Resolving Ethical Disagreements

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Resolving ethical disagreements in scientific, technical, and engineering fields is harder or easier depending on the state of the objective information and the quality of the ethical reasoning brought to bear. Objective information includes verifiable factual information about physical phenomena under discussion, the causal processes at work in producing an effect or outcome, and the positive and negative effects of allowing the phenomena to occur or persist. The resources of ethical reasoning include clarity in defining the terms used in moral argument, common moral guidelines, debate through example and counter example, and logical probing of the coherence of arguments.

Current controversies about such questions as the safety of introducing genetically modified organisms into nature, the safety of vaccines, the likelihood of H5N1 or some future strain of avian flu becoming contagious among humans and triggering a pandemic, or HIV treatments involve a mix of ethical and factual disagreements. Ending the factual disagreements does not guarantee resolution of all the ethical ones, because many ethical arguments do stem from differences of principle. However, working to develop factual knowledge sufficiently well proven to be accepted by many people with different ethical points of view would focus the ethical arguments differently. By reducing the extent of uncertainty about phenomena factual knowledge widely enough shared to set a common "baseline" for debate and narrows the range of plausible claims about the effects of doing or not doing, allowing or prohibiting certain types of conduct. In 1970 there was still honest disagreement about the impact of chloroflorocarbon (CFC) emissions on the stratospheric ozone layer, so arguments that costly policy measures (such as banning all uses of CFCs) must begin immediately were open to the reasonable objection that there is good reason to believe the benefits of the ban to society as a whole would exceed the costs that various members of society will have to bear to make the policy work. When consensus that CFCs were depleting the stratospheric ozone layer became very strong, proposals for costly policies were back on the table because the costs of failing to act appeared to be greater. This did not end arguments about what policy, creating what mix of costs for different individuals and groups, should be adopted, but it did remove "do nothing" from the list of ethically reasonable choices.

Getting consensus on the relevant factual knowledge may not be easy. First, physical facts do not announce themselves; the results of experiments must be analyzed and interpreted, and in interpretation there is wider or narrower leeway for reasoned disagreements among scientists. Second, processes of

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interpretation are vulnerable to several forms of motivated distortion. Research institutes and industry often have incentives to downplay risks so they can proceed with experiments or bringing products to market. Activists often have incentives to exaggerate risks to broaden their own fame or attract donations needed to keep their organizations or activities alive. Individuals and groups may have strong ideological beliefs that make it difficult for them to accept facts that seem to undermine their ideologies. Desire for fame, grants, or other advantages may lead scientists into scientific fraud that, if undetected, skews understanding of the facts or makes more difficult the forging of scientific consensus on the facts. However, trying to secure consensus on facts is worthwhile for at least two reasons. First, some ethical disagreements are really disagreements about the need to act in a particular way at a particular time that can be resolved with consensus on the facts, as in the CFC debate noted earlier. Second, judgments about the relative weight to be given to competing values may depend on facts. A decision to "ration" access to an extremely expensive treatment that is the only currently-known way to prevent death from some rapidly-spreading antibiotic-resistant bacterial infections will inspire more challenge if the treatment has an 80% chance of working than if it has a 1% chance.

When consensus on the relevant facts (outcomes and causal mechanisms leading to them) does not settle a particular disagreement about how to act, the resources of ethical reasoning must be applied. While ethical theorists and moral philosophers tend to regard clarity in definition of terms as both desirable and helpful in resolving disagreements, acceptance of a common phrase may have the opposite effect if its meaning depends on other definitions over which there is no agreement. An advocate of clarifying terms might have been happy to see the "right to life" principle invoked in debates about abortion, but then dismayed because continuing, and unabridged differences in defining the moment when a human life begins have prevented convergence on a common set of ethical rules on the matter.

Clarity of terms is often assumed to be necessary for, or at least to facilitate, the development of common moral guidelines regarding some forms of behavior. However, students of law and politics know many examples of using consciously selected ambiguous terms to straddle a disagreement by allowing different participants to interpret the term in different ways. Proponents of "papering over" a disagreement with vague words and phrases are not giving up on their initial position; they are responding either to lack of highly persuasive factual knowledge that would settle arguments in favor of their proposal or to the difficulty of using currently available ethical arguments to persuade others to adopt a similar position at the moment. Creative ambiguity is generally an appeal to the future, with adherents of various positions expecting or hoping that new developments or the impacts of further activity will support adopting their recommendations later on. Thus, existence of a set of common moral rules is not necessarily a sign of common morality; it may be a tactical device for settling the questions that can be settled while continuing disagreement on others. The content of the rules reveals the areas of agreement and the areas of continuing disagreement.

Even when all the rules are clear and agreed, the existence of a set of common ethical rules does not end all ethical debate. Codes and standards are expressed in general terms, but applied in specific situations. Particular situations may well present complications that no one anticipated when writing the code. Thus, the process of applying ethical rules involves the same methods of debate through example and counter example or logical probing of the coherence of arguments that occurred when people developed the rules.

Debate through examples and counter-examples is a form of reasoning by analogy very similar to the sort of reasoning that goes on as lawyers and judges apply legal rules to disputes. Rather than focus on the internal coherence of the moral rules, arguing through examples probes the implications of the rules for the

humans involved in or affected by some interaction. It promotes sensitivity to the wide variation in actual human behavior and interaction, and to the possibility that the consequences (good or bad) of some act or failure to act may be very different for different individuals or groups. Mixing lead into paint to improve its consistency and drying was a common practice until the connection between flaking paint and lead poisoning of toddlers became better understood. Though lead paint posed hazards of lead poisoning for everyone, adults need larger doses of lead to suffer noticeable symptoms and seldom eat flaking paint. Toddlers' greater sensitivity to lead and willingness to eat paint flakes meant they faced greater hazards. Since even adults would be healthier if lead were removed, prohibiting its use in paint became the accepted rule.

Debate through examples and counter-examples can bridge the divide between approaches to moral reasoning that evaluate conduct by the intentions of the doer and that evaluate conduct by the effects it has on others. Examples and counter-examples rest on interactions that can be retold in either summary or extended form. Particularly in extended form, they can provide reminders that there is enough slippage between intentions and results that a fully satisfactory ethical theory or moral philosophy needs to address both.

Logical probing of the coherence of arguments focuses on the internal consistency of ethical rules, of the premises on which they rest, and on the reasoning by which the premises are claimed to require acceptance of the rules. Objections to "therapeutic cloning" – the idea of cloning a person so that the clone can provide replacements for the person's poorly functioning organs – derive very clearly and logically from blanket objections to creation of living organisms "in the lab" rather than through natural reproductive processes. Many people who reject human cloning find it hard to accept using human embryos to create stem cells on logical grounds because they do not see any logical way to classify making stem cells and using them to "grow" organs as acceptable while classifying cloning and raising humans for the same purpose as unacceptable.

Though internal consistency is only one criterion of a good argument, ethicists and moral philosophers value it as a safeguard against inadvertent slippage. Pointing out inconsistency is a regular feature of ethical arguments even among members of the general public. In arguments over the death penalty, individuals who oppose abortion but accept use of the death penalty are often accused of logical contradiction, and anti-death penalty activists urge them to end the inconsistency by altering their views on the death penalty. The simpler version of this charge asserts that the right to life principle settles the question by requiring rejection of both. A more complex version acknowledges that other ethical values may be at stake as well, and its adherents would ask why an anti-abortion supporter of the death penalty believes the right to life should be weighed more heavily than other values at the start of life but not later on. Even in less charged ethical debates, probing the logical consistency of the reasoning behind existing or proposed ethical rules is another way of improving that reasoning.

Good ethical debate must bring the resources of both objective knowledge formation and ethical reasoning together to ensure that the situation in which the ethics will be applied is understood as accurately as possible and the ethical rules adopted based on thorough consideration of all the relevant ethical principles and stakeholder concerns.

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