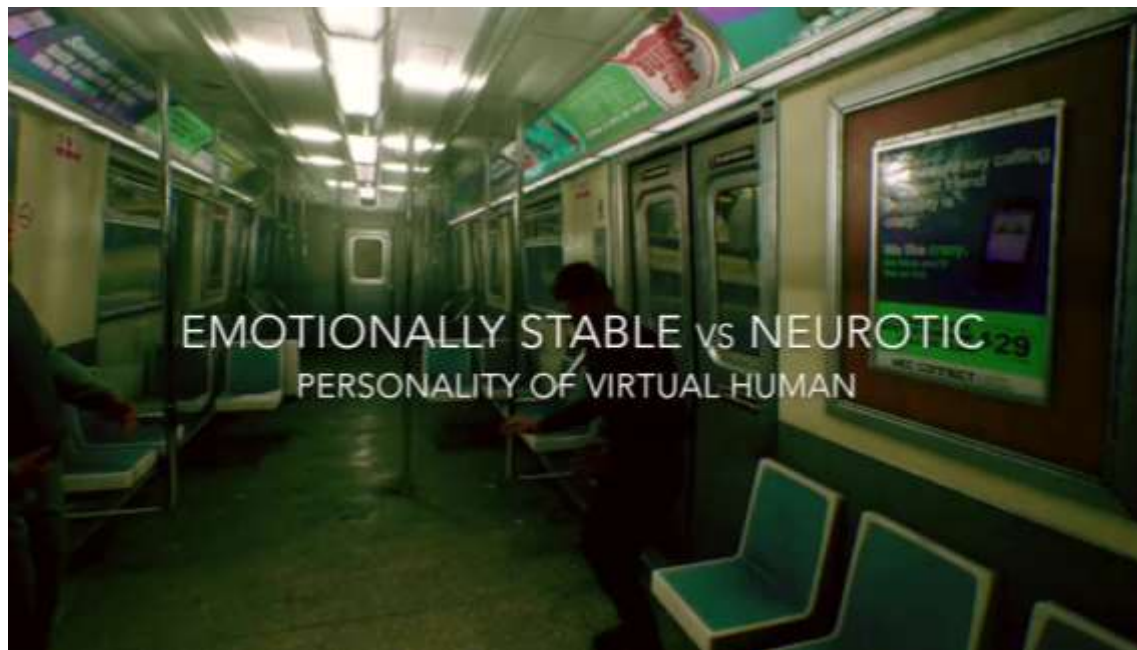
Misogyny is alive and well in the metaverse.

BY MOIRA DONEGAN PUBLISHED: APR 13, 2023

Scientific Objectives

- 1 Understand the nature and prevalence of behaviours perceived as inappropriate or harassing, & design inclusive avatars
- 2 Identify physiological markers, such as facial expressions and voice changes, that signal when users perceive a behaviour as disturbing
- 3 Conduct experiments to test the findings from the previous objectives, and design tools to enhance user safety and agency in the Metaverse

Perceptual evaluation of virtual human behavior



Fostering empathy in Social VR through physiologically-based affective haptic feedback

Persuasive vibrations



Harassment Prevention through Empathy and Perspective-taking Enhancement

First session:
Exposure to a virtual situation of social harassment



VR per GENERE
Virtual Reality Projection of Gender-
Violence in Europe based on the avoidance
of the bystander, perspective and empathy



Bystander behaviour in the Metaverse

What about the ethical approach?

Within the project

- Continuous exchange with the team of developers
- Appointment of an **external ethics advisory committee** to further discuss ethical issues specifically related to **XR, use of avatar, metaverse**
- **Sensibilization** of researchers/scientists/students, through webinars, conferences or sessions during summer school
- **Sensibilization of the society/users** during open conferences
- White paper

Identity and legal dimension

Cultural approach of ethical recommendations

Ethics

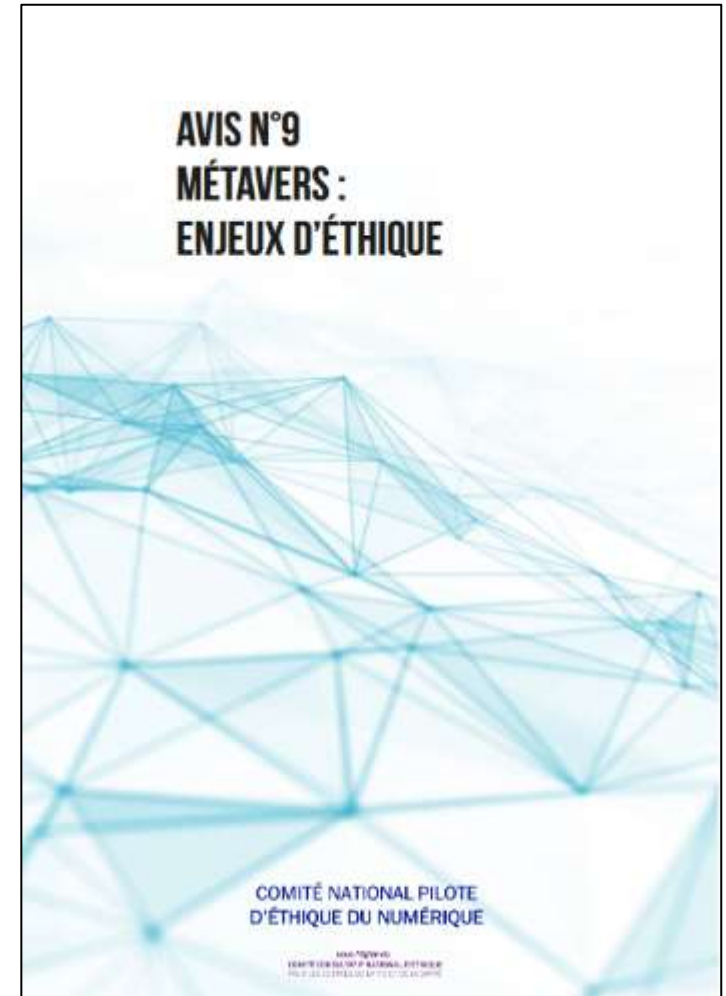
Avatars play a central role in the metaverse ecosystem

Immersive experience

- ⇒ Physiological issues (cyberkinesetosis)
- ⇒ Psychological issues (addiction, harassment, aggression)
- ⇒ Anthropomorphic illusions and data protection (informed consent).
- ⇒ Potential impact on the individual, society and the environment

Ethical issues are amplified

- ⇒ Evocative and convincing power
- ⇒ real-time nature of the interaction between the user and the system
- ⇒ first-person immersion and embodiment
- ⇒ risk misrepresenting identities, promoting stereotypes, or creating unrealistic expectations
- ⇒ the spread of hate speech and discrimination, exacerbated by disinformation and information destabilization operations -



Metavers: ethical issues. Opinion 9 of the Comité national pilote d'éthique du numérique. February 29, 2024.

Identity – legal dimension (EU/France)

Lawyers urged to remain vigilant of legal risks from digital twinning projects

The creation of digital replicas of individuals, based on their data = the 'digital twin'

- ⇒ many difficulties in sociology, in science and in law
- ⇒ hybrid identity: can be a person or an objet or a way of interpretation of data
- ⇒ challenges the legal system and questions Identity, free will and property

Notion of digital human rights ?

- ⇒ questions personhood and ownership
- ⇒ questions the concept of person, identity, entitlement to rights and obligations, legal capacity, liability, data processing, etc.

In the digital age, individuals become collections of data points, raising concerns about how law should address this « derealisation » of personhood

Need of a reassessment of core legal concepts,

- ⇒ unique opportunity to modernize the law
- ⇒ Providing new incriminations in the event of a traumatic experience in a metaverse, whether psychological or physical.



Marina Teller,
Director, Chair of
excellence Deep
law 4 tech, UCA

Should the twin be an extension of a person or as an asset in an immaterial representation of the individual?

If an avatar in the metaverse presents some harrassment behaviour, which legislation apply?

*« The line between human beings and things blurs, and the twin may occupy a legal grey area as a center of interest, neither fully a person, nor merely an object. It blurs the line between being and having »
M. Teller*

Social ethical issues identified in Japan



*Yukiko Nakano, Head of the Intelligent User Interface Laboratory at Seikei University, Japan
Multimodal Dialogue System Architecture*

22 issues in Avatar Social Ethics

| | |
|---------------------------------|----------------------------------|
| Human rights | Dignity |
| Autonomy | Literacy |
| Sustainability & Inclusive | Privacy |
| Discrimination & Disparity | Trust & Trustworthy |
| Diversity | Anonymity |
| Well-being | Psychological impacts |
| Safety | Behavior change |
| Secure | Identity |
| Rule of law | Morality |
| Responsibility & Accountability | Disruptive behavior & harassment |
| Democracy | Error |

Customer harassment

Impersonation in communication between avatars

Freedom of choice of avatar and resulting behavioral change

Towards Elaborating Avatar Ethics Guidelines in Japan

<Gender>

The gender of the avatar does not necessarily correspond to the gender of the operator, nor does it have to. In services using avatars, it is necessary to avoid misunderstandings and prejudice caused by gender.

<Identity>

Avatars allow people to have the appearance of a different gender, age or race to themselves. The effects and implications of this need to be understood.

Avatars that strongly reflect specific racial, cultural or religious characteristics should be created and used with respect and consideration for them. E.g. physical features, ethnic costumes, religious decorations.

<Privacy>

The privacy of both the avatar operator and the user must be considered.

<Freedom of expression>

If avatar-based activities become more essential in people's lives, restrictions on avatar-based expression may be recognized as a violation of freedom of expression.

<Well-being>

It is necessary to consider how the use of avatars affects the mental, social, physical, and economical wellbeing of users



Particular attention must be paid to potentially vulnerable people, especially children and teenagers.

P12 – to Public authorities, manufacturers and operators, users
Recommend that people with certain pathologies or behavioral disorders either avoid the use of metaverse or be accompanied before, during and after the use of a metaverse at these different stages; provide advice to caregivers on the potential risks of metaverse.

P14 To public authorities
Without waiting for the results of scientific studies currently underway, consider the **measures to be taken to protect the youngest users**, with a view to imposing age limits on the use of certain peripherals such as headsets, and to regulating access to metavers, in particular by studying the possibility of implementing effective parental controls or access restrictions.



It is desirable **that everyone can have equal opportunities to use CAs**. Therefore, when developing CAs, considerations **of accessibility** is necessary to ensure that everyone **(e.g. children, people with disabilities and the elderly)** can use CAs.

- It is desirable for one person to be able to **use multiple CAs to improve productivity**.
- It is desirable to **improve the service quality by using CAs**.

Regulations / Principles/ Recommendations about AI

[EU's Artificial Intelligence Act](#) establishes the 1st comprehensive regulatory framework for its member states= global hub for human-centric, trustworthy AI.

HumanE AI Research Agenda highlights the ingredients of collaborative Intelligent Systems in Europe

[Humane AI Research agenda](#) highlights the ingredients of Collaborative Intelligent Systems

The United States, [the Algorithmic Accountability Act of 2022](#)

Canada proposed the [Artificial Intelligence and Data Act \(AIDA\)](#) in which risk n systems will be made mandatory.

China adopts [notably restrictive rules](#) toward social stability and state control.

Japan currently has no law specifically directed to regulating AI. Japan is taking an i while minimizing foreseeable harms and published [new AI Guidelines for Business](#)

By aligning with the [Global Digital Compact](#), while addressing Africa's unique challenges and opportunities, the [African Digital Compact](#) is committed to building a digitally empowered Africa where technology fuels economic growth, societal well-being, and a prosperous future for everyone.

The [Organization for Economic Cooperation and Development \(OECD\)](#), acknowledges AI's potential alongside its risks and recognizes welfare and wellbeing with frequently cited AI benefits such as innovation, productivity and economic growth and encourage Member States to uphold principles of trustworthy AI.

GLOBAL HARMONISATION

CULTURAL DIMENSION

P20 Raise awareness, particularly among vulnerable people, of the risks of manipulation or attachment to fictitious entities.



COMETS
CNRS Ethics Committee

OPINION no. 2024-46

"THE PHENOMENON OF ATTACHMENT TO 'SOCIAL' ROBOTS.

A CALL FOR VIGILANCE AMONG THE SCIENTIFIC RESEARCH COMMUNITY"

WORKING GROUP MEMBERS:

Catherine Pelachaud, COMETS member, rapporteur

Patrice Debré, COMETS member, rapporteur

Christine Neville, COMETS member

Raja Chabla, emeritus professor of artificial intelligence, robotics and ethics at Sorbonne University

Jean-Gabriel Ganascia, emeritus professor of computer science and artificial intelligence at Sorbonne University

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