

NanoEthics Seven Years On

Christopher Coenen

Published online: 8 August 2014
© Springer Science+Business Media Dordrecht 2014

It is now a year and a half since I started to take over from John Weckert as Editor-in-Chief of this journal. The excellent issues that came out in 2013 were still very much John's work, and I am deeply indebted both to him and to Springer for giving me the opportunity to learn on the job, while providing help and advice as and when necessary. In consequence, it is fair to say that looking back over the first seven years of *NanoEthics* means acknowledging what John has accomplished in creating a forum for research and well informed discussion on nanoscience, nanotechnologies, and other fields of new or emerging science and technology.

It was truly a great honour and a great pleasure when he invited me to become his successor as Editor-in-Chief because, since its early days, *NanoEthics* has been the most important journal for my work. Many of the articles published and discussions initiated in the journal have done much to mould my understanding of ethical, societal, epistemological, and other aspects of new or emerging science and technology. It would be unfair to the authors who would be neglected if I were to single out individual papers, so I will survey the first seven years of *NanoEthics* by highlighting some of the journal's main preoccupations and topics during the period from 2007 to 2013. Among other things, issue 1/2007 launched a

debate about 'speculative ethics' that has been highly influential in recent discussions of the role of the imagination and future visions in discourse on emerging fields of technoscience. Moreover, the contributions to this issue gave a foretaste of how *NanoEthics* would develop into a general forum for reflection on new and emerging science and technology. As early as 2007 (as testified by issues 2/2007 and 3/2007), the journal was clearly establishing its credentials as a crucial factor in research and discussion on ethical, societal, governance and other aspects of nanoscience and nanotechnologies. Up to the present, it has always welcomed studies on the history of discourse about nanotechnology and society, and *NanoEthics* has therefore also become an important medium of self-reflection for the entire 'nano community' in a broader sense.

The journal has likewise had a powerful impact on discourse about the anthropological aspects of technologies that are converging at the nanoscale, in particular with regard to the topic of 'human enhancement', and this too began to become apparent very early on (as of issue 2/2007). *NanoEthics* has also published highly original studies on historical and philosophical aspects of new and emerging science and technology that have dealt with, for example, the current relevance of Francis Bacon and Georges Bataille, vitalism, and the topics of contingency and finitude. Moreover, it has provided a platform for laboratory engagement studies, important early contributions to the discourse on synthetic biology, and research and reflection about religious viewpoints on nanotechnology, as well as the importance of ancient myths and the imagination in our understanding of the

C. Coenen (✉)
KIT (Karlsruhe Institute of Technology) ITAS (Institute
for Technology Assessment and Systems Analysis),
POB 3640, 76021 Karlsruhe, Germany
e-mail: christopher.coenen@kit.edu

ethical and societal consequences of new and emerging technoscience.

The contributions to *NanoEthics* cover an impressively wide variety of emerging and converging technological fields that encompass neurotechnologies and developments in the area of information and communication technologies, such as ambient intelligence and persuasive technology. It might come as a surprise to some that the journal has also published a considerable number of studies on animal ethics. This reflects the circumstance that the role and treatment of animals in technoscience is not only of crucial importance for technoscientific practice and animal ethics, but also relevant to broader ethical, anthropological and philosophical reflections concerning the triangular relationship between humans, animals and technologies. Furthermore, *NanoEthics* has played a key role in publishing papers by scholars who have been working on the influential, EU-funded DEEPEN project, and members of the community of scholars, scientists and others who have organised themselves in the Society for the Study of New and Emerging Science and Technology (S.NET). Two recent, guest-edited collections of papers dealt with a wide variety of questions about the opportunities and limitations of anticipation in relation to the societal challenges posed by nanotechnologies and their regulation under conditions of uncertainty. Since its beginnings, the journal has also contributed consistently to (self-)reflection on the field of nanoethics itself, including the issue of whether there are any ethical problems exclusively specific to nanotechnology.

Numerous papers published in *NanoEthics* and the discussions influenced by them also show that a variety of developments in and around emerging fields of science and technology, and discourse on human enhancement in particular, make it imperative that scholars do not restrict themselves to purely ethical approaches, but take into account other philosophical fields, as well as studies from a wide variety of disciplines in the social sciences and humanities. Accordingly, the journal has developed into a small, but important, voice within the large field of science and technology studies (STS). Both in this regard and in general terms, *NanoEthics* is not only strongly interdisciplinary, but highly international too, featuring contributions from many different countries. Since its inception, the journal has also published reviews of some of the most important books on ethical and societal aspects of nanoscience, nanotechnologies, and other new or emerging fields of science

and technology. And last but by no means least, the journal is a major forum for research and discussion on the public perception of these fields, and their educational, legal and economic implications, publishing also analyses of the risks and benefits of a wide variety of specific applications of science and technologies.

In his modest manner, John Weckert remarked that a “journal can to some extent define a field but for a new journal it is more the other way around; what people in the field are doing dictates the content of the journal” [1], implying that this explains the broad thematic scope of *NanoEthics*. Of course, the decisive factor here was that John managed to bring together and attract an impressive array of thinkers from a wide variety of backgrounds, and with very different approaches to the scholarly analysis of developments in and around new and emerging science and technology. The new editorial team, of which John is still, I am delighted to say, a member, aims to follow in his footsteps in this respect too.

Besides John, the team consists of Laura Cabrera – who is also responsible for the journal’s book review section –, Mario Kaiser, Colin Milburn and Fern Wickson. It is a wonderful privilege to work in this team, and I would like to express my deep gratitude for their willingness to collaborate with me as editors of *NanoEthics*, bringing all their multifaceted expertise to bear and helping to ensure it continues to flourish in the years to come. I am also very grateful that *NanoEthics* will not have to forego the advice and inspiration of Davis Baird, Rafael Capurro, James Moor, and Pieter E. Vermaas, who will act as the journal’s consulting editors.

This survey of the first seven years of *NanoEthics* makes it clear that the journal’s success has been attributable to the following factors: It is a leading medium of philosophical, social science and humanities research on, and a forum for general discussion of nanoscience and nanotechnologies. Furthermore, it has published important ethical studies concerned with a wide variety of controversial, new and emerging fields of science and technology. The contributions to *NanoEthics* also reflect the fact that the ethical examination of new and emerging developments in science and technology, in particular in fields that are strongly shaped by futuristic visions, needs to be informed by a wide variety of expertise from philosophy, the social sciences and the humanities. As John Weckert has pointed out, “anything that contributes meaningfully to ethical discussions is legitimate

subject matter” [1] for *NanoEthics*. This is, for example, true for investigations of anthropological aspects of the field, but also for studies of a broad range of sociological and other facets of new and emerging technoscience. Moreover, the journal has come to be accepted as a major international forum for theoretical and methodological discussions concerning scholarly research on new and emerging fields of research and development. It aims to stimulate debate, in part by publishing critical discussion notes, which are short, often essayistic papers, as well as special sections, on a broad variety of topics.

While the new team of editors will develop a vision for *NanoEthics* in seven years time, which will appear in one of the forthcoming issues, we will not reinvent the wheel, but aim to further develop the journal along the lines laid down by John during its first seven years. The two issues published in 2014 demonstrate that the journal continues to display its traditional strengths. Four papers focus on the field of nanomedicine and, taken together, illuminate it from the diverse perspectives characteristic of *NanoEthics*. They include analyses of the role of metaphors, ethical aspects of clinical research in this area, legal problems and the use of carbon nanotubes in biomedical applications. Furthermore, a thought-provoking ethical discussion of whether there is a moral obligation to develop brain implants maintains the journal’s involvement in discourse on neurotechnologies. Likewise, topics in the area of animal ethics continue to feature prominently. Two contributions specifically deal with the relevance of ethical and societal issues within nanoscience itself, shedding light on options for action to enhance the appreciation of them among scientists and graduate students. International points of view are represented by two comparative studies: one concerning the regulation of nanotechnology in three European countries and at the EU level, and one on German, UK and international anti-nanotechnology civil society groups. The challenges encountered in public engagement activities on nanotechnology are appraised in another article. A further international perspective is

introduced by an enlightening discussion note that compares the two extant draft codes of ethics for the global do-it-yourself biology community, using them to cast light on transatlantic divergences in citizen science ethics. The journal’s openness to fresh topics in new or emerging research and development is also demonstrated by an interdisciplinary article on public issues that have arisen around vaccine development. A discussion note on synthetic biology, a field of research and development that is expected to become an even more prominent topic in *NanoEthics* in the future, argues against the notion of ‘artificial life’. Another discussion note analyses practices involved in ‘visioneering’, so continuing the discussion about the role of visions of the future in technoscience and discourse on it. The present issue also features a book review section in which two important publications on ethical aspects of nanotechnology are presented and discussed.

In the forthcoming December issue, a special section on body hacking, self-made cyborgs and transhumanist visions, guest-edited by Bárbara Nascimento Duarte and Enno Park, will bring together personal accounts and reflections by individuals who identify themselves as ‘cyborgs’ with scholarly analyses of the cyborgism movement, so opening *NanoEthics* to narrative bioethics or, more broadly, a narrative ethics of technology. Other special sections are planned, some on similarly controversial matters, others on well established fields of research.

In order to emphasise the extensive thematic and disciplinary scope of *NanoEthics*, the journal has a new subtitle: *Studies of New and Emerging Technologies*. We invite contributions on the topics sketched out above and other aspects of new or emerging technoscience, and hope our work continues to inspire debate and dialogue about developments that will affect every aspect of human life.

References

1. Weckert J (2012) Editorial. *NanoEthics* 6(3):153