

IT and Ethics

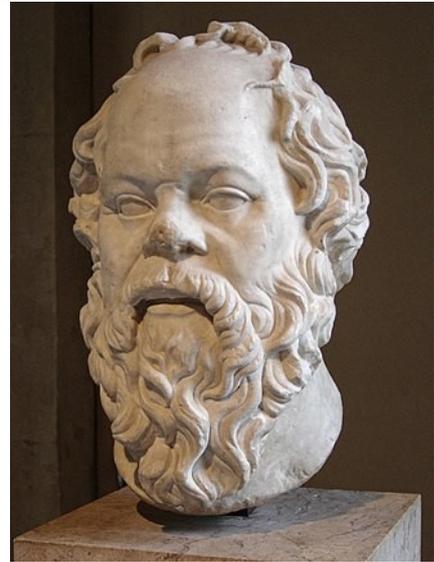
Are right and wrong the same in the IT era?

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What and why

- The classic definition of ethics: the rules and standards that regulate the behaviour of an individual towards others
- Most 'golden rules' are still valid – but there is a row of new ethical questions and new aspects brought along by new technologies
- New communication channels (coupled with certain social developments) have shown a need for additional ethical considerations and norms

I know, I know not: imaginary questions to Socrates



- “Oh, this is so that ...”
 - “Should we obey laws?”
 - “Is stealing OK?”
 - “Are elderly people to be honoured?”
 - “Should I tell truth to anyone?”
- “I do not know what it is.”
 - “Is spamming OK?”
 - “Can I lie on Facebook?”
 - “Am I allowed to read someone’s e-mail?”
 - “How can I avoid surveillance?”

Tempest in a teapot?

- Maybe it is just an artificial problem invented by bored people?
- But
 - (as said in several previous topics) The bets have grown, losing becomes increasingly costly
 - Human relationships are sometimes better seen with technology in the background
 - Internet is the game for consenting adults
 - The Earth has shrunk (not physically...)

Ethical theories

- Some possible ethical approaches to information society (from *Ethics for the Information Age* by Michael J. Quinn):
 - **Subjective (Moral) Relativism** – Right and Wrong are purely individual
 - **Cultural Relativism** – Right and Wrong are consistent in a culture, but tend to change over time and space
 - **Divine Command Theory** – Right and Wrong are set by a higher being and can be learned from the scriptures
 - **Ethical Egoism** – long-time personal benefit is the only source of Right, barter is a foundation of human relationships; doing good makes sense if useful



- **Kantianism** (I. Kant) – an attempt towards universal ethics:
 - Autonomy (1st formulation): Act only from moral rules that you can at the same time will to be universal moral laws
 - Motives (2nd formulation): Act so that you always treat both yourself and other people as ends in themselves, and never only as a means to an end
- **Act (Direct) Utilitarianism** (J. Bentham, J.S. Mills) – utility counts; Right is determined by the total increase of happiness for all the involved parties
- **Rule (Indirect) Utilitarianism** (J.S. Mills) – utility from the rules; Right is achieved by the rules which increase happiness



- **Social Contract Theory** (T. Hobbes, J. Locke, J.J. Rousseau) – Right is achieved by the rules which make sense to everyone (they obey out of free will)
- **Rawls' Theory of Justice** (J. Rawls) – Right has two assumptions:
 - Anyone can claim enough rights and liberties as long as everyone else can do the same
 - Inequality may exist if a) it stems from factors that are universally accessible, and b) it strives to help the least advantaged people the most
- **Virtue Ethics** (Aristotle) – Right is determined by what virtuous people would do in the situation. Intellectual vs moral virtues

The paradox of liberty and equality

- The French Revolution had a famous motto: “Liberty, Equality, Fraternity!” (*Liberté, égalité, fraternité*)
- Sounds nice, but is absurd:
 - **Liberty**: maximum freedom for self-realization => success is also up to abilities => some get farther than others
 - **Equality**: maintaining the average for everyone => the more successful or talented people get bored (or hit the ceiling)
- Equal opportunities vs equal wealth/poverty
- Fraternity as a requirement can contradict both!
- IT and information society amplifies the contradictions

Views on cyberethics

- Herman Tavani in his *Ethics and Technology*:
 - Cyberethics is more than computer/Internet ethics
 - Different fields emphasize different aspects of it
- Examples:
 - **IT**: issues related to adoption of technology (loss of jobs)
 - **Philosophy**: “Big Picture” (do we become stupid online?)
 - **Social sciences**: impact on social groups (too few women)
 - **Information sciences**: free speech, preservation and development of culture (how to preserve FB content?)

Phases of cyberethics

- Phase I: 1950s and 1960s - standalone (non-networked) mainframes. The first attempts on AI and the first ethical questions in IT (Can machines think? If yes, should we build a thinking machine? If machines can be intelligent, then what it means to be human?). Privacy (in the context of surveillance and large databases)
- Phase II: 1970s and 1980s - the rise of business sector, first networks (local and wide area networks). New questions:
 - personal privacy (+network and business aspects)
 - rise of 'intellectual property'
 - beginning of computer crime (rather harmless at first)



- Phase III: since ~1990: the Web era. New issues include
 - freedom of speech
 - anonymity
 - legislation
 - trust
 - public vs private information
- Phase IV: near future - merging technologies, ubiquitous computing, smart objects and things, chips, bioinformatics, probably nanocomputing

Different approaches (H. Tavani)

- **Professional ethics** - predominantly the view of computer, natural and information sciences, the issues include professionalism, responsibilities, risks, safety and reliability, codes of conduct etc
- **Philosophical ethics** - the philosophical and legal view on issues like privacy, anonymity, copyright, freedom of speech etc
- **Descriptive ethics** - the view of social sciences on e.g. the impact of technology on various institutions (government, education etc) and social groups (e.g. by sex/gender, age, ethnicity etc)

Normativity and transparency

- Ethics can be
 - Non-normative – observing/describing without judgment
 - Normative – clear ethical judgment (Right/Wrong)
- Sometimes depends on transparency:
 - Transparent - the users understand both the technology and related moral choices (e.g. phones vs surveillance)
 - Non-transparent with known features (tech is transparent, moral choices are not; e.g. Google)
 - Non-transparent (opaque) – many new things (e.g. IoT, AI)

Some main issues today

- Copyright (and legislation in general)
- Privacy
- Freedom of speech, censorship and the Big Brother
- Information security, cybercrime, cyberwar
- Digital Divide and ubiquitous computing
- Communication and media (incl traditional vs social)
- Clash of cultures (incl in cyberspace)

Re-visiting Himanen

- Protestant ethic
 - Money
 - Work
 - Flexibility
 - Determination
 - Accountability
 - Optimality
 - Stability
- Hacker ethic
 - Passion
 - Freedom
 - Hacker work ethic
 - Hacker money ethic
 - Hacker net ethic (nethic)
 - Caring
 - Creativity

Half full or half empty?

- In 2000, Attila Krajci formulated a set of online dangers
- Each one can actually be found a positive counterpoint!
 - **Trust:** "You never know who is on the other side" vs "you can have a *carte blanche*, ridding you of earlier loads"
 - **Authenticity:** "What you find cannot be trusted" vs "you can look at the information itself rather than external authority"
 - **Sense of reality:** "Things go unreal if you are online too much" vs "sometimes, the cyberspace is what someone needs in order to open up"



- **Alienation:** "net addicts get alienated from others" vs "sometimes a way to escape is necessary"
- **Identity:** "you can be whoever you want until you do not know anymore who you are" vs "you can be whoever you want and stay yourself"
- **Aggression:** "computer games make you aggressive" vs "games can teach very different things"
- **Extremes:** "Internet has porn, pedophiles and brain-washers" vs "sometimes one needs to see wrong to know right"



- **Communication:** "Internet does not allow using the whole spectrum of communication" vs "Internet adds new ways of communication, sometimes by seemingly truncating them"
- **Noise:** "you get lost in the mass of information" vs "there will be totally new ways to extract what you need"

Democracy vs Dictatorship (R. Pinter)

- “Cyber-Athens”
 - Technophiles
 - Digital Agora
 - Direct democracy
 - E-elections
 - Free society
- “Cyber-1984”
 - Technophobes
 - Surveillance and thought police
 - Big Brother
 - E-dictatorship
 - The Matrix?

Seeking for middle ground: technorealism

- A manifesto from 1998: <http://www.technorealism.org/>
- Some good points, some debatable stuff – a commented version can be found at <http://www.zpub.com/aaa/techreal.html>
- From the pre-Facebook (social media) era – a lot of modern things are not included
- Yet, a similarly balancing approach is still sorely needed

Codes of Conduct

- Seems like another piece of pointless bureaucracy
- Similar point to internal rules, security policies etc:
 - Formulation comes after thinking
 - A written thing is easier to remember (stays in sight)
 - Can help find suitable people (who then obey it out of free will \leq Social Contract Theory) – those who oppose would be thankful for an early warning

Conclusion

- The ethical foundation in technology is largely the same as elsewhere
- Many new questions (that Socrates cannot answer)
- Ethical choices in technology may affect a much larger area
- Ethical codes (codes of conduct) actually make sense

For further study

- Steven Northcutt, *IT Ethics Handbook*
- Herman Tavani, *Ethics and Technology*
- Michael J. Quinn, *Ethics for the Information Age*
- Robert Pinter (ed), *Information Society*
- Pekka Himanen, *Hacker Ethic*
- ...

Thanks