Preface

INTRODUCTION

The Human Face of Technology (And Vice Versa)

Selves are the ultimate negentropic technologies, through which information temporarily overcomes its own entropy, becomes conscious, and is finally able to recount the story of its own emergence in terms of a progressive detachment from external reality. There are still only informational structures. But some are things, some are organisms, and some are minds, intelligent and self-aware beings. Only minds are able to interpret other informational structures as things or organisms or selves. And this is part of their special position in the universe. (Floridi, 2011)

This provocative statement from Floridi illustrates the interconnectedness of humans, science, and technology within our evolving society. The advancement of technologies in the 20th century has radically altered life and society in substantial ways by offering new tools and techniques to leverage core areas of human activity including health, education, transportation, construction, communication, medicine, and economics. These transformations have been both outward and inward, challenging the very nature of human existence and what it means to live harmoniously with one another in a society that revolves around technological progress and innovation.

Much of the current research in technoethics mirrors key areas of technological development where society is divided. For instance, one emerging area of technoethical inquiry and debate revolves around the very nature of our human condition as technoselves (Luppicini, 2012a) and what it means to be human amidst a myriad of human enhancement technologies that allow us to augment human bodies and minds in substantive ways. There are a diversity of human enhancing technologies currently available or in development which have spurred public debate and concern (e.g., plastic surgery, prosthetic limbs, exoskeletons, performance and mind-enhancing drugs, biosensors, neural implants, wearable computers, etc.). These technologies (and others to come) are being scrutinized as an (un)ethical means of altering or transforming the human condition itself. The ethical debate over human nature and changing boundaries of humanity and the human body is a core concern within this technoethical area. Another area of technoethical inquiry examines the moral dilemmas revolving around the boundaries of the social world itself as we struggle to navigate the juxtaposition of humans and autonomous social robots, which for some warrant social rights and responsibilities. This type of ethical inquiry brings the debate concerning
human enhancement to a new level of importance. Are human and artificial moral agents equivalent on some level that should be acknowledged? Beyond the realm of human embodiment and agency, there are also technological applications revolving around the Internet and social networking technologies that invoke public concern (digital democracy, media ethics, cybercrime, and online plagiarism). What are the ethical problems and dilemmas that individuals face in cyberspace? What are the privacy concerns with posting personal information online, and how much is too much? What are the trends in cyber-criminal activity and other areas of ethical misconduct that occur using the Internet? How does the use of sensationalized writing techniques used by mainstream journalists influence the credibility of online news? Grounded in the research domain of technoethics which places human ethics and values at the centre of technological inquiry, these questions and others are taken up in this volume.

Objectives of this Book

This edited book continues to expand the growing body of work on the existing intellectual platform within the field of technoethics. As a rapidly expanding area of inquiry, technoethics draws on and goes beyond traditional “ethics of technology” and “philosophy of technology” approaches, which highlight longstanding ethical theories and controversies for intellectual analysis. Technoethics also deals with current (and future) problems in science and technology innovation at the intersection of human life and society. As such, it brings into play an interdisciplinary base of scholarly contributions from pure philosophy, the social sciences, humanities, engineering, computing, applied sciences, and other areas of scholarly inquiry into technology and ethics. This interdisciplinary focus is helping to leverage ethical analysis, risk analysis, technology evaluation, and the combination of ethical and technological analyses within a variety of real life decision-making contexts and future planning situations faced by 21st century society.

The significance of the selected chapters appearing in this volume can be attributed to a variety of factors including high peer review standards, the timeliness of the topics covered, author attention to research protocols and methodological procedures, contribution to research knowledge on ethics and technology, and contribution to practice. Both empirical and theoretically oriented chapters are offered to provide a current snapshot of new developments in the field today. The remaining sections in this preface outline essential background knowledge, key areas of current research in the field, and brief sketches of chapters covered in this volume.

BACKGROUND

General Background

As the unity of the modern world becomes increasingly a technological rather than a social affair, the techniques of the arts provide the most valuable means of insight into the real direction of our own collective purposes. (McLuhan, 1951)
The modern world, as depicted by McLuhan over 60 years ago is continuing to evolve (technologically, individually, and socially) as humans attempt to weave the benefits of technological progress with the need to further collective purposes of humans living together in a society that embraces progress and innovation. In response, the field of Technoethics has developed to deal with the mounting ethical debates and dilemmas that accompany the co-evolution of technology and human society.

There are a number of seminal publications that can be cited as key drivers in the formalization of Technoethics as an interdisciplinary research field. These publications brought together leading technology and ethics scholars from around the world and provided a solid intellectual platform upon which to grow. First, the two volume *Handbook of Research on Technoethics* (Luppicini & Adel, 2009) drew on the contributions of over 100 experts from around the world working on a diversity of areas where technoethical inquiry. Next, the first reader in *Technoethics, Technoethics and the Evolving Knowledge Society: Ethical Issues in Technological Design, Research, Development, and Innovation* (Luppicini, 2010) was published for use at the undergraduate and graduate level in a variety of courses that focus on technology and ethics in society. The text focused on a broad base of human activities connected to technology interwoven within social, political, and moral spheres of life. It engaged readers in the study of key ethical dimensions of a technological society and helped reinforce work found in the handbook. Together, these publications helped set the stage for the creation of the *International Journal of Technoethics* in 2010.

In 2012, the *International Journal of Technoethics* (Rocci Luppicini, Founding Editor-in-Chief) completed its third year of publication. This international peer-reviewed journal provides a forum for scholarly exchange among philosophers, researchers, students, social theorists, ethicists, historians, practitioners, and technologists working in areas of human activity affected by technological advancements and applications. With the strong support of IGI Global, the journal retains its founding Editor-in-Chief and its 12 Associate Editors, namely Allison Anderson (University of Plymouth), Keith Bauer (Marquette University), Josep Esquirol (University of Barcelona), Deb Gearhart (Ohio University), Pablo Iannone (Central Connecticut State University), Mathias Klang (University of Lund), Andy Miah (University of the West of Scotland), Lynne Roberts (Curtin University of Technology), Neil Rowe (U.S. Naval Postgraduate School), Martin Ryder (Sun Microsystems), John Sullins III (Sonoma State University), and Mary Thorseth (NTNU). The mission of the journal is as follows:

*The mission of the International Journal of Technoethics (IJT) is to evolve technological relationships of humans with a focus on ethical implications for human life, social norms and values, education, work, politics, law, and ecological impact. This journal provides cutting edge analysis of technological innovations, research, developments policies, theories, and methodologies related to ethical aspects of technology in society. IJT publishes empirical research, theoretical studies, innovative methodologies, practical applications, case studies, and book reviews. IJT encourages submissions from philosophers, researchers, social theorists, ethicists, historians, practitioners, and technologists from all areas of human activity affected by advancing technology.* (International Journal of Technoethics, n.d.).

Technoethics developed through the coming together of technology experts (philosophers, technicians, administrators, instructors, students, and researchers) struggling with the many dilemmas arising from public controversies and ethical debate created by technological advancement in society. This interdisciplinary research field provided a means to transcend traditional approaches in the study of ethics and technology driven by existing philosophical approaches, intellectual analyses of pervasive problems,
and logical reasoning. It provided a multifaceted intellectual platform for experts working at the nexus of applied work in technology and ethics (e.g., bioethics, engineering ethics, computer ethics, etc.). The types of scholars attracted to this field are scholars and technology experts working in new areas of technology research where social and ethical issues emerge (i.e., genetic research, nanotechnology, human enhancement, neurotechnology, robotics, reproductive technologies, etc). The current state of Technoethics is marked by an openness to multiple forms of scholarly inquiry and practical real world value. As stated in Luppicini (2012b):

As pioneering breakthroughs are made in technological advancements and applications, novel questions arise regarding human values and ethical implications for society, many of which give rise to ethical dilemmas where conflicting viewpoints cannot be solved by relying on any one ethical theory or set of moral principles. Accordingly, the field of Technoethics takes a practical focus on the actual impacts (and potential impacts) of technology on human beings struggling to navigate the “real world” of technology. In many cases, this leads to the creation of more questions than answers in an effort to discern the underlying ethical complexities connected to the application of technology within real-life situations.

The topics covered in this volume expand on scholarship covered in the International Journal of Technoethics and supporting publications. It provides up to date coverage of cutting edge work from a variety of areas where technoethical inquiry is currently being applied.

KEY AREAS OF TECHNOETHICS IN FOCUS

Caution: Humans under Construction

It may seem odd to some to bring up such an entrenched notion as the homo sapiens (Latin for wise man) and its claim to fame as representing the most sentient beings on Earth. This popular nomenclature aligned with evolutionary theory and the morphological change that separated homo sapiens from earlier primates who lacked the precision grip offered by the opposable thumb, along with lowered larynx and hyoid bone, which made speech possible (Brues & Snow, 1965). Although these evolutionary developments were significant, equally significant were the historical and behavioural changes that accompanied the development of material culture resulting from the industrial revolution. It was at this time that the human construction of objects became intimately intertwined with human life and society in a way that raised public fear and awareness about the close connection between technology, human life, and society. Under the industrial revolution, the nature of human work, community structures, and the structure of society became reorganized under an industrial model. It was at this point in history where scientific and technological advancement became core drivers of social interaction and human development. In this way, the industrial and post-industrial age became the most significant developments in differentiating humans from all other living entities on Earth since the time of Darwin.

In the 21st century, the priority position given to science and technology in driving human and social evolution has not declined. If anything, it has become more pronounced in the rise of the digital age according to academic work, which acknowledges the close link and importance of technology in the evolution of society and human development within it (Richerson & Boyd, 2005). Within this digital age, the material culture is not only concerned with external objects (digital devices, tablets, laptops, cell
phones, etc.), which humans can use, but it also includes transformative technologies (objects), which are more intimately connected to human beings (neural implants, prosthetics, performance-enhancing substances). It is the shift from external object focus to internal object focus that marks an important shift in human culture and values, which defines this stage of the digital society. This shift has also created some of the most challenging ethical dilemmas that society must face.

Will enhanced humans become the new norm, and if so, what will this mean for those that are not enhanced? How do we navigate the changing conceptualization of what constitutes human nature and what are/should be the safe and ethical limits of human enhancement to preserve the integrity and meaning of what it means to be human? As a young academic, my supervisor used to remind me that we have always been technical beings (what I later expanded on and developed with the notion of “homotechnicus” (with Jose Galvin) and, more recently, the notion of the “technoself”). This helped pull together the amassing conceptual and empirical investigations from established scholars around the world who, like me, recognized the intrinsic technological nature of human beings and the need to update the existing conceptualization of what it means to be human. The notion of “technoself” was created by pulling together the core aspects of technical and non-technical features of human nature expressed in polar notions of a technical human (cyborg, posthuman, transhuman, beman, etc.). At its core, this provides a more accurate representation of human nature to advance knowledge.

One major driving force for the reconceptualization of humans aligns with the recent development of new human enhancement and therapeutic technologies that create neurological changes in humans to augment or restore brain functions. The use of technology in neurological treatments is just one example of the plethora of new tools available to the technoself. For example, an electrode placed in the brain has been found to be effective in stopping limb tremors in Parkinson’s patients. However, there are other technological advances, such as the use of neurochips and other types of brain-machine interfaces, which may have unintended consequences. If many alterations are made to the brain, it must be questioned as to whether the issue of personal liability could be affected. Who is responsible for actions in humans subjected to such technological alterations at the neurological level? It is no surprise that there is a growing body of work in neuroethics focusing on technological alterations to brain chemistry and function. This is just one of the topic areas covered in this volume.

**Extending Human Ethics into our Creations**

Does it make sense to attribute moral agency and ethical responsibility to technological creations such as social robots and other types of autonomous agents? Given the vivid images imparted to us from science fiction literature and films (and extreme proponents of the transhumanist movement like Ray Kurweil), it becomes easy to dream of such a reality at this point in history or in the near future. Certainly the computational dream of downloading one’s consciousness into a second vessel (human, android, or digital hologram) appears to be completely unfounded (and absurd). However, there is a larger public concern about the ethical limits of human enhancement and the augmentation of status for social robotic applications becoming increasingly entrenched in human life and society. For example, through her scholarly writings, MIT professor Sherry Turkle has explored the connection of children and the elderly to sociable robots designed for personal companionship and care. There is the very real and growing fear that the increased personal investment and time in the relationships built with artificial agents/devices will detract from the quality of personal investment and time in building relationships with human beings. This represents one major area of focus in this volume.
Riding the Waves in Cyberspace

There is the old saying, “the old grey mare, she ain’t what she used to be,” and this is definitely true of the Internet and how it is being used today. In the early days of the Internet, beginning in 1969 (called ARPANET), it was used as a measure to safeguard information and communications in the case of war. With the advent of personal computing and popularization of the Internet in the 1990s, the digital “wild west” was open for business, and it gradually became known that the Internet was not always a positive driver of culture and society. The lives of too many people have been negatively impacted by the unethical waves of exploitation, harassment, and abuse, which have allowed cybercrime to develop and flourish.

What is cybercrime? Cybercrime is a fairly new type of crime that has only become possible with the advent of the Internet and advanced digital technologies. Cybercrime refers to any crime that involves a computer and a network. According to the Britannica Online Encyclopedia (Cybercrime, 2012):

*Cybercrime, also called computer crime, the use of a computer as an instrument to further illegal ends, such as committing fraud, trafficking in child pornography and intellectual property, stealing identities, or violating privacy. Cybercrime, especially through the Internet, has grown in importance as the computer has become central to commerce, entertainment, and government.*

Given the widespread growth of the Internet and networking technologies within the global economy and social life, efforts to locate and eliminate cybercrime represents a serious challenge for law enforcement agencies around the world. It is trivially true that we live at a time when computing is at the heart of the knowledge economy and social life itself (Luppicini, 2009). Unfortunately, there are myriad cybercrime varieties that exist, including cyber espionage, cyber terrorism, cyber stalking, cyberbullying, identity theft, and information theft (to name just a few). In a more subtle, yet equally important area of public concern, there is continual criticism against sensationalistic media, which distorts the truth and biases the content of online news media to highlight what is exciting and controversial rather than trying to provide fair and comprehensive coverage of actual events. It raises the question as to what online news should cater to, what is actually happening or what broadcasters believe people want to see for entertainment value.

Within the sea of information online are the ingredients for a paradise of calm ethical waves and a dangerous tsunami with the power to crush everyone it its path. In an effort to mitigate the unethical waves crashing up against the shores of global cyberspace, there are a number of countermeasures aimed at curbing negative consequences faced by digital natives while highlighting the positive. For instance, the formulation of rules and guidelines for netiquette along with the promotion of broader programs of e-learning ethics provide a means of setting visible boundaries for what should and what should not take place with respect to student use of the Internet and digital tools for academic purposes. These types of measures play an important role in defining social expectations to help steer away from the turbulent seas of online plagiarism and other academic offences. Building on this framework of appropriate standards are broader societal aims geared towards increasing democratic participation in society through the use of the Internet and social networking. This volume provides coverage of new ethical and unethical waves found on the Internet.
ORGANIZATION OF THE BOOK

This volume pulls together current scholarship pertaining to recent developments within the field of Technoethics. In terms of book organization, this book contains 16 chapters divided into 3 sections to highlight a logical flow of writing organized into key thematic areas of technoethical inquiry. Section 1, “Ethical Boundaries of Humans and Robots,” contains 6 chapters: Chapter 1, “Redefining the Boundaries of Humanity and the Human Body: From Homo Sapiens to Homo Technicus” (Jose Galván and Rocci Luppicini); Chapter 2, “The Relevance of Value Theory for the Ethical Discussion of Human Enhancement” (Tobias Hainz); Chapter 3, “Personal Liability and Human Free Will in the Background of Emerging Neuroethical Issues: Some Remarks Arising from Recent Case Law up to 2013” (Angela Di Carlo and Elettra Stradella); Chapter 4, “Artificial Ethics: A Common Way for Human and Artificial Moral Agents and an Emergent Technoethical Field” (Laura Pană); Chapter 5, “Of Robots and Simulacra: The Dark Side of Social Robots” (Pericle Salvini); and Chapter 6, “Nature and Cases (Peter Heller). Section 2, “Unethical Waves in Cyberspace,” contains 5 chapters: Chapter 7, “Sacrificing Credibility for Sleaze: Mainstream Media’s Use of Tabloidization” (Jenn Mackay and Erica Bailey); Chapter 8, “Internet Companies and the Great Firewall of China: Google’s Choices” (Richard A. Spinello); Chapter 9, “The Legal Challenges of the Information Revolution and the Principle of ‘Privacy by Design’” (Ugo Pagallo); Chapter 10, “Gambling with Laws and Ethics in Cyberspace” (Lee Gillam and Anna Vartapetian); and Chapter 11, “A Study of Cyber Crime and Perpetration of Cyber Crime in India (Saurabh Mittal and Ashu Singh). Finally, Section 3, “New Waves in Cyberspace,” contains 5 chapters: Chapter 12, “Ethics, Media, and Reasoning: Systems and Applications” (Mahmoud Eid); Chapter 13, “Antinomies of Values under Conditions of Information Age” (Liudmila Baeva); Chapter 14, “Shaping Digital Democracy in the United States: my.barackobama.com and Participatory Democracy” (Rachel Baarda and Rocci Luppicini); Chapter 15, “Ethics for eLearning: Two Sides of the Ethical Coin” (Deb Gearhart); and Chapter 16, “Privacy vs. Security: Smart Dust and Human Extinction” (Mark Walker).

More detailed descriptions of the chapters are as follows:

- Chapter 1, “Redefining the Boundaries of Humanity and the Human Body: From Homo Sapiens to Homo Technicus,” by Jose Galván and Rocci Luppicini, takes a fresh look at the recent debate concerning what it means to be human within a technological society and what attributes are core to human beings with respect to human enhancement technologies. This chapter explores key concepts that are helping to redefine how human beings, as homotechnicus, provide a more accurate vision of human beings and the priority of ethics over technics within the evolving technological society. A technoethical perspective of the human being is presented in order to highlight defining characteristics of humans entrenched within a technological society. Under this framework, symbolic capacity and technical ability are assumed to be grounded within the free and ethical nature of human beings. Ideas derived from Modernity and Postmodernity are drawn upon in an effort to find a more encompassing view of humans, one which accommodates both its technical and ethical dimensions.

- Chapter 2, “The Relevance of Value Theory for the Ethical Discussion of Human Enhancement,” by Tobias Hainz, explores core aspects of value theory to show its utility in leveraging ethical debates concerning human enhancement technologies. Key dimensions of value theory discussed include value lexicality, the monismpluralism dichotomy, and incommensurability. In addition to providing new concepts to help navigate debates concerning human enhancement technologies,
practical examples are drawn upon to highlight key arguments for and against human enhancement. The chapter makes a solid contribution by demonstrating how value theory can leverage the ethical discussion of human enhancement in an effort to raise awareness of value-theoretical issues revolving around human enhancement technologies.

- Why are people concerned about the possible legal and ethical issues connected to the uptake of new neurotechnologies? Chapter 3, “Personal Liability and Human Free Will in the Background of Emerging Neuroethical Issues: Some Remarks Arising from Recent Case Law up to 2013” (Angela Di Carlo and Elettra Stradella), examines ethical and legal issues connected to emerging neurotechnologies in relation to relevant legal concepts, including capacity, liability, testimony, evidence, fundamental constitutional rights and freedoms, the principle of human dignity, etc. More specifically, the authors question how the nature of personal liability is changing due to new scientific developments. This chapter contributes by highlighting the opportunities and challenges of neurolaw and neuréthics within the traditional legal framework.

- Chapter 4, “Artificial Ethics: A Common Way for Human and Artificial Moral Agents and an Emergent Technoethical Field” (Laura Pana), envisions a new type of morality arising from public debates concerning current scientific and technical developments. In this provocative chapter, the author appeals to the need for a new approach to ethics, one in which both individual and social morality are key priorities with respect to controversial scientific and technical developments. To this end, the author attempts to unpack key scientific, technical, and philosophical premises to help ground a program of artificial ethics. Pana’s innovative approach to artificial ethics contributes by establishing the place of artificial ethics within the group of new and emergent ethical fields of research connected to our technological society.

- Chapter 5, “Of Robots and Simulacra: The Dark Side of Social Robots” (Pericle Salvini), elaborates on a promising theoretical framework for assessing the ethical acceptability of robotic technologies (including social robots). In this chapter, the author conceptualizes robots as a form of mediation between human actions and their ethical acceptance based on the notion of human presence. The author makes a convincing case to show that human presence is characterised by a system of mutual relations among human beings and the environment shaped through technological mediation. The chapter makes a valuable contribution by drawing attention to the increasing ethical impact of social robots and simulated forms of human presence in the lives of human beings.

- Chapter 6, “Nature and Cases” (Peter Heller), examines the complexity and typical ethical trade-offs that occur when new technologies are applied in core areas of life and society (health, medical, military, engineering, etc.). The chapter is grounded in the belief that new technological advances often lead to ethical trade-offs in an effort to balance the desirable versus undesirable ethical aspects of a new technology or technological application. The discussion contributes by drawing on empirical cases to address the difficult challenges faced by decision makers struggling to decide on overall moral merit based on numerous variables examined.

- Chapter 7, “Sacrificing Credibility for Sleaze: Mainstream Media’s Use of Tabloidization” (Jenn Mackay and Erica Bailey), draws on an empirical study to help explain how sensationalized (tabloid-style) writing techniques employed by mainstream journalists influence the credibility of online news. The chapter documents a study where participants read a series of news stories and rated perceived credibility of writing using McCroskey’s Source Credibility Scale. The results showed that tabloid style articles were rated less credible than traditional stories and that
online news media using tabloidized writing techniques may limit perceived article credibility. Furthermore, participants were less likely to enjoy stories written in a tabloidized style.

- **Chapter 8, “Internet Companies and the Great Firewall of China: Google’s Choices” (Richard A. Spinello),** addresses a recent technoethical dilemma in the world of the Internet. The chapter focuses on the search engine company Google and the types of ethical challenges faced when dealing with current censorship policies in China. This case study makes an important contribution to the discussion of Internet company ethics encountered when attempting to navigate differing social, cultural, and political landscapes. Based on the authors’ analysis and an appeal to the ideal of universal human rights, including the natural right of free expression, the case is made that a socially responsible company should resist the implementation of censorship regulations within authoritarian political regimes.

- **Chapter 9, “The Legal Challenges of the Information Revolution and the Principle of ‘Privacy by Design’” (Ugo Pagallo),** provides a critical account of the impact of the information revolution on data protection in a twofold way. First, the chapter addresses the cross-border interaction taking place in cyberspace and how it challenges current legal frameworks. Second, it draws on the principle of privacy to show how normative limits can be established to safeguard data protection and guard against liability issues. The chapter contributes by drawing on current information system cases (video surveillance networks, smart cards for biometric identifiers) to unpack the challenges of ensuring privacy.

- **Chapter 10, “Gambling with Laws and Ethics in Cyberspace” (Lee Gillam and Anna Vartapetiance),** delves into the murky waters of law and ethics in cyberspace. The author makes the case that, while many Internet users ignore policies and laws that govern online activities, there are valid reasons and existing laws in the physical world, which apply to online conduct that Internet users should follow. This chapter draws on selected legal and ethical issues that occur at the intersection of online activity and offline life to show how greater awareness of legal and ethical complexities is required to safeguard the online experience for all and to identify appropriate interventions to deal with negative online experiences such as the development of online gambling addictions.

- **Chapter 11, “A Study of Cyber Crime and Perpetration of Cyber Crime in India” (Saurabh Mittal and Ashu Singh),** focuses on cybercrime in India and examines the motives underlying cybercrime perpetration. This chapter contributes by documenting the state of cybercrime activity in one part of the world and offers useful advice on measures for crime prevention in India.

- **Chapter 12, “Ethics, Media, and Reasoning: Systems and Applications” (Mahmoud Eid),** investigates the connection between ethics, reasoning, and the media as it bears on the role of ethical reasoning education for communication and media professionals. This thought-provoking chapter looks at the current state of globalization and the ever-increasing media system connectivity to illustrate the intricacies involved in how different media systems operate around the world. The author makes a strong case for the need to pay greater attention to cultivate rational and ethical skills to cope with the huge impact that media has on society.

- **Chapter 13, “Antinomies of Values under Conditions of Information Age” (Liudmila Baeva),** explores changing human values in the current information age. The author provides an insightful discussion on how information technologies can, at the same time, empower individuals and organizations and create new challenges to sustaining a sense of individuality and freedom. The chapter discusses how the virtualization of core areas of life and society (communication, education, leisure, art) has led to a substitution of virtual versions and simulacra for traditional relations and
amenities. The chapter is devoted to studying value antinomies of the modern age: information and knowledge, virtuality and reality, feelings and game, friendship and contacts, etc. The chapter contributes by providing a rich conceptual understanding of key ethical challenges faced by individuals. Since values are the projections of the future in the present, this chapter helps to elicit to some extent the main trend of the social-cultural dynamics of the modern high-tech society.

- Chapter 14, “Shaping Digital Democracy in the United States: my.barackobama.com and Participatory Democracy” (Rachel Baarda and Rocci Luppicini), puts ideas about participatory democracy to the test by examining the ethical implications of new digital technologies and social media within the context of e-politics. This chapter reviews an empirical study conducted on Barack Obama’s campaign social networking site, my.barackobama.com. It explores the ways in which the site was used to create participatory democracy within an online community. A content analysis of the Website and interviews with members of groups on the site provide insight into the uses and abuses of the Internet.

- Chapter 15, “Ethics for eLearning: Two Sides of the Ethical Coin” (Deb Gearhart), reveals that there are multiple ethical issues an eLearning program administrator faces that merit serious consideration. This chapter discusses core ethical concerns facing eLearning administrators, including internal ethical issues (eLearning program quality control) and external ethical issues (unethical behaviors from eLearning students and counter measures). This chapter provides helpful insight into the ethical challenges faced by eLearning program administrators in their profession.

- Chapter 16, “Privacy vs. Security: Smart Dust and Human Extinction” (Mark Walker), investigates the dilemma created by intrusive surveillance technologies required to safeguard people’s security. At the same time, it explores the potential negative consequences such technologies might have on individual privacy. The chapter contributes valuable policy recommendations to help guide surveillance organizations such as the National Security Agency.

In summary, this collection provides an excellent collection of the latest developments in technoethics in the hopes of helping readers better navigate the murky ethical and social waters created by a broad range of “new” technological advances within society today. As the editor of this volume, it is a privilege to present the following 16 chapters, which delve into the current state of technoethics and new dilemmas in the age of technology.

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REFERENCES


