## **SUMMARY** (ENGLISH)

Through the lens of classical phenomenology, the cultural role of technology is understood as that of revealing dimensions and qualities of reality that could not be observed or experienced without its intercession. In other words, technologies frame world-views and disclose new worlds. Elaborating on the phenomenological tradition and inspired by Martin Heidegger's existential phenomenology and his pioneering work in the field of philosophy of technology, this dissertation focuses on interactive virtual worlds as disclosed by digital simulations and video games. In particular, it structures an account of the effects that such artificial phenomenologies have on human kinds of ontologies.

The objectives of my study are those of both

- assessing the expressive potential of interactive digital simulations from a postphenomenological framework, and
- complementing the current horizons of philosophy of technology, media studies and game studies with the largely overlooked perspective of digital mediation as ontological instruments as well as mediators of philosophical thought. Digital simulations are recognized as technologies capable of materializing alternative phenomenologies and new ways of interactively understand causation and they can pragmatically disclose philosophical notions, hypotheses and experiments as well as give raise to new questions that could only emerge and be experienced in those virtual contexts.

In line with the theoretical framework of reference, the term 'ontology' is used to indicate, in this dissertation, the rationalization of certain relationships that are constituted between a being and a world. This understanding of 'ontology' presupposed an inextricable engagement between beings and worlds, a relationship which is always characterized by biological as well as historical dimensions. Closely following the path laid by Heidegger, the term 'metaphysics' is, instead, specifically utilized to indicate a family of world-views that ensues from the establishment of a theoretical standpoint. From Heidegger's perspective, metaphysics is the very, perverted pursuit of objective truth that went largely overseen in the methods and goals of Western thought and is a defective heritage that must be 'overcome'.

The inspiration derived from Heidegger's work is evident in several components of my study, among which — most notably — lexical ones as well as those related to his overarching philosophical aim of 'overcoming' the unsatisfactorily limited perspectives offered by the Western tradition of though. When describing the social and cognitive effects of the exposition to interactive virtual worlds, for example, I refrain from referring to them as ruptures, revolution or from using paradigm-breaking expressions. Instead, terms like 'alteration', 'shift' or 'overcoming' are the ones that map the understanding of the ontological effects that I recognized in the progressive diffusion of interactive, digital mediation in social practices. The term 'overcoming', in particular, is utilized in accord with Heidegger's embracing of the concept, which is not to be understood in the dialectical meaning of the German term *Überwindung* (surpassing) but must be interpreted in the nuanced conjunction of two other terms: *Andenken* (rememoration) and *Verwindung* (distortion, twisting, incorporation).

How can the 'overcoming' of the traditional limitations of metaphysical thought be pursued, according to Heidegger? The early Heidegger recognized a possibility for salvation in a regression to the pre-Socratic pursuit of philosophical truth. In two of his later writings, instead, he suggested

that the 'overcoming' of the metaphysical horizon of Western thought could be actualized (if at all) through the apex of metaphysics itself: technology.

Inspired by several aspects of the early phase of Heidegger's thought and by the openness and the reflections on technology of his later work, my dissertation chiefly understands digital mediation as an ontological instrument. Embracing such position, my work does not propose an understanding of humans as beings who will ever have the possibility to 'liberate' themselves from their characteristic finitude or their fundamental limitations to develop and structure thought. It however understands this particular moment in the process of Western civilization as one in which human projectivity, their innate tendency to try to overcome their limits and supplement their finitude, is the dominant background upon which human beings and technology are mutually constitutive in their fundamental interrelation.

The fundamental question at the basis of this research was, consequentially, enunciated as follows: "how can digitally mediated simulation supplement human beings in 'overcoming' the horizon of their traditional (pre-digital) ontologies?"

From the outlined perspective, it should be evident that the 'overcoming' of traditional kinds of human ontologies through the use of any technologies (embraced as a projective ontological tools) could never be understood as a complete and definitive 'abandonment' of our biological heritage and philosophical traditions, but rather as 'Andenken and Verwindung': as "a going-beyond that is both an acceptance (or 'resignation') and a 'deepening'." (Vattimo, 1991, xxvi) In particular, interactive, digital simulations are recognized as intrinsically affording the 'overcoming' of two specific aspects inherent in being humans that traditionally determined the way in which they structured and elaborated ontologies:

- 1. Their customary and exclusive engagement with the world commonly indexed as 'actual'. Digital simulations are recognized as artefacts capable of granting access to perceptually stable, self-changing and interactively intelligible virtual worlds. Such worlds are, in general, causally and spatio-temporally independent from those that humans share as biological creatures, although depending on it for their existence in what could be largely defined as a parental relationship. Working with (and within) the flexible and programmable worlds afforded by computers, twenty-first century philosophers can objectively craft, experience and divulge ontological alternatives as well as philosophical claims within simulated environments. Presented as virtual experiences, philosophical concepts and alternative phenomenologies cannot only be accessed without the mediation of subjective imagination, but take a novel projective dimension which I propose to call 'augmented ontology'.
- **2.** The specific structure of their 'positionality'. Adapting the anthropological perspectives offered by Helmuth Plessner's theory of 'positionality' to the age of digital technologies, interactive digital simulations are understood as capable of enhancing and expanding the native body schemas of human beings with supplementary, virtual body schemas. As a corollary of this approach, the proposed perspective to philosophy of technology opened the way to (and was complemented by) the structuring of a phenomenological account of biometry in relation to interactive, digital experiences.

Allowing for the transcendence of such fundamental aspects of how human kinds of ontologies were pre-digitally developed and structured, the interactive experiences of virtual worlds disclosed by digitally mediated simulations are understood as the contexts where a new, projectual humanism is already arising. In other words, I recognize computers as media capable

of 'overcoming' the constraints and the effects of written text as the dominant form of mediation for the development and the dissemination of thought.

In his 1986 book *Experimental Phenomenology*, Don Ihde wrote that "[w]ithout entering into the doing, the basic thrust and import of phenomenology is likely to be misunderstood at the least or missed at the most." (Ihde, 1986, 14) In agreement with Ihde and firmly believing that the work of a digital humanist is necessarily interdisciplinary and involved in practical 'doings', I developed 'the question concerning digital technology and projectual humanism' and elaborated an answer to it in a way that is not purely speculative, but is also experiential and generative. The material activity of 'doing philosophy' that I propose in my study involves, in fact, designing and developing digital interactive experiences (mostly in the forms of video games) and using such experiences for three interrelated pursuits: as ontological instruments, as new media to disclose and negotiate philosophical ideas and as a vehicle to understand the concept of incorporation in virtual worlds.

Two are the essential dimensions in which my work was involved with some form of *praxis* and materialized through 'doing':

- 1. my activity as a video game designer and video game developer, through which I created several philosophical games (commercial as well as experimental) aimed at making certain notions playable and interactively disclose alternative world views, and
- 2. the development of a postphenomenological approach to biometrically-aided design which led to the grant-funded launch of the applied research project *BD4CG Biometric Design for Casual Games* in collaboration with the University of Antwerp, Belgium.

The practical outcomes of the activities summarized above as well as several of the theoretical elaborations contained in my dissertation were published in academic journals, presented at academic or industry conferences and were made available online both in their textual and in their interactive, ludic form. A complete list of published works, video games and articles derived from this study is available in the section of this text dedicated to my biography.