

## Chapter 3

# The Real Virtuality of Metaverses

**Eliane Schlemmer**

*UNISINOS - São Leopoldo, Brazil*

**Luciana Backes**

*UNILASALLE - Canoas, Brazil*

### ABSTRACT

*This chapter approaches the Real Virtuality theme that appears in the construction processes of Digital Virtual World in 3D in Metaverses. The authors present and discuss subtopics like “Virtuality and Reality: Virtual Reality Experiences and Real Virtuality Experiences in Immersive Learning,” “The Simultaneousness of Worlds: From the Digital Virtual Space of Coexistence to the Space of Hybrid and Multimodal Coexistence,” “The Culture of Real Virtuality.” The chapter concludes that it is possible to understand that i-Learning, through the Real Virtuality Experiences and Virtual Reality Experiences, may represent an effective possibility to subjects’ education nowadays. In this context, the authors believe it is fundamental to (re) think Education for the current generation, the prospect of a Network Society, a Cultural Hybridism and Multimodality.*

### INTRODUCTION

The students of today are increasingly immersed in different 3D Digital Virtual Worlds, in overlapping analogue spaces that coexist in the world of dialectical relationships. This fact has contributed to (re) signifying the analog world itself in which they live and coexist. These students, while living in their physical bodies and physical spaces - schools or internet cafés, for example, also live through digital representations which may be graphic such as in virtual digital bodies (when, for example, the student assumes a specific character and has a unique personality in a game such as when you create your own avatar to interact in 3D Digital Virtual Worlds, digital virtual spaces, or simply a simulation of physical reality. Thus, the student can both act and interact in an experience that simulates 3D, a certain physical reality, as in an imaginary fictional context whose situation does not correspond at all to what one knows of the analogue, physical world. This allows him to have experiences in both Virtual Reality (VR)

DOI: 10.4018/978-1-5225-5469-1.ch003

and Real Virtuality (RV), according to Castells (1999). The present generation owns galaxies, islands, clouds, houses, virtual digital castles, and has virtual friends and virtual relationships. In short, a virtual digital life is constituted, enabling countless experiences, and thus showing that an appropriation of the analogue world also happens by means of attributing constructed meaning in the virtual digital world.

In this technical and socio-cultural context, researchers and educators from different areas of knowledge, seek to understand what challenges, changes and transformations this reality brings to education. So, what education is necessary for the student of this historical and social time and how can we maximize the learning process? In order to provide information to answer these questions we will discuss the concept of Virtuality and Reality - Virtual Reality Experiences and Real Virtuality Experiences in Immersive learning; we will discuss the Simultaneousness of Worlds – from Digital Virtual Living Spaces to Hybrids and Multimodal Living Spaces, The Culture of Real Virtuality and finally present some of our conclusions.

## **VIRTUALITY AND REALITY: VIRTUAL REALITY EXPERIENCES AND REAL VIRTUALITY EXPERIENCES IN IMMERSIVE LEARNING**

Virtuality, broadly speaking, is what has quality or virtual character, that is, the potential to accomplish something. The term is commonly used to refer to situations in which the action, communication, interaction does not occur in a physical classroom form in analog spaces but in a digital form, using different digital technologies in a web environment. As discussed in Chapter 3 - Metaverse, 3D Digital Virtual Worlds, the concept of Virtuality is related to the virtual and according to Lévy (1999), can be understood in the sense: *technical* - related to IT; *current* - “virtual” means “unreality” once “reality” presupposes a material realization, a tangible presence - it is believed that something must be either real or virtual, and therefore cannot have both qualities simultaneously, and; *philosophical* - the virtual is what exists only in capacity and not in fact, the force field that tends to be solved in an update. The virtual is prior to the formal or effective implementation:

*The word virtual comes from the Medieval Latin virtualis, derived from virtus, strength, power. ... In strictly philosophical terms, the virtual does not preclude the real, but the current: virtuality and actuality are only two ways to be different. (Lévy, 1996, p.15)*

Can we then say that we virtualize different worlds through our thoughts, which in turn can be updated through different languages in the representation?

Thus, based on Lévy (1996), we can say that virtuality refers to everything that characterizes the detachment of time and space, “deterritorialization”. Yet, what can we say when this term is associated with the digital? Could we then think of a “territory” of another kind, as digital? In this case, the digital would be a form of accomplishing the virtual – that which is the virtual representation of a pre-known physical classroom space, which is simulated in the digital, is the virtual representation of an unknown imaginary space, which is conceived in digital. In both cases, what happens is an update, that is, the realization of which is in capacity and that in turn is accomplished in digital.

In this context, the creation of 3D Digital Virtual Worlds in Metaverses can be considered as the “digital materialization” of this virtuality, that is, the world ceases to exist in the potential sphere and begins to take its place in space, in this case, of a digital nature.

16 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/the-real-virtuality-of-metaverses/199679](http://www.igi-global.com/chapter/the-real-virtuality-of-metaverses/199679)

## Related Content

---

### Learning Object Evaluation

Erla M. Morales, Francisco J. García and Ángela Barrón (2008). *Encyclopedia of Networked and Virtual Organizations* (pp. 800-807).

[www.irma-international.org/chapter/learning-object-evaluation/17692](http://www.irma-international.org/chapter/learning-object-evaluation/17692)

### On the (Virtual) Road: Applying the Travelogue Concept to Virtual Spaces

Robert Matthew Poole (2018). *Virtual and Augmented Reality: Concepts, Methodologies, Tools, and Applications* (pp. 1142-1157).

[www.irma-international.org/chapter/on-the-virtual-road/199733](http://www.irma-international.org/chapter/on-the-virtual-road/199733)

### REVERIE Virtual Hangout: An Immersive Social and Collaborative VR Experience

Ioannis Doumanis and Daphne Economou (2021). *International Journal of Virtual and Augmented Reality* (pp. 18-39).

[www.irma-international.org/article/reverie-virtual-hangout/298984](http://www.irma-international.org/article/reverie-virtual-hangout/298984)

### Gamification: To Engage Is to Learn

Biancamaria Mori (2020). *Virtual and Augmented Reality in Education, Art, and Museums* (pp. 81-92).

[www.irma-international.org/chapter/gamification/241595](http://www.irma-international.org/chapter/gamification/241595)

### Use of Virtual Academic Environments During the Coronavirus Pandemic

Kadir Uludag (2024). *Exploring the Use of Metaverse in Business and Education* (pp. 275-285).

[www.irma-international.org/chapter/use-of-virtual-academic-environments-during-the-coronavirus-pandemic/343985](http://www.irma-international.org/chapter/use-of-virtual-academic-environments-during-the-coronavirus-pandemic/343985)