

Professional Inequalities in Engineering

Most Engineering Ethics courses include a focus on the professional ethics side of things: this is likely what the ethics instruction you'll face on any test (FE, PE, etc.) will focus on. Most of these, by now, should be pretty common sense given the ethical background you've built up this semester: don't have conflicts of interest, don't take credit for other people's work, don't discriminate in the workplace, don't cheat your customers, etc.

- These are most often codified in a Code of Ethics
 - These codes may be fairly outcome-oriented in that they care how your action comes across, since that is the easiest way to measure an action (think: we can't know what you're thinking, just what you did)
 - Often, though, they start from an action-oriented base: they care that engineers are honest, trustworthy professionals. If you're not sold on the consequentialist thinking of outcome-oriented codes, you might think that an action-oriented approach is preferable because then we're cultivating the sort of engineers who will do the right thing, even if the code doesn't specifically address the circumstances they're in
 - Keep these distinctions in mind as you're completing your final; your code can be action-oriented or outcome-oriented (or both, if you think we shouldn't be limited to one sort of ethical theory), just make sure to justify your choice



For the next few weeks, we'll be focusing on more of these professional ethics, now that you've got a basis in ethical theory and its applications in engineering.

Where those professional ethics get especially difficult is when there is a power inequality present. This may be between a superior and a subordinate, a more

affluent company and a start-up, a company and its consumers, or even between people who aren't part of a social minority and those who are.

- There are significant gender and racial inequalities present in engineering today (see supplementary reading links)
- When thinking about professional ethics in engineering, we need to be aware of how these inequalities affect the topic at hand, and what we can (and perhaps ethically should) do to make a difference



Conflicts of Interest

A conflict of interest is when a professional has an interest that might keep them from meeting their other interests or obligations if pursued

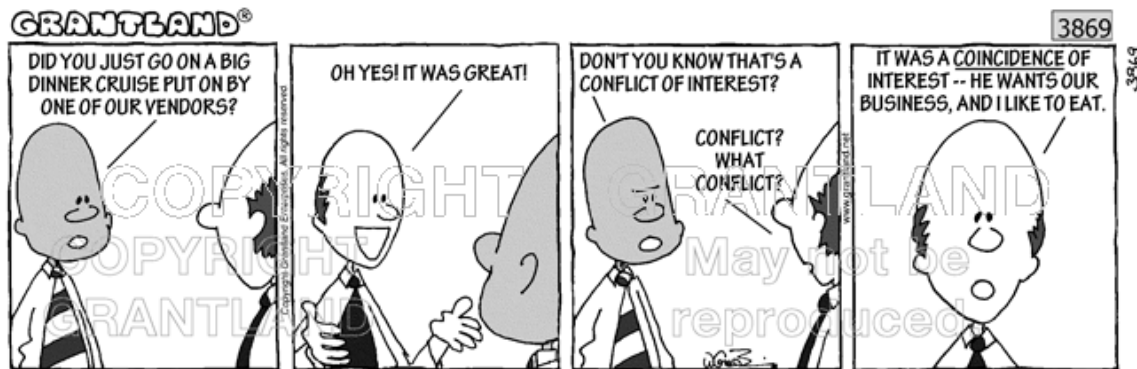
- This is distinct from competing interests, which is when you're interested in two different things
 - Competing interests aren't incompatible; conflicting interests are
- Why are conflicts of interest bad?
 - They can distort your judgment
 - This is defined by the typical case, not the specific one
 - We don't want to be making case-by-case decisions about what is a conflict of interest, we want a rule that applies to everyone
 - Even though the virtuous person wouldn't let a conflict of interest distort their judgment, we have to assume everyone isn't a perfectly virtuous person
 - Keep in mind that the truly virtuous person wouldn't put themselves in that position in the first place
 - This can be something like investment in a competitor's stock, acceptance of business gifts (free travel to something other than a conference, etc.), etc.
 - Some doctor's offices don't even allow pharmaceutical pens in their office anymore to avoid the appearance of a conflict of interest, and out of fear that familiarity with one company over the other could influence physicians



"Yes, I am employee of the month again. And yes, I'm the one who chooses the employee of the month. And no, I don't see a conflict of interest."

- What do the three main ethical theories say about conflicts of interest?
 - Utilitarianism: it's only a problem if it doesn't maximize happiness
 - This will be different for Rule Utilitarianism: we can easily imagine a rule against conflicts of interest designed to maximize happiness for everyone involved
 - Kantianism: universalizable principle: don't have conflicts of interest
 - Is there any way that wouldn't be universalizable?
 - Virtue Ethics: the virtuous person wouldn't have conflicting interests, they wouldn't put themselves in a situation where their ethics were compromised
 - We're not looking for a golden mean between having no conflicting interests and having too many; the golden mean is between something like bribery and not having any stake in the game: you're ethically allowed to have interests, you just have to be explicit about them and not have conflicting ones
 - What does this tell us about how conflicts of interest should be handled?
 - If we go with Rule Utilitarianism (often seen as the more applicable of the two) instead of Act, conflicts of interest should be avoided under any theory
- Can a conflict of interest be diffused?
 - Get rid of one of the conflicting interests
 - Does telling someone about it work?
 - That just makes it their problem, or makes you feel better, it doesn't make the conflict go away
 - What are the difficulties surrounding disclosure of conflicts of interest?
 - Informed consent: client/employer needs to know what they're getting into
 - Remember, informed consent came about from difficulties with paternalism: making decisions on someone's behalf, while trying to hold their best interests in mind

- So, we don't want to be paternalistic and decide it's best for the other party if we don't tell them about our conflicting interests
 - Doesn't end the conflict
- Where is the line between an apparent conflict of interest and a disclosed or diffused conflict of interest?
 - Apparent conflicts don't actually exist, disclosed ones still do
 - We still want to avoid both, though, especially under Utilitarianism: an apparent conflict can cause just as much damage to the company as an actual one
- How can we avoid conflicts of interest?



Confidentiality

Confidentiality is “the duty to keep secret all information deemed desirable to keep secret” (assigned reading, p 155)

- This definition may seem a bit circular, or at least self-fulfilling
 - Luckily, you won't usually be the one determining what is confidential; instead it's determined by the employer or the client
- Why is confidentiality necessary?
 - The reading argues that it's based on the autonomy of people to keep their information private
 - But, what about your right to use the information you possess?
 - Remember our discussion of positive versus negative rights
 - A positive right is a right *to* something; if held, it entitles the bearer to something
 - Ex: the right to welfare assistance, the right to healthcare
 - A negative right is a right *against* something; if held, it entitles the bearer to non-interference
 - Ex: the right against assault, the right to own a gun
 - A negative right usually supersedes a positive one

- So, the customer's right (e.g.) against their information being used without their consent is stronger than your right to do what you will with the information you possess
 - We might also think confidentiality is good because it promotes trustworthy behavior, increases social utility, or is universalizable
 - What problems could arise with confidentiality?
 - Conflict of interest worries: when you change jobs, you have to keep trade secrets from your previous job from influencing your work at your new job
 - What would the above discussion on conflicts of interest say about this situation? Why is it ethical/unethical? How can we avoid such a situation?
 - Whistleblowing worries



Whistleblowing

Whistleblowing is when someone goes outside the normal structure of reporting to make it known that the company is performing actions they believe to be legally or ethically wrong

- What do the three main ethical theories tell us about the ethics of whistleblowing?
 - Utilitarianism: when it maximizes utility or happiness
 - So, when there are unsafe circumstances present or when many people will be harmed
 - Rule Utilitarianism: when doing so is in line with a rule designed to maximize utility or happiness
 - Kantianism: What would be our universalizable principle here?
 - It would be ethically required of us to speak up when people are being used as a mere means
 - It may be universalizable to speak up when you see someone's rights being violated
 - Virtue Ethics: there will be an objectively right answer for your situation, but it may be hard to know what it is

- What virtue are we looking for? What vices might be present?
 - This might be a similar spectrum to that of honesty
 - Vice of deficiency: covering up wrong-doing -- Virtue of speaking up when necessary -- Vice of excess: exposing too much and so not keeping necessary confidentiality
- What does this tell us about when and why whistleblowing might be necessary?
 - Does it depend on how severe the ethical wrong is?
 - This would be amenable to Virtue Ethics and Utilitarianism, but maybe not to Kantianism
- Can whistleblowing ever be an ethical good? What about an ethical requirement?
 - Utilitarianism: it is ethically required if the other options available detract from overall happiness/utility
 - Kantianism: you are ethically required to act in accordance with your ethical duty, which is determined by what is universalizable
 - Virtue Ethics: if you are striving to be a virtuous person, then you are ethically required to act in the most virtuous ways



Whistleblowing can be a contentious topic for companies. If they're faced with a whistleblower, it means something has gone dramatically wrong.

- However, this doesn't mean they should stifle or punish whistleblowers
 - First of all, there are protections against that
 - Additionally, there is benefit to be gained by the information a whistleblower has
 - They are taking a risk by going outside of normal channels, and so have decided the information they have is worth the risk
 - That information can be used to benefit the company and make useful changes (think: the Challenger case study)
- A company can make use of the "bad news" a whistleblower brings
 - A company might even want to incentivize the reporting of bad news in order to make these beneficial changes

- Incentivizing such reporting will also mean that whistleblowers aren't necessary in the first place
- It will allow them to hear about the bad news in house, rather than causing a scandal
- People may be more likely to want to work for such a company, since they will be less likely to be put in a difficult position
- This incentivization may be:
 - procedural (adding a space on forms to list risks, review meetings, etc.),
 - educational (training superiors to react well to receiving "bad news" from their subordinates),
 - or structural (having various methods for reporting to ensure that at least one will work: open-door policies, external audits, lattice-style command structures; we don't want just one person in charge of all of it in case they're stifling the flow of information)



It may feel like a big professional risk to be a whistleblower and go outside the chain of command. How can you avoid having to blow the whistle?

- Find a company that will be good to work for
 - Ask how they handle bad news in your interview (be sure to frame this in a positive way: How does your company incentivize reporting of risks and work with employees to mitigate them?)
- Form your own lattice-style connections
 - Up, down, and across so that you have a vast community of people who you can talk to, as well as encouraging your subordinates to talk to you
 - Make sure these are reputable connections; don't pick the unethical people
- Communicate well when reporting
 - Be succinct, make a clear and powerful point, and be friendly about it (no ad hominem attacks)
 - You've been trained for this in this class!
- Don't compromise your moral standing in order to avoid blowing the whistle



Discussion Questions:

- Anything above with a question mark!
- How do professional inequalities enter into the above topics of confidentiality, conflicts of interest, and whistleblowing?
 - What additional ethical worries enter into the picture in light of professional inequalities?
 - What are we ethically required to do about those situations, either as companies or individuals?
- What can you do to practice being an ethical engineer in your career?