

Emerging Computer Technologies: From Information to Perception

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The aim of the presentation is to introduce the tools and the distinctions we need in order to analyse the new emerging digital technologies focussing on their innovations.

This work will point out how it is mandatory to define two different transparencies in the post-phenomenological analysis in order to understand the innovation of such technologies.

The idea of a personal computer has been abandoned, as Mark Weiser predicted [5], for more pervasive and ubiquitous devices. Users have not to be immersed in a device in order to get the digital information they need because these information are visualised in their everyday world. Therefore, thank to this kind of innovation related to the design of the interface, the digital information are not framed in a limited space anymore, but they are literally erupting into our world [2].

For example, Augmented Reality and some applications in Virtual Reality, developed for the device *Oculus Rift*, aim to pervasively introduce such digital objects in our surroundings by merging digital and everyday world at a perceptual level.

Moreover, such technology is becoming so cheap [1] that it will likely allow every citizen of the western world to “play” and act with them. Therefore, they are not only innovative but they have the possibility to become pervasive and to have a massive social impact as well.

While philosophy is struggling with the analysis on the “information” involved with

the computing capabilities of computers and how we are living in the age of information, computer sciences are developing these new devices which revolutionarily rethink the way the subject perceives the digital output. They are trying to make the devices “transparent” in order to allow the subject to directly live among the digital objects they produce [6].

Therefore, the innovative feature of these technologies is in how they relate to the perceiving subject. It is not a novelty in what is processed by the computer or in how the external world is “digitalised” into bits of information, but it is an innovation in the way the subject perceive and act through them.

The digital contents are turning into perceptual objects just as other common everyday objects are.

Imaging technologies, which in a post-phenomenological framework are the technologies providing a visualisation of an object, already started this trend by enabling the subject to perceive images of something which was not perceivable before [4] such as in the case of a radio-telescope which allow the perception of objects not perceivable by the human naked eye. However, the new digital technologies will bring this potentiality to a higher level by allowing the perception of new digital beings.

Using a post-phenomenological approach, which directly uses the concept of transparency in order to study the relation

among subject, technology and world [3, 7], this work will show what these technologies are trying to do by highlighting what means to be “transparent”.

It will be clear that such “transparency” is not an indivisible concept and it collects many different aspects in itself. Thus, we need to distinguish its various elements in order to highlight what a transparency is and how it works in a better way.

Thanks to a phenomenological analysis based on Husserl’s works, we will subdivide this concept into two distinct elements. The first element will be related to the possibility of the subject to directly perceive the object thanks to the “withdrawing” activity of the technology which becomes invisible. The second one will be related to the content of such a perception because it focus the attention on the “noematic” content of the perceived object. Therefore, to be “transparent” does not mean only the subject’s intentionality flows directly toward the external object, but it also means the external object shows itself as an

object “similar” to common objects.

The presentation will be structured in two main sections. The first one will focus on the introduction of the two types of transparency in post-phenomenology and the reasons why we need them.

The second one will focus on what such introduction yields and on how we need to consider these digital objects.

The digital object are not bunch of data perceivable as string of text which has to be read and comprehended. They are perceived as common objects which do not require any reading activity. Therefore, we cannot go further in our analysis studying the “information” involved in such realisations because now we are facing perceptual objects in our everyday environment and so we need to bring the analysis at the perceptual level as well.

Digital objects are not merely “data” anymore and they are becoming perceptual beings of our world as other common objects are. Therefore, the word “information” has to be reframed in its importance at least.

Acknowledgments

Nicola Liberati worked on the post-phenomenological analysis on transparencies and applying them to the new digital technologies. Shoji Nagataki worked on the concept of information. Nicola Liberati is supported by the

PostDoctoral Research Fellowship of the *Japan Society for the Promotion of Science (JSPS)*, No. P14782. Shoji Nagataki is supported by Grant-in-Aid for Scientific Research (C), No. 25370034.

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