Taking Ethics Seriously

Why Ethics Is an Essential Tool for the Modern Workplace

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Outline

- Two case studies
- Myths and misconceptions
- Ethical principles
  - Generalization principle
  - Utilitarian principle
  - Autonomy
- The case studies reconsidered
- Another issue (time allowing)
Two Case Studies

Ford Pinto (1972)
Volkswagen emissions (2015)
Early 1970s: Exploding gas tank in Ford Pinto in low-speed collisions.
Ford Pinto

- The company knew of the danger.
  - Decided not to fix the defect.
  - Would have cost $11 per car.
  - To fix bolts that punctured the gas tank on collision.
Ford Pinto

- Dennis Gioia was centrally involved.
  - Now a professor of business ethics and organizational behavior.
Ford Pinto

- Gioia tells the inside story honestly in an article.

Pinto Fires and Personal Ethics: A Script Analysis of Missed Opportunities

Ford Pinto

- Gioia held engineering and MBA degrees.
  - He saw business as unethical.
  - But he thought he could make the world better by working within the system.
  - So he cut his long hair and joined Ford as Field Recall Coordinator.
Ford Pinto

- Cost-benefit analysis showed that the defect should not be fixed.

\[\text{Costs: } \$137,000,000\]

(Estimated as the costs of a production fix to all similarly designed cars and trucks with the gas tank aft of the axle (12,500,000 vehicles \(\times \$11/\text{vehicle}\))

\[\text{Benefits: } \$49,530,000\]

(Estimated as the savings from preventing (180 projected deaths \(\times \$200,000/\text{death}\) + (180 projected burn injuries \(\times \$67,000/\text{injury}\) + (2,100 burned cars \(\times \$700/\text{car}\))
Ford Pinto

- 1978: Ford prosecuted for reckless homicide.
  - After 3 teenage girls were killed by exploding gas tank in Indiana.
  - Ford acquitted due to lack of evidence.
Ford Pinto

- Gioia later began using the Pinto case in his classes.
- Then and for years afterward, he believed he had made the right decision at Ford, given the evidence at hand.
  - Then he changed his mind.
  - Why?
Ford Pinto

It is fascinating to me that for several years after I first conducted the living case with myself as the focus, I remained convinced that I had made the “right” decision in not recommending recall of the cars. In light of the times and the evidence available, I thought I had pursued a reasonable course of action. More recently, however, I have come to think that I really should have done everything I could to get those cars off the road.
Ford Pinto

- What is the **rational basis** for his views?
  - Either for his decision at Ford...
  - **Or** for changing his mind later?
Lesson: We often make the wrong decision because we don’t know what is right.

Not because we are bad people.
Lesson: We often make the wrong decision because we don’t know what is right.

- Not because we are bad people.
- We don’t have the conceptual equipment to analyze the issue.

Ford Pinto
We can rationalize almost anything.

- How do we distinguish mere rationalization from correct analysis?
- **This is why we have ethics.**
- It provides the conceptual equipment we need.
Several countries limit auto emissions.

- As measured by a predetermined test cycle in a laboratory (not on the road).
- For several years, Volkswagen Diesel cars circumvented the test...
Volkswagen Emissions

VW Golf Diesel emission system

Diesel oxidation catalytic converter
Particulate filter

Engine control computer

H$_2$S catalytic converter
Exhaust valve
Nitrogen oxide trap
Volkswagen Emissions

- VWs emitted far more NO\(_x\) on the road than allowed by EPA.
  - Based on 2014 tests by engineers at West Virginia University.

Arvind Thiruvengadam, Engineering professor, WVU.

Ran initial tests that found excess emissions.
Volkswagen Emissions

Average emissions of nitrogen oxides in on-road testing

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<thead>
<tr>
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<th>GRAMS OF NITROGEN OXIDES PER KILOMETER</th>
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<tr>
<td>2011 Volkswagen Jetta</td>
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<tr>
<td>Highway</td>
<td>15 times limit</td>
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<td>Urban (Los Angeles)</td>
<td>25 times</td>
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<tr>
<td>Urban (San Diego)</td>
<td>37 times</td>
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<tr>
<td>Rural (Up and Downhill)</td>
<td>38 times</td>
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<tr>
<td>2012 Volkswagen Passat</td>
<td></td>
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<tr>
<td>Highway</td>
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<td>Urban (San Diego)</td>
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<td>Rural (Up and Downhill)</td>
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U.S. limit
.04 grams/kilometer

Source: Arvind Thiruvengadam, Center for Alternative Fuels, Engines and Emissions at West Virginia University
Volkswagen Emissions

- EPA discovered patches in onboard software.
  - They cut emissions when they detect that an emissions test is running.
  - Altered software in 11 million diesel cars worldwide.
  - “Largest scandal in automotive history.”
Volkswagen Emissions

- Repercussions.
  - Company set aside $20 billion to cover costs of scandal.
    - Not enough.
  - CEO Martin Winterkorn resigned.
    - Other executives resigned or suspended
Volkswagen Emissions

- Repercussions.
  - VW stock fell 35% in one day.

**Investors’ reaction to Volkswagen emissions saga**

- EPA announces fines against Volkswagen, says it cheated on emissions test.
- VW confirms 11 million diesel cars worldwide include "defeat device" software.
- VW CEO Martin Winterkom announces resignation Wednesday morning.
- VW hails sale of certain diesel vehicles; stock is down 15 points by Monday.
- NYC law firm files class action lawsuit on behalf of owners and leasees impacted by "defeat device."
Volkswagen Emissions

- Repercussions.
  - Prosecutions
    - German authorities considering criminal prosecutions against certain VW employees.
  - Threat to German economy
    - VW employs 274,000 in Germany, not counting suppliers.
Volkswagen Emissions

- Repercussions.
  - U.S. settlements
    - $14.7 billion settlement with consumers
    - $1.2 billion settlement with WV dealers.
  - Shareholder lawsuits
    - >1400 lawsuits in Germany alone, seeking $9 billion.
Volkswagen Emissions

- How could this happen?
  - We don’t yet have the inside story, only some clues.
    - 2006 Powerpoint presentation on how to cheat
    - Top management repeatedly rejected employee proposals to reduce emissions, due to cost
    - 2014 memo to CEO
  - A possible rationalization…
In a court filing, the company lawyers, as part of a defense in a shareholder lawsuit, suggest that the discrepancy was common knowledge within the industry. “The vehicles of all manufacturers exceed various emissions limits in normal street use,” Volkswagen lawyers said in a court filing, which was obtained by The Times. They further argued that the differences between road emissions and lab emissions were tolerated by regulators.

Possible rationalization

- On-road emissions are always higher.
  - Cars are designed to perform well in test cycle.
  - Everyone knows this.
- Tampering with software is no different in principle.
  - Just a clever way to achieve same result.
Myths and Misconceptions

- Myth 1: The purpose of ethics is to judge who is good and bad.
Myths and Misconceptions

- **Wrong**
  - Ethics is a *negotiation tool* for working out how we are going to live and work together.
  - It provides the basis for the *social infrastructure* we rely on.
  - Much as *engineering* provides the basis for the *physical infrastructure* we rely on.
Myths and Misconceptions

- **Myth 2:** Society relies primarily on legal enforcement, not ethics.
Myths and Misconceptions

- Wrong
  - Suppose everyone starts running red lights tomorrow morning.
  - There is no way the police can stop it.
  - We rely on voluntary compliance with rules on which we agree. Ethics provides the agreement.
  - Laws and regulations cannot keep up with a complex and fast-moving world of work.
Myths and Misconceptions

- **Myth 3:** We all know what’s right. It’s just a matter of doing it.
Myths and Misconceptions

- **Myth 3**: We all know what’s right. It’s just a matter of doing it.

  - Then why do we disagree all the time?
Myths and Misconceptions

- **Myth 4:** Ethics is just a matter of opinion.
  - There are no objective standards.
  - Only personal values.
Myths and Misconceptions

- **Myth 4:** Ethics is just a matter of opinion.
  - There are no objective standards.
  - Only personal values.

- Try to remember this the next time you are mugged.
Myths and Misconceptions

- Ethics is not about personal values.
  - It’s about **interpersonal** values.
  - The whole point of ethics is to reach consensus.
    - Ethics can’t do its job if it’s purely personal.
Ethical principles

Why we need them
Ethical principles

- We must have principles for resolving issues in an objective way.
  - Otherwise we can rationalize anything.
  - Generalization principle
  - Utilitarian principle
  - Respect for autonomy
Generalization principle
Generalization principle

- Basic premise: We always act for a reason.
  - Every action has a rationale.
Generalization principle

- Basic premise: We always act for a reason.
  - Every action has a rationale.
- So if the reason justifies the action for me...
  - It justifies the action for **anyone** to whom the reason applies.
  - Otherwise, it’s not a reason,
Example - Theft

- Suppose I steal a watch from a shop.
- I have 2 reasons:
  - I want a new watch.
  - I won’t get caught.
  - Security at the shop is lax.
Example - Theft

- So I am making a decision for everyone:
  - All who want a watch and think they won’t get caught should steal one.
Example - Theft

- So I am making a decision for everyone:
  - All who want a watch and think they won’t get caught should steal one.
- But if all do this, they will get caught.
  - The shop will install security.
  - My reasons will no longer apply.
Example - Theft

- I am not saying that all these people actually **will** steal watches.
  - Only that if they did, my reasons would no longer apply.
Example - Theft

- My reasons are **inconsistent** with the assumption that people will act on them.
- I am caught in a contradiction.
  - My reasons imply that these people **should** steal.
  - These same reasons presuppose that they will **not** steal.
Generalization principle

- The principle is:
  - The reasons for an action should be consistent with the assumption that everyone with the same reasons acts the same way.
Example - Cheating

- What is wrong with cheating on an exam?
- My reasons:
  - I will get a better grade.
  - Which means I will get a better job.
Example - Cheating

- Nearly all students have these reasons.
- If they all cheat...
  - Everyone will have a top grade.
  - Good grades won’t get me a better job.
Example – Agreements

- Breaking an agreement violates generalization principle.
  - If I break it merely for convenience or profit.
  - An agreement (or contract) is a mutual promise.
Example – Agreements

- Suppose everyone broke agreements when convenient.
  - It would be impossible to **make** agreements in the first place.
  - And therefore impossible to achieve my purposes by breaking them!
  - The whole point of having an agreement is that you keep it when you don’t want to keep it.
Utilitarian principle
Utility

- Action is a means to an end.
  - You want to achieve some goal.
  - Maybe your ultimate goal is happiness.
  - Whatever it is, let’s call it utility.

Jeremy Bentham
Father of utilitarianism
Utility

- Action is a means to an end.
  - You want to achieve some goal.
  - Maybe your ultimate goal is happiness.
  - Whatever it is, let’s call it utility.

- Then you should try to create as much utility as you can.
  - The “greatest good for the greatest number.”
Utility

- More precisely, we should maximize net expected utility.
  - Multiply probability of each possible outcome by its utility (positive or negative).
  - Take algebraic sum.
Utility

- For example, suppose I listen to loud TV in my hotel room at 2 am.
  - Keeping other guests awake.
  - Why is this unethical?
  - May not violate hotel rules.
Utility

- For example, suppose I listen to loud TV in my hotel room at 2 am.
  - Keeping other guests awake.
  - Why is this unethical?
  - May not violate hotel rules.

- It reduces net utility.
  - Maybe it makes me a little happier.
  - But it substantially reduces utility of other guests.
Utilitarian principle

- An act is ethical only if I can rationally believe that **no other act**...
  - ...creates more net expected utility.
  - ...and **satisfies other ethical principles**.
  - Counts **everyone's** utility.
The underlying argument

- Why is it wrong to cause people (unnecessary) pain?
Why is it wrong to cause people (unnecessary) pain?

- Perhaps because I think pain is inherently bad.
- I should minimize the pain I cause.
- It is the same with positive utility.
Why must we respect only those acts that satisfy other ethical principles?

Because behaviors that have no coherent rationale are **not acts**!

This is how we distinguish **free action** from mere behavior, even through both are determined by physical and biological causes.
Autonomy
Autonomy

- Autonomy = self-law
  - I act autonomously when I freely make up my own mind about what to do, based on coherent reasons I give for my decision.
  - An agent is someone who can act autonomously.
  - Humans are agents, insects are not.
Autonomy

- Fundamental obligation: respect autonomy.
  - This rules out murder, coercion, slavery, etc.
Autonomy

- To make this more precise...
  - An action has the form of an **action plan**.
    - **If** the reasons for my action apply, **then** do it.
    - Example: “If I want to catch the bus, and the bus stop is across the street, and no cars are coming, then cross the street.”
Autonomy

- Coercion does not violate my autonomy if it is consistent with my action plan.
  - I start to cross the street to catch a bus, and you pull me out of the path of a car.
  - This is consistent with my action plan.
  - Not a violation of autonomy.
Coercion does not violate autonomy if there is informed consent.

- My employer tells me I must transfer to another city or be fired.
- This is inconsistent with my action plan.
- But by taking the job, I implicitly agreed to abide by the company’s business decisions.
Autonomy

- Coercion **does** violate autonomy if there is **no informed consent**.
  - My boss insists on a sexual relationship.
  - This is inconsistent with my action plan.
  - By taking the job, I did **not** consent to satisfy the boss’s personal desires.
Coercion does not violate autonomy if it prevents unethical behavior.

- I can stop you from mugging someone.
- This does not interfere with your action plan, because mugging is not an action plan.
  - It has no coherent rationale because it interferes with another person’s autonomy.
  - But my interference must be minimal (interferes with no more than the unethical behavior).
Principle of Autonomy

- It is unethical to adopt an action that I am rationally constrained to believe will interfere with the ethical action plan of at least one other person without informed consent.
  - It is unethical to throw a bomb into a crowd, even though I don’t know which person(s) it will harm.
The Case Studies Reconsidered

Ford Pinto
Volkswagen emissions
Ford Pinto

- The cost-benefit analysis was a legitimate utilitarian calculation.
  - Considered net expected utility, measured in monetary terms.
    - Not just company cost.
  - Failure to fix the defect may well have satisfied the utilitarian principle.
  - But there are two other principles to satisfy!
Ford Pinto

- Failure to fix violates **generalization principle**.
  - Violation of **implied warranty**.
    - There is an implied **agreement** that the product is fit for the purpose for which it is sold.
    - A known **defect** that poses a lethal hazard makes the car **unfit** for transportation.
    - Violation of this agreement, merely for profit or convenience, is contrary to generalization principle.
Ford Pinto

- Failure to fix violates autonomy.
  - Ford was rationally constrained to believe that the defect would cause serious injury or death for at least one person.
    - In fact, many people (as assumed by their cost/benefit analysis).
    - This is violation of autonomy without informed consent.
Failure to fix violates *autonomy*. Why no informed consent?

- True, all car manufacturers are rationally constrained to believe that people will be killed in their cars.
- But customers give informed consent to this danger, because they assume the normal risks of driving.
- A defective gas tank is not normal and therefore not a risk assumed by the customer.
Volkswagen emissions

- No obvious violation of the utilitarian principle.
  - VW engineers might rationally believe that the expense of reducing emissions, and the resulting damage to sales & the company, might outweigh the damage of additional NO\textsubscript{x} in the atmosphere.
Volkswagen emissions

- No obvious violation of autonomy.
  - Additional NO$_x$ in the atmosphere might cause illness or death for some people, but it is not enough to show probability.
  - VW engineers must be rationally constrained to believe this, and they were not.
Tampering with the software appears to be illegal, at least in the US. Violating the law, merely for convenience or profit, is contrary to the generalization principle. Principled civil disobedience has a different analysis. No evidence that this was a motivation.
Volkswagen emissions

- The element of **deception** violates the **generalization principle**.
  - It is true that manufacturers game the system.
    - On-road emissions are greater than in the test cycle.
  - But on-road emissions bear **some relation** to test results.
    - VW’s emissions are **9 to 38 times greater** than in the test.
Volkswagen emissions

- VW therefore **deceived** governments and the public.
  - **Deception** merely for convenience or profit violates the generalization principle.
  - If everyone did it, no one would be deceived, which is **inconsistent** with the **reasons** for the deception.
  - In particular, if all manufacturers used VW’s trick, VW would have been caught, which again defeats its purpose.
Online Self-censorship

- Should a social networking site block or take down offensive/false posts?
Online Self-censorship

- A very high-profile case:
  - An amateurish film, *Innocence of Muslims*, was uploaded to YouTube 1 July 2012.
    - Posted by Nakoula Basseley Nakoula, a Coptic Christian
    - Highly offensive due to negative portrayal of Islam and the Prophet Muhammad.
Online Self-censorship

- Reaction...
  - Protests worldwide.
  - Reportedly 50 deaths, mainly in Pakistan.
Online Self-censorship

- President Barack Obama asked Google (owner of Facebook) to consider taking down the film.
  - But this is not required by U.S. law.
  - Google refused.
  - But removed the video in some countries.
Online Self-censorship

- Google’s position:
  - The post is consistent with company policy.
  - “It is against the Islam religion [sic] but not Muslim people.”
  - As reported in *NY Times*, 14 Sep 2012.
Online Self-censorship

- Two issues that must be distinguished:
  - Should the *government* regulate what appears on *YouTube*?
  - Should *YouTube* regulate what appears on *YouTube*?
- We are looking at the *second* issue.
Online Self-censorship

- A complex issue.
  - We cannot resolve it here.
  - But we can indicate how the principles might apply.
Online Self-censorship

- Apply generalization principle
  - No clear violation.
  - Is there deception (not generalizable)?
    - Deception = causing someone to believe something you know if false.
    - Not obviously deceptive. We don’t expect claims to be true just because they appear on YouTube.
    - Although the video itself could be deceptive.
    - Same argument applies to “fake news.”
Online Self-censorship

- Apply **utilitarian** principle
  - YouTube should delete posts it is rationally constrained to believe cause more harm than good, if this satisfies other principles.
Online Self-censorship

- Objection: The *protestors* are killing people, not Google.

  True, but the utilitarian principle counts all consequences of an action, including those that depend on the choices of other people.
Online Self-censorship

- Objection: it is **hard** to screen videos.
  - About 400 hours uploaded every minute.
  - “Ought implies can.”
  - What about advanced data mining techniques?

- The issue becomes...
  - Does operating YouTube result in more good than harm, even after **best efforts** to remove most egregious posts?
  - Probably.
Online Self-censorship

- Objection: restricting freedom of expression in a Western society, due to harmful content, may **not be generalizable**.
  - Although cartoonish depictions may not be necessary for freedom of expression.
  - As in *Charlie Hebdo* case.
Online Self-censorship

- Respect for **autonomy**.
  - Operating YouTube violates autonomy if...
    - Google executives are rationally constrained to believe that some posts **will inevitably** result in **disabling harm** to persons or their reputation (probability is not enough), even after **best efforts** to remove such posts.
    - A **daunting challenge**, but compare with office bulletin board.
    - For some reason, “anything goes” when we are **online**.
Online Self-censorship

- Respect for **autonomy**.
  - We tend to be wowed by new technology and overlook hazards.
    - Early automobiles were very dangerous to passengers & pedestrians, due to reckless driving.
    - Early X-ray machines electrocuted many patients.
    - DDT was sprayed on children before its health effects were investigated.
    - It took deliberate effort to correct these ethical lapses.
    - Time to do the same with social networking?
Questions? Comments?