

Critical Reasoning & Moral Theory (Part 1)

Professional Ethics in Computing

Lecture 02

Largely based on lecture by Dr John Cartlidge

Moodle Forum & Notes

- **Moodle Forum:**

- Upload links to articles / videos that raise an ethical question(s) regarding computing systems
 - Give a brief (one sentence) summary of the material
 - State a brief (one/two sentence) argument about the ethical situation(s) raised in the material
- Respond to materials using critical discussion

- **Moodle Wiki:**

- Each week, one group will take notes..
- Upload to wiki (<24hrs). Others respond/edit (on going)

- Your contributions / interactions **will be assessed**

Task: argue whether “Good” / “Bad”

Lying to a friend

Hacking a secure computer system

Killing somebody

Revenge

Abortion

War

Journalist lies in news article

Giving to charity

Slavery

Teacher has relationship with student

Cheating in an Exam

Bribery

Giving to Charity

Taxes

Doctor sells your medical records

Capital Punishment

Eating Pork

Import tariffs

Ethical considerations

- Some interesting ideas ...
 - The set of moral /ethical / professional things are somehow related / overlapping
 - Context is important to how we consider an ethical situation
 - Some actions are fundamentally good, e.g., helping a friend
 - “Costs” are important: for instance how serious is the consequence of an action / inaction to a person
- Today, we will learn more about all of these ideas

Moral Issues & Theories

- When searching for answers on moral questions:
 - Often ask questions for which there is *no one single correct answer*
 - However, there may be (many) *incorrect answers*
- Moral Theories
 - To help *explain why one answer may be better than another*
 - Help you *figure out why you find it difficult to agree with another person* about the answer to a moral question
- **Learning outcomes:**
 - Today, you will learn some moral / ethical theories:
 - 1. Virtue Theory**
 - 2. Act Utilitarianism**
 - 3. Rule Utilitarianism**

Ethics & Morality

- Traditionally, ethics as: “*philosophy of morality*”
- More recently: “*ideals and rules of professional groups*”

Ethics is a set of morally permissible standards of a group that each member of the group (at his/her rational best) wants every other member to follow even if their doing so would mean that he/she must do the same

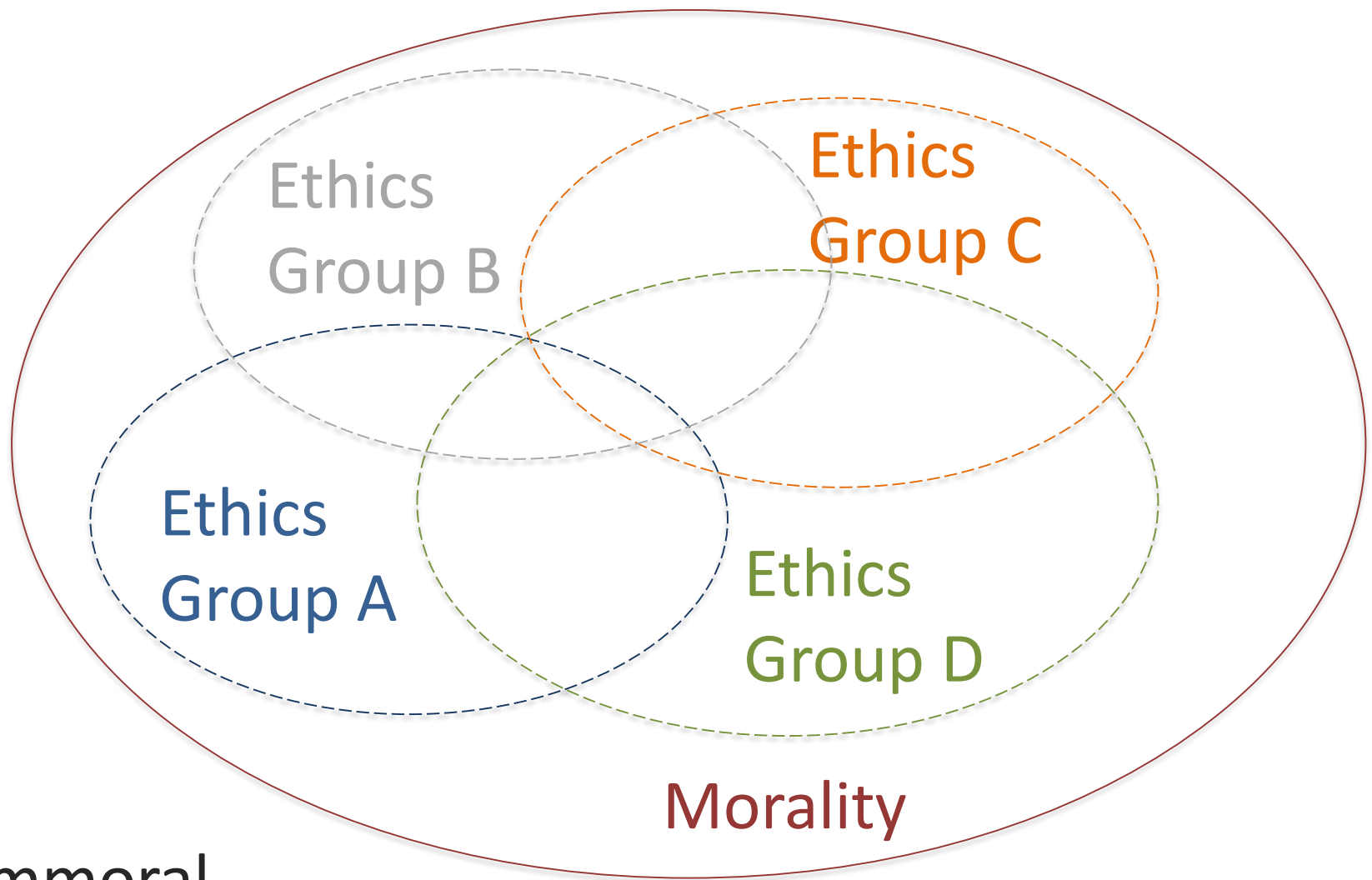
[Michael Davis, *Profession, Code, & Ethics*, p.40]

Morality is the set of standards everyone (every rational person at his/her rational best) wants everyone to follow even if their following them means having to do the same

[Michael Davis, *Profession, Code, & Ethics*, p.41]

Note: “Ethical” is not synonymous with “morally good”. An action might be unethical but morally permissible.

[Qu: How does this relate to Alice in workshop 1 Scenarios?]



Immoral

(Killing, stealing, lying, etc...)

Moral Theory

- The quest for defining morality an attempt to answer one or both of the following:

1. How do I know that X is good?

2. Why is X good?

- We will be looking at ways to answer these questions...

Religious Ethics

- Set of ethical standards for followers of a specific religion
- All major religions offer their own set of ethics
 - Standards appropriate *for all humans*
 - Ethics generally the *same as* moral standards
- Not appropriate for *professional ethics*
 - E.g., religion unlikely to address the issue of whether it is moral to postpone a security update
 - Yet, this is likely a breach of ethics for an IT professional in charge of your e-mail server
- We want people to be ethical *regardless* of religious beliefs
 - Methods of ethical decision making we consider will generally *not violate* religious beliefs

Divine Command Theory

- X is good because God commands it (and for no other reason)
 - Dates back to Plato (4th Century BC)
 - *Is goodness loved by the gods because it is good, or is it good because it is loved by the gods?*
 - Decrees communicated by religious texts, messengers of God (priests/prophets), revelation
- We are concerned with ethical standards of those who *create, sell, or use, computers, software, and technology*
 - Hence, we need answers to “*Why is X good?*” to which people of all religions represented in society can agree
 - We reject the divine command theory – it doesn’t help us

Cultural Relativism

- No valid rational criterion for determining the right thing to do exists
 - An action is judged good or bad based *only* on the standards adopted by one's society
 - Different cultures cannot be judged against each other
- Positives: *Promotes tolerance*
 - We do not unfairly judge other cultures
- Negatives: *Difficult to defend*
 - (e.g., Nazi Holocaust);

Qu: What are the boundaries of a culture? How do we determine whether two people belong to the same culture?

Cultural Relativism (2)

- Two attributes of culture appear to be universal: language and morality – there is a “natural morality”

The existence of a common morality is supported by the widespread agreement of most moral matters by all moral agents... killing, causing pain or disability, depriving of freedom ... unless there is an adequate justification ... deceiving, breaking promises, cheating, breaking the law, and neglecting duties also need justification in order not to be immoral.

[Bernard Gert, *Common Morality*, 2004, pp.8-9]

- The case for cultural relativism is weak
 - Also, it doesn't provide useful guidance in deciding what is right when interacting with people of other cultures
- **We reject cultural relativism** – it doesn't help us

Virtue Theory

- Introduced in Ancient Greece by Plato (428-348 B.C.)
- Developed by Aristotle (384-322 B.C.)
 - Along with Socrates, Plato (a student of Socrates) and Aristotle (a student of Plato) are three of the most influential classical philosophers in the Western world.
 - Their extensive works influenced all aspects of Western society (philosophy, science, religion, politics, justice, ...) for two thousand years
- Virtue theory answers two questions:
 1. *What does it mean to be “good”?*
 2. *How does one become good?*

1. What does it mean to be “good”

- List of **virtues** (characteristics of a good person)
- Each virtue an ***ideal mean*** between two extremes, e.g.:
 - *Cowardice*: to be afraid of *everything*
 - *Recklessness*: to be afraid of *nothing*
 - *Courage*: is the *ideal mean*
- Degree depends on **context**
 - E.g., Climbing a cliff to rescue a person would allow for greater risk than climbing a cliff for the thrill/enjoyment

2. *How does one become “good”?*

- Two *kinds* of virtues:
 1. *Intellectual*: acquired through education
 2. *Character*: acquired by habitually acting according to the virtues
 - We are not born virtuous, we must learn it over time
- Moral decision making becomes the question:
 - *What would a virtuous/good person do in this situation?*

Qu: You are a software engineer directed by your boss to release car-safety technology you think is *insufficiently* tested. What would a *courageous* person do?

Aristotle's *Virtues* and *Vices*

Virtue Theory (4)

Virtue	Domain	Vice [Deficit]	Vice [Excess]
Courage	Fearlessness	Cowardly	Reckless
	Confidence	Cowardly	Rash
Temperance	Pleasure/Pain	Insensible	Intemperate
Generosity	Giving/ Taking Money	Stingy	Wasteful
Magnificence	Giving/ Taking Money	Petty	Tasteless/ Vulgar
Greatness of Soul	Honour/Dishonour	Small of Soul	Vain
Even Tempered	Anger	Slow-tempered	Quick-tempered
Truthfulness	Self Assessment	Self-deprecating	Boastful
Wittiness	Amusement	Boorish	Clownish
Friendliness	Relationship to others	Quarrelsome	Obsequious
Properly disposed to shame	Shame	Shameless	Shameful
Appropriate Indignation	Empathy	Spiteful	Envious

Utilitarianism and Consequentialism

- ***Consequentialism:***

- Term introduced by philosopher G. E. M. Anscombe (1958)
- The *consequence* of an action, *not the motivation*, makes the action *good* or *bad*

- ***Utilitarianism:***

- *Consequentialist moral theory*
- *The right decision is the one that causes the most happiness [The “greatest happiness principle”]*
 - *Jeremy Bentham (1748-1832) regarded as founder*
 - *John Stuart Mill (1806-1873) regarded strongest proponent*
 - *Mill (a childhood student of Bentham) is possibly the most important English philosopher of 19th Century*

Utilitarianism

- What is *happiness*?
 - “*pleasure and the absence of pain*” [Mill]
- What is *unhappiness*?
 - “*Pain and the absence of pleasure*” [Mill]
- *Pleasure* (physical, emotional, mental):
 - Satisfaction of accomplishment, appreciation of interesting idea, aesthetic pleasure of art, pleasure of helping others, ...
- *Moral act* is the one that *maximises happiness*
 - Since happiness occurs in future as a *consequence* of the act, *utilitarianism is predictive*
 - Our ability to predict consequences of a decision determines the morality of our actions

Utilitarianism: Two varieties

- **Act Utilitarianism:**

- *Each ethical choice evaluated to maximise happiness, compared to other options*

- **Rule Utilitarianism:**

- *Select a set of rules. Each act evaluated as to whether it conforms to rules*
- Rules selected to maximise happiness if followed faithfully
 - Some acts could, in principle, cause unhappiness
 - But, overall, the aggregate of acts maximises happiness

Act Utilitarianism

- “*The greatest good for the greatest number*”
[the “greatest happiness principle”, Bentham]
- Calculated using “*utilitarian calculus*”
 - Calculations must be done frequently by ordinary people

Qu: Using act utilitarianism, how would you answer your friend's question: “How do I look?”

Act Utilitarianism (2)

- Utilitarian calculus can be tricky...
 - Some pleasures different in *quality* (so count more or less than others)
 - How do we know particular action will *actually* make another person happy
 - Decisions may affect millions of people for hundreds of years, so impact on total happiness hard to estimate
- If acting morally requires you to make such predictions, it follows that acting morally requires you to prepare yourself for that as best you can
 - Even so, it is very difficult and can easily lead to errors

Act Utilitarianism (3)

- **Qu: Should the US government confiscate the fortune of a rich American with \$30bn and distribute to all Americans (who each receive \$100)?**
 - Consider how you would feel about receiving the money?
 - Consider how you would feel about the government in future?
- **Qu: Should we give all school children candy for lunch?**
 - Consider time / long term effects
- **Qu: A profoundly unhappy person has no friends or family. Is it morally right to kill this person?**
 - Are we happy with act utilitarian analysis? Rule utilitarianism helps to resolve some of these difficulties...

Rule Utilitarianism

- Premise:
 - *Easy to follow rules will lead to fewer calculations*
 - (and therefore fewer errors)
 - *Rules can be examined at length by experts*
 - (so not left to each individual non-expert to calculate)
 - *Will increase utility (happiness) better than act utilitarianism*
 - despite fact some individual acts may decrease utility
- Analogy (navigating a maze):
 - Use simple rule: “*always keep right hand on wall*” (until exit)
 - Compare with “random wandering”:
 - Will cause lots of errors (results in wandering in circles)
 - Compare with “remember steps”:
 - Too difficult in large maze, leads to mistakes (again, wander in circles)

Rule Utilitarianism (2)

- **Adopt a set of rules** and **violate them only** in the case where **compelling evidence** indicates that **utility will be increased by such violation**

– *It is difficult (impossible?) to decide upon a set of rules*

- We use Gert's rules, as a plausible working set:

[Bernard Gert]

- | | |
|-------------------------------|-----------------------|
| 1. Do not kill | 1. Do not deceive |
| 2. Do not cause pain | 2. Keep your promises |
| 3. Do not disable | 3. Do not cheat |
| 4. Do not deprive of freedom | 4. Obey the law |
| 5. Do not deprive of pleasure | 5. Do your duty |

- **Note:** “Do not steal” is covered by combination of rules, primarily rule 4
- Follow rules **unless** compelling case that utility will be enhanced by breaking rule

Reflection

- **Scenario:**
 - Suppose you are in a lifeboat that is overloaded.
 - The heaviest people are thrown overboard until the lifeboat is no longer overloaded.
- **Qu: Is this a moral act?**
 - Analyse this from an act utilitarian perspective
 - Analyse this from a rule utilitarian perspective
 - Analyse this using virtue theory

Case Study: Edward Snowden

- **Edward Snowden makes 'moral' case for presidential pardon**
 - The Guardian: 13/09/2016 (Article & Video)
 - <https://www.theguardian.com/us-news/2016/sep/13/edward-snowden-why-barack-obama-should-grant-me-a-pardon>
 - **Edward Joseph Snowden** (born June 21, 1983) is an American computer professional, former Central Intelligence Agency (CIA) employee and former contractor for the United States government who copied and leaked classified information from the National Security Agency (NSA) in 2013 without prior authorisation. His disclosures revealed numerous global surveillance programs, many run by the NSA ... with the cooperation of telecommunication companies and European governments
- [Wikipedia: https://en.wikipedia.org/wiki/Edward_Snowden]

Homework...

- **Before Wednesday's workshop:**
 - **Individually:** watch Edward Snowden video
 - **Individually:** find an news story related to computing systems that has some ethical issues. Bring link to workshop
 - **Note taking group only:** upload notes of today's lecture to the Moodle wiki before Wednesday workshop
- **During tomorrow's workshop:**
 1. **Individually:** presentation to class (1 minute) - introduce the article you selected and give a brief ethical/moral explanation
 2. **In groups:** each group to present a summary of deliberative debate of Snowden's video
 3. **In groups:** write and submit a 1 page summary of tasks 1 and 2 (24 hours to submit)

Summary

1. You should now understand that *ethics* and *morality* are related but *not synonymous*
2. You should now be aware of the following moral theories and *why we will not consider them* in this course:
 - Divine Command Theory
 - Cultural Relativism
3. You should now understand how to *critically discuss* an *ethical situation* using the *following moral theories*:
 - Virtue Theory
 - Act Utilitarianism
 - Rule Utilitarianism

[END]