Don Ihde. *Medical Technics*. University of Minnesota Press 2019. 94 pp. \$7.95 USD (Paperback ISBN 9781517908300).

Philosophy of technology is an often overlooked, yet vibrant and growing, subfield in philosophy today. Over much of his career, Don Ihde has been one of the most influential thinkers in philosophy of technology. He is the founder of postphenomenology, which develops aspects of 'classical' phenomenology and hermeneutics while adding a non-foundationalist, pragmatic twist. Postphenomenology begins from the insight that human-world relations are technologically mediated in such a manner that both terms—human and world—are mutually co-constituted in technological mediations. Thus, the focus of analyses becomes the multitude of 'human-technics-world relations' (9). Postphenomenological analyses primarily take the form of descriptive and informative 'case studies' of concrete technologies in human practices.

Since retiring from Stony Brook University in New York, Ihde has remained very active, and this small volume is what he calls a 'late life little book' (51), of which there are several, all with 'Technics' in the title. As I understand it, 'technics,' as Ihde uses the term, is meant to indicate that technologies are not merely inert objects waiting to be taken up and used (or simply examined by philosophers!). Rather technologies are always articulated in concrete practices. The term emphasizes both the materiality of technologies as well as the perceiving, embodied nature of humans engaged in technological practices.

Medical Technics, thus, examines multiple ways that different medical technologies are embedded in contemporary science-based medicine. Mingled in with third-person analyses of medical technologies is a first-person narrative of Ihde's experiences with such technologies throughout various medical procedures over the last two decades. Ihde opens the book in the following way: 'This is a book about aging and medical technologies in the twenty-first century' (1). The authorial approach here is a refreshing mix of autobiography and postphenomenological analyses. This book is accessible to non-philosophers, as well as those interested in getting a sense of postphenomenology. If, however, one were looking for a more thorough theoretical introduction to postphenomenology, this would not be the best choice. (His book *Postphenomenology and Technoscience: The Peking Lectures* (SUNY Press 2009) would be a good place to start.) Nonetheless, Ihde's deep knowledge of the history and philosophy of science and technology is on full display in the text. Although short, this book contains several provocative insights and ideas that will stick with the reader long after closing the back cover.

Of the seven brief chapters, some were previously published elsewhere or are adaptations of previous publications. These writings, all thematically united, are brought together here, along with an introduction, a post-script, and an interview of Ihde by Daisy Alioto.

The central chapters of the book take up the notion of 'cyborg technologies' (26). Rather than engage in utopian, post-human fantasies about technologies that would allow us to transcend human finitude, Ihde's 'cyborg' is precisely a response to human finitude, specifically diminishments that come with aging. Dental crowns, hearing aids, stents, heart transplants, and other implantable technologies are 'cyborg technologies,' for Ihde, and 'the gradual accumulation of human-technology hybridization, or the cyborg process, often relates to contemporary *aging*' (34). As if to accentuate the point, in these chapters Ihde's hybrid first-and-third-person narrative approach is most pronounced as he describes in some detail the several medical procedures that have led him to become more and more cyborgian. The hybrid narrative structure in these chapters is not merely a conceit, however; it serves an important postphenomenological function. For the 'human' in the

human-technics-world relations often becomes a medical patient—that is, one element in the practices of medical technics. Any phenomenological analysis of technologies in contemporary medical practice that ignores the patient's point of view would be simply incomplete. Moreover, the merging of analytic insights provided by postphenomenology with the pathos of personal concern in these chapters highlight important aspects of the cyborg experience that would otherwise be lost.

The emphasis on embodiment, specifically, what Ihde calls elsewhere, 'whole body perception,' is also a central thrust of two other chapters. In 'Sonifying Science: Listening to Cancer,' Ihde returns to his abiding interest in acoustic technologies and develops his idea that oftentimes 'art precedes science in the invention and use of technologies-tools-instruments' (16). In 'From Embodiment Skills in Computer Games to Nintendo Surgery,' Ihde presents a postphenomenological description of human-technology interrelations that occur in video game play. His focus is on embodiment, concluding that '[video] game embodiment is distinctly different from ordinary embodiment' (60); moreover, it is a form of embodiment that has also found new and emerging surgical technics. So, rather than de-skilling, playing video games as children and adolescents actually 'pre-skill' young surgeons today to engage in laparoscopic and robot-assisted surgery in which minimal hand movement merge with highly-detailed screen images and interface devices to minimize the trauma of invasive surgeries, leading to shortened recovery times and improved patient outcomes.

In the 'Postphenomenological Postscript,' Ihde shows how technoscientific practices are embedded in larger economic and political structures. Mid-twentieth technoscience was dominated by macro-technologies tied to physics and Cold War concerns, while the near-term future trajectory of technoscience, focused on biology, is turning more toward micro-technologies. This transition underscores his notion that technologies, like all things, have 'shelf lives' (68) in which they have a beginning but also an end, which is a sobering reminder to unbridled technoenthusiasm.

Finally, in the concluding interview the reader gets a sense of what it is like to talk with Don Ihde. It reveals his clarity of thought, wide-ranging curiosity, and inescapable sincerity. Occasionally in the book, Ihde mentions his Kansas upbringing, and the book is suffused with a Midwestern sensibleness and a low tolerance for hyperbole that has allowed him to chart a course over his career between utopian and dystopian visions of technology but one that tasks us, whether as philosophers or as plain persons, to pay attention to how we engage with technologies because, after all, 'we make technologies, and, in turn, technologies make us' (77).

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