



WISCONSIN
UNIVERSITY OF WISCONSIN-MADISON

Ethics & Professional Practice

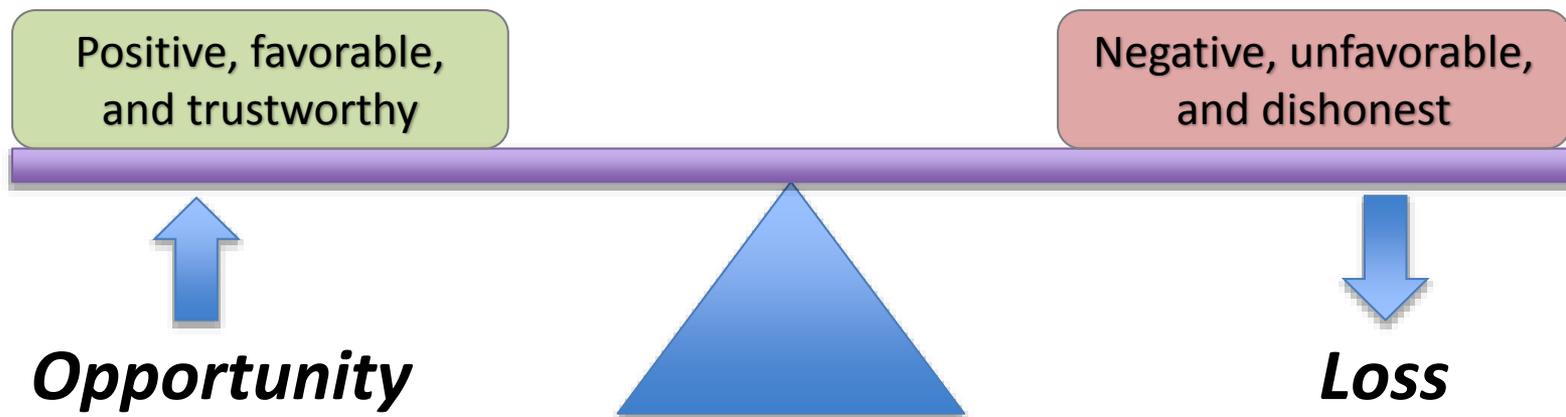
Jeffrey S. Russell, Ph.D., P.E.
Professor of Civil and Environmental Engineering
Jeffrey.Russell@wisc.edu

Outline

- Defining our goal in context
- Defining morals, values, and ethics
- Data on ethics in engineering and construction
- Decisions, behaviors, pressures, and rationalization
- What can we do about it: Practical advice for promoting and engaging in ethical behavior

A reasonable goal

- We'll never be **perfect**.
- But we can think about what it means to **behave ethically**.
- And we can commit to **acting ethically**.
- Making this commitment ahead of time makes it easier to make the **right choice**.



Significant Real-World Events

- 1970-1978 - Ford Pinto – Flammable fuel tanks (180 dead)
- 1981 - Hyatt Regency – Walkway Collapse (114 dead)
- 1984 - Union Carbide – Bhopal disaster (3,783 dead)
- 1986 - NASA – Challenger Shuttle disaster (7 dead)
- 2000 - Firestone – Tire failure and tread separation (271 dead)
- 2005 – Hurricane Katrina levee and floodwall breaches
- 2010 - BP – Deep Water Horizon Disaster (11 dead)
- 2014 - General Motors – Faulty ignition switches (124 dead)
- 2014-2015 - Flint, Michigan – Lead water crisis (15+ dead)
- 2016-2017 - Wells Fargo – 3.5 million fraudulent accounts
- 2015-2016 - Volkswagen – 15 million diesel vehicles recalled
- 2017 – Hurricane Harvey reservoir overflows and levee failures

Unethical Behavior Makes Big Headlines



“Construction workers win payouts for 'blacklisting'”

BBC News - May 9, 2016

“...the blacklist included details of worker's political views, personal relationships, competence, and trade union activities”

“Volkswagen reaches \$1.2 billion settlement with U.S. dealers over emissions scandal”

Los Angeles Times - October 1, 2016

“...up to \$10 billion buying back or repairing about 475,000 vehicles”



“Four more officials charged with felonies in Flint water crisis”

The Washington Post – December 20, 2016

“...exposed children to lead-tainted water and resulted in the death of a dozen people from Legionnaire's disease.”

Even in Wisconsin, Unethical Behavior Routinely Makes the News

“OSHA Fines Wisconsin Construction Company \$105K”

Wisconsin Public Radio - March 16, 2016

“An 18-year-old employee that had only been on the job for three months was killed...”

“Wisconsin Architectural Firm to Plead Guilty and Pay \$3 Million to Resolve Criminal and Civil Claims”

U.S. Department of Justice, Office of Public Affairs - January 6, 2016

“...improper use of foreign materials on construction projects involving federal funds.”

“U.S. Attorney’s Office Reaches Settlement with Miron Construction Company Inc.”

U.S. Department of Justice, Office of Public Affairs - April 16, 2014

“\$4 million settlement... concludes a multi-year investigation by the FBI of Miron’s billing practices in Wisconsin public school construction projects”

When we think of unethical behavior...

Lying

Fraud

Bid rigging

Conflict of
interest

Sexual
harassment

Discrimination

Bribery

Ignoring
public safety

Ethical behavior often goes unnoticed

We tend to assume people are behaving ethically. We don't notice things we think are normal.

“Engineer Does Good Job As Expected” does not make for an exciting headline.



When we think of ethical behavior...

Honest

Professional

Fair

Objective

Self-aware

Focused on
public safety

Willing to
report wrong-
doing

Technically
competent

Responsible

Despite the headlines, most people behave ethically

- Studies on unethical behavior emphasize the prevalence of unethical behavior.
- Buried in all this research is the fact that the majority of people choose to behave ethically.
- Studies consistently show that some people will make choices based solely on self-interest. Even so, the majority choose to act ethically.

Business Case for Ethical Behavior

"A good reputation is valuable, not just with customers but when trying to hire top talent."

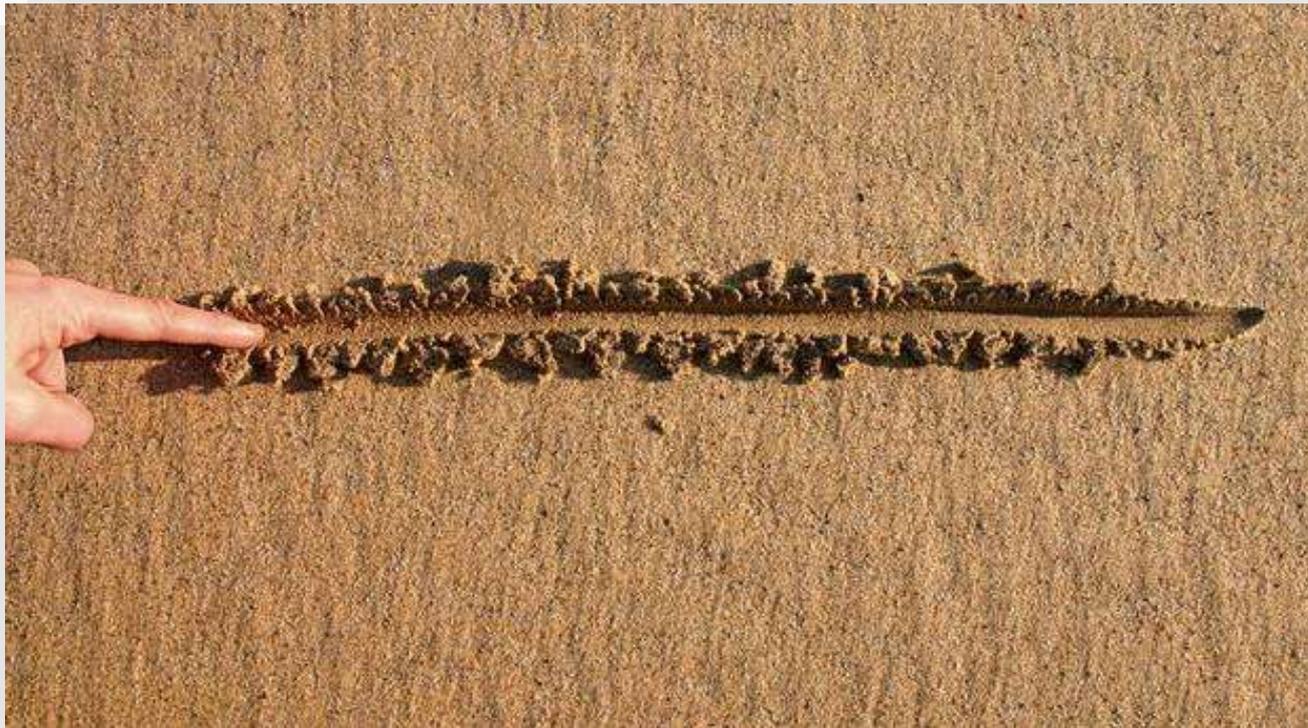
Illegal conduct can be extremely costly.

Good governance pays off financially.

Good corporate social responsibility policies usually (though not always) lead to benefits such as better employee morale, better access to capital, and better reputation with customers."

*“Morality, like art,
means drawing a line somewhere.”*

- Oscar Wilde, Author and Playwright



Where do we draw the line?

...as people

...as employees

...as managers

Individual morals, values, and behaviors...

Organizational culture, standards, and policies

Community standards and practices

Professional codes of ethics and accepted practices

Law

Key questions

- Does morality matter?
- Does ethical practice matter?
- What are the costs and impacts of unethical behaviors?
- Who are my ethical role models?
- Is it my job to make sure peers behave ethically?
- What role does my profession have in ethics?
- What are my expectations of organizations I'm affiliated with, in regard to ethical behavior?



Sources: Onsrud, H. J. (1987). "Approaches in Teaching Engineering Ethics," *Civil Engineering Education—ASCE Civil Engineering Division*, Fall, pp. 11-27.

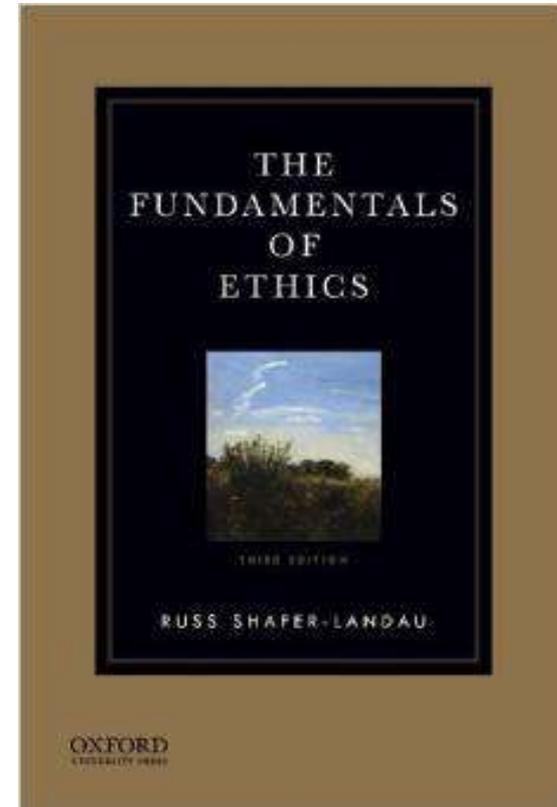
Fleddermann, C. B. (1999). *Engineering Ethics*, 1st ed. Prentice Hall, Upper Saddle River, NJ.

Defining morals, ethics, and values

Ethics: a philosophical perspective

- Defining the nature of our moral duty

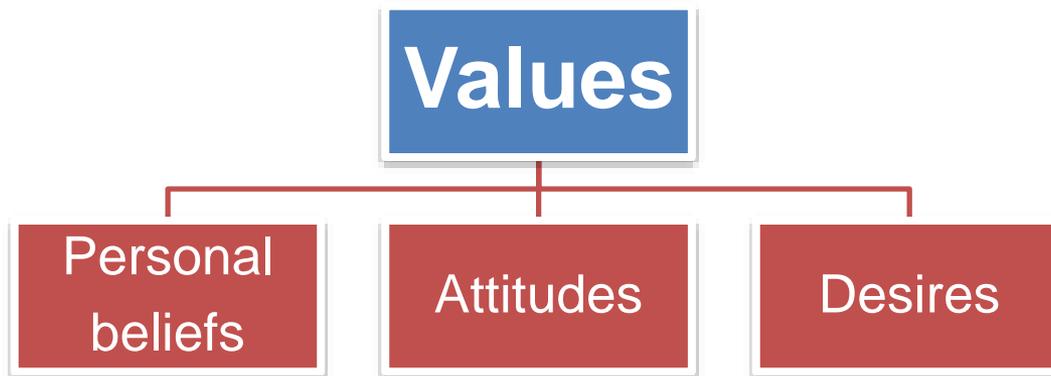
Source: Shafer-Landau, R. (2015). The Fundamentals of Ethics, Oxford University Press, New York, NY.



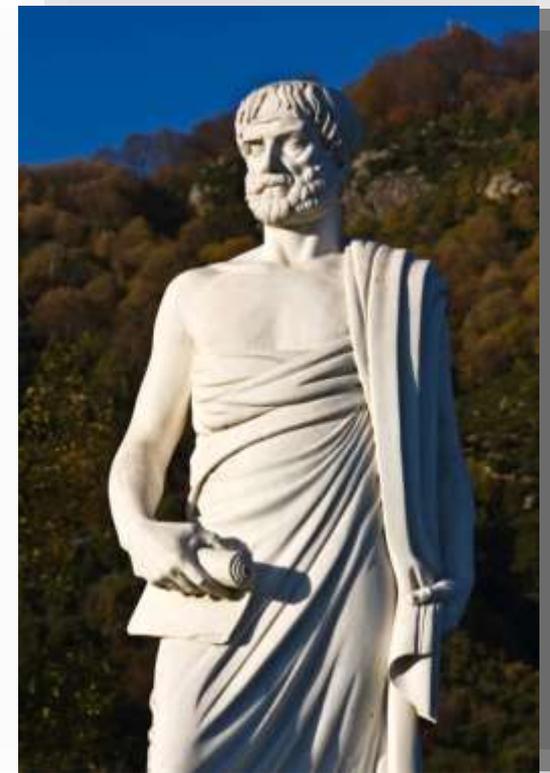
Take assessments and learn more about what influences your own morals and ethics at www.YourMorals.org

Ethics: a philosophical perspective

“Theory or system of behaviors,
guided by **moral value**”



Ethical, preference, stated, and operational



Statue of Aristotle

Ethics: a psychological perspective

- Behavior that is rewarded tends to be repeated. Behavior not rewarded tends to not be repeated.
- Cost-benefit analysis limited by perception of time and its relation to our choices and behavior
 - Self-control issues are most likely to occur when choices and their consequences are separated in time.

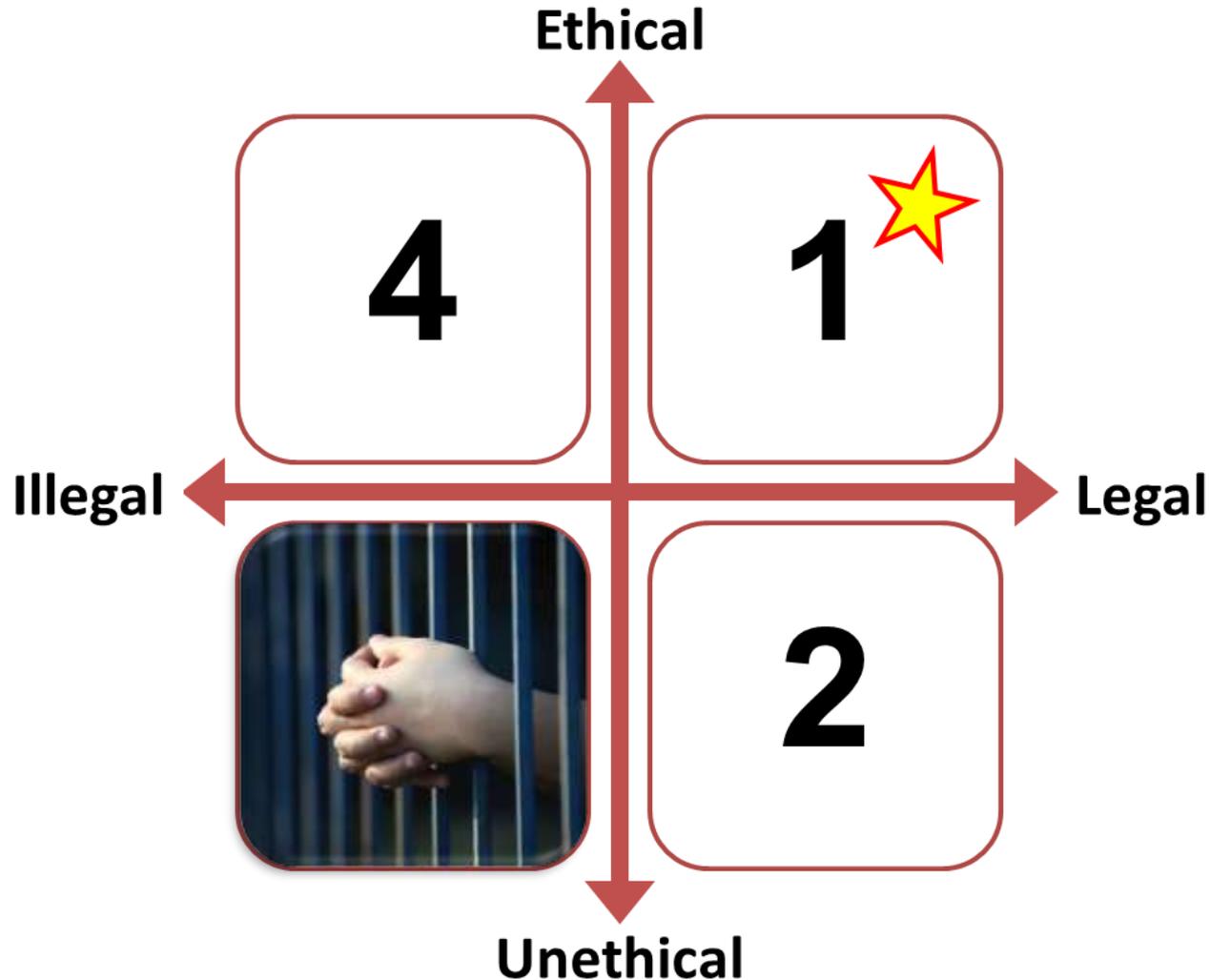


Ethics: a practical perspective

- Ethics involves doing the right thing even when it costs more than you want to pay. It is what we **should** do.



Ethics and the law



**How do you define
ethics?**

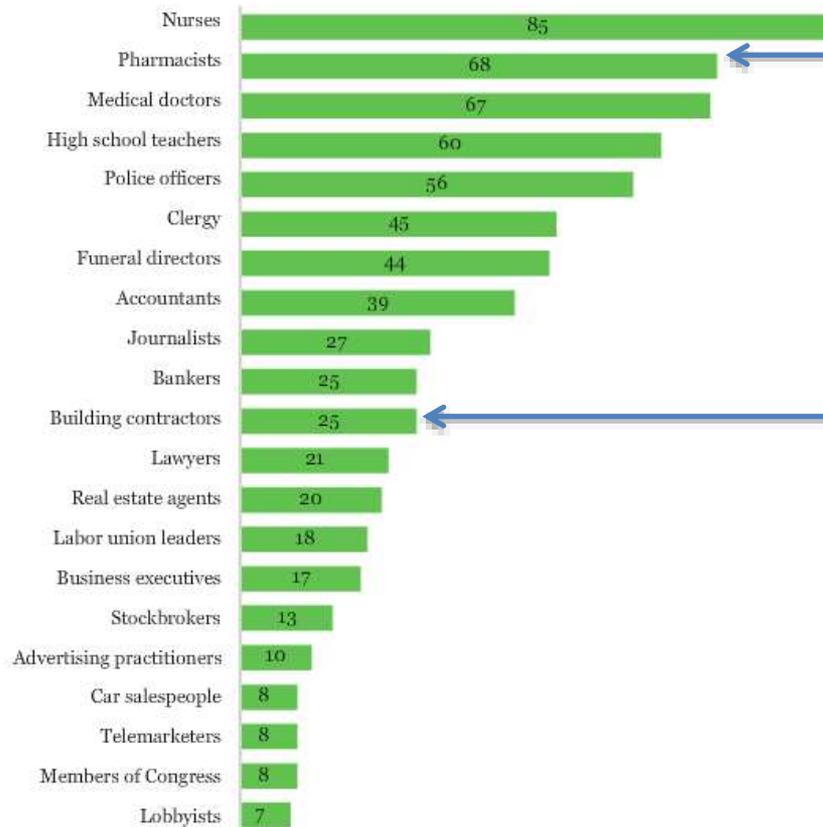
Defining a profession: Data on ethics in engineering and construction

People think engineers are ethical...

Please tell me how you would rate the honesty and ethical standards of people in these different fields -- very high, high, average, low or very low?

Dec. 2-6, 2015

■ % Very high/High

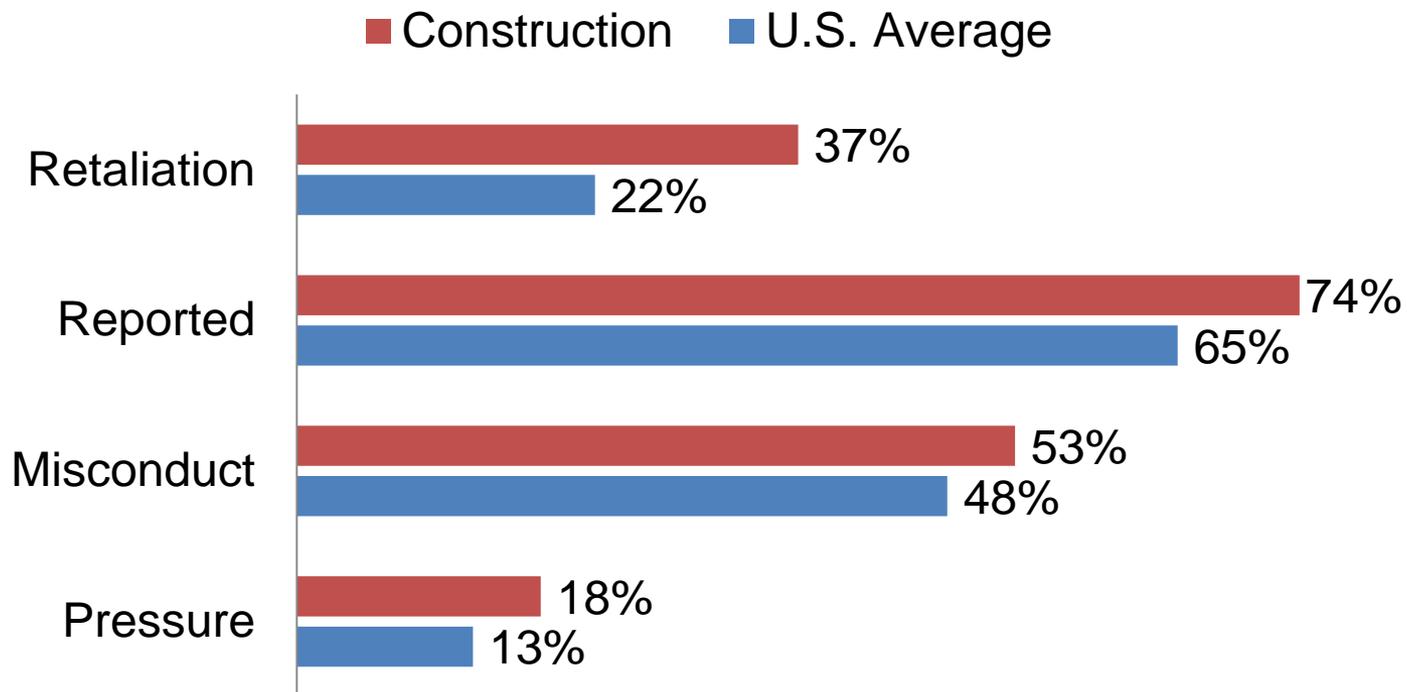


70% of respondents felt Engineers honesty and ethical standards were "High" or "Very High" in a 2012 Gallup Poll.

Similar polling for other industries, including building contractors, was conducted in 2015. (Engineers were not included in the Gallup's 2015 Polling)

...but serious challenges persist

Construction Industry Compared to U.S. Average

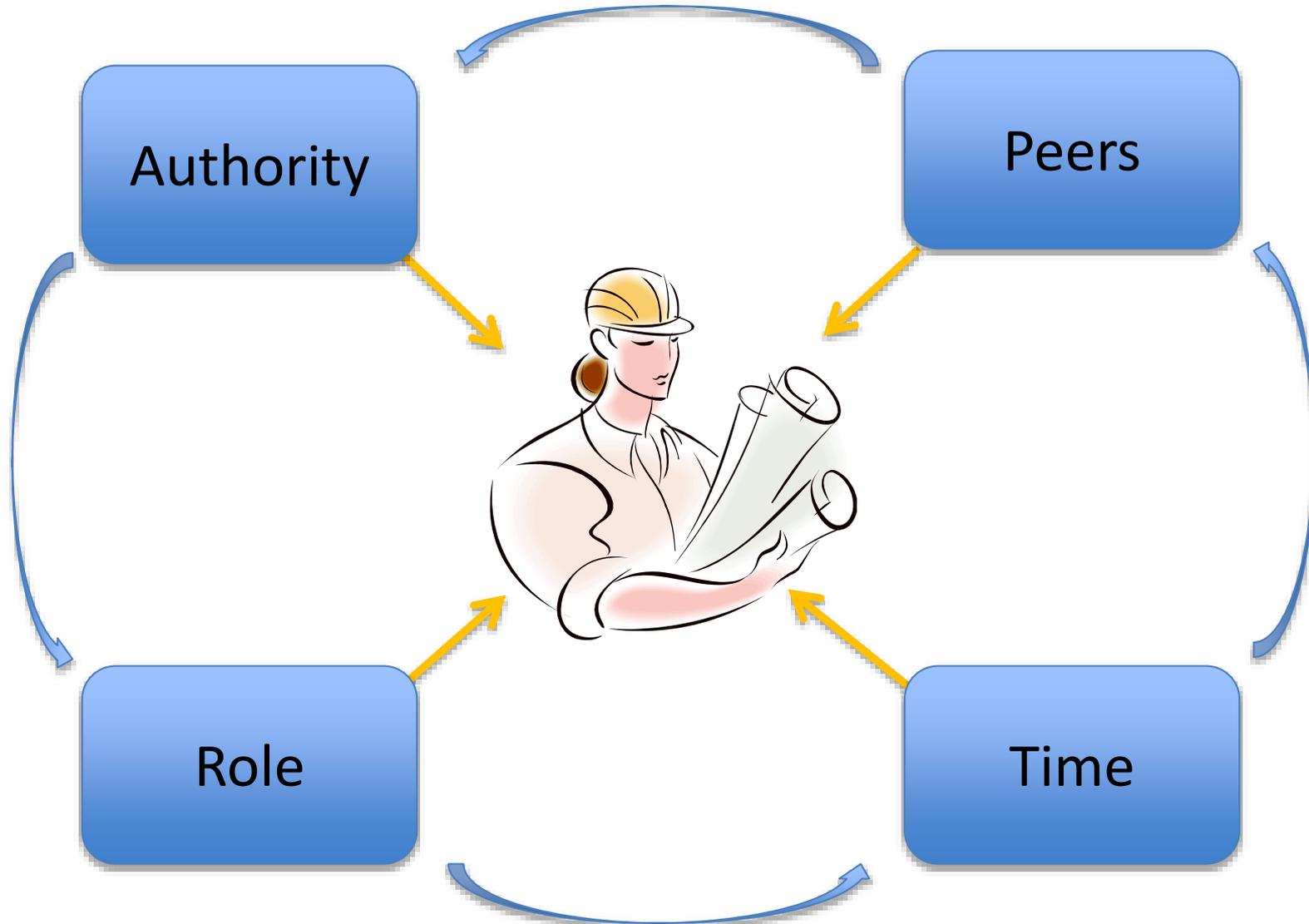


Source: National Business Ethics Survey of the U.S. Construction Industry: Gauging Industry Practices & Identifying Ethics Challenges. Rep. Ethics Resource Center, 2013. [Online] [18 May 2015] page 2.

Why do people make unethical decisions and engage in unethical behaviors?

PRESSURE

Pressures and decision-making



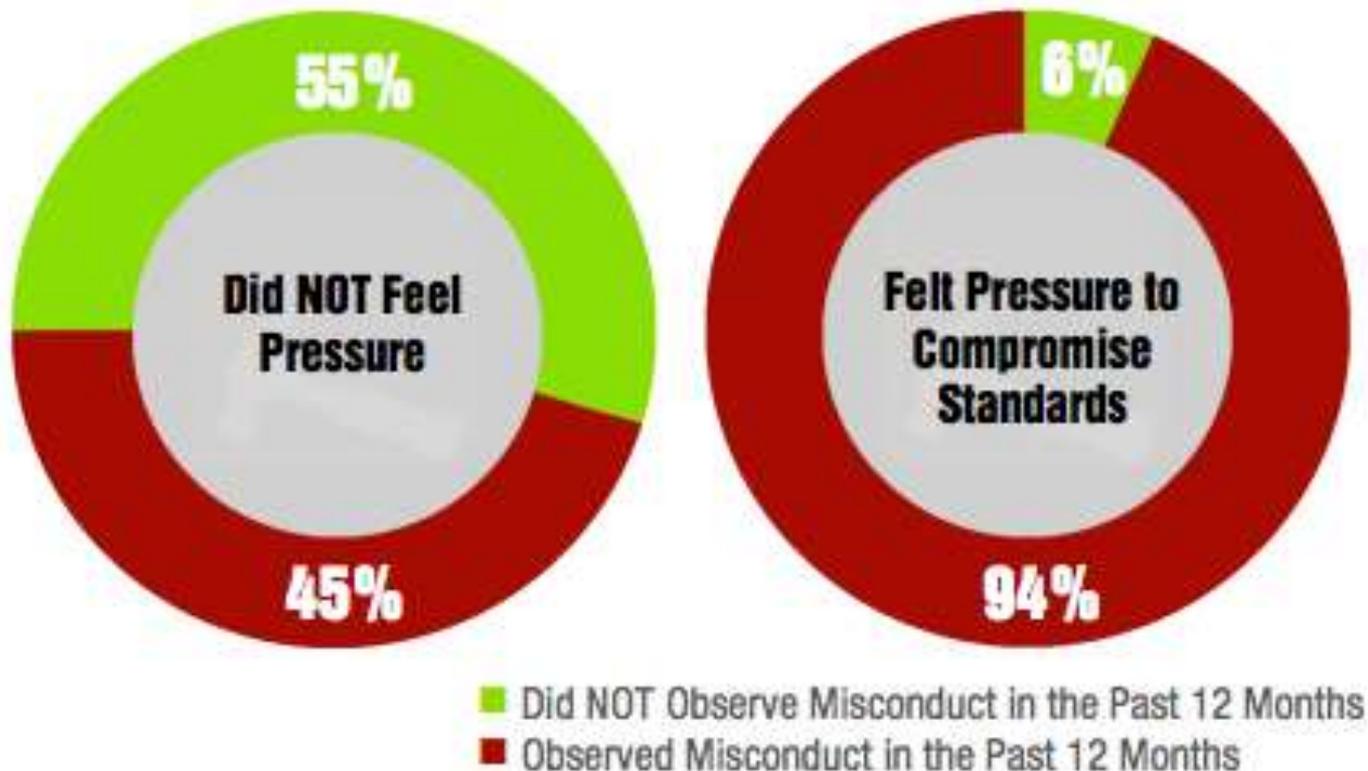
Pressures by intensity

- Adhering to a project timeline
- Trying to keep a project on budget
- Meeting your personal financial obligations
- Ensuring the financial stability and success of your company
- Keeping your job
- Wanting to make your boss look good
- Advancing your career
- Committing safety violations
- Ignoring wrongdoing you witness
- Violating the law

Source: National Business Ethics Survey of the U.S. Construction Industry: Gauging Industry Practices & Identifying Ethics Challenges. Rep. Ethics Resource Center, 2013. [Online] [18 May 2015] page 14.

Pressure is felt across organizations

Employees who feel pressure to compromise their own standards are far more likely to observe misconduct by others in their organization.



Source: National Business Ethics Survey of the U.S. Construction Industry: Gauging Industry Practices & Identifying Ethics Challenges. Rep. Ethics Resource Center, 2013. [Online] [18 May 2015] page 13.

Context matters



Blind Spots



Cognitive blindness

Listen to NPR's *Psychology of Fraud: Why Good People Do Bad Things*



Source: "Psychology Of Fraud: Why Good People Do Bad Things", *National Public Radio*, May 1, 2012.
<http://www.npr.org/2012/05/01/151764534/psychology-of-fraud-why-good-people-do-bad-things>

Rationalizing Risk: Four Stages to Denial

- It won't happen.
- If it happens, it won't happen to me.
- If it happens, and happens to me, it won't be that bad.
- If it happens to me and it's bad, there is nothing I could do to stop it anyway.



Source: Ripley, A. and Kluger J. (2006). "Katrina, One Year Later," *Time*, Aug 28.

The role and influence of social and cultural pressure

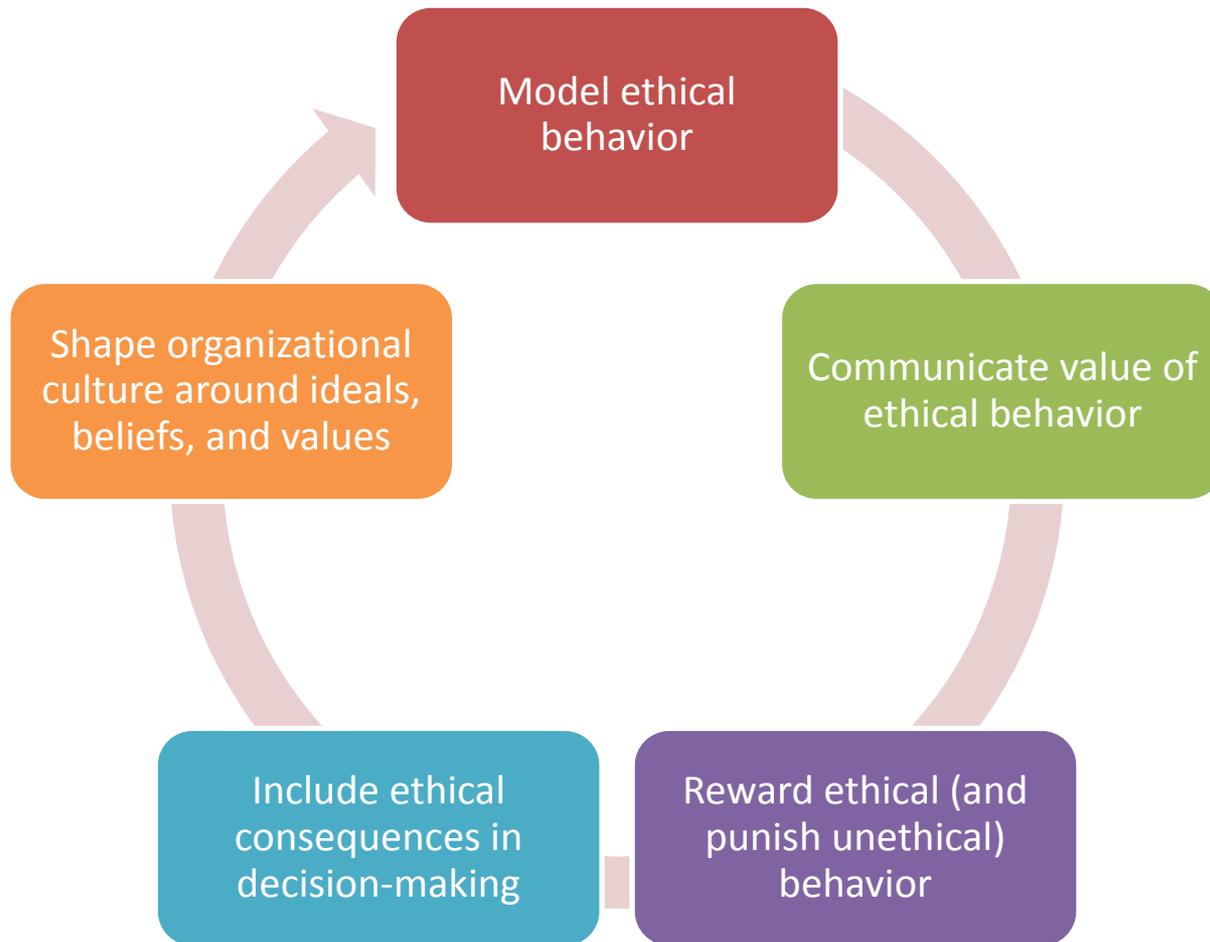
- NASA and the Challenger Disaster
 - “Take off your engineering hat and put on your management hat”
- Ford Pinto
 - Ford's Environmental and Safety Engineering division developed a cost-benefit analysis entitled *Fatalities Associated with Crash Induced Fuel Leakage and Fires*.
 - In the memo Ford estimated the cost of fuel system modifications to \$137 million, but would only save 180 burn deaths and 180 serious injuries per year, a cost to society of \$49.5 million, thus not worth implementing.



What can we do about it?

Practical advice for promoting and engaging in ethical behavior

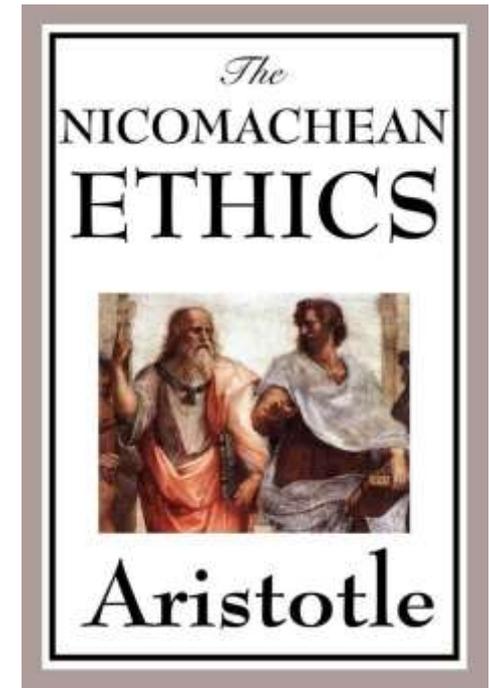
Leadership and Ethical Behavior



Training, experience, practice

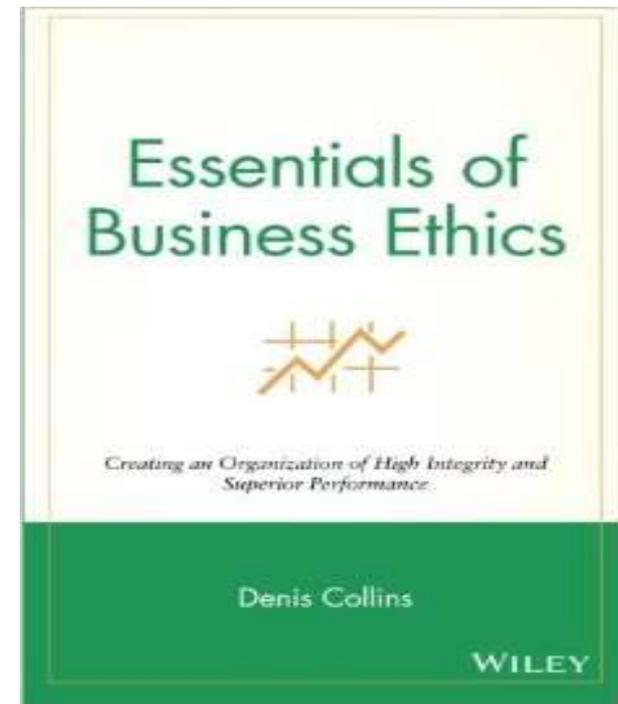
“Excellence is an art won by training and habituation. We do not act rightly because we have virtue or excellence, but we rather have those because we have acted rightly. We are what we repeatedly do. Excellence then is not an act but a habit.”

~Will Durant, paraphrasing Aristotle’s
Nicomachean Ethics



Ethics and Management

- 39% reported manager failed to keep promises
- 37% reported manager did not give credit where credit was due
- 24% reported manager violated employee privacy
- 23% reported manager blamed others to cover up mistakes or minimize embarrassment

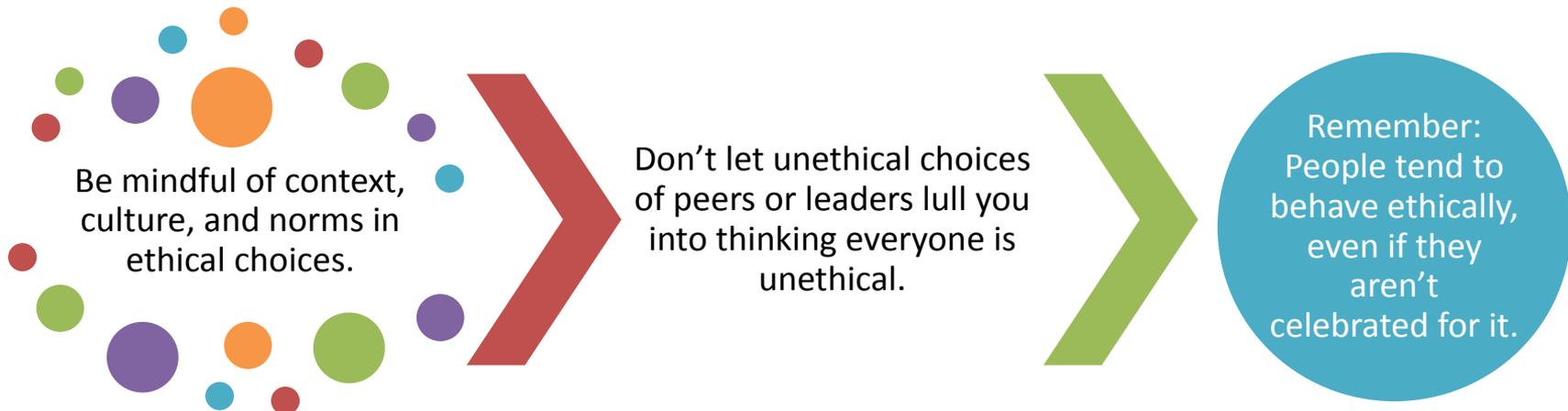


**Note that the majority of managers do behave ethically*

Source: Collins, D. (2009). Essential of Business Ethics-Creating an Organization of High Integrity and Superior Performance, John Wiley & Sons Inc, Hoboken, NJ. page 179.

Free download for UW students available online at: <http://onlinelibrary.wiley.com/book/10.1002/9781118386163>

Unethical behavior is never normal





Manage with ethics in mind

- Set realistic performance goals for your team, and beware of motivations that encourage unethical behavior.
- Treat your team fairly and honestly. A leader's behavior has an enormous effect on a team's behavior.
- A recent study said only 25% of people think their colleagues model good ethical behaviors. Make sure you're in that 25%.

Source: <https://www.gurufocus.com/news/556454/ceb-says-only-25-percent-of-employees-trust-that-their-colleagues-behave-ethically>

Manage with ethics in mind



Don't overwork your team. Exhausted people make unethical choices.



Practices considered unethical in one culture (such as gift-giving) might be OK in another. If something feels wrong, show respect, but speak up.



Pay attention to small slips. Minor transgressions can escalate into full-fledged scandals.

Questions to ask yourself

Is it right?

Is it fair?

Am I hurting
anyone?

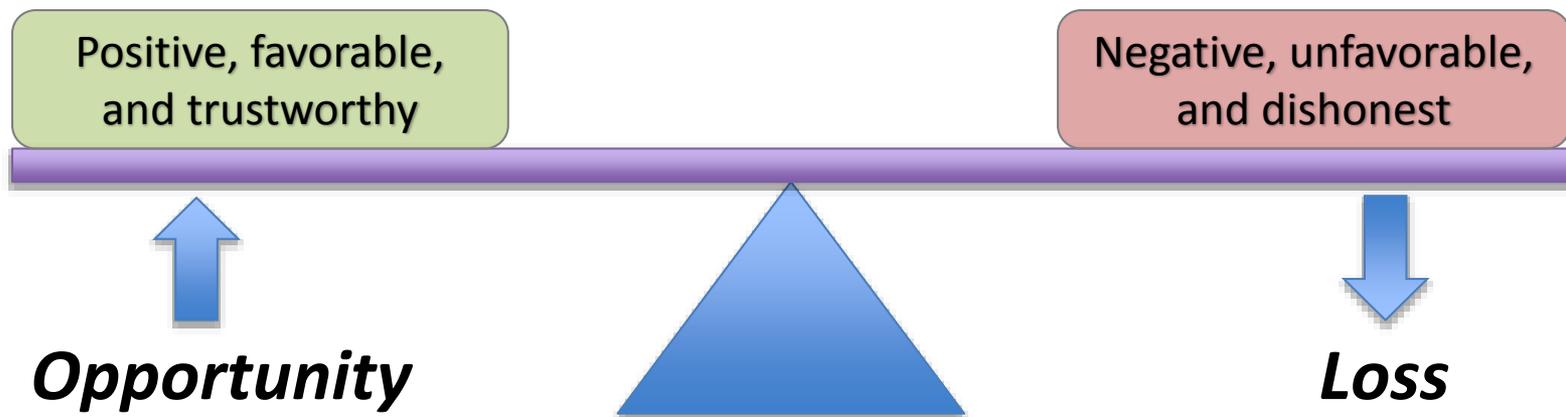
Could I disclose
this to the public
or a respected
mentor?

Would I tell a
family member to
do this?

Does it pass the
“stink” test?

A reasonable goal

- We'll never be **perfect**.
- But we can think about what it means to **behave ethically**.
- And we can commit to **acting ethically**.
- Making this commitment ahead of time makes it easier to make the **right choice**.



Summary

- We'll never be perfect. But we can think about what it means to behave ethically.
- The goal is not to be ethical but to accomplish things ethically. In other words, ethics is not a belief or value system, it is a pattern of behavior.
- We tend to assume people are behaving ethically. We don't notice things we think are normal.
- The majority of people choose to behave ethically.
- Ethics, practically, is about doing the right thing even when it costs you more than you want to pay.
- Ethical behavior can be beneficial and even profitable, because it generates confidence, passion, and trust.

Summary

- The law of effect: Behavior that is rewarded tends to be repeated. Behavior not rewarded tends to not be repeated.
- Laws, rules, and regulations are written while ways of behaving are usually unwritten. Sometimes, ethics and the law may come into conflict.
- Most people think engineers are ethical, but challenges persist.
- People engage in unethical behavior because of pressure that is often felt across organizations.
- Context can be stronger than reason, values, and good intentions. Do not underestimate the “power of the situation.”
- Context and justification can create cognitive blindness that leads us to rationalize unacceptable risk.

Summary

- Leaders, role models, and peers can affect our own behavior, as can organizational culture, context, and socialization.
- Ethical development is both habitual and reflective.
- To the extent ethics is learned, it is learned from experience.
- Ethics are not about the way things are, but about the way they ought to be. Change the real world and the standard.
- Unethical behavior is never normal.
- We can promote ethical behavior by creating ethical environments, setting clear and realistic expectations, rewarding ethical behavior, practicing mindfulness and “moral stretching,” and speaking up when something doesn’t feel right.

Sources

- Anderson, Mary P. (2006). *Daniel W. Mead, Pioneer Educator, Ethicist, and Consultant, Vol. 44, No. 2—GROUND WATER—March–April*, pages 319–322.
- Onsrud, H. J. (1987). “Approaches in Teaching Engineering Ethics,” *Civil Engineering Education—ASCE Civil Engineering Division, Fall*, pp. 11-27.
- Fleddermann, C. B. (1999). *Engineering Ethics*, 1st ed. Prentice Hall, Upper Saddle River, NJ.
- Gallup Polling. (2015). US Views on Honesty and Ethical Standards in Professions [online] Available at:
<http://www.gallup.com/poll/180260/americans-rate-nurses-highest-honesty-ethical-standards.aspx>
- “Federal Prosecutors Investigating Wells Fargo Over Sales Tactics”, *The Wall Street Journal*, September 14, 2016. <http://www.wsj.com/articles/federal-prosecutors-investigating-wells-fargo-over-sales-tactics-1473881424>

Sources

- “FIFA Corruption: Top Officials Arrested in Pre-Dawn Raid at Zurich Hotel” *New York Times*, December 3, 2015.
http://www.nytimes.com/2015/12/03/sports/fifa-scandal-arrests-in-switzerland.html?_r=0
- “Deloitte Brazil unit hit with record fine over audit reports”, *CNBC/Reuters Newswire*, December 5, 2016. <http://www.cnbc.com/2016/12/05/deloitte-brazil-unit-hit-with-record-fine-over-false-audit-reports.html>
- “Designers Face Collapse Fallout”, *ENR Magazine*, December 12, 2016.
<http://www.enr.com/articles/41066-designers-face-fatal-pedestrian-bridge-collapse-fallout>
- “Construction workers win payouts for 'blacklisting'”, *BBC News*, May 9, 2016.
<http://www.bbc.com/news/business-36242312>
- “Volkswagen reaches \$1.2 billion settlement with U.S. dealers over emissions scandal”, *Los Angeles Times*, October 1, 2016.
<http://www.latimes.com/business/la-fi-volkswagen-settlement-20161001-snap-story.html>

Sources

- “Four more officials charged with felonies in Flint water crisis”, *The Washington Post*, December 20, 2016.
https://www.washingtonpost.com/news/energy-environment/wp/2016/12/20/four-more-officials-charged-with-felonies-in-flint-water-crisis/?utm_term=.bcc1ef130cd7
- “Hundreds of California homes, buildings used plans drafted by 2 phony engineers, say authorities”, *Fox News*, February 9, 2016.
<http://www.foxnews.com/us/2016/02/09/hundreds-california-homes-buildings-used-plans-drafted-by-2-phony-engineers-say-authorities.html>
- “Former CEO Indicted for Masterminding Conspiracy Not to Compete for Oil and Natural Gas Leases”, *U.S. Department of Justice, Office of Public Affairs*, March 1, 2016. <https://www.justice.gov/opa/pr/former-ceo-indicted-masterminding-conspiracy-not-compete-oil-and-natural-gas-leases>
- “OSHA Fines Wisconsin Construction Company \$105K”, *Wisconsin Public Radio*, March 16, 2016. <http://www.wpr.org/osha-fines-wisconsin-construction-company-105k>

Sources

- “James Cape & Sons alerted authorities to alleged bid rigging”, *Associated Press*, January 15, 2004. http://journaltimes.com/news/state-and-regional/james-cape-sons-alerted-authorities-to-alleged-bid-rigging/article_33c0c341-11b5-5f5c-82dc-616cd85109c4.html
- “Wisconsin Architectural Firm to Plead Guilty and Pay \$3 Million to Resolve Criminal and Civil Claims”, *U.S. Department of Justice, Office of Public Affairs*, January 6, 2016 . <https://www.justice.gov/opa/pr/wisconsin-architectural-firm-plead-guilty-and-pay-3-million-resolve-criminal-and-civil-claims>
- “U.S. Attorney’s Office Reaches Settlement with Miron Construction Company Inc.”, *U.S. Department of Justice, Office of Public Affairs*, April 16, 2014. <https://www.justice.gov/usao-edwi/pr/office-united-states-attorney-reaches-settlement-miron-construction-company-inc-and>
- Shafer-Landau, R. (2015). *The Fundamentals of Ethics*, Oxford University Press, New York, NY.

Sources

- Lawson, William D. (2004). “Professionalism: The golden years,” *ASCE J. Prof. Issues Eng. Educ. Pract.*, 130(1). pp. 26-36.
- “Psychology Of Fraud: Why Good People Do Bad Things”, *National Public Radio*, May 1, 2012.
<http://www.npr.org/2012/05/01/151764534/psychology-of-fraud-why-good-people-do-bad-things>
- *National Business Ethics Survey of the U.S. Construction Industry: Gauging Industry Practices & Identifying Ethics Challenges*. Rep. Ethics Resource Center, 2013. pgs. 2, 13, 14. [Online] Available at:
<http://www.mcakc.org/wp-content/uploads/2013/07/National-Business-Ethics-Survey-of-the-Construction-Industry.pdf> [accessed May 15, 2015]
- Durant, W. (1926). *The Story of Philosophy*. New York, NY: Simon and Schuster, p.98 para Aristotle (350 B.C.E.). *Nicomachean Ethics*. Book 1.

Sources

- Collins, D. (2009). *Essential of Business Ethics-Creating an Organization of High Integrity and Superior Performance*, John Wiley & Sons Inc, Hoboken, NJ. page 179. [Online] Available at:
<http://onlinelibrary.wiley.com/book/10.1002/9781118386163>
- Robison, J. (2008). *Evaluating Your Business Ethics: A Q&A with Max H. Bazerman*, Gallup Business Journal. [Online] Available at:
<http://businessjournal.gallup.com/content/107527/evaluating-your-business-ethics.aspx>
- <http://ethicalsystems.org>
- Source: Nash, L. (1981), “Ethics without the Sermon”, *Harvard Business Review*, 59, pp. 79-90.
- Ripley, A. and Kluger J. (2006). “Katrina, One Year Later,” *Time*, Aug 28.
- Brooks, David (2015). *The Road to Character*, Random House, New York, NY.

Sources

- Parrish, Steve. “The Profit Potential in Running an Ethical Business,” *Forbes Magazine*, February 4, 2016. [ONLINE]
<https://www.forbes.com/sites/steveparrish/2016/02/04/the-profit-potential-in-running-an-ethical-business/#7ce525d57687>
- Duggan, Tara. “How Do Ethics Affect the Financial Results of a Company?,” *Houston Chronicle*. [ONLINE] <http://smallbusiness.chron.com/ethics-affect-financial-results-company-51280.html>
- Martin, Mike W. (2000), *Meaningful Work: Rethinking Professional Ethics*, Oxford University Press, New York, NY, pp. 142.
- Chussil, Mark, (2016), “Keep a List of Unethical Things You’ll Never Do,” *Harvard Business Review*, May 30, 2016. [ONLINE]
<https://hbr.org/2016/05/keep-a-list-of-unethical-things-youll-never-do>
- Barnes, C. M., Schaubroeck, J., Huth, M., & Ghumman, S. (2011). “Lack of sleep and unethical conduct.” *Organizational Behavior and Human Decision Processes*, 115, 169–180.

Sources

- Shalvi, Shaul, Ori Eldar, and Yoella Bereby-Meyer. "Honesty Requires Time (and Lack of Justifications)." *Psychological Science* 23, no. 10 (October 2012): 1264–1270.
- Haslam, Alexander S. and Reicher, Stephen. (2007). Beyond the Banality of Evil: Three Dynamics of an Interactionist Social Psychology of Tyranny *Personality and Social Psychology Review* [ONLINE]
[http://www.bbcprisonstudy.org/includes/site/files/files/2007%20PSPB%20Banality%20of%20evil\(1\).pdf](http://www.bbcprisonstudy.org/includes/site/files/files/2007%20PSPB%20Banality%20of%20evil(1).pdf)

Additional Resources

Ethics & Compliance Initiative



www.ethics.org

Ethical Systems



www.ethicalsystems.org/

The (Honest) Truth About Dishonesty



RSA Animate - The Truth About Dishonesty, feat. Dan Ariely
https://www.youtube.com/watch?v=XBmJay_qdNc

A practical consideration



Questions & Comments?

Contact me:

jeffrey.russell@wisc.edu

Thank you!