

## COMPUTER AND INFORMATION ETHICS

Information and Communication Technologies have profoundly altered many aspects of life, including the nature of entertainment, work, communication, education, health care, industrial production and business, social relations and conflicts. As a consequence, they have had a radical and widespread impact on our moral lives and hence on contemporary ethical debates. Consequently, information and communication technology (ICT) has affected – in both good ways and bad ways – community life, family life, human relationships, education, careers, freedom, and democracy. The more specific term “computer ethics” has been used, in the past, in several different ways. For example, it has been used to refer to applications of traditional Western ethics theories like utilitarianism, Kantianism, or virtue ethics, to ethical cases that significantly involve computers and computer networks. “Computer ethics” also has been used to refer to a kind of professional ethics in which computer professionals apply codes of ethics and standards of good practice within their profession. In addition, names such as “cyber ethics” and “Internet ethics” have been used to refer to computer ethics issues associated with the Internet.

In the mid 1940s, innovative developments in science and philosophy led to the creation of a new branch of ethics that would later be called “computer ethics” or “information ethics”. The founder of this new philosophical field was the American scholar Norbert Wiener, a professor of mathematics and philosophy at MIT. The issues that he identified included topics that are still important today: computers and security, computers and unemployment, responsibilities of computer professionals, computers for persons with disabilities, information networks and globalization, virtual communities, teleworking, merging of human bodies with machines, robot ethics, artificial intelligence, computers and religion, and a number of other subjects. Studies into issues of computer and information ethics clearly show that the arrival of new technologies give new twists to old ethical issues. Beginning with the computer ethics works of Norbert Wiener, a common thread has run through much of the history of computer ethics; namely, concern for *protecting and advancing central human values, such a life, health, security, happiness, freedom, knowledge, resources, power and opportunity*. Thus, most of the specific issues that Wiener dealt with are cases of defending or advancing such values. For

example, by working to prevent massive unemployment caused by robotic factories, Wiener tried to preserve security, resources and opportunities for factory workers. Similarly, by arguing against the use of decision-making war-game machines, Wiener tried to diminish threats to security and peace. In the late 1990s, a similar approach to computer ethics, called “value-sensitive computer design”, emerged based upon the insight that potential computer-ethics problems can be avoided, while new technology is under development, by *anticipating possible harm to human values and designing new technology from the very beginning in ways that prevent such harm*.

## CYBERCRIME

Cybercrimes are any crimes that involve a computer and a network. In some cases, the computer may have been used in order to commit the crime, and in other cases, the computer may have been the target of the crime. More and more criminals are exploiting the speed, convenience and anonymity of the Internet to commit a diverse range of criminal activities that know no borders, either physical or virtual. These crimes include: Attacks against computer hardware and software, for example, malware and network intrusion; (2) Financial Crimes and corruption, such as online fraud, intrusion into online financial services and phishing; (3) Abuse, in the form of grooming or ‘sexploitation’, especially Crimes against Children.

fake protein powders.

In the past, cybercrime was committed mainly by individuals or small groups. Today, we are seeing criminal organizations working with criminally minded technology professionals to commit cybercrime, often to fund other illegal activities. Highly complex, these cybercriminal networks bring together individuals from across the globe in real time to commit crimes on an unprecedented scale. Criminal organizations are turning increasingly to the Internet to facilitate their activities and maximize their profit in the shortest time. The crimes themselves are not necessarily new – such as theft, fraud, illegal gambling, sale of fake medicines – but they are evolving in line with the opportunities presented online and therefore becoming more widespread and damaging.

## INTERNET/SOCIAL NETWORKS AND GOOD LIFE

The Internet is the decisive technology of the Information Age, and with the explosion of wireless communication in the early twenty-first century, we can say that humankind is now almost entirely connected, albeit with great levels of inequality in bandwidth, efficiency, and price.

People, companies, and institutions feel the depth of this technological change. For instance, media often report that intense use of the Internet increases the risk of isolation, alienation, and withdrawal from society, but available evidence shows that the Internet neither isolates people nor reduces their sociability; it actually increases sociability, civic engagement, and the intensity of family and friendship relationships, in all cultures.

Our current **“network society”** is a product of the digital revolution and some major sociocultural changes. One of these is the rise of the **“Me-centered society,”** marked by an increased focus on individual growth and a decline in community understood in terms of space, work, family, and ascription in general. But individuation does not mean isolation, or the end of community. Instead, social relationships are being reconstructed on the basis of individual interests, values, and projects. Community is formed through individuals’ quests for like-minded people in a process that combines online interaction with offline interaction, cyberspace, and the local space.

In the first decade of the 21<sup>st</sup> century, new media technologies for social networking such as Facebook, MySpace, Twitter and YouTube began to transform the social, political and informational practices of individuals and institutions across the globe, inviting a philosophical response from the community of applied ethicists and philosophers of technology. Contemporary Ethical Concerns about internet and the Social Networking Services mostly arose due to its impact on our everyday life.

Lingering ethical concerns remain about the way in which SNS can distract users from the needs of those in their immediate physical surroundings (consider the widely lamented trend of users obsessively checking their social media feeds during family dinners, business meetings, in classes, etc.). Such phenomena, which scholars worry are indicative of a growing cultural tolerance for **being ‘alone together.’**

Such concerns interconnect with broader philosophical questions about whether and how the classical ethical ideal of ‘the good life’ can be engaged in the 21<sup>st</sup> century. We must also

**prudential = forethought**

expand the scope of philosophical inquiry beyond its present concern with narrowly interpersonal ethics to the more universal ethical question of *prudential wisdom*. Do internet and the Social Networking Services and related technologies help us to cultivate **the broader intellectual virtue of knowing what it is to live well**, and how to best pursue it? Or do they tend to impede its development? This concern about prudential wisdom and the good life is part of a growing philosophical interest in using the resources of classical virtue ethics to evaluate the impact of internet and the Social Networking Services and related technologies. This program of research promotes inquiry into the impact of internet and computers not merely on the cultivation of prudential virtue, but on the development of a host of other moral and communicative virtues, such as honesty, patience, justice, loyalty, benevolence and empathy, etc.

## **PRIVACY, FREEDOM AND THE INTERNET**

As is the case with privacy, identity, community and friendship on Internet and Social networking Services, ethical debates about their impact on civil discourse, freedom and democracy in the public sphere must be seen as extensions of a broader discussion about the political implications of the Internet. Much of the literature on this subject focuses on the question of **whether the Internet encourages or hampers the free exercise of deliberative public reason and reasoning**. A related topic of concern is the potential of the Internet to fragment the public sphere by encouraging the formation of like-minded individuals who deliberately shield themselves from exposure to alternative views. The worry is that such narrow-mindedness will promote extremism and the reinforcement of ill-founded opinions, while also preventing citizens of a democracy from recognizing their shared interests and experiences. There is the question of the extent to which Internet and Social networking Services can facilitate political activism, civil disobedience and popular revolutions resulting in the overthrow of authoritarian regimes. Commonly referenced examples include the 2011 North African revolutions in Egypt and Tunisia, with which Facebook and Twitter were respectively associated (also consider the recent Facebook data scandal and President Trump Campaign.)

While in the use of Internet and Social networking Services one should examine the dangers in which minority voices are inevitably dispersed and drowned out by the majority voices. Certainly, compared to the **‘one-to-many’** channels of communication favored by

traditional media, Internet and Social networking Services facilitate a ‘**many-to-many**’ model of communication that appears to lower the barriers to participation in civic discourse for everyone, including the marginalized. However, if one’s ‘Facebook friends’ or people you ‘follow’ are sufficiently numerous, then minority opinions may still be heard as lone voices. Existing Internet and Social networking Services lack the institutional structures necessary to ensure that minority voices enjoy not only *free*, but qualitatively *equal* access to the deliberative function of the public sphere. One must also consider the quality of informational exchanges on Internet and Social networking Services and the extent to which they promote a **genuinely dialogical public sphere** marked by the exercise of critical rationality.

Better use of Internet and Social networking Services demands from the user a much responsible involvement. Such responsibility may depend upon resisting the “**false sense of activity and accomplishment**” that may come from merely clicking ‘Like’ in response to acts of meaningful or menaingless political speech, forwarding calls/Emails to sign petitions that one never gets around to signing oneself or even meaningfully reading. Or again simply ‘following’ an outspoken social critic on Twitter whose ‘tweeted’ calls to action are merely forwarded with personal commentaries (You can imagine many such instances). Some argue that it will also require the cultivation of new norms and virtues of online **civic-mindedness**, without which online ‘democracies’ will continue to be subject to **the self-destructive and irrational tyrannies of mob behavior**.

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**Acknowledgements:**

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