Solving Moral-Ethical Problems

Preparation for Case Studies Analysis

Introduction

- Often moral disagreement and controversy are experienced in a context of agreement
  - Common morality
  - Unclear understanding of important matters
  - the relevant facts of the problem
  - Ethical and or moral issues

Framing the problem

- Keep in mind the wide areas of agreement as well as agreement on what is unclear or simply unknown
- Ethical analysis elements:
  - Relevant facts
  - Relevant ethical considerations

Solving Ethical Problems: Difficulties

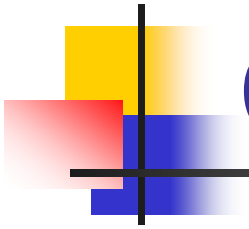
- Engineers more at ease with quantitative concepts
- Approaching the problem from the Judge vs Agent perspective (*a postiori vs a priori*)
- Approach the problem from many directions
- Often there is no absolute right answer

A Structured Way to Approach ethical problems

- What we mean by good, bad,right, wrong
- What actions are morally permissible at the most general level
- Bring the general and theoretical to the specifics of the problem

Problems of Relevance

- Factual issues
  - What facts must be taken into account
- Conceptual issues
  - Determining definitions, meaning of concepts and how they apply to your particular case



Common Morality

- We have discussed them earlier in this course. Each of us may offer different grounds for them
  - Moral beliefs, rules that guide our lives
  - Must attempt to formulate these general beliefs

Some features of human life

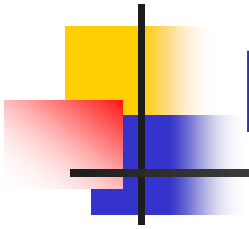
- Vulnerability
  - Susceptible to pain, suffering, unhappiness, death
- Autonomy
  - To some degree at least, capable of thinking for ourselves and make our own decisions
- Interdependency
  - Depend on each others, must cooperate

Some features of human life

- Shared expectations
  - Beyond our individual goals we may want things together, as a group working toward shared ends
- Common moral traits
  - Fair-mindedness, self-respect, respect for others, compassion, benevolence, these traits can be found to some degree in most of us

Common morality

- This list, even if incomplete, seems to provide a reasonable basis for understanding why common morality includes rules or principles about duties
  - Not to harm others
  - To make reparations for harms,
  - Not to lie, not to cheat, keep promises, respect others freedom, be fair and so on

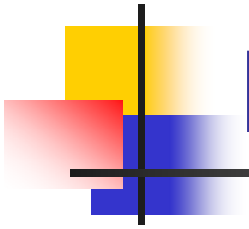


Exceptions

- Although the rules presented are quite general, this does not mean that they have no exceptions
- But, taking exception to them requires having a justification for doing so

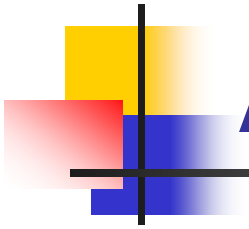
Engineering codes of Ethic

- They reflects those general principles
  - Faithful agents to their employer
  - To protect the public (*not to put anyone in harms way*)
- This is most true for engineers since they are often put in a position of trust and responsibility to provide such protection
- These codes help define the professional morality



Engineering codes

- Often are simply specific applications of common morality to the engineering profession
- Not to be confused with personal morality
  - For example, for a given individual accepting a bribe might be acceptable, but contrary to both common morality and professional code



Analyzing a Case

- What are the relevant facts?
- What are the ethical considerations relevant to the case?
  - Keep in mind that these two questions are interconnected

Factual Issues

- If people disagree about some facts, or if they are not aware of the same facts they may well make different moral judgements
  - Relevant laws
  - Regulations
  - Events, decision process, actors, responsibilities

Difficulties over Factual Issues

- Disagreement that appear to be about moral issues often turn out to be about relevant facts.
- Factual issues are sometimes very difficult to resolve.
- Once factual issues are clearly isolated, moral disagreement can re-emerge on an other level

Facts of the case

- Discerning relevant facts
- Known and unknown facts
  - We have a responsibility to seek answers to unanswered factual questions

Conceptual Issues

- Good moral thinking relies not only on attending carefully relevant facts but also having a good grasp of the key concepts involved:
  - Public health, safety, bribery, conflict of interest, confidentiality, trade secret, loyalty which are some of the key terms of engineering ethics

Problem solving
(iterative process)

1. Problem domain
   - Case statement
2. Ethical problem solving
   - Relevant facts
   - Factual issues
   - Moral issues
   - Analysis
   - Solution

Methods for Moral Problem Solving

- Sometimes sorting out factual and conceptual components process resolves the moral problems
- In some instances there is still uncertainty about the moral problem even after all facts have been settled.

Conflicting values: Creative Middle Way Solutions

- Two or more moral rules or duties seems to apply but imply different or incompatible moral judgements.
- Close examination will often show that one rule or duty has a higher priority than the others.

Lessons from Challenger

- Administrative structure of large organization facilitate decision making failures
- Easy to fall in a comforting belief that a safe and conservative course is followed while in fact they are deviating in dangerous un-chartered territory.

Columbia

- NASA's culture: Management thinks themselves proverbial rocket scientists
- Too smart to need outside advice
- Failure is not an option...
- The only game in town (warn of a big mistake in advance, you are dead space meat)

Columbia & Challenger

- Committee concluded that unless they change the status quo regarding the NASA culture that nothing will really change in substance, only in appearance.
- One veteran, still on duty, e-mailed: There were times that several of us talked about how the atmosphere was reverting to a pre-Challenger style even a couple of years before Columbia."

Shuttle program

- NASA Headquarters Office of Safety and Mission Assurance should have direct line authority over the entire Space Shuttle Program safety organization and should be independently resourced.