

# Review of: "The Discontinuity of the Virtual Toward the Non-Living and the Living"

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I see this text as an ontological study of the virtual from the angle of a discontinuity with the non-living and the living.

The text is difficult to read for several reasons. The study is conducted essentially at a conceptual level, without a coherent ontological framework being established. The study mentions a very large number of notions for which various ontological theories exist but which are not cited. For example, on the notions of reality and level of reality, articles by Roberto Poli and Claudio Masolo can be found online. A whole literature exists on the ontology of artefacts, the virtual, and fiction, but it is ignored by the author. Moreover, the author's plan does not make for easy reading. Instead of specifying in the introduction the notion of the virtual adopted in the study, the author does so several times halfway through the text, and the definitions lack clarity. These difficulties make it impossible for me to assess the article's contribution.

One problem I have is that the author does not define - from the outset - the meaning of the term 'virtual' that she uses. There are many meanings, both philosophical and technical. We have to wait until section Main.c *The virtual as a subdomain of the non-living*, on page 12, to learn that the notion of virtual reality is favored. But it is not clear in what exact sense the author is using the term 'virtual reality'.

A common notion of virtual reality is that of a computer simulation. Something is simulated, which can be likened to a fictional entity: a fictional world, more or less similar to the real world, is simulated. The ontology of fiction is a well-developed field. We can refer in particular to the work of Amie Thomasson. When we talk about fictional characters, two entities are commonly distinguished. For example, the entity 'Sherlock Holmes-1' as a character created by Conan Doyle - this artefactual entity exists as a social cultural object in the real world - and the entity 'Sherlock Holmes-2' as a private detective evolving in a fictional world created by Conan Doyle. In this fictional world, Sherlock Holmes-2 is a living human being. Nowadays, video games, an advanced form of virtual reality, allow us to meet fictional beings that we consider to be alive, like SH-2, and with whom we have interactions like those we have with real humans.

But the notion of virtual reality to which the author refers seems to be different. On page 12, it is expressed as follows:

'The ensembles of programmes, which together perform complex tasks that give us *virtual reality* - *non-existent* in fact, but only simulated as visible tableaux - in which and with which we can even actually interact (so virtual reality is the interface between us and the ensemble of software programmes)'. I say 'seems to be different' because the sentence is difficult to understand. In fact, what we do understand, thanks to the context, because it goes on to talk about Artificial Intelligence, is that the question the author is asking is that of the possibility of creating an artificial consciousness by means of a set of programs. So we understand why AI is mentioned in the abstract of the text and why the notion of consciousness appears in the preliminaries.

On page 14, in the section Main.d *The virtual*, the author returns to the notion of virtuality. By referring to altered images of reality giving access to a virtual domain, the author borders on the common notion of virtual reality giving access to a non-real world. It's a real shame that the author doesn't take this opportunity to evoke the notion of a fictional world and position her approach.

We have the same comment to make about section Main.f *What is the virtual?* on page 16 and confess that we are finding it increasingly difficult to understand the author, particularly when she states that 'the Virtual is composed of the AI and the reality it gives'. What is this reality that AI 'gives'?

Unfortunately, the Conclusion does not provide any clarification. In §5, there seems to be a conclusive definition: 'Then, the *virtual* is: non-living, artifact'. But does this definition set out a necessary and sufficient condition, or simply a necessary one? In any case, what contribution does such a definition make to the notion of artefact, given that it seems obvious (notwithstanding some positions taken in the field of work on artificial life) that the artefacts we create are non-living?