BOOK REVIEW

The Ethics of Technology: Methods and Approaches, Sven Ove Hansson (ed.) (2017) Rowman & Littlefield, London, 263pp., £115 (hardback) £33 (paperback) ISBN 9781783486588

In the years since the publication of this volume, the field of ethics of technology has become central to public debate. A prominent example is the debate around the development and application of artificial intelligence (AI). In June 2018, the European Commission installed a high-level expert group (HLEG) of representatives from academia, civil society and industry to include ethical considerations in the implementation of the European strategy on AI. The HLEG published *Ethics Guidelines for Trustworthy AI* in April 2019. The process and its outcome have been both an inspiration and a source of fierce debate over the most effective way to deal with ethical issues raised in the development, application and broad societal entrenchment of (emerging?) technologies (see Metzinger, 2019; Metcalf, Moss and Boyd, 2019; Bietti, 2020). The ethics of technology has become a topic high on the agenda of national governments, transnational institutions such as the EU and the United Nations (2020), and professional standards organizations (IEEE, 2020). Big technology companies, such as Google and Facebook, have installed oversight boards.[1] Growing public awareness and concern about how technology impacts and interferes with our interpersonal relations and societal institutions has led to growing demand for experts who can interpret and anticipate the ethical issues around the development and use of technology.

Hansson's edited volume, which noticeably antedates the developments mentioned above, brings together a number of different perspectives on, and theories and methods in, the ethics of technology. It is intended for advanced students in the ethics of technology, and (literally) starts out from the question: 'What is the task of a professional ethicist?' (p.vii). My personal background in the analytical sciences (mathematics, computer science and philosophy) makes me particularly appreciative of the more systematic and conceptual chapters. I think these will be very useful beyond their intended audience, and will help persuade those working on the technology that ethics is part of their work.

The introductory chapter provides a concise clarification of what is normally covered in the ethics of technology (and what is not), different concepts of ethics, the nature of the ethics of technology and how we see it in practice. The structured, analytical style seems primarily aimed at providing conceptual clarity, which can be seen as a tool for practice in this complex interdisciplinary field. It provides a vocabulary for discussing the ethics of technology. Some of the following chapters present a few of the most fundamental ethical issues of technology, for example, 'Technology and distributive justice' and 'Responsibility analysis and ethical risk analyses'. I particularly like the simple framework presented in the latter as it can be seen as integrating the notions of fairness of distribution, of risks and benefits, and of responsibility.

Other chapters in the book have different styles and deliver different types of contribution. The 'Ethics of sustainability' chapter could provide useful lessons in the context of current discussions on the ethics of AI. 'International technology transfer', 'Feminist technology design' and 'The ethics

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[1] Facebook installed an oversight board in May 2020 to 'exercise independent judgment over some of the most difficult and significant decisions around content on our platforms'. Note that ethics is not mentioned. See https://about.fb.com/news/2020/05/welcoming-the-oversight-board/ (accessed August 2020). The external advisory council of Google, installed in April 2019, was short-lived owing to controversy surrounding one of its members. See https://www.blog.google/technology/ai/external-advisory-council-help-advance-responsible-development-ai/ (accessed August 2020).

of doing ethics of technology' are indispensable for remaining critical of implicit assumptions and power structures, not only in technology, but also in the study and practice of the ethics of technology. Several chapters give overviews of frameworks, techniques and settings attempting to deal with the complex combination of uncertainty, diverse understandings, evaluations and feedback loops inherent to the field. 'Case study methodologies', 'Ethical tools' and 'Value sensitive design and responsible research and innovation' provide a helpful resource for methods when planning research projects.

While the overall selection of the topics makes sense in a book aiming to provide methods and tools, I did find some chapters less connected to the overall structure of the book, contributing less because of the way they addressed the topics. In 'Postphenomenological approaches' there is an imbalance and disconnect between the discussions of Ihde's postphenomenological account and Albert Borgmann's 'ethical assessment of our contemporary technological situation' (p.67). While the chapter provides case material for class discussions, it is not always clear which concepts are illustrated. The chapter ends after a brief introduction of Borgmann's views, but without discussion of their epistemic or ethical underpinnings, and without comparison with Ihde's views.

I very much appreciated the perspective on the ethics for technology through the notion of profession, in particular, that of engineers in 'Profession as a lens for studying technology'. However, this perspective could have been framed more clearly in terms of professional ethics for engineers on the one hand, and the field of ethics of technology on the other. It was not entirely clear to whom the advice on using the lens of profession was directed, and to achieve what aim. The fact that many recommendations are formulated negatively ('one cannot', 'one should not', p.92) leaves the impression that the chapter implicitly engages with a critical debate external to this book (and maybe also external to the core topic of this book).

'Privacy impact assessments' conspicuously leaves unmentioned the general data protection regulation (GDPR) of the European Union (the text of which was agreed in 2016, so before publication of the book). This binding law across the EU makes performing a privacy impact assessment a legal requirement for data controllers. Thereby an activity in the ethics of technology has become part of legal accountability, a significant development that would have been worth mentioning. Also, it would have been a good opportunity to introduce the interaction between ethics and formal regulation of technology, a topic missing completely from the book.

'Ethics of emerging technology' starts by differentiating between entrenched and emerging technologies. The chapter's overview overlaps with the methods and approaches mentioned earlier in the book in reference to technology (without making the distinction). Indeed, all of this chapter is concerned with the inherent uncertainties and ignorance around the broad societal impacts of technology, famously captured in the control dilemma formulated by David Collingridge (1980) – surprisingly unmentioned in this chapter. It would have been helpful if the chapter had framed the difference in approaches directly, rather than presenting a classification of technologies.

The current societal debates around technology have certainly increased the need for a framework for moral reasoning within the design of, and policy for, technology. Despite missing direct connection to many of the prominent current public debates, this book provides a number of interesting perspectives and essential concepts for a wider professional audience, not just professional ethicists, but also engineers, policymakers and lawyers, for example. The combination of chapters gives a good impression of the academic debates across the field of ethics of technology, but the main strength of the book, in my view, lies in the conceptual clarity of selected chapters. The book may also contribute to a vocabulary that can cut across disciplines, and serve as an inspiration for ethical deliberation in technology research and societal debate.

References

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