Ethical Thinking in Practice

Professional Skills & Issues
### Dr Peggy Gregory

Thinking about ethics

- Ethics is concerned with what is 'right'/'good' for individuals and society
  - Making moral decisions - what are good and bad actions?
  - What are our responsibilities and rights?
  - How do we live a good life?
  - How do we navigate ethical issues in our lives/professional lives

Ethical dilemmas

- Dilemmas arise when 2 or more values conflict:
  - Your employer asks you to build software that tracks employee productivity through keystrokes or webcam monitoring
  - You're part of a team developing autonomous vehicles & drones, but you're aware your work could be misused
  - Automation and AI increase productivity but can replace human workers on a large scale
  - Big data analytics can be useful, i.e. develop new medicines, but data centres consume massive energy, contributing to carbon emissions

Consequentialism – balancing the outcomes of an ethical decision
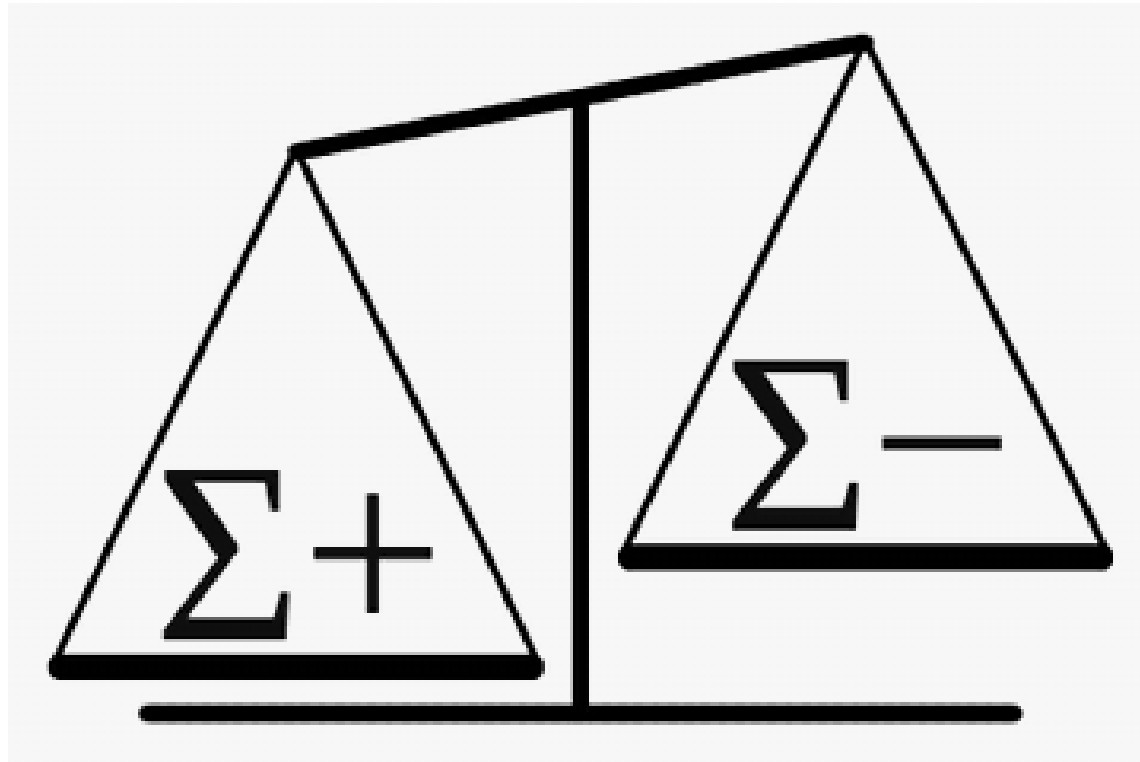
Act and Rule Consequentialism

Act consequentialism

- A particular action is morally good only if it produces more overall good than any alternative action

Rule consequentialism

- Whether acts are good or bad depends on moral rules
- Moral rules are chosen solely based on their general consequences - to produce the best results if adopted by most people
- Individuals should apply rules to make a moral choice.

Duty based ethics

- Duty-based (deontological) ethics are concerned with what people do, not with the consequences of their actions.
  - Do the right thing, because it's right
  - Don't do wrong things
- In this approach, you don't justify an action by showing that it produces good consequences
- Some kinds of action are wrong or right in themselves, regardless of the consequences.

The Philosopher's Dilemma
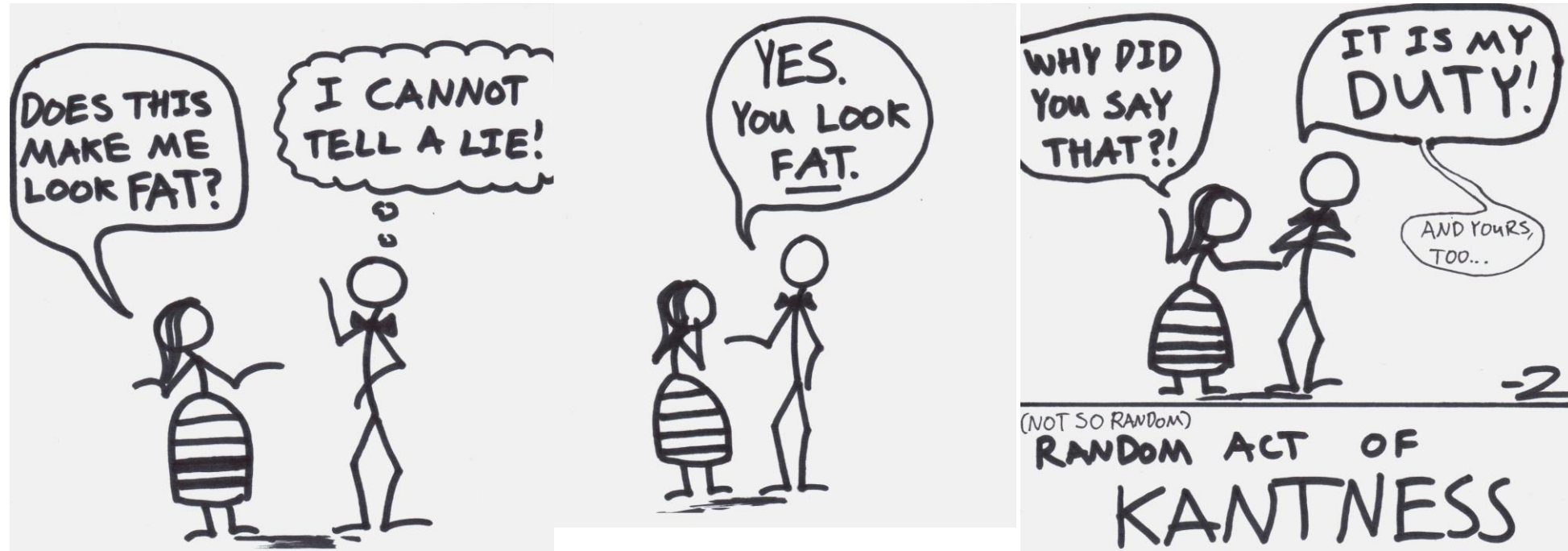
Immanuel Kant – ruining dates since 1785

Apologies for the gender stereotype … but it works just as well if you swap roles

Moor – Computer ethics can be discussed reasonably & rationally

- Moor disagrees with these views of computer ethics:
  - "Routine ethics" – ethical problems in computing are no different to those in other fields
  - "Cultural relativism" – local customs and laws determine what is right and wrong, and as computing crosses cultural boundaries the problems are intractable
- Moor is AGAINST these because:
  - Routine ethics underestimates the unique ethical challenges that computing technology poses
  - Cultural relativism underestimates the stability of our core human values

Moor - Computer Ethics is unique

- Computer ethics is unique because computers have certain properties:
- Logical malleability
  - Computers can perform any activity that has inputs, outputs and connecting logical operations – infinite possibilities
- Invisibility factor
  - Most of the time and under most conditions, computer operations are invisible
- Informationally enriching
  - Computer technology is used to modify activity and to enhance it with extra knowledge

We use values in all areas of life

- All interesting human enterprises, including computing, are conducted within frameworks of values
- Value frameworks can be rationally criticised and adjusted
- They provide us with the reasons for justifying judgments
- In every reasonably complex human activity we make value choices
- i.e. Business people make value decisions about good investments, computer scientists make decisions about what makes a good programme (here we are using 'good' in a non-ethical sense i.e. 'effective')

SELF-DIRECTION
- Freedom
- Curious
- Independent
- Creativity
- Choosing own goals
- Privacy
- Self-respect

UNIVERSALISM
- Broadminded
- Equality
- Unity with nature
- Protecting the environment
- Inner harmony
- A world of beauty
- Social justice
- A world at peace
- Wisdom

STIMULATION
- Daring
- Variation in life
- Excitement in life

BENEVOLENCE
- Mature love
- A spiritual life
- Helpful
- Forgiving
- True friendship
- Meaning in life
- Honest
- Responsible
- Loyal

HEDONISM
- Enjoying life
- Self-indulgent
- Pleasure
- Intelligent

CONFORMITY
- Humble
- Self-discipline
- Politeness
- Honouring of elders

ACHIEVEMENT
- Capable
- Successful
- Influential
- Ambitious
- Social recognition

TRADITION
- Detachment
- Respect for tradition
- Devout
- Obedient
- Moderate
- Accepting my portion in life

SECURITY
- Healthy
- Family security
- Social order
- Clean
- Reciprocation of favours
- Sense of belonging
- National security

POWER
- Wealth
- Authority
- Social power
- Preserving my public image

Core values

- Ethical values – are judgments beyond special interest communities.
- They are rights and values we share as humans:
  - Life
  - Happiness
- Also
  - Freedom, Knowledge, Resources, Protection
- All things being equal, people do not want to suffer death, pain, disability, interference, deception, loss of resources or intrusion
- Moor says the ethical point of view is:
  - "Respect others and their core values"

Reasoning with core values

- Core values provide standards with which to evaluate the rationality of our actions and policies
- They give us reasons to favour some actions over others
- They provide a framework of values for judging standards and balancing decisions and preferring one policy to another

James Moor - Reason, Relativity, and Responsibility in Computer Ethics, Computers & Society March, 1998

Managing disagreements

- If you had a list of what makes a good computer programme:
  - Does the job intended, has been thoroughly tested, doesn't have obvious bugs, well-structured, well-documented, secure, easy to maintain, has a usable interface
- Different people may dispute the ranking BUT there will still be some agreement
- Avoid the many/any fallacy
  - Because many alternatives are acceptable, any argument is acceptable

Four questions

- Terrell Ward Bynam suggests
  - Computer technology is powerful
  - We need strategies for ethical decision making
- Four important questions
  1. What is a 'policy to guide our actions'?
  2. How do we decide whether existing policies cover the situation?
  3. How do we formulate new policies?
  4. How do we ethically justify new policies?

Policies to guide our actions

- Ethical principles are social phenomena – we don't need to reinvent them constantly

- We generally learn how to behave appropriately when we are growing up

- We try to avoid offending others

- In a reasonable, just society where laws and institutions seem fair, we can use a list to guide our decision-making

List of policies for conduct

1. *International treaties* – broadest policies
2. *Laws* – at national/state level more specific laws
3. *Regulations* – used to interpret and carry out laws
4. *Standards of good practice* – these will be found in different professional communities
5. *Professional codes of ethics* – i.e. BCS, IEEE
6. *Corporate policies* – most companies have policies for conduct
7. *Community and personal values*

Limitations

- This approach has limitations as laws and family values can be unjust or biased, and corporate policies and cultures can be ruthless

- Where there are problems, or where we are looking at a 'policy vacuum' we need to use a case analysis method to look at the problem in more depth and consider the details

Developing Ethical Judgement

- Aristotle argued that good ethical judgement depends on experience

- Bynum argues that good ethical judgment involves pattern recognition skills and the ability to see what is right or wrong

- People need to cultivate moral awareness by clarifying their value system and worldview, observing human nature and engaging in ethical behaviour

- No algorithm for ethical decision-making, but there are 'heuristic methods'*

* Heuristic methods = experience-based methods for problem solving

A method of case analysis…

1. *Take the 'ethical point of view' -* treat all humans as equal and respect the ethical relevance of their needs and rights
   - This means adopting a perspective in which *equality*, *justice* and *respect* play central role
   - *Equality* – we all suffer pain and joy, have needs and plans that can be advanced or thwarted
   - *Justice* – treating people equally is an important part of justice, also fairness and moral rightness
   - *Respect* – is a vital part of human life, people do not function well without respect

A method of case analysis…

2. *Develop a description of the case*
   – Need a detailed description of the relevant facts and considerations in the case, people involved and their roles and relationships

3. *Identify key ethical issues and 'traditional' solutions* that fit the case
   – Determine whether existing policies to guide one's conduct apply. If they do you can apply them. Most ethical decisions in ICT can be handled in this way. If you face a 'policy vacuum' proceed as follows …

A method of case analysis…

4. *Call on your ethical knowledge and skills*

    – Several strategies to help:

    – *Think of precedents and analogies* – what aspects are similar and what is different?

    – *Use your sensitivity:* imagine who may object either because they feel at risk or have responsibilities

    – *Role play and apply your ability to sympathise* – for each significant participant, see their view. What would a just solution be? What if that participant were a friend or a relative? For each possible action, who may object? would you be proud to tell others about it?

A method of case analysis…

5. *Get the advice of others*

   – Ethical practices are social phenomena. Get others' views, to get a different perspective

6. *Use a systematic analysis technique*

   – A number of possible options choose one or more:

   a. *Perform a 'professional standards analysis'.* If case involves ICT professionals try systematically applying principles from codes of conduct … does anyone violate a principle in the code? Is it justified? Is there a policy vacuum that can be filled by a new policy? How should that policy by stated and justified?

A method of case analysis…

b. *Perform a 'roles and responsibilities analysis'*. Systematically consider the roles or the people involved – identify responsibilities and rights* If ICT creates new roles and responsibilities, list them

c. *Perform a 'stakeholder analysis'.* Stakeholders are those affected. Systematically consider the benefits/harms to each stakeholder group identified. Are any groups rights respect or violated? If so, how should benefits and harms be more fairly distributed?

d. *Perform a 'systematic policy analysis'.* Look at laws, rules, principles and practices. If you find a 'policy vacuum' consider new policies

e. *Perform an 'ethical-theory analysis'.* Not generally needed but could use ethical theories to help

A method of case analysis…

7. *Draw relevant ethical conclusions about the case*
   – By engaging in all/most of these steps, you will have a wide set of insights. What are the ethical issues? Did anyone do anything unethical? If there are competing ethical values, how would you rank them?

8. *Draw relevant lessons about the future*
   – If the case involved unethical actions, how can they be prevented in the future? If there is a policy vacuum, what policies would you recommend?