

Editorial introduction – Ethics of New Information Technology

This special issue of *Ethics and Information Technology* focuses on the ethics of new and emerging information technology (IT). The papers have been selected from submissions to the sixth international conference on Computer Ethics: Philosophical Enquiry (CEPE2005), which took place at the University of Twente, the Netherlands, July 17–19, 2005.

Ethics of New Information Technology was the central theme of CEPE2005, as reflected in many of the 48 papers presented at the conference. The premise of CEPE2005 was that information technology is currently moving beyond the familiar mainframe, PC, laptop and networked computer paradigms, and that these new developments require ethical reflection. We are now witnessing the mobile and wireless revolution, the ubiquitous computing revolution, as well as revolutionary new uses of IT in biomedicine, education, the fight against crime and terrorism, entertainment and other areas. We are anticipating a nanotechnology revolution, as well as a convergence between information technology, biotechnology and nanotechnology (“converging technologies”). These new developments require ethical reflection, even before their consequences become visible.

Ethical reflection on information technology occurs at various stages. It sometimes focuses on entrenched information technology: systems and software that have been accepted by a community of users, that have a history of usage, and that have engendered effects on users and society at large. Sometimes, it is focused on IT that is still in its introductory stage: technology that exists but is still somewhat unproven, used by early adopters but not by a large community, and that can still develop in different directions. At yet other times, ethical reflection focuses on IT still in development, or even

anticipates future IT developments, at a stage when consequences are still unclear and the technology may still take different forms. Evidently, ethical reflection will not be the same at these different stages. When technologies have not yet been fully formed, ethics will have to be more speculative and more concerned with plausible scenarios and consequences than when the technology is fully entrenched. Also, while technology is still being developed, there is more room to reflect morally on technology design as opposed to technology usage.

This special issue contains papers that focus on the ethical study of (information) technologies that are still emerging and have not yet been fully entrenched in society. It contains both ethical analyses of particular emerging technologies (nanotechnology, converging technology, ambient intelligence, artificial life, intelligent agents) and methodological reflections on the study of ethical aspects of new and emerging technologies. We hope that these papers contribute to the development of an (information) technology ethics in which scholars are aware of the various stages of technological development and diffusion at which ethical reflection may take place, and in which more resources are devoted to anticipatory ethical reflection on new and emerging technologies.

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