

Moral Concepts And Theories

(ESSAY #3)

Introduction

In considering issues in engineering ethics, a distinction is sometimes made between morals and ethics. When this distinction is made, the term **morals** is taken to refer to generally accepted standards of right and wrong in a society and the term **ethics** is taken to refer to more abstract principles which might appear in a code of professional ethics or in a textbook in ethical theory. However, the terms **moral philosophy** or **moral theory** would refer to a set of abstract moral principles as appropriately as the term **ethics**, so it may be more practical to use the words interchangeably. Both of the terms refer to standards of right conduct and the judgments of particular actions as right or wrong by those standards.

Moral and ethical statements must be distinguished from two other types of statements, namely those in etiquette and those in law. Referring to a rule of etiquette, we might say, "You should compliment your host or hostess after a good meal." Here we have used the word should, and this suggests that we have made an ethical judgment. However, there are at least two important differences between statements of etiquette and statements of ethics. First, moral and ethical statements are generally thought to have greater importance than statements of etiquette. Most of us probably feel that a violation of a rule such as "An engineer should protect the safety of the public" is much more serious than a violation of a rule such as "You should not eat peas with your knife." A second difference between ethics and etiquette is that ethical norms cannot be changed by books of rules or by authoritative bodies, but rules of etiquette may be.

Moral and ethical statements should also be distinguished from laws. The fact that an action is legally permissible does not establish that it is morally and ethically permissible. Suppose an engineer discovers that her company is emitting a substance into the atmosphere that is not currently regulated by the Environmental Protection Agency (EPA). Suppose further that the engineer reads some scientific literature that indicates the pollutant causes respiratory problems and may cause other more serious health problems. Should she reveal this information to the EPA? Whatever your views on this matter, it is clear that the mere fact that emitting the substance is legally permissible does not also mean it is morally permissible to do so. It does not settle the question as to what the engineer should do.

Just as legality does not imply morality, illegality does not imply immorality. It would be illegal to introduce very small amounts of a chemical into the atmosphere if doing so violates EPA standards, but one might make a good argument that there are cases in which it is not immoral to do so and that in fact the EPA standards in this case are too strict and fail to balance costs and benefits in a rational way.

If we wanted to draw a Venn diagram of the relationship between law and morality, it might look like the diagram on the following page. The shaded area covers those actions that are both legal and moral. The light areas cover those actions that are legal and not moral or that are moral and not legal.

Three Kinds of Statements in Ethics

People often think of ethical reasoning as fuzzy and imprecise, and it is certainly true that the qualitative thinking that goes on in ethics is not susceptible to the same kind of precision that can be achieved in mathematics. Often,

however, ethical thinking is unnecessarily confused, and much of this confusion is due to the failure to distinguish between three kinds of statements that are made in ethics.¹

Factual statements are either true or false and refer to claims that can be confirmed or refuted by empirical observation. The claim that a product will produce accidents because of faulty design is a factual claim, although it can be crucial in a moral debate. For example, two engineers could agree on the moral principle that unsafe products should not be put on the market, but disagree as to whether Product X will produce accidents. We might describe this disagreement as to whether Product X should be marketed as a disagreement over professional ethics, but actually the disagreement hinges on different factual claims. Factual claims can be as controversial as moral claims, and it is absolutely crucial in a moral disagreement to first determine whether there is a disagreement over facts.

Conceptual statements are statements about the meaning or scope of certain terms. Discussions of conceptual issues can be very important in ethics. The best-known example of a conceptual issue is the question whether the fetus should be considered a human person. This depends on how we define the term person, and many people believe the abortion debate hinges on this definition. The definition cannot be settled by appeal to facts about the fetus, although these facts may influence our definition of person.

To take an example from engineering, let us suppose an American engineer is employed by a company that is doing business in a foreign country. A representative of a foreign firm tells the engineer that his product will not be considered for purchase unless the representative is given a substantial payment. Since the representative is not a government official, the payment would not be illegal under the Foreign Corrupt Practices Act. The engineer believes that paying bribes is wrong, but considers this to be paying extortion rather than a bribe. He defines bribery as paying money to get a person to give special (and inappropriate) consideration to his product. He defines extortion as demanding money to do what one ought to (do or not to do) anyhow. Thus paying money to get the representative to consider your product, when he ought to consider it anyhow, is paying extortion, not bribery. Since he believes bribery is wrong but paying extortion is not wrong, he pays the fee to the representative.

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Venn Diagram on the Relationship of Law and Morality

In this example, you could disagree with the engineer's moral evaluation of bribery and extortion. You could also disagree with him regarding his definitions of bribery and extortion. Both of these disagreements might be called moral disagreements in a broad sense, but only the second is a moral disagreement in the strict sense. The first kind of disagreement is a conceptual disagreement. Thus we have a wider and narrower sense of the term moral.

Moral statements are statements that something is right or wrong. There can, of course, be disagreement over moral statements. We have just mentioned an example of a genuine moral disagreement, namely the disagreement over whether it is wrong to pay extortion. There are many other examples of genuine moral disagreements. For example, some people may not believe it is wrong to pay bribes in a country where this practice is generally accepted. Engineers may disagree over the morality of killing civilians, so that one engineer could work on a particular defense contract in good conscience and another could not. You can probably think

of many other areas where two people can have genuine moral disagreements.

In discussing factual disagreements, appeal is made to factual or empirical considerations. In considering conceptual disagreements, arguments are presented about the appropriateness of one definition as opposed to another. In evaluating moral disagreements, appeals are made to broader and more basic moral principles. These principles are often organized into moral theories.

Moral Theories

In making judgments about right conduct, most of us recognize the value of moral consistency. The requirements of consistency take several different forms. (1) If a consulting engineer breaks confidentiality with her client because it is in her interest to do so but condemns another engineer for doing the same thing, we are inclined to say that she is inconsistent. She is not applying the same standards to herself that she expects everyone else to follow. (2) We also expect a person to be consistent with her own moral standards. If she keeps strict confidentiality one time and breaks it another time, even when there is no important difference between the two cases, we again say that she is inconsistent. (3) Finally, our moral beliefs must be consistent with one another. Our moral beliefs about confidentiality must be consistent with our beliefs about bribery, whistle blowing, and the environment. Ultimately, we must know how our moral beliefs in professional ethics relate to our beliefs about abortion, the moral justification of racial and sexual quotas in hiring, euthanasia, and any other moral issue.

One way to think consistently in this way is to have a moral theory, i.e. a set of moral principles which systematically link moral beliefs to one another by means of a set of coherent moral principles. A theory in any area offers the opportunity to define terms in uniform ways and to relate a set of ideas to one another in a consistent manner. Moral theory does the same thing with moral ideas.

A moral theory can be conveniently divided into three parts. First, there is a moral standard, a criterion or test of what is right or wrong. It has the general form:

"Those actions are right that possess characteristic X."

Thus, those and only those actions are right that possess some characteristic X. We could fill in X by a phrase such as, "producing the greatest total amount of human well-being" or "equally respect the humanity of each person." Obviously these expressions need further definition. What do we mean by human well-being? What do we mean by respect for the humanity of each person? These questions would have to be answered in an adequate moral theory.

Second, moral principles serve to categorize different types of actions as right or wrong. Moral principles have the following form:

"Those actions of type Y are right (or wrong)."

Such actions are right because they conform to the moral standard by possessing characteristic X or wrong because they fail to conform. Examples of moral principles would be, "Bribery is wrong" and "Killing innocent people is wrong." These practices might be wrong because they fail to promote human well-being or because they fail to respect the humanity of each person. In any case, they serve to show the implications of the moral standard for a broad class of actions.

Third, moral judgments are statements about the rightness or wrongness of particular actions. Moral judgments

have the following form:

"Action Z is right (or wrong)."

Examples of moral judgments would be "John should not have bribed the foreign official to buy his product" or "John should not have agreed to work on the defense contract" or "Jane was right to have refused to sign that design." Moral judgments apply moral standards or moral principles to specific situations. They are thus the ultimate goal of moral reasoning.

Earlier, the need to test our moral views for overall moral consistency was given as one of the driving forces behind the search for a moral theory. From this standpoint it would be desirable to have a single moral theory in which all of our views could be encapsulated. However, moral philosophers have generally concluded that it is not possible to incorporate all of the moral views that are generally accepted in our culture into a single coherent moral theory. Rather, there seem to be two systems of moral concepts that are the most influential, although there are considerable areas of overlap. These two theories are utilitarianism and the ethics of respect for persons. Let us consider each of these.

Utilitarianism

The moral standard of utilitarianism is:

Those actions are right that produce the greatest total amount of human well-being.

Utilitarianism has great intuitive appeal to many people because human well-being seems to be such a natural goal of human endeavor. In order to be plausible, however, utilitarians must define well-being. Yet people define well-being, or what some might call the "good life," in different ways. For some it is physical pleasure, for others financial and professional success, and so forth. How do we resolve these conflicts?

One of the solutions that is most widely accepted by utilitarians is called preference utilitarianism. According to preference utilitarianism, those conditions are promoted that allow each individual within society to pursue happiness as he or she defines it. Each individual may use his or her own preferences as a guide to action. But of course each person must also promote those conditions that allow others to pursue their own preferences. So, from the utilitarian perspective, each person has a double obligation: to maximize his own well-being, however this is defined, but only insofar as this is compatible with promoting those conditions that enable others to maximize their own well-being, however they define it. Only in this way will the utilitarian ideal be realized.

At least two conditions must be met if an individual is to pursue her well-being. First, each individual must have the maximum degree of personal freedom; only in this way can she pursue well-being as she defines it. Second, she must enjoy the basic conditions of existence necessary to realize well-being, however it is defined. The most obvious such conditions are the conditions of physical well-being. For example, nobody can pursue their well-being if they are sick and cannot obtain medical care, or if they are subjected to unsafe working conditions, or are subjected to risk due to toxic emissions. Many non-physical conditions are also required for most people to realize their well-being, such as education and companionship.

A utilitarian analysis of a moral problem consists of three steps.

1. The utilitarian must determine the audience of the action or policy in question--those people who will be affected for good or ill.

2. The positive and negative effects of the alternative actions or policies must be determined.
3. The utilitarian must decide which course of action produces the greatest overall utility.

The utilitarian ideal is a persuasive one and has been very influential in individual morality and public policy in America in the twentieth century. It is an essential perspective in engineering ethics, where technological decisions are often made in terms of cost/benefit or risk/benefit analysis. These types of analysis are simply applications of utilitarianism. However, there are two major drawbacks to the utilitarian perspective on morality.

First, implementation of the utilitarian perspective requires extensive knowledge of facts, and sometimes this knowledge is not available. This is especially evident in the case of cost/benefit and risk/benefit analysis. In order to balance the cost or negative utility of an engineering project, such as the Aswan Dam in Egypt, against the benefit or positive utility, we must be able to calculate the long-term effects of the project on all the members of the audience. This requires an enormous amount of knowledge, some of which we do not have. Insofar as we do not know the long-term positive and negative consequences of an action or policy, we do not know how to evaluate it from a utilitarian perspective. Sometimes utilitarians are reduced to a "best guess" approach, and this is obviously not very satisfactory.

The second problem with utilitarianism is that it can lead to injustice for certain individuals. A mining operation that is unsafe and leads to black lung disease for some of the miners may produce more utility than harm, from an overall standpoint, but it may be unjust to the miners themselves. Maximizing utility at the expense of individuals produces serious ethical problems which utilitarian theory is not well-equipped to handle. The next theory is more satisfying in this regard.

The Ethics of Respect for Persons

The moral standard of the ethics of respect for persons or RP morality can be stated as follows:

Those actions are right that equally respect each human person as a moral agent.

A moral agent is an individual capable of both formulating and pursuing purposes of his or her own and of being responsible for the actions taken to fulfill those purposes. Thus moral agents must be distinguished from things, such as knives or shovels, which exist to fulfill purposes imposed on them by moral agents.

The emphasis on respect for each individual is expressed in the Golden Rule: "Do unto others as you would have them do unto you." This moral maxim is found in one form or another in most major religious traditions. It forces a person to consider others by imaginatively placing himself or herself in the position of other members who could be affected by his or her actions.

The Golden Rule is an excellent rule of thumb in many practical moral deliberations. However, it can lead to seemingly perverse results, sometimes because it seems too permissive and sometimes because it seems too restrictive. Suppose an engineer who has a rather carefree attitude toward danger participates in the design of an automobile which is relatively inexpensive and fun to drive, but whose advantages are purchased at the prices of safety. He might justify participating in the design by saying (quite honestly) he would be willing to drive the car himself. While designing the car might be justified by the Golden Rule, we might still find problems with it from an ethical standpoint. Or perhaps an engineer orders the dumping of small amounts of chemicals into the local river, even though there is some evidence that the material may pose health problems. She justifies her action by

saying, "I fish in the river and eat the fish myself. I would be perfectly willing for other plants to do what our plant does." Her action might be justified by the Golden Rule, but we might wonder about its moral permissibility.

In the above examples, the Golden Rule seems too permissive, but sometimes it seems too restrictive. Suppose an engineer discovers gross incompetence on the part of one of his fellow engineers, but refuses to report him on the grounds that he would not want to be reported (and probably lose his job as a consequence) if he were in a similar situation. Here the Golden Rule seems to prohibit actions that we might consider to be morally permissible or even morally required.

In order to provide a more precise and objective guideline for respecting the moral agency of individuals, some moral philosophers have appealed to a doctrine of rights. A right may be defined as an entitlement to act or to have another individual act in a certain way. Rights serve as a protective barrier, shielding individuals from the unjustified infringements of others. The rights necessary to implement the ethics of respect for persons are the rights to freedom and those physical and non-physical conditions necessary to realize one's well-being as he or she defines it.

In RP morality, these basic rights may not be sacrificed for the greater overall utility. One individual's (or group's) rights may be overridden to protect another individual's (or group's) rights that are considered to be more basic, but not merely to provide greater utility for the other individual or for the group. This is the most important difference between RP morality and utilitarianism.

If an individual's rights may be overridden only to protect a more fundamental or basic right of another individual, those rights that are most fundamental must be known. This requirement calls for a hierarchy of rights. Philosopher Alan Gewirth has proposed a three-tiered hierarchy of rights. The first tier includes the most basic rights, the essential preconditions of action: life, physical integrity, and mental health. The second tier includes rights to maintaining the level of purpose-fulfillment an individual has already achieved. This tier includes the right not to be deceived or cheated, to have one's possessions stolen, to be defamed, or to suffer broken promises. The third tier includes those rights necessary to increase one's level of purpose-fulfillment. It includes the right to such things as property, self-respect, and nondiscrimination.²

To apply RP morality, follow this sequence:

1. Determine the audience of the action or policy. The audience whose rights are affected would ordinarily be the same as the audience under the utilitarian analysis.
2. Evaluate the seriousness of the rights infringements each action will impose.
3. The course of action that produces the least serious rights infringements must be chosen.

Rights-infringements can be measured in three dimensions. First, some rights are more basic than others. A right to life, for example, is more basic than the right to property. Second, an action that abrogates a right altogether is more serious than one that merely limits it. Taking away all of an individual's property, for example, is a more serious rights-infringement than taking away only some of it. Third, there is a difference between an actual and a merely potential rights-infringement. An action that actually produces a disease, for example, is a more serious rights-infringement than one that merely increases the risk of having it.

There are two principal difficulties with RP morality. First, it is sometimes difficult to apply in a way that leads to

a clear conclusion. In some cases, any alternative open to an engineer may involve interference with an individual's or company's rights, and it may not always be clear which rights should have priority. This is especially true if the rights violations are merely potential rather than actual or if the action is only a slight infringement on a right. Suppose a pollutant is introduced into the atmosphere which has been shown to cause mild respiratory problems in some people. However, installing the pollution control devices necessary to stop the emission will be so expensive that the plant may be forced to close and many jobs will be lost in an economically depressed community. What does RP morality tell us to do here? It is clear that the hierarchy of rights is not sufficient to resolve the dilemma. The threat to health might be considered a threat to a basic right, but the threat to this basic right is not an extremely serious one. The threat to economic well-being might be considered a threat to a second-tier right, but the threat to this right is more serious and more certain and may affect a larger number of people. The methodology so far presented does not present adequate grounds for resolving such dilemmas.

A second problem with RP morality is that moral judgments implied by it sometimes appear implausible because they conflict so strongly with overall welfare or utility. Products can always be made more safe with the expenditure of greater amounts of money. Automobiles could be made safer if they cost \$100,000 each, but few people could afford to buy them. The decision to construct cheaper automobiles means that a number of individuals will die who otherwise might not die, so that the basic right to life of these individuals will be violated. Yet most people are probably inclined to believe that the decision to produce cheaper but less safe automobiles is the right one, and this decision is most easily justified from a utilitarian perspective.

Conclusion

Our review of the two most important moral theories leads to the following conclusions.

First, it is probably impossible to unite all of our moral beliefs into a single coherent theory. Utilitarianism requires us to maximize the total amount of preference satisfaction, even if it means doing an injustice to individuals. RP morality requires us to respect the rights of individuals, even if it means promoting something less than the total amount of preference satisfaction.

Second, given this fundamental divergence between the two theories, it is often best to analyze a complex moral problem from the standpoint of both moral theories. If the two theories converge on the same conclusion, we can have some assurance about the proper course of action. If the two theories do not converge, a decision must be made as to which conclusion has priority. In general, moral philosophers have adopted the view that RP considerations should take priority over utilitarian considerations, except in those instances where the violation of rights is relatively minor.

Third, in addition to conflicts between the two theories, many problems that arise within a given theory are not adequately treated by the theories as they have been presented. These problems fall into two broad categories, which we can call relevance problems and conflict problems. These concepts are discussed in Essay #2.