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A FAUSTIAN EXCHANGE: WHAT IS TO BE HUMAN IN THE ERA OF UBIQUITOUS TECHNOLOGY?

## Cognitive revolution, virtuality and good life

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Abstract We are living in an era when the focus of human relationships with the world is shifting from execution and physical impact to control and cognitive/ informational interaction. This emerging, increasingly informational world is our new ecology, an infosphere that presents the grounds for a cognitive revolution based on interactions in networks of biological and artificial, intelligent agents. After the industrial revolution, which extended the human *body* through mechanical machinery, the cognitive revolution extends the human mind/cognition through information-processing machinery. These novel circumstances come with new qualities and preferences demanding new conceptualizations. We have some work ahead of us to establish value systems and practices extended from the real to the increasingly virtual/infocomputational. This paper first presents a current view of the virtual versus the real and then offers an interpretation framework based on an info-computational understanding of cognition in which agency implies computational processing of informational structures of the world as an infosphere. The notion of "good life" is discussed in light of different ideals of well-being in the infosphere, connecting virtuality as a space of potential and alternative worlds for an agent for whom the reality is a space of actual experiences, in the sense of Deleuze. Even though info-computational framework enables us to see both the real world and the diversity of virtual worlds in terms of computational processes on informational structures, based

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School of Innovation, Design and Engineering, Mälardalen University, Västerås, Sweden e-mail: gordana.dodig-crnkovic@mdh.se URL: http://www.idt.mdh.se/~gdc on a distinct layered cognitive architecture of all physical agents, there is clear difference between potential worlds of the virtual and actual agent's experiences made in the real. Info-computationalism enables insight into the mechanisms of infosphere and elucidates its importance as cognitively predominant environment and communication media. The conclusion is that by cocooning ourselves in an elaborate info-computational infrastructure of the virtual, we may be increasingly isolating ourselves from the reality of direct experience of the world. The biggest challenges of the cognitive revolution may not be technological but ethical. They are about the nature of being human and its values.

**Keywords** Cognitive revolution · Virtual worlds · Ethics of the virtual · Good life

## 1 Introduction: cognitive revolution

ICT is causing revolutionary changes in our lives, on a global scale and in a number of dimensions. As Floridi (2007) rightly proclaims:

... in information societies, the threshold between online and offline will soon disappear, and that once there is no difference, we shall become not cyborgs but rather inforgs, that is, connected informational organisms.

This revolution is at least as radical as the industrial revolution, and we can still only speculate about its farreaching consequences. The basic reason is the "phase transition" from slow and predominantly local contact and information processing to practically instantaneous communication on a global scale, supported by unprecedented