

*Chemistry 3250*  
*Introduction to Ethics*

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Note: This lecture was heavily influenced by Jeffrey Kovac, *The Ethical Chemist* (Pearson, Upper Saddle River, NJ, 2004).

## *Ethics as a practical matter*

- ▶ Ethical decisions come up all the time in professional life.
  - ▶ Decisions regarding the careers of subordinates/students
  - ▶ Decisions involving the disclosure (or not) of information
  - ▶ Decisions regarding acceptable risk to yourself or to others
  
- ▶ One way or another, you're going to make ethical decisions.
  
- ▶ Ideally, you would apply a calm, rational process to situations that are often anything but calm and rational.

## *How do you decide what is right?*

- ▶ There is a common pool of very basic values that most of us hold.
- ▶ These values sometimes conflict, but even when they don't, the common core only covers certain clear cases, as Gass calls them.
- ▶ It's useful to have a couple of things to help us find our way through ethical decisions:
  - ▶ A process for working our way through ethical problems
  - ▶ A set of principles we apply to resolve these problems

## *Ethical principles and ethical theories*

- ▶ Ethical principles can come from two sources:
  - ▶ Innate or strongly ingrained principles widely shared within a society
  - ▶ Ethical systems or theories that provide overarching principles
- ▶ Ethical theories attempt to convert ethical questions into logical questions by providing principles from which ethically correct behavior can be deduced.
- ▶ Ethical theories are limited and, pushed to their limits, can often generate results that run contrary to most people's sense of what is right.
- ▶ Knowing several ethical theories can however help us phrase questions which will allow us to see our way through an ethical problem.

## *Utilitarianism*

**Greatest happiness principle:** “actions are right in proportion as they tend to promote happiness; wrong as they tend to produce the reverse of happiness.” (J. S. Mill, *Utilitarianism*, 1861)

- ▶ It has sometimes been said that most people, if asked how they make ethical decisions, will eventually come up with something like the greatest happiness principle.
- ▶ We don't have a “calculus of happiness” that would reduce the greatest happiness principle to a calculation, so a great deal of judgement is required in applying this principle.
- ▶ Also, how do we balance harm done to some against happiness gained by others? Should we only maximize overall happiness, or are additional constraints required?

- ▶ The broader good or broader harm are hard to account for (e.g. long-term decay in ethical standards if we allow utilitarian considerations to erode the force of these standards).
- ▶ Hard to hold people to absolute responsibilities in a utilitarian system.
- ▶ Nevertheless, utilitarian considerations are important in ethical decision making since they emphasize consequences to individuals:
  - ▶ **Whom** does a certain decision benefit or harm?
  - ▶ **How much** benefit/harm does each individual affected derive from a certain course of action?
  - ▶ How do my decisions affect me?While we would all like to think that we can be perfectly altruistic and only consider how our decisions affect others, utilitarianism includes *everyone* in the overall balance or happiness, including the person making the decision.

## *Deontological theories*

- ▶ Deontology is the study of moral obligations. The word derives from a Greek root meaning “that which is obligatory” (Webster’s New Collegiate Dictionary, G. & C. Merriam, 1981).
- ▶ Deontological **theories** posit that we have certain moral obligations which override our evaluation of potential consequences.
- ▶ Deontological **codes** are codes of conduct to which members of a certain group are to be held. This includes most criminal law, religious law, but also student codes of conduct, professional codes of conduct, etc.

- ▶ Deontological theories fall into one of two categories:
  - Received principle theories in which principles derived from a particular source (e.g. religious texts) are asserted to create absolute obligations  
While not strictly “theories”, deontological codes create obligations which are often interpreted in an absolute way.
  - Guiding principle theories in which moral obligations can be derived from one guiding principle

## *The Golden Rule*

*The simplest guiding-principle deontological theory*

- ▶ Perhaps the simplest deontological theory is the Golden Rule:  
*Do unto others as you would have them do unto yourself.*
- ▶ Versions of this rule appear in the texts of most religions.
- ▶ Like utilitarianism, the Golden Rule encourages you to think about consequences to others.  
Putting yourself in their shoes, as the Rule encourages you to do, may make those consequences more vivid and discourage rash actions.
- ▶ Hard to reconcile with (e.g.) the responsibility to disclose wrongdoing

## *The Categorical Imperative*

*A powerful guiding-principle deontological theory*

- ▶ From I. Kant, *Foundations of the Metaphysics of Morals* (1785), translated by L. W. Beck (Bobbs-Merrill, Indianapolis, 1959):

*Act only according to that maxim by which you can at the same time will that it should become a universal law.*

- ▶ Can be used to justify strict codes of conduct
- ▶ Takes consequences out of the picture completely  
This can be either a strength or a weakness, according to perspective and/or situation.
- ▶ Leads to an important question:  
What would happen if everybody took the course of action I am considering?

## *Gass' Case of the Obliging Stranger*

- ▶ W. H. Gass, The case of the obliging stranger, *Phil. Rev.* **1957**, 66, 193–204.
- ▶ Points out that there are *a priori* ethical truths, i.e. that some ethical truths, of which there are **clear cases**, do not derive from a more fundamental principle, but rather that claims to have found a fundamental principle of ethics had better lead to correct conclusions in these cases.
- ▶ To put it another way, Gass highlights the fact that ethical theories are *a posteriori* constructs which provide convenient generalizations, and perhaps even useful methods of thinking about ethical problems, but cannot be taken as infallible bedrocks for ethical reasoning.

## *The role of deontological codes*

- ▶ For professionals, an additional complication is the existence of deontological codes.
- ▶ These may be imposed by a professional society, employer or institution.
- ▶ There are generally strong sanctions (up to and including exclusion from the society, place of employment, or institution) for breaching a deontological code.
- ▶ Deontological codes are generally **not arbitrary**. They are designed to protect the group and/or society at large.
- ▶ What happens if a deontological code conflicts with other ethical considerations?
- ▶ A useful question: Could I justify a breach of the deontological code to colleagues/superiors in the organization?

## *Analyzing ethical problems*

- ▶ Start by **defining the problem**.
  - ▶ What has happened to trigger an ethical problem?
  - ▶ What are the ethical issues involved?
  - ▶ Who is involved?
  - ▶ What are the relationships between the people involved?
  - ▶ What potential conflicts are there between ethical principles and/or deontological requirements?
  - ▶ What potential consequences are in play for all involved?
  
- ▶ Generate a **list of possible alternative actions**.  
Note that this list may sometimes include “Do nothing.”

- ▶ **Analyze the ethical merits** of the alternatives identified. Use a combination of your understanding of deontological obligations of all players, impact on others and on yourself, ethical principles, your own internal sense of what's right, common sense. . .
  
- ▶ **Conclude:** Pick the best (or least bad) alternative after comparing the ethical merits of various options.