Chapter 2: Two Examples

This book will be filled with arguments, but arguments are pale and abstract without examples. One good example may do more to clarify how ethics matters to economics than would a hundred pages of argument. Furthermore, ethics is not just logic. Emotion has its part to play, too, and examples help to engage the emotions. In this chapter our concern is not to argue that ethics matters in economics but to exhibit through examples how important ethics is.

We shall discuss two examples. The first caused an uproar.

2.1 A shocking memorandum

In December of 1991, Lawrence Summers, who was then the chief economist at the World Bank, sent the following memorandum to some colleagues:

Just between you and me, shouldn't the World Bank be encouraging *more migration of the dirty industries to the LDC's [less developed countries]? I can think of three reasons:*

(1) The measurement of the costs of health-impairing pollution depends on the foregone earnings from increased morbidity and mortality. From this point of view a given amount of health-impairing pollution should be done in the country with the lowest cost, which will be the country with the lowest wages. I think the economic logic behind dumping a load of toxic waste in the lowest-wage country is impeccable and we should face up to that.

(2) The costs of pollution are likely to be non-linear as the initial increments of pollution probably have very low cost. I've always thought that under-populated countries in Africa are vastly under polluted; their air quality is probably vastly inefficiently low [sic] compared to Los Angeles or Mexico City. Only the lamentable facts that so much pollution is generated by non-tradable industries (transport, electrical generation) and that the unit transport costs of solid waste are so high prevent world-welfare-enhancing trade in air pollution and waste.

(3) The demand for a clean environment for aesthetic and health reasons is likely to have very high income-elasticity. The concern over an agent that causes a one-in-a-million change in the odds of prostate cancer is obviously going to be much higher in a country where people survive to get prostate cancer than in a country where under-5 mortality is 200 per thousand. Also, much of the concern over industrial atmospheric discharge is about visibility-impairing particulates. These discharges may have

very little direct health impact. Clearly trade in goods that embody aesthetic pollution concerns could be welfare-enhancing. While production is mobile the consumption of pretty air is a non-tradable.

The problem with the arguments against all of these proposals for more pollution in LDCs (intrinsic rights to certain goods, moral reasons, social concerns, lack of adequate markets, etc.) could be turned around and used more or less effectively against every Bank proposal for liberalisation (quoted in The Economist, February 8, 1992, p. 66).

The memorandum is worth reading carefully, and we would urge you to read it a second time before proceeding further. Summers is not seriously proposing a World Bank program to export pollution to the LDC's. Such a policy faces technical difficulties, and there are moral arguments against it (though Summers points out provocatively that similar moral objections apply to other World Bank policies). One should also not think that Summer has distorted economics in order to serve some personal ideology. On the contrary, his economic logic is exemplary. His only mistake was to put into words uncomfortable implications that most economists would prefer not to draw or at least not to draw in a memo that might be "leaked" to The Economist. We've seized on this example, because it is easier to recognize controversial ethical content in economic theory when it is so blatant and apparently repugnant.

2.2 The economic benefits of exporting pollution to LDC's

Air and water pollution lessen the quality of life in many ways, yet most kinds of pollution have no market prices. One cannot go to the hardware store and purchase for $19.95 a twenty-percent decrease in the toxic chemicals in the air one breathes. There are few markets in pollution limitation first because it is not possible to locate all the sources of air and water pollution. (If your neighbors decide to dump left-over weed killer down their drain, who will ever know?) Second, even if it were possible, it would be prohibitively expensive to strike a deal with all the polluters in order to improve your air or water. Third, any deal you strike with polluters will affect your neighbor and vice versa--while walking to the corner, you've got to breathe the same air your neighbor breathes. Any effective deal will require cooperation among your neighbors.

Thus some collective action is often needed in controlling pollution. One way economists can help with the problems of controlling pollution is by imputing costs to it. The hope is to figure out what pollution costs would be, if there were markets where pollution could be bought and sold. Economists may attempt to impute pollution costs by examining housing prices in communities that are much the same, apart from their air quality. They can draw inferences from how much people pay for air filters, water filters, or bottled water. They can collaborate with biologists in determining and assessing the costs of damage to health caused by pollutants. In such ways, economists may be able to estimate how much people in developed countries would be willing to pay to lessen pollution in their environment and how much people in LDC's would have to be compensated in order to be willing to accept more pollution.

People might be ignorant of the harms caused by pollution. People in a LDC might be willing to accept toxic wastes for very little compensation, because they were unaware of the contents of the wastes, the harms they might do, or the prospects of the wastes escaping and poisoning ground water. If their willingness to accept more pollution were based on such mistakes, it would not reflect what was really in their interest.

Summers avoids the problem of LDC negotiators mistaking their interests, because he does not rely on estimates of how eager people in developed countries are to be rid of their pollution or how willing people in LDC's are to accept it. What his three points attempt to show instead is that, insofar as they are rational, people in LDC's should be happy to sell pollution rights to people in developed countries for a price that the latter should be happy to pay. For the economic costs of the consequences of increased pollution are much lower in LDC's than they are in developed countries. The willingness to accept more pollution in LDC's does not rest on mistakes about the consequences of doing so.

Economists employ complicated techniques to determine economic costs when things are not literally bought or sold, and it will simplify the discussion here if we engage in some make-believe. Suppose pollution could be bought and sold on the market. Since pollution is a bad, what consumers would want to buy would be its absence. Let us think of reductions of pollution that consumers could buy as units of a single hypothetical commodity, "environmental quality" or "EQ". We can then think about what the price of units of EQ and total expenditures on EQ would be in this make-believe world in which individuals could separately purchase and consume units of EQ, and firms could separately produce and market units of EQ.

Consider whether rational and well-informed individuals, who live in a particular LDC, Poor, could strike deals to sell units of EQ to rational and well-informed individuals, who live in a developed country, Rich. If Poor is one of those "underpolluted" LDC's Summers refers to, Poor currently has a great deal of inexpensive EQ. Environmental quality is inexpensive not only because it is plentiful, but because, as Summers points out, (1) the value added to output by an additional unit of EQ will be very low, (2) the costs in health or aesthetics of a small drop of EQ will be small, and (3) citizens in Poor lack other things that they would want to purchase first. In Rich, on the other hand, EQ is costly and scarce. So unless the price of a unit of EQ is extremely high or extremely low, individuals in both Poor and Rich will gain if EQ's are sold by individuals in Poor to individuals in Rich. The possibility for making advantageous trades will disappear only when Poor has acquired so much of Rich's pollution that the price of environmental quality in Poor is as high as it is in Rich. This will happen only when there is much more pollution in Poor than in Rich. For given Poor's poverty, a bad environment will have lower costs for individuals in Poor, and they should be willing to pay as much for pollution abatement as are individuals in Rich are only when Poor faces much worse pollution problems.

So if individuals were all rational and well informed, and it were possible for individuals easily to buy, sell, and transport pollution or "environmental quality," there would be active trading between the developed and less developed nations of the world, and pollution would be pouring out of the developed nations and into the less developed nations. But units of EQ cannot ("lamentably"?) be individually appropriated, bought, and sold, and it is hard to transport pollution between nations. Consequently, the World Bank can enhance world welfare by facilitating transfers of pollutants to LDC's in return for some measure of compensation.

Merely shifting pollution to LDC's, without paying any compensation would not, of course, be mutually beneficial. But from the perspective of "cost-benefit analysis" (see section 7.4), it would still result in a net benefit, because the developed countries could compensate the LDC's and still be better off. One could thus read Summers' memo as also pointing out the advantages of uncompensated transfers of pollution to the LDC's.

2.3 Where does ethics come in?

The three points in Summers' essay show that the amount rational individuals in developed countries would be willing to pay to lessen their pollution is more than the amount that rational individuals in LDC's would demand in order to accept more pollution, and that there would be more pollution in LDC's if pollution were easily exchangeable. But why should one conclude that it is "lamentable" that "pollution is generated by non-tradable industries"? Why should one conclude, "Clearly trade in goods that embody aesthetic pollution concerns could be welfare-enhancing?" [our emphasis] How is one supposed to reach the conclusion that "the World Bank [should] be encouraging more migration of the dirty industries to the LDC's"? How does one get from claims about how rational and well-informed individuals would choose to claims about welfare and from claims about welfare to claims about what the World Bank ought to do? We have not yet clarified the logic of Summers' argument.

We would suggest that Summers' argument can be articulated as follows:

1. The economic costs of the consequences of increased pollution in LDC's are much less than the economic benefits of the consequences of lessened pollution in developed countries (premise).

2. Rational and well-informed people in developed countries would be willing to pay more to lessen pollution than rational and well-informed people in LDC's would demand in return for accepting more pollution. (from 1)

3. For some intermediate compensation C, all rational and well-informed individuals would be willing to transfer pollution from a developed economy to a LDC. (from 2)

4. If all well-informed and rational individuals are willing to make an exchange, then carrying it out makes all of them better off. It increases everyone's welfare. (premise)

5. Shifting pollution to LDC's from developed countries and paying C makes everyone better off (from 3 and 4).

6. It is a good thing to make people better off (premise)

7. It is a good thing to shift pollution to LDC's and to pay compensation C (from 5 and 6).

The conclusion in this reconstruction of Summers' argument is slightly different than "the World Bank [should] be encouraging more migration of the dirty industries to the LDC's," but if one assumes that the jobs and revenues provided by dirty industries are "reasonable compensation," then this reconstruction captures Summers' intentions. One might argue that it would be a good thing to shift pollution to LDC's regardless of whether there is any compensation, on the grounds that there is a "net benefit" in such shifts. But it will take more controversial moral premises to establish this stronger conclusion, and we will not comment on such an argument at this point.

The above argument contains two plausible moral premises, statements 4 and 6. In later chapters we shall examine these ethical principles. What is important here is to recognize that they are indispensable. Summers is well aware that dumping pollution in LDC's raises moral questions, and in the last paragraph he briefly refers to some of these. But the tone of the memorandum (which is addressed to fellow economists, not to the public at large) suggests is that the three numbered paragraphs make a "scientific" case, while the last paragraph in the memo mentions wishy-washy moral objections. The moral content does not wait for the last paragraph to make its appearance. The three numbered paragraphs are part of a moral argument, and Summers' economics is shot through with ethics.

2.4 Should the World Bank encourage migration of dirty industries to LDC's?

The conclusion in the argument above appears to follow from its premises but the logic is not transparent. In particular, one might wonder exactly how 2 is supposed to follow from 1 or how 3 is supposed to follow from 2. If one does not want to accept the conclusion, either one has to challenge one of these links, or one has to question at least one of the premises.

The uproar caused by this memo suggests that most people are not willing to accept its conclusion. But this may be a thoughtless first reaction. Why shouldn't the World Bank encourage migration of dirty industries? Though we can't pretend to speak for all those who find this conclusion objectionable, here are three possibilities. (We will consider others in Chapter 14.)

1. Encouraging dirty industries to migrate to LDC's will lead to more total pollution. Developed countries have the incentive and the administrative capacity to enforce pollution controls, while LDC's, for the reasons Summers gives, have less incentive to limit pollution, and they have a harder time enforcing pollution controls. Since many of the consequences of pollution are global, the consequences of encouraging the migration of dirty industries to LDC's will be very bad.

2. Even though people in both developed economies and LDC's would be happy to shift pollution to LDC's for some reasonable compensation, the exchange is unfair. Consider an analogous agreement between a billionaire and a beggar whereby the beggar agrees to work sixteen-hour days in exchange for daily gruel and a straw mattress. Both parties may be rational and well-informed, and both may enter the agreement voluntarily. But most people would say that the billionaire is exploiting the beggar. No matter how voluntary, the arrangement is unjust. Indeed the analogy may understate the injustice of dumping pollutants in LDC's, because much of the poverty in LDC's has been caused by the developed countries. A better analogy would involve a billionaire and a beggar, who is now impoverished because of previous plunder, competition, or manipulation by the billionaire. The exploitation seems more egregious if the wealthy party caused the other's poverty.

3. The migration of dirty industries to LDC's will not make them truly better off. Something has got to be wrong with Summers' argument or his notion of welfare. The economic benefits of these industries will not compensate for the harms they will cause.

Although the first objection, that migration of dirty industries will increase world-wide pollution, is a serious one, it need not challenge Summers' moral framework. To the extent that the effects of pollution are not localized, Summers' arguments concerning the net benefits of shifting pollution do not go through. If an exchange sought by Poor and Rich has consequences for Q that create no costs and benefits for Poor or Rich, then the exchange will not necessarily be socially beneficial. If the harms of pollution are not mainly local, then one cannot conclude that the migration of dirty industries will be beneficial, no matter how attractive they may be to the particular traders.

The second objection, in terms of the injustice of shifting pollution to LDC's, would not surprise Summers. He alludes to such objections in his last paragraph, but he offers no response apart from the observation that such objections "could be turned around and used more or less effectively against every Bank proposal for liberalisation." The injustice objection also shows that premise 6, that it is a good thing to make people better off, needs qualification. It may not be a good thing to make people better off if doing so involves severe injustice.

Merely pointing out that shifting pollution to LDC's is exploitative does not show that it is wrong. Most people are prepared to put up with additional injustice in exchange for a sufficiently large increase in welfare. Before deciding what is best, one needs to know how great the welfare benefits will be and how much injustice will result. It is easy to see why Summers does not broach these questions, but it is hard to see how one could defend this policy proposal without addressing them. One misleading feature of this memo is its suggestion that, apart from some moral belly-aching, the policy implications are simple.

The third and last objection is not well formulated. It is basically just an expression of skepticism about the claim that it would really be worthwhile for LDC's to sell environmental quality to developed economies. If Summers' memo is right, this skepticism is unfounded. But is Summers' memo really right?

It is comparatively easy to question whether mutual willingness to exchange demonstrates mutual benefit on the grounds that the parties may be ignorant or irrational. But Summers argues that, given the actual consequences of increased pollution in LDC's, rational individuals in LDC's should be willing to accept pollution for less money than individuals in developed nations should be willing to pay. Does it not then follow that making the deal would make the parties better off?

The conclusion does not follow, for step 2 doesn't necessarily follow from premise one. Even though the economic costs in LDC's of the consequences of pollution are much lower than the economic benefits in developed countries, rational and well-informed individuals do not have to accept the market's evaluation of the consequences of the pollution. If there were markets on which all varieties of environmental quality could be bought and sold, there would be massive transfers of pollution to LDC's. But those transfers would not necessarily be preferred by the agents involved, and they would not necessarily increase human well-being. Let's see why.

The economic costs of the harms pollution causes are much lower in LDC's because wages and productivity are lower, because people are more likely to die of other things before they can be harmed by pollution, and because there are other pressing needs upon which individuals will spend their money first. But are economic costs and benefits a reliable guide to what is harmful and beneficial? Given the current unequal distribution of wealth, preventing crippling injuries confers much greater economic benefits in rich countries than in poor ones. But the moral significance of crippling injuries should not depend on whether the victim lives in a wealthy country. One might thus reasonably raise moral objections to regarding economic costs and benefits as a guide to what ought to be done. It seems that costs and prices have a contestable moral significance built into them.

Summers' memorandum is an amalgam of economic analysis and moral philosophy. Or perhaps it would be less misleading to say that the economic analysis in Summers' memo already contains an inextricable dose of ethics. We do not pretend to have proven than ethics is mixed up in all of economics and cannot be separated out, and indeed in the appendix we shall consider proposals for isolating a pure "value-free" science of economics. Our point here is illustrative. Economics of the kind exemplified by Summers' memorandum is shot through with controversial ethical commitments.