Tavani, H. T. (2013). *Ethics and technology: Controversies, questions, and strategies for ethical computing*. (4th ed.) Hoboken: Wiley.

Introduction to Cyberethics: Concepts, Perspectives, and Methodological Frameworks.

Please note *– this summary is no substitute for actually reading the chapter. I primarily develop these summaries myself to help with a lecture presentation but I am happy to make them available to you – they typically summarise the main points of the chapter – you'll need to read the chapter for the detail. I apologise for any typos or grammatical errors. As I say I mainly develop these for my own use.*

By Steve McKinlay   4/10/2017

Defining Cyberethics

This is essentially an introductory chapter into **Cyberethics**. Tavani prefers the term Cyberethics over computer ethics or information ethics for a couple of reasons. Computer ethics, he claims, seems to relate to ethical issues to do with actual computers – the machines. However computers, communication technology, networks and associated technologies have converged in recent years and he considers this a new kind of medium than merely that of the machine or the computer. Secondly, he claims that computer ethics might be confused with a field of study that is only concerned with computer professionals and the related ethical issues they may face. Thus, the term Cyberethics, according to Tavani, encompasses not only the narrower range of issues above, but also a much wider set of issues that may related to the use of technology and its ethical impact on society, individuals as well as organisations. Another term that has become popular in the media is "digital ethics".

Scenarios

Tavani opens the chapter by presenting three different scenarios. One relates to a case of cyberbullying where the young girl at the centre of this tragic event ends up taking her own life. The case involves a much older person taking on an anonymous identity and posting abusive and hurtful messages on the girls MySpace page (a social media platform that was popular between 2005 and 2008). There are several ethical issues to consider with this case. Our right to anonymity on the internet, issues to do with responsibility of the organisation running the social networking site (MySpace), as well as questions about the degree to which the technology played a part in the tragic affair.

The second scenario discusses a former employee (Kravitz) of PhoneDog Media. Kravitz created and ran a twitter account using the organisations name in his employer. The account attracted a following of around 17,000 followers. Shortly after the employee left the company sued Kravitz claiming the 17,000 follower list was their property. The ethical questions here related to intellectual property. Who rightly owns the list of followers? Does the company automatically have the exclusive property rights over the list?

The third scenario relates to a blog site "The Washingtonienne" where the owner Jessica Cutler revealed personal and private details about sexual relationships she was having with men in exchange for financial benefits. The ethical issues relate to freedom of speech, defamation, confidentiality, anonymity and privacy.

Questions arise due to the gap, or what Moor (2004) calls "policy vacuums" between the technology and laws governing their appropriate use. Remedy is mostly only available in common law however, we notice that governments and policy is beginning to catch up with many of these issues with things like "revenge porn" being quickly outlawed across many jurisdictions, and the introduction of laws restricting wholesale freedom of speech by bloggers and the like.

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There have been many cases of cyberbullying that have ended in tragedy – a quick google search confirms this. Recent social media sites such as Qooh.me and AskMe.fm have been implicated. Related issues include internet trolling, online stalking and hate speech.

Many countries have since implemented laws to curb this sort of behaviour and safety in schools has become a major focus since 2006 when the first cases came to light.

Four Developmental Phases

Tavani breaks provides a chronological timeline from the 1950s through to today summarising the ethical concerns of each era.

I won't rehearse these here; have a quick browse of that section for more detail.

However the issues of today seem to be issues relating to privacy, anonymity, surveillance loom large as a ethical issue worthy of serious consideration and debate – in particular the Snowden revelations, issues to do with collection of data by the NSA. Later in the course I have a very interesting YouTube video by Mikko Hypponen an expert in this area that I am sure will generate some debate an interest.

As computer technology continues to converge, become pervasive and ubiquitous – that is, it seems we cannot live our lives unconnected anymore, or certainly it has become very difficult to do so the issues related to this have become very important. Phil Brey (2005) calls this phenomenon "ambient intelligence" – smart objects interconnected to one another. They permeate our work and play environments.

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The last couple of years has seen the emergence and development of big data, data mining and predictive risk modelling used by many private and increasingly Government agencies. Thus a new ethical concern has arisen due to these technologies – we will discuss this later in the course.

The uniqueness debate

A question that continues to be debated within cyberethics is this;

While some believe that computer technology has introduced new and unique moral problems, are these problems genuinely unique? That is, are they really any different to existing ethical issues? After all bullying is bullying. Regarding the Megan Meier case some might argue there is nothing really new or unique about the bullying that led to her death. On the other hand there are those that would argue there are some unique features about the case, the relative ease at which the bullying was carried out and the ability to commit this abuse under the cloak of anonymity. This makes it much harder to track down and stop the offending.

It also may be that it is issues to do with the *scope* and *scale* that is afforded by IT that leads us to believe cyberethics ought to be an independent field of study.   Maner (2004) argues that computers have generated a number of ethical issues that (a) did not exist prior to their use and (b) could not have existed had computer technology not been invented. What do you think the evidence is that Maner is correct?

We need to make a distinction between unique issues that to the technology and unique issues that are ethical issues. Tavani points out it is a logical fallacy to assume, given these two points, that there are at least some unique ethical issues that could only exist due to cybertechnology.

The uniqueness debate is ongoing and there are arguments for both sides – what do you think?

We could simply take the line that ethical issues to do with cybertechnology are philosophically interesting and therefore worthy of our attention regardless of whether they are unique or not.

Moor's (2004)approach is to argue that it is due to the *logical malleability* of cybertechnology that we generate new possibilities for human action – which on the face of it seem to be limitless and these create policy vacuums – that is, we have no explicit laws to deal with such possibilities and so the ethical approach is often all that is left at our disposal.

Not discussed in the text is Deborah Johnson's genus-species (1994) argument. Johnson argues that we are talking about a *species* of ethical issues. There is no doubt the IT has given rise to new kinds of entities, databases, software and perhaps even digital identities and these require a slightly new way of approaching ethical problems.

Three Perspectives

Tavani introduces three ways to think about cyberethical issues

- Applied Ethics
- Philosophical Ethics
- Sociological/Descriptive ethics

I'll very briefly explain each perspective now.

Applied.

The applied approach, as opposed to theoretical approaches develops a set of coherent and consistent rules or standards (often implemented as codes of conduct and the like) by which moral problems are analysed. Rather than debate surrounding the appropriateness or not of a particular meta-ethical theory (consequentialism or duty based ethics for example – note, we will look at these

in more detail in week two) we look at the problem we are faced with then apply the rules or standards as required.

Don Gotterbarn has been a strong advocate of this approach. According to Gotterbarn "the only way to make sense of computer ethics is to narrow its focus to those actions that are within the control of the individual moral computer professional." The principle focus, according to Gotterbarn is on the issue of professional responsibility and not on the broader social and moral implications of the technology.

Gotterbarn goes on to make some interesting analogies – the printing press and air transport have transformed our lives, almost as significantly as IT yet we don't have printing press ethics, or airplane ethics. So, why do we have computer ethics?

Philosophical

The analysis of the nature and social impact of computer technology and the corresponding formation and justification of policies for the ethical use of such technology (Moor, 2007).

It's clear that Moor's definition is far more wider reaching than Gotterbarn's construal above. Moor might argue that the printing press and airplane have not affected out social policies and norms to the extent that computer technologies and the internet have – I'd have to agree with him. The use of information technology is so pervasive in our lives and touches almost all aspects of our lives these days that it seems natural that we'd have a separate yet related branch of ethics to deal with such issues.

Philip Brey (2004) notes the standard methodology used by philosophers to conduct research into applied ethics has three distinct stages

1. Identify a controversial practice as a moral problem
2. Describe and analyse the situation – clarify the concepts and examine the factual data
3. Apply moral theories and principles in the deliberative approach in order to reach a position

Sociological / Descriptive

The previous two approaches are normative. That is they are prescriptive by nature. Normative approaches often include the word "ought" – we ought to behave this way or that way. These approaches can be contrasted with descriptive inquiries. Descriptive ethics does not attempt to offer or prescribe a particular solution it merely describes in a nonevaluative way the facts and issues as well as the various groups or cultures related to a particular moral issue.

A benefit of taking this approach is that by taking an analytical nonevaluative approach it may help us better understand the normative aspects of the moral situation. Many aspects of social networking technology for example (Twitter, Facebook) have affected our traditional notions of friends, community and so on. These issues according to Tavani, maybe be better analysed from a sociological or descriptive approach.

Cyberethics Methodology

The three perspectives described don't necessarily mean we must choose a single perspective when analysing moral problems. In the final part of the chapter Tavani attempts to provide a framework by which ethical issues can be analysed.

The standard approach with its three stages

1. Identify the ethical issue
2. Describe and analyse the problem in conceptual and factual terms
3. Apply ethical theories and principles in a deliberative process

Moor argued that additional steps taking into consideration "policy vacuums" and "conceptual muddles" are required before we can move from step 2 to step 3.

Brey (2004) argues however that this is still not enough. Brey argues, the approach works well in professional fields such as medical, business and so on but does not fare well in cyberethics.   The reason Brey argues is that the approach tends to focus on the use of cybertechnology – and this method he fears may neglect ethical issues that are embedded in the technology itself which may have moral implications. The assumption using the standard approach is that the technology is morally neutral – this could be a mistake according to Brey. For example, feminsts have argued that so called ergonomic design may actually be biased towards men.

A Disclosive Method for Cyberethics

Brey makes a distinction between cybertechnology where some features are morally transparent, and those which are morally opaque (or perhaps not yet known). For example video surveillance cameras – where the locations are known there is a degree of transparency, but where they are in undisclosed areas this is more controversial from a moral perspective. Data mining is another example. It may be assumed that such technology is morally neutral however data mining raises certain moral issues relating to personal privacy and even freedom and democracy (we'll come back to this later in the course). Internet search engines also exhibit morally opaque characteristics. Seemingly benign on the face of it but would you want someone having complete access to your internet search history?

An adequate methodology according to Brey requires identification or disclosure of features that without proper analysis would go unnoticed as having moral implications. Thus, Brey's method involves revealing moral values which may be embedded in the features and practices associated with the technology.

Brey's method calls for a collaborative approach by computer scientists, philosophers and social scientists. There are three levels of analysis

- Disclosure level
- Theoretical level
- Application level

 All the moral values embedded within the design of a computer system must be disclosed. Thus computer scientists need to be involved as they understand the technology. Social scientists evaluate the system design and philosophers are needed to apply existing ethical theories.

It is this interdisciplinary approach that is primarily used throughout the text to examine the issues raised in chapters 4 through to 12.

A Comprehensive Strategy

The final section of the chapter outlines a comprehensive strategy for approaching cyberethical issues. I won't rehearse the steps here.

Make it your homework to check them out in the text book.