The Ethics Of Invention Technology And The Human Future By Sheila Jasanoff

GARNER MOHAMMED

Does America Need More Innovators? MIT Press
This work focuses on one of ethics' most insidious problems: the inability to make clear and consistent choices in everyday life. The practical tools and techniques in this book can help readers design a set of personal standards, based on sound ethical reasoning, for reducing everyday compromises.
Technology and Society Wadsworth Publishing Company
“Deftly shows how a seemingly frivolous film genre can guide us in shaping tomorrow’s world.” —Seth Shostak, senior astronomer, SETI Institute Artificial intelligence, gene manipulation, cloning, and interplanetary travel are all ideas that seemed like fairy tales but a few years ago. And now their possibilities are very much here. But are we ready to handle these advances? This book, by a physicist and expert on responsible technology development, reveals how science fiction movies can help us think about and prepare for the social consequences of technologies we don’t yet have, but that are coming faster than we imagine. Films from the Future looks at twelve movies that take us on a journey through the worlds of biological and genetic manipulation, human enhancement, cyber technologies, and nanotechnology. Readers will gain a broader understanding of the complex relationship between science and society. The movies mix old and new, and the familiar and unfamiliar, to provide a unique, entertaining, and ultimately transformative take on the power of emerging technologies, and the responsibilities they come with.
Can Science Make Sense of Life? Macmillan
From today's headlines to your textbook, SOCIETY, ETHICS, AND TECHNOLOGY, 5E, International Edition explores the cutting edge of technological innovation and how these advances represent profound moral dilemmas for society as a whole. You will build a strong foundation in theory and applied ethics as you are challenged to examine critically the social effects of technology in your daily life.This timely anthology, filled with cutting-edge work from prominent scholars and thinkers, focuses on current technological issues and ethical debates. Insightful introductions and focus questions before each piece help put readings in context and to establish frameworks for ethical decision-making. The readings examine the consequences of technological change from a variety of historical, social, and philosophical perspectives. Special coverage of the history of technology focuses on ground-breaking developments, as well as the technological underpinnings of contemporary globalization. New articles examine the impact of contemporary technological advances, such as nanotechnology, artificial intelligence, and social media. In addition, the book explores the future of technology in such areas as human rights, overpopulation, biotechnology, information technology, climate change, and the environment.
Ethics, Technology, and Engineering Penn State Press
This collection of essays by Sheila Jasanoff explores how democratic governments construct public reason, that is, the forms of evidence and argument used in making state decisions accountable to citizens. The term public reason as used here is not simply a matter of deploying principled arguments that respect the norms of democratic deliberation. Jasanoff investigates what states do in practice when they claim to be reasoning in the public interest. Reason, from this perspective, comprises the institutional practices, discourses, techniques and instruments through which governments claim legitimacy in an era of potentially unbounded risks—physical, political, and moral. Those legitimating efforts, in turn, depend on citizens’ acceptance of the forms of reasoning that governments offer. Included here therefore is an inquiry into the conditions that lead citizens of democratic societies to accept policy justification as being reasonable. These modes of public knowing, or “civic epistemologies,” are integral to the constitution of contemporary political cultures. Methodologically, the book is grounded in the field of Science and Technology Studies (STS). It uses in-depth qualitative studies of legal and political practices to shed light on divergent cross-cultural constructions of public reason and the reasoning political subject. The collection as a whole contributes to democratic theory, legal studies, comparative politics, geography, and ethnographies of modernity, as well as STS.
Innovation and Its Enemies Oxford University Press
Over the course of a generation, algorithms have gone from mathematical abstractions to powerful mediators of daily life. Algorithms have made our lives more efficient, more entertaining, and, sometimes, better informed. At the same time, complex algorithms are increasingly violating the basic rights of individual citizens. Allegedly anonymized datasets routinely leak our most sensitive personal information; statistical models for everything from mortgages to college admissions reflect racial and gender bias. Meanwhile, users manipulate algorithms to "game" search engines, spam filters, online reviewing services, and navigation apps. Understanding and improving the science behind the algorithms that run our lives is rapidly becoming one of the most pressing issues of this century. Traditional fixes, such as laws, regulations and watchdog groups, have proven woefully inadequate. Reporting from the cutting edge of scientific research, The Ethical Algorithm offers a new approach: a set of principled solutions based on the emerging and exciting science of socially aware algorithm design. Michael Kearns and Aaron Roth explain how we can better embed human principles into machine code - without halting the advance of data-driven scientific exploration. Weaving together innovative research with stories of citizens, scientists, and activists on the front lines, The Ethical Algorithm offers a compelling vision for a future, one in which we can better protect humans from the unintended impacts of algorithms while continuing to inspire wondrous advances in technology.
Responsible Innovation MIT Press
A critical exploration of today's global imperative to innovate, by champions, critics, and reformers of innovation. Corporate executives, politicians, and school board leaders agree—Americans must innovate. Innovation experts fuel this demand with books and services that instruct aspiring innovators in best practices, personal habits, and workplace cultures for fostering innovation. But critics have begun to question the unceasing promotion of innovation, pointing out its gadget-centric shallowness, the lack of diversity among innovators, and the unequal distribution of innovation's burdens and rewards. Meanwhile, reformers work to make the training of innovators more inclusive and the outcomes of innovation more responsible. This book offers an overdue critical exploration of today's global imperative to innovate by bringing together innovation's champions, critics, and reformers in conversation. The book presents an overview of innovator training, exploring the history, motivations, and philosophies of programs in private industry, universities, and government; offers a primer on critical innovation studies, with essays that historicize, contextualize, and problematize the drive to create innovators; and considers initiatives that seek to reform and reshape what it means to be an innovator. Contributors Errol Arkilic, Catherine Ashcraft, Leticia Britos Cavagnaro, W. Bernard Carlson, Lisa D. Cook, Humera Fasihuddin, Maryann Feldman, Erik Fisher, Benoît Godin, Jenn Gustetic, David Guston, Eric S. Hintz, Marie Stettler Kleine, Dutch MacDonald, Mickey McManus, Sebastian Pfotenhauer, Natalie Rusk, Andrew L. Russell, Lucinda M. Sanders, Brenda Trinidad, Lee Vinsel, Matthew Wisnioski
Future Law John Wiley & Sons
This collection of expert articles explores the development drivers of new technology-based firms and projects. It provides perspectives for an in-depth understanding of how technological inventions lead to the creation of new and sustainable companies or business units. The authors address methods and concepts that help technology-based start-ups and entrepreneurial projects

successfully develop innovative products and services.

Society, Ethics, and Technology Springer Science & Business Media

An anthology of writings by thinkers ranging from Freeman Dyson to Bruno Latour that focuses on the interconnections of technology, society, and values and how these may affect the future. Technological change does not happen in a vacuum; decisions about which technologies to develop, fund, market, and use engage ideas about values as well as calculations of costs and benefits. This anthology focuses on the interconnections of technology, society, and values. It offers writings by authorities as varied as Freeman Dyson, Laurence Lessig, Bruno Latour, and Judy Wajcman that will introduce readers to recent thinking about technology and provide them with conceptual tools, a theoretical framework, and knowledge to help understand how technology shapes society and how society shapes technology. It offers readers a new perspective on such current issues as globalization, the balance between security and privacy, environmental justice, and poverty in the developing world. The careful ordering of the selections and the editors' introductions give Technology and Society a coherence and flow that is unusual in anthologies. The book is suitable for use in undergraduate courses in STS and other disciplines. The selections begin with predictions of the future that range from forecasts of technological utopia to cautionary tales. These are followed by writings that explore the complexity of sociotechnical systems, presenting a picture of how technology and society work in step, shaping and being shaped by one another. Finally, the book goes back to considerations of the future, discussing twenty-first-century challenges that include nanotechnology, the role of citizens in technological decisions, and the technologies of human enhancement.

What Technology Wants John Wiley & Sons

This is the story of a seductive idea. Over the past century, the potential of new technology to solve social dilemmas has captivated modern culture. From apps that encourage physical activity to airport scanners meant to prevent terrorism, the concept that clever innovation can improve society is irresistible, but faith in such technological fixes is seldom questioned. Where did this idea come from, what makes it so appealing, and how does it endanger our future? Techno-Fixers traces the source of modern confidence in technology to engineering hubris, radical utopian movements, science fiction fanzines, policy-makers' soundbites, corporate marketing, and optimistic consumer culture from the turn of the twentieth century until today. Sean Johnston demonstrates that, through the promotion of prominent government scientists, technocrats, entrepreneurs, and popular media, modern invention became the favourite tool for addressing human problems and society's ills. Nonetheless, when it comes to assessing the success of cigarette filters as the solution to safe smoking, or DDT as the answer for agricultural productivity, the evidence is sobering. Cautioning that the rhetoric of technological fixes seldom matches reality, Johnston examines how employing innovation to bypass traditional methods can foster as many problems as it solves. A critical examination of modern faith in technology, Techno-Fixers evaluates past mistakes, present implications, and future opportunities for innovating societies.

What Things Do Penguin

Biology and politics have converged today across much of the industrialized world. Debates about genetically modified organisms, cloning, stem cells, animal patenting, and new reproductive technologies crowd media headlines and policy agendas. Less noticed, but no less important, are the rifts that have appeared among leading Western nations about the right way to govern innovation in genetics and biotechnology. These significant differences in law and policy, and in ethical analysis, may in a globalizing world act as obstacles to free trade, scientific inquiry, and shared understandings of human dignity. In this magisterial look at some twenty-five years of scientific and social development, Sheila Jasanoff compares the politics and policy of the life sciences in Britain, Germany, the United States, and in the European Union as a whole. She shows how public and private actors in each setting evaluated new manifestations of biotechnology and tried to reassure themselves about their safety. Three main themes emerge. First, core concepts of democratic theory, such as citizenship, deliberation, and accountability, cannot be understood satisfactorily without taking on board the politics of science and technology. Second, in all three countries, policies for the life sciences have been incorporated into "nation-building" projects that seek to reimagine what the nation stands for. Third, political culture influences democratic politics, and it works through the institutionalized ways in which citizens understand and evaluate public knowledge. These three aspects of contemporary politics, Jasanoff argues, help account not only for policy divergences but also for the perceived legitimacy of state actions.

The Oxford Handbook of Law, Regulation and Technology Oxford University Press

It is a curious situation that technologies we now take for granted have, when first introduced, so often stoked public controversy and concern for public welfare. At the root of this tension is the perception that the benefits of new technologies will accrue only to small sections of society, while the risks will be more widely distributed. Drawing from nearly 600 years of technology history, Calestous Juma identifies the tension between the need for innovation and the pressure to maintain continuity, social order, and stability as one of today's biggest policy challenges. He reveals the extent to which modern technological controversies grow out of distrust in public and private institutions and shows how new technologies emerge, take root, and create new institutional ecologies that favor their establishment in the marketplace. Innovation and Its Enemies calls upon public leaders to work with scientists, engineers, and entrepreneurs to manage technological change and expand public engagement on scientific and technological matters.

Technopoly University of Chicago Press

What does it mean to think about technology philosophically? Why try? These are the issues that Carl Mitcham addresses in this work, a comprehensive, critical introduction to the philosophy of technology and a discussion of its sources and uses. Tracing the changing meaning of "technology" from ancient times to our own, Mitcham identifies the most important traditions of critical analysis of technology: the engineering approach, which assumes the centrality of technology in human life; and the humanities approach, which is concerned with its moral and cultural boundaries. Mitcham bridges these two traditions through an analysis of discussions of engineering design, of the distinction between tools and machines, and of engineering science itself. He looks at technology as it is experienced in everyday life—as material objects (from kitchenware to computers), as knowledge (including recipes, rules, theories, and intuitive "know-how"), as activity (design, construction, and use), and as volition (knowing how to use technology and understanding its consequences). By elucidating these multiple aspects, Mitcham establishes criteria for a more comprehensive analysis of ethical issues in applications of science and technology. This book will guide anyone wanting to reflect on technology and its moral implications.

Machine Ethics Mango Media Inc.

Dreamscapes of Modernity offers the first book-length treatment of sociotechnical imaginaries, a concept originated by Sheila Jasanoff and developed in close collaboration with Sang-Hyun Kim to describe how visions of scientific and technological progress carry with them implicit ideas about public purposes, collective futures, and the common good. The book presents a mix of case studies—including nuclear power in Austria, Chinese rice biotechnology, Korean stem cell research, the Indonesian Internet, US bioethics, global health, and more—to illustrate how the concept of sociotechnical imaginaries can lead to more sophisticated understandings of the national and transnational politics of science and technology. A theoretical introduction sets the stage for the contributors' wide-ranging analyses, and a conclusion gathers and synthesizes their collective findings. The book marks a major theoretical advance for a concept that has been rapidly taken up across the social sciences and promises to become central to scholarship in science and technology studies.

The Ethics of Invention: Technology and the Human Future Harvard University Press

American law assumes that individuals are autonomous, defined by their capacity to choose, and not obligated to each other. But our bodies make us vulnerable and dependent, and the law leaves the weakest on their own. O. Carter Snead argues for a paradigm that recognizes embodiment, enabling law and policy to provide for the care that people need.

The Ethics of Invention Routledge

Elon Musk named Our Final Invention one of 5 books everyone should read about the future A Huffington Post Definitive Tech Book of 2013 Artificial Intelligence helps choose what books you buy, what movies you see, and even who you date. It puts the "smart" in your smartphone and soon it will drive your car. It makes most of the trades on Wall Street, and controls vital energy, water, and transportation infrastructure. But Artificial Intelligence can also threaten our existence. In as little as a decade, AI could match and then surpass human intelligence. Corporations and government agencies are pouring billions into achieving AI's Holy Grail—human-level intelligence. Once AI has attained it, scientists argue, it will have survival drives much like our own. We may be forced to compete with a rival more cunning, more powerful, and more alien than we can imagine. Through profiles of tech visionaries, industry watchdogs, and groundbreaking AI systems, Our Final Invention explores the perils of the heedless pursuit of advanced AI. Until now, human intelligence has had no rival. Can we coexist with beings whose intelligence dwarfs our own? And will they allow us to?

Thinking through Technology Oxford University Press

The variety, pace, and power of technological innovations that have emerged in the 21st Century have been breathtaking. These technological developments, which include advances in networked information and communications, biotechnology, neurotechnology, nanotechnology, robotics, and environmental engineering technology, have raised a number of vital and complex questions. Although these technologies have the potential to generate positive transformation and help address 'grand societal challenges', the novelty associated with technological innovation has also been accompanied by anxieties about their risks and destabilizing effects. Is there a potential harm to human health or the environment? What are the ethical implications? Do this innovations erode of antagonize values such as human dignity, privacy, democracy, or other norms underpinning existing bodies of law and regulation? These technological developments have therefore spawned a nascent but growing body of 'law and technology' scholarship, broadly concerned with exploring the legal, social and ethical dimensions of technological innovation. This handbook collates the many and varied strands of this scholarship, focusing broadly across a range of new and emerging technology and a vast array of social and policy sectors, through which leading scholars in the field interrogate the interfaces between law, emerging technology, and regulation. Structured in five parts, the handbook (I) establishes the collection of essays within existing scholarship concerned with law and technology as well as regulatory governance; (II) explores the relationship between technology development by focusing on core concepts and values which technological developments implicate; (III) studies the challenges for law in responding to the emergence of new technologies, examining how legal norms, doctrine and institutions have been shaped, challenged and destabilized by technology, and even how technologies have been shaped by legal regimes; (IV) provides a critical exploration of the implications of technological innovation, examining the ways in which technological innovation has generated challenges for regulators in the governance of technological development, and the implications of employing new technologies as an instrument of regulatory governance; (V) explores various interfaces between law, regulatory governance, and new technologies across a range of key social domains.

Films from the Future W. W. Norton & Company

We live in a world increasingly governed by technology—but to what end? Technology rules us as much as laws do. It shapes the legal, social, and ethical environments in which we act. Every time we cross a street, drive a car, or go to the doctor, we submit to the silent power of technology. Yet, much of the time, the influence of technology on our lives goes unchallenged by citizens and our elected representatives. In The Ethics of Invention, renowned scholar Sheila Jasanoff dissects the ways in which we delegate power to technological systems and asks how we might regain control. Our embrace of novel technological pathways, Jasanoff shows, leads to a complex interplay among technology, ethics, and human rights. Inventions like pesticides or GMOs can reduce hunger but can also cause unexpected harm to people and the environment. Often, as in the case of CFCs creating a hole in the ozone layer, it takes decades before we even realize that any damage has been done. Advances in biotechnology, from GMOs to gene editing, have given us tools to tinker with life itself, leading some to worry that human dignity and even human nature are under threat. But despite many reasons for caution, we continue to march heedlessly into ethically troubled waters. As Jasanoff ranges across these and other themes, she challenges the common assumption that technology is an apolitical and amoral force. Technology, she masterfully demonstrates, can warp the meaning of democracy and citizenship unless we carefully consider how to direct its power rather than let ourselves be shaped by it. The Ethics of Invention makes a bold argument for a future in which societies work together—in open, democratic dialogue—to debate not only the perils but even more the promises of technology.

Techno-Fixers Springer Science & Business Media

How are all these things affecting us? How can their role in our lives be understood? What Things Do answers these questions by focusing on how technologies mediate our actions and our perceptions of the world.

Evaluating New Technologies Routledge

From the author of the New York Times bestseller The Inevitable— a sweeping vision of technology as a living force that can expand our individual potential In this provocative book, one of today's most respected thinkers turns the conversation about technology on its head by viewing technology as a natural system, an extension of biological evolution. By mapping the behavior of life, we paradoxically get a glimpse at where technology is headed-or "what it wants." Kevin Kelly offers a dozen trajectories in the coming decades for this near-living system. And as we align ourselves with technology's agenda, we can capture its colossal potential. This visionary and optimistic book explores how technology gives our lives greater meaning and is a must-read for anyone curious about the future.

Ethics and Cyber Warfare Princeton University Press

Discover the technologies and trends that threaten humanity and our planet--- and how we can rein them back in, together In The Unintended Consequences of Technology: Solutions, Breakthroughs and the Restart We Need, accomplished tech entrepreneur Chris Ategeka delivers an insightful and eye-opening exploration of the challenges and the opportunities at the intersection of technology, society and our planet. Detailing both positive and negative technology use cases that on one hand have made humanity better, but on the other hand pose a serious threat to individuals and groups across the world, the author demonstrates how to avoid allowing powerful technologies to overcome

our better natures. In this book, you'll: Discover how the forces of capitalism, greed and the myths that surround meritocracy when combined with exponential technology pose an existential risk for humanity. Explore the many exponential technologies such as gene editing, 5G, behavior modification, cyberspace... that have lots of promise but also uncertainty. Consider the future of humanity we wish to collectively build, and whether we can rebuild a capacity for empathy at scale in our tech tools Perfect for founders, business leaders, executives, managers, Chief Technology Officers, and anyone else [i.e. all human beings] responsible for the use and proliferation of advanced technologies. The Unintended Consequences of Technology is a thought-provoking, must-read resource for those at the forefront of our new technological reality.