
Reviewed by Kevin P. Lee*

INTRODUCTION

In Technology and the Virtues,¹ Shannon Vallor develops an approach to the ethics of technology rooted in a comparison of Aristotelian, Confucian, and Buddhist theories of moral virtue. She argues that “technologies invite or afford specific patterns of thought, behavior, and valuing; they open up new possibilities for human action and foreclose or obscure others.”² Sometimes, this is done explicitly and sometimes it is implicit. Consider, for example, the practice of human-centered design thinking, which is an iterative process for product design that places high value on user experience. The resulting products and services are shaped by the designer’s understanding of what constitutes a human need or want, typically derived through an ethnographical study of human behavior. Major technology companies, including Google and Apple, use design thinking to improve customer satisfaction. Technology can also have unintended effects on human satisfaction by creating habits or traits that help or hinder human behavior and character. For example, using computer screens has displaced paper as the preferred means for delivering reading materials, with the unintended effects of decreasing the reader’s engagement with text and promoting interruption and distraction. Vallor develops the neologism, “technomoral,” to

* Professor of Law, Campbell University, Norman Adrian Wiggins School of Law.

² Id. at 2.
refer to the intended and unintended consequences of technology on the ability of humans to have fulfilled lives.

If this conception of the technomoral is correct, what virtues ought technology promote? How ought morally responsible decisions be made about technology? This is urgently needed since the NBIC (nano, bio, information, and cognitive) technologies hold the potential to unleash existential crises and radically transformative social changes? They present complex moral dilemmas that quickly exhaust the resources of standard policy debates and contribute to an increasingly “disordered geopolitics and widening fractures in the public commons.” Vallor argues that moral assessment of the technology cannot be achieved through the deontological and utilitarian ethics, which view moral reasoning in terms of discursive calculations within a field of moral possibilities. Thus, although these forms of moral reasoning dominate in public policy today, they become overwhelmed by rapid changes in social meaning because they lack resources for imagining the state of persistent change, characteristic of technology today. The alternative developed in Technology and the Virtues is to look comparatively to broadly diverse forms of practical reasoning—Aristotelian, Confucian, and Buddhist—to determine a minimal set of core principles that define the structure of thinking about the good. These common principles she argues can be the basis for a virtue ethics (which she calls “technomoral wisdom”) that might describe common commitments to the common practices of the emerging global information society.

---

3 Id. at 5.
4 Id. at 154.
I. DESCRIPTION OF THE BOOK

The book is divided into three parts: Part I is a metaphilosophical assessment. It advocates for a virtue ethics approach to assessing technology. Virtue (Latin), arete (Greek), and de (Chinese) refer to similar conceptualizations of assessing moral character, given excellent human function (ergon). These ancient approaches to moral reasoning have been the object of renewed interest in contemporary moral philosophy. This interest was furthered by the works of Elizabeth Anscombe, who called for a renewal in her classic essay “Modern Moral Philosophy.” Anscombe argued that deontological ethics rely, ultimately, on some conception of divine duty and therefore ought to be dropped in the modern discourse for a robust moral psychology. Vallor accepts that deontology ought to be dropped but establishes her claim by considering features of practical reason that exist across cultures in the Aristotelian, Confucian, and Buddhist practices of moral reasoning. Drawing from what she takes to be the acceptable aspects of these ancient traditions, she argues for a common ground. Four common commitments emerge from her analysis: (1) a belief there can be a common conception of the moral good (although the nature of the common good is contested); (2) a common understanding that virtues achieve the common good; (3) the belief that moral virtues are the habits of good character; and (4) a belief that the moral life depends on some understanding of moral anthropology (the human as a moral being.) Vallor argues, following Alasdair MacIntyre, that virtues are understood and taught through particular practices and narratives of a tradition. She

---

5 Id. at 36-37.
7 VALLOR, supra note 1, at 36-42.
8 Id. at 109-110.
suggests there is an emerging global technological tradition, with its own narratives and practices, upon which a technomoral virtue ethics might be founded.\(^9\)

Part II further develops the theoretical foundations for her virtue ethics. She begins by defending comparative studies of virtue, in which she is engaged, and stressing the cultivation of the moral self through habituation. She finds similarities among the Confucians, Buddhists and Aristotelians in their understanding of this process through examination of the moral lives of exemplars and the repetition of moral practices. Common principles of moral self-cultivation involve a relational focus and a commitment to moral self-development, which involves moral attention, practical judgement, and extension of moral concern. In examining the three virtue traditions, she identifies twelve specific technomoral virtues: 1. Honesty; 2. Self-control; 3. Humility; 4. Justice; 5. Courage; 6. Empathy; 7. Care; 8. Civility; 9. Flexibility; 10. Perspective; 11. Magnanimity; 12. Technomoral Wisdom.\(^10\)

Part III applies Vallor’s conception of technomoral virtue to four types of emerging technologies: social media, surveillance, robot weapons, and human enhancement. Social media are a new context in which human relations take place.\(^11\) The nature and quality of the relations needs careful scrutiny for the challenges and opportunities to enrich human flourishing. Although she laments that social media cultivate many practices that are counter-productive to the virtues she has identified, she remains hopeful. She concludes

---

\(^9\) She believes a “family resemblance” exists among the traditions of moral reasoning that she is examining. She writes:

> This family resemblance can be articulated as a framework for the practice of moral self-cultivation, with seven core elements: moral habituation, relational understanding, reflective self-examination, intentional self-direction of moral development, moral attention, prudential judgement, and the appropriate extension of moral concern.”

*Id. at 118.

\(^10\) *Id. at 120.

\(^11\) Vallor writes, “the distinctive feature of Web 2.0 is that it is *users* who create and share the vast majority of its content…” *Id. at 160.
that the social media have displaced older venues for social engagement without replacing them. This has led to some degradation in social-political relation, and yet there are untapped resources in social media that could be developed.  

Next, she looks to surveillance and the ethics of privacy. She accepts that the emerging surveillance technologies will not be constrained by cultural or legal controls., privacy will be absent like it is in Bentham’s Panopticon. She hopes that the inevitable surveillance will provide opportunities for self-cultivation. Citing the Quantified Self movement, she suggests that surveillance might offer opportunities to use increased understanding of human behavior to achieve better self-awareness and non-coercive measure of social control through “nudges”.

The third technology is robotic weapons. Here she notes that robot ethics typically takes either utilitarian or deontological forms. It rarely engages virtue ethics, which can help to articulate goods sought by the technology. In this regard, robot ethics engages the values of hope, courage, and self-care. These devices also have radically transformative possibilities for social relations and self-understanding. Vallor argues persuasively that virtue discourse will be essential to navigating them. Finally, she looks at technologies for human enhancement, which directly pose questions about imagining fulfilled human lives. What virtues would humans need to have in order to responsibly meet this challenge? Citing Nietzsche, she questions, if the enhancements should free us from human maladies, then what purpose are we free for? To know the answers to these questions will require steady commitment to cultivating the practices and habits of moral virtue.

---

12 She writes, “New social media and the broader Web have yet to fill the moral vacuum left by the traditional venues whose departure they hastened.” Id. at 187.

13 Id. at 202-204.

14 Id. at 231.

15 Id. at 241.
2. ANALYSIS

Vallor’s work well deserves the many accolades it has received. Her argument for a virtue ethics approach to understanding the moral issues posed by technology is persuasive and compelling. The clarity of the need for a recovery of virtue that Elizabeth Anscombe contended over fifty years ago has only grown. Anscombe contended that deontological and rational choice approaches lack the resources for dealing with the complexity of contemporary issues. Over the intervening years, the complexity of the issues has grown, driven in no small degree by the radical alterations to society brought about by developing new technologies and the scientific concepts that make them possible. Anscombe believed at the time that the recovery of virtue ethics was premature, that it waited on developing a robust science of moral psychology. But to a large degree, that development has happened. Aided by technology, moral psychology today is a well-established field that presents many difficult moral issues of its own. Vallor’s contribution to virtue ethics is therefore timely and valuable.

Despite its many insights, the project she initiates in this work might be extended in three ways. First, it might be useful to engage the ethics of information, which has been pursued through a deontic approach. Vallor, who claims that deontic ethics are inadequate for the times, should take on Floridi’s deontic ethics of information, which is the most influential ethics of technology. There appears to be much to gain from this engagement since both touch on very similar topics but perceive the issues in original ways. Second, Vallor might consider incorporating Platonic conceptions of virtue as they developed in the West. There are several advantages to this, particularly if one considers the relation between Christian Neo-Platonism and Eastern thought in contemporary understanding.\textsuperscript{16} The concept of

“change” which is found as a primary ontological category in Confucian and Mahayana Buddhism is also found in Heraclitus and Plato. These conceptions were taken up by Christian Neo-Platonists, such as Denys the Areopogite, Augustine of Hippo, and Bonaventure, to describe the relation between the observable world characterized by change, and the Christian commitment to an eternal, unchanging God who created all things. The similarity between Christian Neo-Platonism and Eastern thought was a well-spring for contemplative Christian thought and practices in the twentieth century with figures like Thomas Merton and D.T. Suzuki. Vallor’s project might benefit from exploring the significance of these important aspects of Western thought, if only to demonstrate the universality of these experiences and to blunt the artificial divisions between East and West.

Relatedly, the project might benefit from engaging more directly with the implications for politics. By more directly addressing the political, the project might better display its resources for criticizing the dominant neoliberalism. The open-ended description of virtue that Vallor develops rejects a comprehensive metaphysically teleological conception of human function (ergon) that was typical of the Aristotelian virtue ethics. In this respect, she follows modern thought. She adopts MacIntyre’s conception of virtue as a practice, which is a formal conception of virtue without a specific conception of human flourishing, but a reasonable process by which a fulfilled life might be pursued. Vallor seems to suggest this process is a political one in the sense that it involves being engaged in a public life and in a private one. Aristotle argues that humans are by nature social. They seek friendship and establish households. There are public virtues, such as courage and temperance, and there are the private virtues of the householder.


Chinese thought distinguishes between the public rituals and the private practices. But, the nature of the relation of public and private is not articulated in Vallor’s work. Does she imagine the polis as ruled by virtuous kings whose cultivation of the virtues allows them a means to wisely use technology so they might rule like the ancient Chinese Emperors, whose authority rested on the Mandate of Heaven? Or, perhaps, an Aristotelian judge who has cultivated moral perfection to such a high degree that all subordinate virtues can be seen transparently. These elitist views of politics portend dystopian authoritarian forms of government, with a technomoral intelligentsia wielding unlimited authority to protect society from the dangers of the technology they themselves have created. Or, will it be an oligopoly, with a ruling class composed of the masters of tech giants? Does the technomoral have resources that restore a robust liberal democracy? Can it resist the totalizing neoliberalism by conceiving the good?

III. CONCLUSION

Ethical analysis of technology is sorely needed. The new technologies are dramatically powerful forces shaping society and our environment. To address these developments challenge us to think seriously about issues of rights and duty, but as Vallor rightly points out, the new technologies call us to reflect on the goals and purposes that we agree to pursue together. Near the end of the book Vallor cites Ortega y Gusset to point out that the technomoral crisis comes from the “‘appalling restlessness’ that manifests itself in

19 For an account of the Mandate of Heaven, see generally, YONGLIN JIANG, THE MANDATE OF HEAVEN (2013).
This dissipating restlessness may find a distinct home in American culture, which is steeped deeply in this rugged individualism—the blind passion for more that lies like the light at the end of Daisy Buchanan's pier in F. Scott Fitzgerald's novel *The Great Gatsby*, and like Gatsby we believe that “if we run a little faster and stretch our arms out a little farther, then one fine day....” Or consider the restless spirit of the American West that Wallace Stagner captures so well in his novel, *The Big Rock Candy Mountain*: Always moving on, always looking for the next gold rush. What Vallor has written is a hopeful, yet clear-eyed assessment of our ability to meet the awful challenge of facing the future with a faithful commitment to a morally meaningful and satisfying existence.

---

20 Vallor *supra* note 1, at 248.