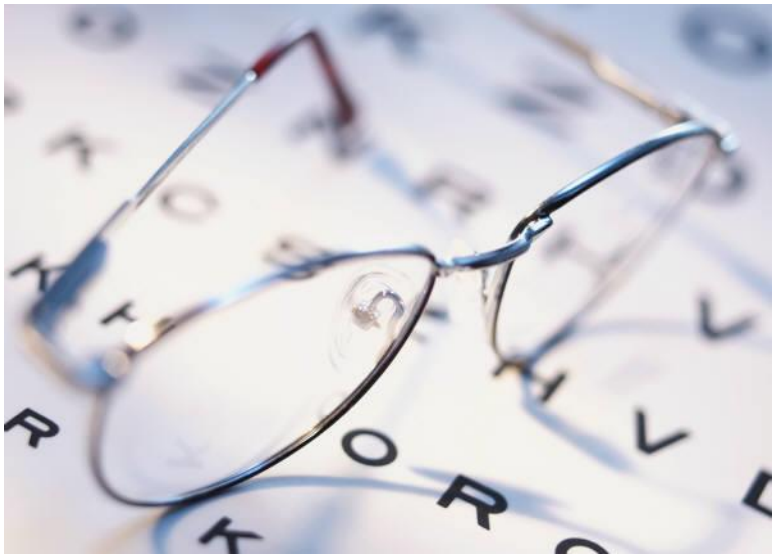
COSC1147: PCP

Advanced Professional Development

Semester 2, 2017

Lecture 1



Cyberethics

Margaret Hamilton- 2017

What Is Cyberethics?

- *Cyberethics* is the study of moral, legal, and social issues involving cybertechnology.
- As a field of *applied ethics*, it:
- examines the impact that cybertechnology has for our social, legal, and moral systems.
- evaluates the social policies and laws that we frame in response to issues generated by the development and use of cybertechnology.

What Is Cybertechnology?

- *Cybertechnology* refers to a wide range of computing and communications devices
  - from standalone computers, to "connected" or networked computing and communications technologies, to the Internet itself.
- Cybertechnologies include:
- digital electronic devices;
- networked computers (including servers, desktops, laptops, etc.);
- stand-alone computers.

Why the term c*yberethics*?

- *Cyberethics* is a more accurate label than *computer ethics*, which can suggest the study of ethical issues limited either to:

a) computing machines,

b) computing professionals.

- *Cyberethics* is also more accurate than *Internet ethics*, which is limited only to ethical issues affecting (only) networked computers and devices.

Cybertechnology and Cyberethics

- "Web 2.0" (**what is web 2.0?**)has made possible the proliferation of social networking sites (SNSs), such as Facebook and Twitter.
- As cybertechnology continues to evolve, computers will likely become more and more a part of who or what we are as human beings.
- For example, Moor (2005) notes that computing devices will soon be a part of our clothing, and even our bodies(*can you think of an example?*).
- Computers are already becoming *ubiquitous*, and are beginning to "pervade" both our work and recreational environments.

Cybertechnology and Cyberethics

- Additional ethical/social concerns associated with this evolution include controversies that are made possible by the following kinds of technologies:
- autonomous machines and sophisticated robots (used in warfare, transportation, care for the elderly, etc.);
- nanocomputing and nano-scale devices;
- artificial agents (including “soft bots”) that act on behalf of humans and corporations;
- AI-induced bionic chip implants (that can cause us to question what it means to be human vs. cyborg).

Ethics….boring!!!!!!!!!!!

- That dreaded “E” word- students really don’t like this word
- As Homer Simpson says- boooooooo, boring!!!!
- What is your understanding of this word?

Are Any Cyberethics Issues Unique Ethical Issues?/ CASE STUDY

- Review the Meghan Meier "cyberbullying" incident (Scenario 1-1 in the textbook).
- Is there anything new or unique, from an ethical point of view, about the ethical issues that emerge in this scenario?
- On the one hand, Meier was bullied in ways that were not possible in the pre-Internet era.
- But are any new or any unique ethical issues generated in this scenario?

Debate about the Uniqueness of Cyberethics Issues

- There are two points of view on whether cybertechnology has generated any new or unique ethical issues:

1. *Traditionalists* argue that nothing is new – crime is crime, and murder is murder.
2. *Uniqueness Proponents* argue that cybertechnology has introduced (at least some) new and unique ethical issues that could not have existed before computers.

The Uniqueness Debate (Continued)

- Both sides seem correct on some claims, and both seem to be wrong on others.
- Traditionalists underestimate the role that issues of *scale* and *scope* that apply because of the impact of computer technology.
- For example, cyberbullies can bully multiple victims simultaneously (scale) and globally (because of the scope or reach of the Internet).
- Cyberbullies can also operate without ever having to leave the comfort of their homes.

The Uniqueness Debate (Continued)

- Proponents of the uniqueness thesis tend to confuse *unique features of tcomputer technology* with *unique ethical issues*.
- Their argument is based on a logical fallacy:

  Premise. Cybertechnology has some unique technological features.

  Premise. Cybertechnology generates some ethical issues.

  Conclusion. (At least some of the) Ethical issues generated by cybertechnology must be unique.

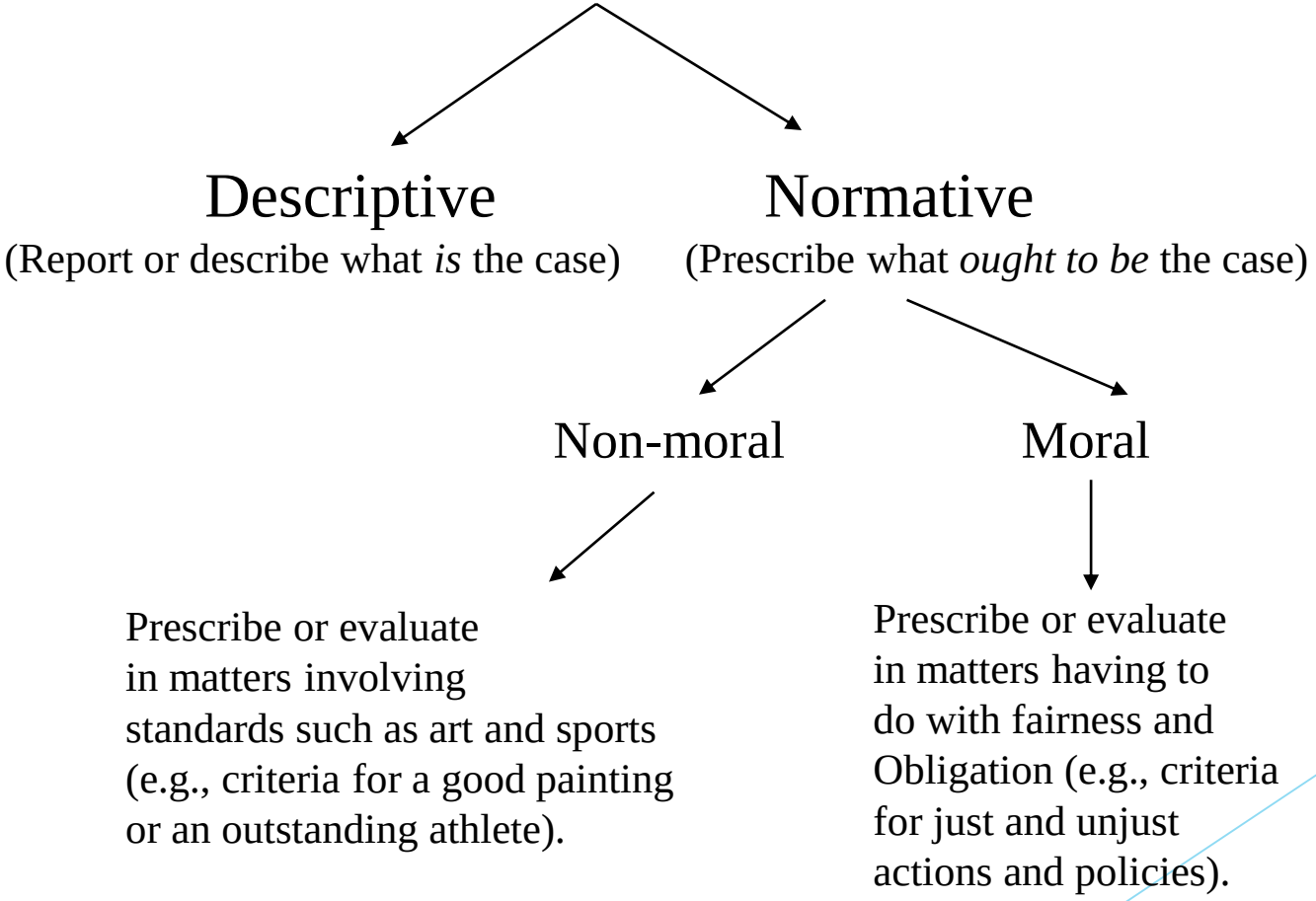
Cyberethics as a Branch of Applied Ethics (continued)

- Three distinct perspectives of applied ethics (as applied to cyberethics):
  - Professional Ethics;
  - Philosophical Ethics;
  - Sociological/Descriptive Ethics.

Cyberethics as a Branch of Professional Ethics

- According to this view, the purpose of cyberethics is to identify and analyze issues of ethical responsibility for computer/information technology (IT)professionals.
- Consider a computer professional's role in designing, developing, and maintaining computer hardware and software systems.
- Suppose a programmer discovers that a software product they have been working on is about to be released for sale to the public, even though it is unreliable because it contains “buggy” software.
- Should they “blow the whistle”?

Descriptive vs. Normative Approaches



Summary of Cyberethics Perspectives

Type of Perspective	Associated Disciplines	Issues Examined
Professional	Computer Science Engineering Library/Information Science	Professional Responsibility System Reliability/Safety Codes of Conduct
Philosophical	Philosophy Law	Privacy & Anonymity Intellectual Property Free Speech
Sociological/ Descriptive	Sociology Behavioral Sciences	Impact of cybertechnology on governmental/financial/ educational institutions and socio-demographic groups

A Three-step Strategy for Approaching Cyberethics Issues

Step 1. *Identify* a practice involving cyber-technology, or a feature in that technology, that is controversial from a moral perspective.

1a. Disclose any hidden (or opaque) features or issues that have moral implications

1b. If the ethical issue is descriptive, assess the sociological implications for relevant social institutions and socio-demographic and populations.

1c. If the ethical issue is also normative, determine whether there are any specific guidelines, that is, professional codes that can help you resolve the issue.

1d. If the normative ethical issues remain, go to Step 2.

Step 2. *Analyze* the ethical issue by clarifying concepts and situating it in a context.

2a. If a policy vacuums exists, go to Step 2b; otherwise go to Step 3.

2b. Clear up any conceptual muddles involving the policy vacuum and go to Step 3.

Step 3. *Deliberate* on the ethical issue. The deliberation process requires two stages:

3a. Apply one or more ethical theories to the analysis of the moral issue, and then go to step 3b.

3b. Justify the position you reached by evaluating it against the rules for logic/critical thinking.