

Editorial: On IRIE Vol. 6

This issue is a very special issue. What it makes so special is the fact that we faced some of the issues dealt in it in the process of creating it: some contributions sent in by Email were blocked by the spam mail scanner. They were - of course wrongly - tagged as 'sexual discriminating' but no alert was given by the system. Now: who was to be made responsible if we - in fact in an uncomplicated und constructive thus human way - would not have fixed the problem in time and the authors would not have been included in the issue? On which grounds did the software decide to block them and thus can it be taken as a moral agent? And finally, is the phenomenon of spam forcing us to use such agents in our social communication on which we have to rely in various ways? There we are amidst the subject of our current issue: Ethics in Robotics.

In fact, robotics has become a fast growing research field and prosperous economic market. Robotic systems are expected to interact not only with experts but also with various every day users like children, sick, elderly or visitors in a museum etc.. Although robots are therefore progressively surrounding us in our professional lives as well as in our private sphere, we have only few reflections on the ethical and societal issues concerned with it. In order to cover all the issues, we called for reflection at three complementary levels.

The first one - that is the most common - concerns how human beings live in a technological environment. It mainly consists in asking questions about the consequences (the so-called „impact assessment“), and the way we (as users) handle robots. Classical ethical issues discussed as well as public policy fall into this category.

On the second level, the reflection is directed towards questions of man-machine interaction and technology design. Robots are not regarded as the ready-made products of engineers but as contested devices and emerging technologies. Concepts, theories and means used in robotics to model the relation between user and machine (master-slave, interacting partners, caregiver-infant, owner-pet, etc.) are discussed concerning their ethical, epistemological, and ontological consequences. In addition, questions of funding politics, military interest, media representation, and the like are central aspects on this level of discussion.

The third level asks the question, why we live with robots. Our main values are embedded into all our technological devices. Therefore, the question is: which values are we trying to realize through them? Artificial creatures are a mirror of shared cultural values. Humans redefine themselves in comparison with robots. This redefinition of living organisms in technological terms has far-reaching implications. Long-term reflections need to be developed and plausible scenarios need to be anticipated.

So we gather innovative conceptions of ethics and engaged technoscience studies in this issue, which develop their argumentation in socio-political and historical contexts to improve applied ethics in general and especially ethics in the field of robotics.

The issue collects a broad variety of themes and approaches concerning very diverse fields of robotics and software agents such as educational robotics (Perez), entertainment robotics (Krähling), military robotics (Asaro), humanoids (Duffy), virtual agents (Becker), ambient intelligence (Crutzen) and others. Philosophical and socio-technical aspects of human-machine interaction (Becker, Crutzen, Duffy, Marino/Tamburinni, Söffker/Weber) as well as the effects of different historical and cultural backgrounds of robotics (Krebs, Kitano) are also analysed. In the beginning an overview of the roboethics is given, groundings for future roboethical approaches are discussed and roadmaps are developed (Asaro, Sullins, Operto/Veruggio). In this issue, we also accepted besides the regular, peer reviewed monographic contributions a dialogue between an engineer in control dynamics (Söffker) and a philosopher (Weber) allowing for an interdisciplinary discourse on the problems of human-machine interaction and the foundations of political and democratic participation in technology development.

We want to thank the authors and guest editors for contributing to this interdisciplinary and relatively young field and apologize for the postponement of this issue due to some significant delays in the process this time - you might agree that it was worthwhile in the end. We hope the contributions help to support the further development of ethics, philosophy of science and technology studies in the field of robotics - and especially to co-construct and shape our future lives with robots and agents in an open and responsible way.

Yours,

Rafael Capurro, Thomas Hausmanninger, Karsten Weber and Felix Weil, the Editors