Preface

We create technology and choose to adopt it. However, once we have adopted a technological device, it can change us and how we relate to other people and our environment. (Quinn, 2006, p. 3)

...the computer profoundly shapes our ways of thinking and feeling...computers are not just changing our lives but our selves. (Turkle, 2000, p. 129)

Alongside the examination of technological advancements and the development of new computer software and hardware, an increasing number of scholars across a range of disciplines are researching and writing about the ethical dilemmas and security issues which the world is facing in what is now termed the Information Age. It is imperative that ordinary citizens as well as academics and computer professionals are involved in these debates, as technology has a transformative effect on all of our daily lives and on our very humanness. The *Encyclopedia of Information Ethics and Security* aims to provide a valuable resource for the student as well as teachers, researchers, and professionals in the field.

The changes brought about by rapid developments in information and communication technologies in the late twentieth century have been described as a revolution similar in impact to the Industrial Revolution of the nineteenth century. The development of the personal computer in the 1980s and the creation of the World Wide Web (WWW) in the early 1990s, followed by the development of low-cost computers and high-speed networks, have resulted in dramatic changes in the way humans communicate with one another and gain information. Today, more than 600 million people have e-mail accounts (Quinn, 2006, p. 2). Communication via cell phone and the Internet is now regarded as commonplace, if not indeed, essential by Westerners, yet there remain many groups both in developing countries and within developed countries who do not have access to these technologies or who lack the skills to use them. Technology has thus helped to create social divisions or to reinforce existing ones based on socio-economic and educational differences. These divisions are often described as the gap between the 'information rich' and the 'information poor.'

Technology can bring harm as well as benefit. It can undermine basic human rights and values, and challenge established social or cultural norms and legal practices. While the home PC with an Internet connection may provide us with ready access to a wealth of information, it also makes us potential victims of cyber crime or subject to invasions of our privacy. Some members of society may enthusiastically embrace the new opportunities offered by new technologies, while others such as the elderly or disabled may become increasingly marginalized by the implementation of these technologies in the public domains of commerce, banking, and education.

It is important to remember that no technical invention is conceived or used in complete isolation or without repercussions which impact on others, therefore we need to study technological developments and their ramifications within their social and cultural contexts. As Raymond Williams noted as far back as 1981 in his seminal text *Contact: Human Communication and History,* "a technology is always, in a full sense, social. It is necessarily in complex and variable connection with other social relations and institutions…' (p. 227). It is therefore rewarding to see that particular ethical or security issues concerning local cultures and institutions or developing nations are addressed by a number of the encyclopedia's contributors.

Although the technologies may be new, many of the moral dilemmas they give rise to are longstanding. Consequently, knowledge of history is an essential accompaniment to our knowledge of current ethical issues and new technological developments. This is demonstrated by several contributors to this volume who, in addressing ethical problems, draw upon the writings of earlier moral philosophers such as Aristotle and Immanuel Kant. Similarly, articles such as those by Christopher Walker concerning ancient methods of document security remind us that information security is not merely a twenty-first-century issue, but rather one to which computers have given an added dimension.

Although the area of Information Ethics is gaining increasing credence in the academic community, the recent study by Jordan, Rainer, and Marshall, which is included in this volume, reveals that there are still relatively few articles devoted to ethics in information systems journals compared with those devoted to security management. The *Encyclopedia of Information Ethics and Security* addresses this gap by providing a valuable compilation of work by distinguished international researchers in this field who are drawn from a wide range of prominent research institutions.

This encyclopedia contains 95 entries concerning information ethics and security which were subjected to an initial double-blind peer review and an additional review prior to their acceptance for publication. Each entry includes an index of key terms and definitions and an associated list of references. To assist readers in navigating and finding information, this encyclopedia has been organized by listing all entries in alphabetical order by title.

Topics covered by the entries are diverse and address a wide range of life areas which have been affected by computer technology. These include:

- education
- the workplace
- health
- privacy
- intellectual property
- identity
- computer crime
- cyber terrorism
- equity and access
- banking
- shopping
- publishing
- legal and political issues
- censorship
- artificial intelligence
- the environment
- communication

These contributions also provide an explanation of relevant terminology and acronyms, together with descriptions and analyses of the latest technological developments and their significance. Many also suggest possible solutions to pressing issues concerning information ethics and security.

Apart from providing information about current and possible future technological developments, this volume contains much thought-provoking material concerning the social and moral implications of information and communication technologies which is of immense importance to us all. Hopefully, it will enable us to make considered and cautious decisions in our adoption and use of new technologies in order to support human flourishing.

In the current era of globalization which has been enabled by the revolution in communications, the renowned ethicist, Peter Singer, suggests that the developed nations should be adopting a global approach to the resolution of ethical and security issues—issues which, he argues, are inextricably linked. As he explains: "For the rich nations not to take a global ethical viewpoint has long been seriously morally wrong. Now it is also, in the long term, a danger to their security" (Singer, 2004, p. 15).

REFERENCES

Quinn, M. (2006). *Ethics for the Information Age* (2nd ed.). Boston: Pearson.

Singer, P. (2002). *One world: The ethics of globalisation.* Melbourne: Text Publishing.

Turkle, S. (2000). Who am we? In Baird et al. (Eds.), *Cyberethics: Social and moral issues in the computer age* (pp. 129-141). New York: Prometheus.

Williams, R. (1981). Communications technologies and social institutions. In R. Williams (Ed.), *Contact: Human communication and its history*. London: Thames and Hudson.

Dr. Marian Quigley
Monash University
Berwick, Victoria, Australia
May 2007