Commentary

Living on a Lifeboat

Garrett Hardin

Susanne Langer (1942) has shown that it is probably impossible to approach an unsolved problem save through the door of metaphor. Later, attempting to meet the demands of rigor, we may achieve some success in cleansing theory of metaphor, though our success is limited if we are unable to avoid using common language, which is shot through and through with fossil metaphors. (I count no less than five in the preceding two sentences.)

Since metaphorical thinking is inescapable it is pointless merely to weep about our human limitations. We must learn to live with them, to understand them, and to control them. "All of us," said George Eliot in Middlemarch, "get our thoughts entangled in metaphors, and act fatally on the strength of them." To avoid unconscious suicide we are well advised to pit one metaphor against another. From the interplay of competitive metaphors, thoroughly developed, we may come closer to metaphor-free solutions to our problems.

No generation has viewed the problem of the survival of the human species as seriously as we have. Inevitably, we have entered this world of concern through the door of metaphor. Environmentalists have emphasized the image of the earth as a spaceship—Spaceship Earth. Kenneth Boulding (1966) is the principal architect of this metaphor. It is time, he says, that we replace the wasteful "cowboy economy" of the past with the frugal "spaceship economy" required for continued survival in the limited world we now see ours to be. The metaphor is notably useful in justifying pollution control measures.

Unfortunately, the image of a spaceship is also used to promote measures that are suicidal. One of these is a generous immigration policy, which is only a particular instance of a class of policies that are in error because they lead to the tragedy of the commons (Hardin 1968). These suicidal policies are attractive because they mesh with what we unthinkingly take to be the ideals of "the best people." What is missing in the idealistic view is an insistence that rights and responsibilities must go together. The "generous" attitude of all too many people results in asserting inalienable rights while ignoring or denying matching responsibilities.

For the metaphor of a spaceship to be correct the aggregate of people on board would have to be under unitary sovereign control (Ophuls 1974). A true ship always has a captain. It is conceivable that a ship could be run by a committee. But it could not possibly survive if its course were determined by bickering tribes that claimed rights without responsibilities.

What about Spaceship Earth? It certainly has no captain, and no executive committee. The United Nations is a toothless tiger, because the signatories of its charter wanted it that way. The spaceship metaphor is used only to justify spaceship demands on common resources without acknowledging corresponding spaceship responsibilities.

An understandable fear of decisive action leads people to embrace "incrementalism"—moving toward reform by tiny stages. As we shall see, this strategy is counterproductive in the area discussed here if it means accepting rights before responsibilities. Where human survival is at stake, the acceptance of responsibilities is a precondition to the acceptance of rights, if the two cannot be introduced simultaneously.

LIFEBOAT ETHICS

Before taking up certain substantive issues let us look at an alternative metaphor, that of a lifeboat. In developing some relevant examples the following numerical values are assumed. Approximately two-thirds of the world is desperately poor, and only one-third is comparatively rich. The people in poor countries have an average per capita GNP (Gross National Product) of about $200 per year; the rich, of about $3,000. (For the United States it is nearly $5,000 per year.) Metaphorically, each rich nation amounts to a lifeboat full of comparatively rich people. The poor of the world are in other, much more crowded lifeboats. Continuously, so to speak, the poor fall out of their lifeboats and swim for a while in the water outside, hoping to be admitted to a rich lifeboat, or in some other way to benefit from the "goodies" on board. What should the passengers on a rich lifeboat do? This is the central problem of "the ethics of a lifeboat."

First we must acknowledge that each lifeboat is effectively limited in capacity. The land of every nation has a limited carrying capacity. The exact limit is a matter for argument, but the energy crunch is convincing more people every day that we have already exceeded the carrying capacity of the land. We have been living on "capital"—stored petroleum and coal—and soon we must live on income alone.

Let us look at only one lifeboat—ours. The ethical problem is the same

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for all, and is as follows. Here we sit, say 50 people in a lifeboat. To be generous, let us assume our boat has a capacity of 10 more, making 60. (This, however, is to violate the engineering principle of the "safety factor." A new plant disease or a bad change in the weather may decimate our population if we don't preserve some excess capacity as a safety factor.)

The 50 of us in the lifeboat see 100 others swimming in the water outside, asking for admission to the boat, or for handouts. How shall we respond to their calls? There are several possibilities.

One. We may be tempted to try to live by the Christian ideal of being "our brother's keeper," or by the Marxian ideal (Marx 1875) of "from each according to his abilities, to each according to his needs." Since the needs of all are the same, we take all the needy into our boat, making a total of 150 in a boat with a capacity of 60. The boat is swamped, and everyone drowns. Complete justice, complete catastrophe.

Two. Since the boat has an unused excess capacity of 10, we admit just 10 more to it. This has the disadvantage of getting rid of the safety factor, for which action we will sooner or later pay dearly. Moreover, *which* 10 do we let in? "First come, first served?" The best 10? The neediest 10? How do we *discriminate*? And what do we say to the 90 who are excluded?

Three. Admit no more to the boat and preserve the small safety factor. Survival of the people in the lifeboat is then possible (though we shall have to be on our guard against boarding parties).

The last solution is abhorrent to many people. It is unjust, they say. Let us grant that it is.

"I feel guilty about my good luck," say some. The reply to this is simple: *Get out and yield your place to others.* Such a selfless action might satisfy the conscience of those who are addicted to guilt but it would not change the ethics of the lifeboat. The needy person to whom a guilt-addict yields his place will not himself feel guilty about his sudden good luck. (If he did he would not climb aboard.) The net result of conscience-stricken people relinquishing their unjustly held positions is the elimination of their kind of conscience from the lifeboat. The lifeboat, as it were, purifies itself of guilt. The ethics of the lifeboat persist, unchanged by such momentary aberrations.

This then is the basic metaphor within which we must work out our solutions. Let us enrich the image step by step with substantive additions from the real world.

REPRODUCTION

The harsh characteristics of lifeboat ethics are heightened by reproduction, particularly by reproductive differences. The people inside the lifeboats of the wealthy nations are doubling in numbers every 87 years; those outside are doubling every 35 years, on the average. And the relative difference in prosperity is becoming greater.

Let us, for a while, think primarily of the U.S. lifeboat. As of 1973 the United States had a population of 210 million people, who were increasing by 0.8% per year, that is, doubling in number every 87 years.

Although the citizens of rich nations are outnumbered two to one by the poor, let us imagine an equal number of poor people outside our lifeboat—a mere 210 million poor people reproducing at a quite different rate. If we imagine these to be the combined populations of Colombia, Venezuela, Ecuador, Morocco, Thailand, Pakistan, and the Philippines, the average rate of increase of the people "outside" is 3.3% per year. The doubling time of this population is 21 years.

Suppose that all these countries, and the United States, agreed to live by the Marxian ideal, "to each according to his needs," the ideal of most Christians as well. Needs, of course, are determined by population size, which is affected by reproduction. Every nation regards its rate of reproduction as a sovereign right. If our lifeboat were big enough in the beginning it might be possible to live *for a while* by Christian-Marxian ideals. *Might.*

Initially, in the model given, the ratio of non-Americans to Americans would be one to one. But consider what the ratio would be 87 years later. By this time Americans would have doubled to a population of 420 million. The other group (doubling every 21 years) would now have swollen to 3,540 million. Each American would have more than eight people to share with. How could the lifeboat possibly keep afloat?

All this involves extrapolation of current trends into the future, and is consequently suspect. Trends may change. Granted: but the change will not necessarily be favorable. If—as seems likely—the rate of population increase falls faster in the ethnic group presently inside the lifeboat than it does among those now outside, the future will turn out to be even worse than mathematics predicts, and sharing will be even more suicidal.

RUIN IN THE COMMONS

The fundamental error of the sharing ethics is that it leads to the tragedy of the commons. Under a system of private property the man (or group of men) who own property recognize their responsibility to care for it, for if they don't they will eventually suffer. A farmer, for instance, if he is intelligent, will allow no more cattle in a pasture than its carrying capacity justifies. If he overloads the pasture, weeds take over, erosion sets in, and the owner loses in the long run.

But if a pasture is run as a commons open to all, the right of each to use it is not matched by an operational responsibility to take care of it. It is no use asking independent herdsmen in a commons to act responsibly, for they dare not. The considerate herdsman who refrains from overloading the commons suffers more than a selfish one who says his needs are greater. (As Leo Durocher says, "Nice guys finish last.") Christian-Marxian idealism is counterproductive. That it *sounds* nice is no excuse. With distribution systems, as with individual morality, good intentions are no substitute for good performance.

A social system is stable only if it is insensitive to errors. To the Christian-Marxian idealist a selfish person is a sort of "error." Prosperity in the system of the commons cannot survive errors. If *everyone* would only restrain himself, all would be well; but it takes *only one less than everyone* to ruin a system of voluntary restraint. In a crowded world of less than perfect human beings—and we will never know any other—mutual ruin is inevitable in the commons. This is the core of the tragedy of the commons.

One of the major tasks of education today is to create such an awareness of the dangers of the commons that people will be able to recognize its many varieties, however disguised. There is pollution of the air and water because these media are treated as commons. Further growth of population and growth in the per capita conversion of natural resources into pollutants require that the system of the commons be

modified or abandoned in the disposal of "externalities."

The fish populations of the oceans are exploited as commons, and ruin lies ahead. No technological invention can prevent this fate: in fact, all improvements in the art of fishing merely hasten the day of complete ruin. Only the replacement of the system of the commons with a responsible system can save oceanic fisheries.

The management of western range lands, though nominally rational, is in fact (under the steady pressure of cattle ranchers) often merely a government-sanctioned system of the commons, drifting toward ultimate ruin for both the rangelands and the residual enterprisers.

WORLD FOOD BANKS

In the international arena we have recently heard a proposal to create a new commons, namely an international depository of food reserves to which nations will contribute according to their abilities, and from which nations may draw according to their needs. Nobel laureate Norman Borlaug has lent the prestige of his name to this proposal.

A world food bank appeals powerfully to our humanitarian impulses. We remember John Donne's celebrated line, "Any man's death diminishes me." But before we rush out to see for whom the bell tolls let us recognize where the greatest political push for international granaries comes from, lest we be disillusioned later. Our experience with Public Law 480 clearly reveals the answer. This was the law that moved billions of dollars worth of U.S. grain to food-short, population-long countries during the past two decades. When P.L. 480 first came into being, a headline in the business magazine *Forbes* (Paddock and Paddock 1970) revealed the power behind it: "Feeding the World's Hungry Millions: How it will mean billions for U.S. business."

And indeed it did. In the years 1960 to 1970 a total of $7.9 billion was spent on the "Food for Peace" program, as P.L. 480 was called. During the years 1948 to 1970 an additional $49.9 billion were extracted from American taxpayers to pay for other economic aid programs, some of which went for food and food-producing machinery. (This figure does *not* include military aid.) That P.L. 480 was a give-away program was concealed. Recipient countries went through the motions of paying for P.L. 480 food—with IOU's. In December 1973 the charade was brought to an end as far as India was concerned when the United States "forgave" India's $3.2 billion debt (Anonymous 1974). Public announcement of the cancellation of the debt was delayed for two months: one wonders why.

"Famine—1974!" (Paddock and Paddock 1970) is one of the few publications that points out the commercial roots of this humanitarian attempt. Though all U.S. taxpayers lost by P.L. 480, special interest groups gained handsomely. Farmers benefited because they were not asked to contribute the grain—it was bought from them by the taxpayers. Besides the direct benefit there was the indirect effect of increasing demand and thus raising prices of farm products generally. The manufacturers of farm machinery, fertilizers, and pesticides benefited by the farmers' extra efforts to grow more food. Grain elevators profited from storing the grain for varying lengths of time. Railroads made money hauling it to port, and shipping lines by carrying it overseas. Moreover, once the machinery for P.L. 480 was established an immense bureaucracy had a vested interest in its continuance regardless of its merits.

Very little was ever heard of these selfish interests when P.L. 480 was defended in public. The emphasis was always on its humanitarian effects. The combination of multiple and relatively silent selfish interests with highly vocal humanitarian apologists constitutes a powerful lobby for extracting money from taxpayers. Foreign aid has become a habit that can apparently survive in the absence of any known justification. A news commentator in a weekly magazine (Lansner 1974), after exhaustively going over all the conventional arguments for foreign aid—self-interest, social justice, political advantage, and charity—and concluding that none of the known arguments really held water, concluded: "So the search continues for some logically compelling reasons for giving aid. . . " In other words. *Act now, Justify later*—if ever.(Apparently a quarter of a century is too short a time to find the justification for expending several billion dollars yearly.)

The search for a rational justification can be short-circuited by interjecting the word "emergency." Borlaug uses this word. We need to look sharply at it. What is an "emergency?" It is surely something like an accident, which is correctly defined as *an event that is certain to happen, though with a low frequency* (Hardin 1972a). A well-run organization prepares for everything that is certain, including accidents and emergencies. It budgets for them. It saves for them. It expects them—and mature decision-makers do not waste time complaining about accidents when they occur.

What happens if some organizations budget for emergencies and others do not? If each organization is solely responsible for its own well-being, poorly managed ones will suffer. But they should be able to learn from experience. They have a chance to mend their ways and learn to budget for infrequent but certain emergencies. The weather, for instance, always varies and periodic crop failures are certain. A wise and competent government saves out of the production of the good years in anticipation of bad years that are sure to come. This is not a new idea. The Bible tells us that Joseph taught this policy to Pharaoh in Egypt more than 2,000 years ago. Yet it is literally true that the vast majority of the governments of the world today have no such policy. They lack either the wisdom or the competence, or both. Far more difficult than the transfer of wealth from one country to another is the transfer of wisdom between sovereign powers or between generations.

"But it isn't their fault! How can we blame the poor people who are caught in an emergency? Why must we punish them?" The concepts of blame and punishment are irrelevant. The question is, what are the operational consequences of establishing a world food bank? If it is open to every country every time a need develops, slovenly rulers will not be motivated to take Joseph's advice. Why should they? Others will bail them out whenever they are in trouble.

Some countries will make deposits in the world food bank and others will withdraw from it: there will be almost no overlap. Calling such a depository-transfer unit a "bank" is stretching the metaphor of *bank* beyond its elastic limits. The proposers, of course, never call attention to the metaphorical nature of the word they use.

THE RATCHET EFFECT

An "international food bank" is really, then, not a true bank but a

disguised one-way transfer device for moving wealth from rich countries to poor. In the absence of such a bank, in a world inhabited by individually responsible sovereign nations, the population of each nation would repeatedly go through a cycle of the sort shown in Figure 1. P_2 is greater than P_1, either in absolute numbers or because a deterioration of the food supply has removed the safety factor and produced a dangerously low ratio of resources to population. P_2 may be said to represent a state of overpopulation, which becomes obvious upon the appearance of an "accident," e.g., a crop failure. If the "emergency" is not met by outside help, the population drops back to the "normal" level—the "carrying capacity" of the environment—or even below. In the absence of population control by a sovereign, sooner or later the population grows to P_2 again and the cycle repeats. The long-term population curve (Hardin 1966) is an irregularly fluctuating one, equilibrating more or less about the carrying capacity.

A demographic cycle of this sort obviously involves great suffering in the restrictive phase, but such a cycle is normal to any independent country with inadequate population control. The third century theologian Tertullian (Hardin 1969a) expressed what must have been the recognition of many wise men when he wrote: "The scourges of pestilence, famine, wars, and earthquakes have come to be regarded as a blessing to overcrowded nations, since they serve to prune away the luxuriant growth of the human race."

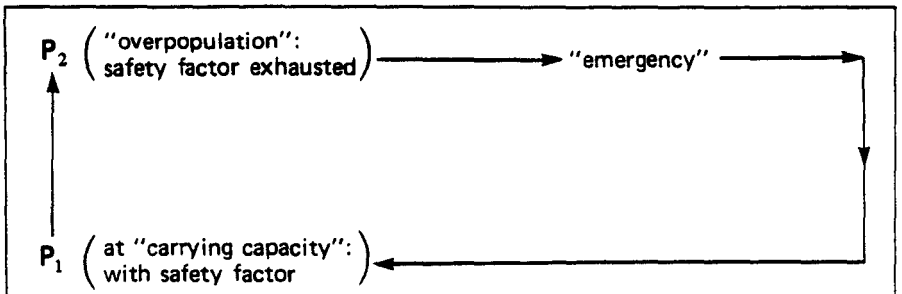

Fig. 1. The population cycle of a nation that has no effective, conscious population control, and which receives no aid from the outside. P_2 is greater than P_1.

Only under a strong and farsighted sovereign—which theoretically could be the people themselves, democratically organized—can a population equilibrate at some set point below the carrying capacity, thus avoiding the pains normally caused by periodic and unavoidable disasters. For this happy state to be achieved it is necessary that those in power be able to contemplate with equanimity the "waste" of surplus food in times of bountiful harvests. It is essential that those in power resist the temptation to convert extra food into extra babies. On the public relations level it is necessary that the phrase "surplus food" be replaced by "safety factor."

But wise sovereigns seem not to exist in the poor world today. The most anguishing problems are created by poor countries that are governed by rulers insufficiently wise and powerful. If such countries can draw on a world food bank in times of "emergency," the population *cycle* of Figure 1 will be replaced by the population *escalator* of Figure 2. The input of food from a food bank acts as the pawl of a ratchet, preventing the population from retracing its steps to a lower level. Reproduction pushes the population upward, inputs from the world bank prevent its moving downward. Population size escalates, as does the absolute magnitude of "accidents" and "emergencies." The process is brought to an end only by the total collapse of the whole system, producing a catastrophe of scarcely imaginable proportions.

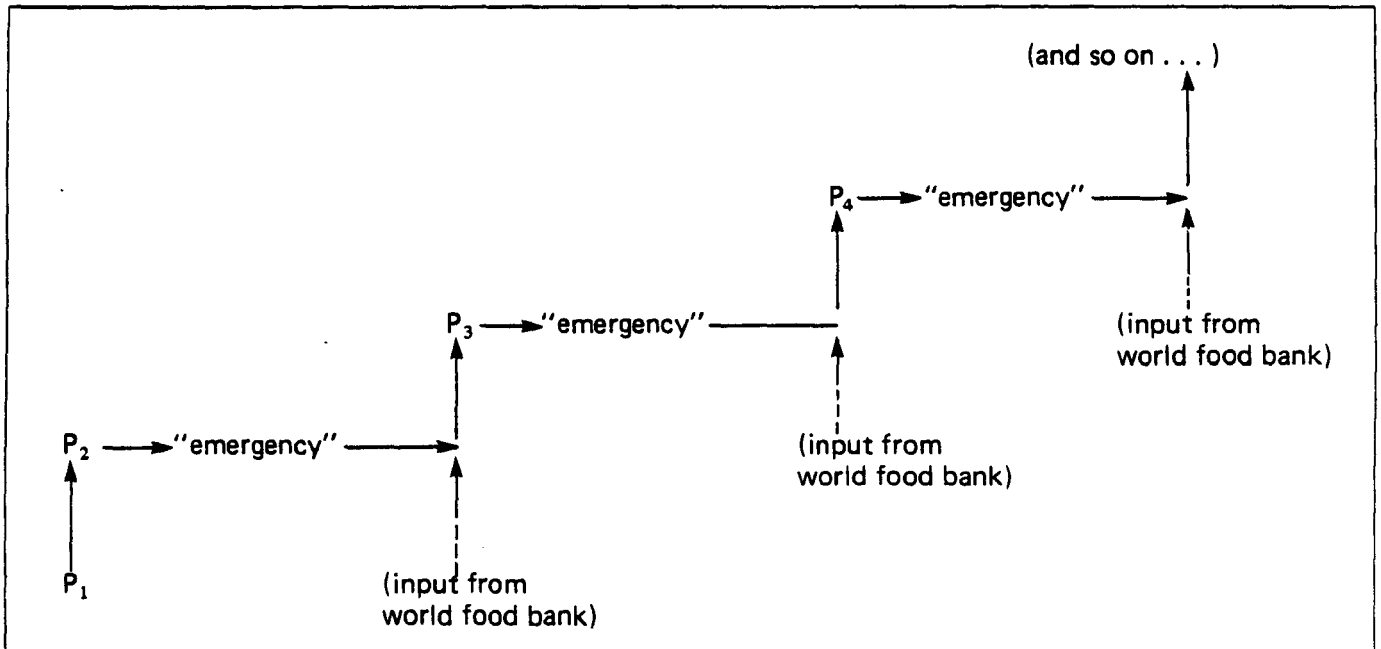

Fig. 2. The population escalator. Note that input from a world food bank acts like the pawl of a ratchet, preventing the normal population cycle shown in Figure 1 from being completed. P_{n+1} is greater than P_n, and the absolute magnitude of the "emergencies" escalates. Ultimately the entire system crashes. The crash is not shown, and few can imagine it.

Such are the implications of the well-meant sharing of food in a world of irresponsible reproduction.

I think we need a new word for systems like this. The adjective "melioristic" is applied to systems that produce continual improvement; the English word is derived from the Latin *meliorare*, to become or make better. Parallel with this it would be useful to bring in the word *pejoristic* (from the Latin *pejorare*, to become or make worse). This word can be applied to those systems which, by their very nature, can be relied upon to make matters worse. A world food bank coupled with sovereign state irresponsibility in reproduction is an example of a pejoristic system.

This pejoristic system creates an unacknowledged commons. People have more motivation to draw from than to add to the common store. The license to make such withdrawals diminishes whatever motivation poor countries might otherwise have to control their populations. Under the guidance of this ratchet, wealth can be steadily moved in one direction only, from the slowly-breeding rich to the rapidly-breeding poor, the process finally coming to a halt only when all countries are equally and miserably poor.

All this is terribly obvious once we are acutely aware of the pervasiveness and danger of the commons. But many people still lack this awareness and the euphoria of the "benign demographic transition" (Hardin 1973) interferes with the realistic appraisal of pejoristic mechanisms. As concerns public policy, the deductions drawn from the benign demographic transition are these:

1) If the per capita GNP rises the birth rate will fall; hence, the rate of population increase will fall, ultimately producing ZPG (Zero Population Growth).

2) The long-term trend all over the world (including the poor countries) is of a rising per capita GNP (for which no limit is seen).

3) Therefore, all political interference in population matters is unnecessary; all we need to do is foster economic "development"—*note the metaphor*—and population problems will solve themselves.

Those who believe in the benign demographic transition dismiss the pejoristic mechanism of Figure 2 in the belief that each input of food from the world outside fosters development within a poor country thus resulting in a drop in the rate of population increase. Foreign aid has proceeded on this assumption for more than two decades. Unfortunately it has produced no indubitable instance of the asserted effect. It has, however, produced a library of excuses. The air is filled with plaintive calls for more massive foreign aid appropriations so that the hypothetical melioristic process can get started.

The doctrine of demographic laissez-faire implicit in the hypothesis of the benign demographic transition is immensely attractive. Unfortunately there is more evidence against the melioristic system than there is for it (Davis 1963). On the historical side there are many counter-examples. The rise in per capita GNP in France and Ireland during the past century has been accompanied by a rise in population growth. In the 20 years following the Second World War the same positive correlation was noted almost everywhere in the world. Never in world history before 1950 did the worldwide population growth reach 1% per annum. Now the average population growth is over 2% and shows no signs of slackening.

On the theoretical side, the denial of the pejoristic scheme of Figure 2 probably springs from the hidden acceptance of the "cowboy economy" that Boulding castigated. Those who recognize the limitations of a spaceship, if they are unable to achieve population control at a safe and comfortable level, accept the necessity of the corrective feedback of the population cycle shown in Figure 1. No one who knew in his bones that he was living on a true spaceship would countenance political support of the population escalator shown in Figure 2.

ECO-DESTRUCTION VIA THE GREEN REVOLUTION

The demoralizing effect of charity on the recipient has long been known. "Give a man a fish and he will eat for a day: teach him how to fish and he will eat for the rest of his days." So runs an ancient Chinese proverb. Acting on this advice the Rockefeller and Ford Foundations have financed a multipronged program for improving agriculture in the hungry nations. The result, known as the "Green Revolution," has been quite remarkable. "Miracle wheat" and "miracle rice" are splendid technological achievements in the realm of plant genetics.

Whether or not the Green Revolution can increase food production is doubtful (Harris 1972, Paddock 1970, Wilkes 1972), but in any event not particularly important. What is missing in this great and well-meaning humanitarian effort is a firm grasp of fundamentals. Considering the importance of the Rockefeller Foundation in this effort it is ironic that the late Alan Gregg, a much-respected vice-president of the Foundation, strongly expressed his doubts of the wisdom of all attempts to increase food production some two decades ago. (This was before Borlaug's work—supported by Rockefeller—had resulted in the development of "miracle wheat.") Gregg (1955) likened the growth and spreading of humanity over the surface of the earth to the metastasis of cancer in the human body, wryly remarking that "Cancerous growths demand food; but, as far as I know, they have never been cured by getting it."

"Man does not live by bread alone"—the scriptural statement has a rich meaning even in the material realm. Every human being born constitutes a draft on all aspects of the environment—food, air, water, unspoiled scenery, occasional and optional solitude, beaches, contact with wild animals, fishing, hunting—the list is long and incompletely known. Food can, perhaps, be significantly increased: but what about clean beaches, unspoiled forests, and solitude? If we satisfy the need for food in a growing population we necessarily decrease the supply of other goods, and thereby increase the difficulty of equitably allocating scarce goods (Hardin 1969b, 1972b).

The present population of India is 600 million, and it is increasing by 15 million per year. The environmental load of this population is already great. The forests of India are only a small fraction of what they were three centuries ago. Soil erosion, floods, and the psychological costs of crowding are serious. Every one of the net 15 million lives added each year stresses the Indian environment more severely. *Every life saved this year in a poor country diminishes the quality of life for subsequent generations.*

Observant critics have shown how much harm we wealthy nations have already done to poor nations through our well-intentioned but misguided attempts to help them (Paddock and Paddock 1973). Particularly reprehensible is our failure to carry out post-audits of these attempts (Farvar and Milton 1972). Thus have we shielded our tender consciences from knowledge

of the harm we have done. Must we Americans continue to fail to monitor the consequences of our external "do-gooding?" If, for instance, we thoughtlessly make it possible for the present 600 million Indians to swell to 1,200 millions by the year 2001—as their present growth rate promises—will posterity in India thank *us* for facilitating an even greater destruction of *their* environment? Are good intentions ever a sufficient excuse for bad consequences?

IMMIGRATION CREATES A COMMONS

I come now to the final example of a commons in action, one for which the public is least prepared for rational discussion. The topic is at present enveloped by a great silence which reminds me of a comment made by Sherlock Holmes in A. Conan Doyle's story, "Silver Blaze." Inspector Gregory had asked, "Is there any point to which you would wish to draw my attention?" To this Holmes responded:

"To the curious incident of the dog in the night-time."

"The dog did nothing in the night-time," said the Inspector.

"That was the curious incident," remarked Sherlock Holmes.

By asking himself what would repress the normal barking instinct of a watch dog Holmes realized that it must be the dog's recognition of his master as the criminal trespasser. In a similar way we should ask ourselves what repression keeps us from discussing something as important as immigration?

It cannot be that immigration is numerically of no consequence. Our government acknowledges a *net* inflow of 400,000 a year. Hard data are understandably lacking on the extent of illegal entries, but a not implausible figure is 600,000 per year (Buchanan 1973). The natural increase of the resident population is now about 1.7 million per year. This means that the yearly gain from immigration is at least 19%, and may be 37%, of the total increase. It is quite conceivable that educational campaigns like that of Zero Population Growth, Inc., coupled with adverse social and economic factors—inflation, housing shortage, depression, and loss of confidence in national leaders—may lower the fertility of American women to a point at which all of the yearly increase in population would be accounted for by immigration. Should we not at least ask if that is what we want? How curious it is that we so seldom discuss immigration these days!

Curious, but understandable—as one finds out the moment he publicly questions the wisdom of the status quo in immigration. He who does so is promptly charged with *isolationism, bigotry, prejudice, ethnocentrism, chauvinism,* and *selfishness.* These are hard accusations to bear. It is pleasanter to talk about other matters, leaving immigration policy to wallow in the cross-currents of special interests that take no account of the good of the whole—*or of the interests of posterity.*

We Americans have a bad conscience because of things we said in the past about immigrants. Two generations ago the popular press was rife with references to *Dagos, Wops, Pollacks, Japs, Chinks,* and *Krauts*—all pejorative terms which failed to acknowledge our indebtedness to Goya, Leonardo, Copernicus, Hiroshige, Confucius, and Bach. Because the implied inferiority of foreigners was *then* the justification for keeping them out, it is *now* thoughtlessly assumed that restrictive policies can only be based on the assumption of immigrant inferiority. *This is not so.*

Existing immigration laws exclude idiots and known criminals; future laws will almost certainly continue this policy. But should we also consider the quality of the average immigrant, as compared with the quality of the average resident? Perhaps we should, perhaps we shouldn't. (What is "quality" anyway?) But the quality issue is not our concern here.

From this point on, *it will be assumed that immigrants and native-born citizens are of exactly equal quality,* however quality may be defined. The focus is only on quantity. The conclusions reached depend on nothing else, so all charges of ethnocentrism are irrelevant.

World food banks move food to the people, thus facilitating the exhaustion of the environment of the poor. By contrast, unrestricted immigration moves people to the food, thus speeding up the destruction of the environment in rich countries. Why poor people should want to make this transfer is no mystery: but why should rich hosts encourage it? This transfer, like the reverse one, is supported by both selfish interests and humanitarian impulses.

The principal selfish interest in unimpeded immigration is easy to identify: it is the interest of the employers of cheap labor, particularly that needed for degrading jobs. We have been deceived about the forces of history by the lines of Emma Lazarus inscribed on the Statue of Liberty:

Give me your tired, your poor
Your huddled masses yearning to breathe free,
The wretched refuse of your teeming shore,
Send these, the homeless, tempest-tossed, to me:
I lift my lamp beside the golden door.

The image is one of an infinitely generous earth-mother, passively opening her arms to hordes of immigrants who come here on their own initiative. Such an image may have been adequate for the early days of colonization, but by the time these lines were written (1886) the force for immigration was largely manufactured inside our own borders by factory and mine owners who sought cheap labor not to be found among laborers already here. One group of foreigners after another was thus enticed into the United States to work at wretched jobs for wretched wages.

At present, it is largely the Mexicans who are being so exploited. It is particularly to the advantage of certain employers that there be many illegal immigrants. Illegal immigrant workers dare not complain about their working conditions for fear of being repatriated. Their presence reduces the bargaining power of all Mexican-American laborers. Cesar Chavez has repeatedly pleaded with congressional committees to close the doors to more Mexicans so that those here can negotiate effectively for higher wages and decent working conditions. Chavez understands the ethics of a lifeboat.

The interests of the employers of cheap labor are well served by the silence of the intelligentsia of the country. WASPS—White Anglo-Saxon Protestants—are particularly reluctant to call for a closing of the doors to immigration for fear of being called ethnocentric bigots. It was, therefore, an occasion of pure delight for this particular WASP to be present at a meeting when the points he would like to have made were made better by a

non-WASP speaking to other non-WASPS. It was in Hawaii, and most of the people in the room were second-level Hawaiian officials of Japanese ancestry. All Hawaiians are keenly aware of the limits of their environment, and the speaker had asked how it might be practically and constitutionally possible to close the doors to more immigrants to the islands. (To Hawaiians, immigrants from the other 49 states are as much of a threat as those from other nations. There is only so much room in the islands, and the islanders know it. Sophistical arguments that imply otherwise do not impress them.)

Yet the Japanese-Americans of Hawaii have active ties with the land of their origin. This point was raised by a Japanese-American member of the audience who asked the Japanese-American speaker: "But how can we shut the doors now? We have many friends and relations in Japan that we'd like to bring to Hawaii some day so that they can enjoy this beautiful land.

The speaker smiled sympathetically and responded slowly: "Yes, but we have children now and someday we'll have grandchildren. We can bring more people here from Japan only by giving away some of the land that we hope to pass on to our grandchildren some day. What right do we have to do that?"

To be generous with one's own possessions is one thing; to be generous with posterity's is quite another. This, I think, is the point that must be gotten across to those who would, from a commendable love of distributive justice, institute a ruinous system of the commons, either in the form of a world food bank or that of unrestricted immigration. Since every speaker is a member of some ethnic group it is always possible to charge him with ethnocentrism. But even after purging an argument of ethnocentrism the rejection of the commons is still valid and necessary if we are to save at least some parts of the world from environmental ruin. Is it not desirable that at least some of the grandchildren of people now living should have a decent place in which to live?

THE ASYMMETRY OF DOOR-SHUTTING

We must now answer this telling point: "How can you justify slamming the door once you're inside? You say that immigrants should be kept out. But aren't we all immigrants, or the descendants of immigrants? Since we refuse to leave, must we not, as a matter of justice and symmetry, admit all others?"

It is literally true that we Americans of non-Indian ancestry are the descendants of thieves. Should we not, then, "give back" the land to the Indians; that is, give it to the now-living Americans of Indian ancestry? As an exercise in pure logic I see no way to reject this proposal. Yet I am unwilling to live by it; and I know no one who is. Our reluctance to embrace pure justice may spring from pure selfishness. On the other hand, it may arise from an unspoken recognition of consequences that have not yet been clearly spelled out.

Suppose, becoming intoxicated with pure justice, we "Anglos" should decide to turn our land over to the Indians. Since all our other wealth has also been derived from the land, we would have to give that to the Indians, too. Then what would we non-Indians do? Where would we go? There is no open land in the world on which men without capital can make their living (and not much unoccupied land on which men with capital can either). Where would 209 million putatively justice-loving, non-Indian, Americans go? Most of them—in the persons of their ancestors—came from Europe, but they wouldn't be welcomed back there. Anyway, Europeans have no better title to their land than we to ours. They also would have to give up their homes. (But to whom? And where would *they* go?)

Clearly, the concept of pure justice produces an infinite regress. The law long ago invented statutes of limitations to justify the rejection of pure justice, in the interest of preventing massive disorder. The law zealously defends property rights—but only *recent* property rights. It is as though the physical principle of exponential decay applies to property rights. Drawing a line in time may be unjust, but any other action is practically worse.

We are all the descendants of thieves, and the world's resources are inequitably distributed, but we must begin the journey to tomorrow from the point where we are today. We cannot remake the past. We cannot, without violent disorder and suffering, give land and resources back to the "original" owners—who are dead anyway.

We cannot safely divide the wealth equitably among all present peoples, so long as people reproduce at different rates, because to do so would guarantee that our grandchildren—everyone's grandchildren—would have only a ruined world to inhabit.

MUST EXCLUSION BE ABSOLUTE?

To show the logical structure of the immigration problem I have ignored many factors that would enter into real decisions made in a real world. No matter how convincing the logic may be it is probable that we would want, from time to time, to admit a few people from the outside to our lifeboat. Political refugees in particular are likely to cause us to make exceptions: We remember the Jewish refugees from Germany after 1933, and the Hungarian refugees after 1956. Moreover, the interests of national defense, broadly conceived, could justify admitting many men and women of unusual talents, whether refugees or not. (This raises the quality issue, which is not the subject of this essay.)

Such exceptions threaten to create runaway population growth inside the lifeboat, i.e., the receiving country. However, the threat can be neutralized by a population policy that includes immigration. An effective policy is one of flexible control.

Suppose, for example, that the nation has achieved a stable condition of ZPG, which (say) permits 1.5 million births yearly. We must suppose that an acceptable system of allocating birth-rights to potential parents is in effect. Now suppose that an inhumane regime in some other part of the world creates a horde of refugees, and that there is a widespread desire to admit some to our country. At the same time, we do not want to sabotage our population control system. Clearly, the rational path to pursue is the following. If we decide to admit 100,000 refugees this year we should compensate for this by reducing the allocation of birth-rights in the following year by a similar amount, that is downward to a total of 1.4 million. In that way we could achieve both humanitarian and population control goals. (And the refugees would have to accept the population controls of the society that admits them. It is not inconceivable that they might be given proportionately fewer rights than the native population.)

In a democracy, the admission of immigrants should properly be voted

on. But by whom? It is not obvious. The usual rule of a democracy is votes for all. But it can be questioned whether a universal franchise is the most just one in a case of this sort. Whatever benefits there are in the admission of immigrants presumably accrue to everyone. But the costs would be seen as falling most heavily on potential parents, some of whom would have to postpone or forego having their (next) child because of the influx of immigrants. The double question *Who benefits? Who pays?* suggests that a restriction of the usual democratic franchise would be appropriate and just in this case. Would our particular quasi-democratic form of government be flexible enough to institute such a novelty? If not, the majority might, out of humanitarian motives, impose an unacceptable burden (the foregoing of parenthood) on a minority, thus producing political instability.

Plainly many new problems will arise when we consciously face the immigration question and seek rational answers. No workable answers can be found if we ignore population problems. And—if the argument of this essay is correct—so long as there is no true world government to control reproduction everywhere it is impossible to survive in dignity if we are to be guided by Spaceship ethics. Without a world government that is sovereign in reproductive matters mankind lives, in fact, on a number of sovereign lifeboats. For the foreseeable future survival demands that we govern our actions by the ethics of a lifeboat. Posterity will be ill served if we do not.

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