

DISCRIMINATING ALTRUISMS

by *Garrett Hardin*

Abstract. Reliable Darwinian theory shows that pure altruism cannot persist and expand over time. All higher organisms show inheritable patterns of caring and discrimination. The principal forms of discriminating altruisms among human beings are individualism (different from egoism), familialism, cronyism, tribalism, and patriotism. The promiscuous altruism called "universalism" cannot endure in the face of inescapable competition. Information can be promiscuously shared, but not so matter and energy without evoking the tragedy of the commons. Universalism is not recommendable even as an ideal. Survival now requires the creation of an intellectual base for a new patriotism.

According to the *Oxford English Dictionary* the word "altruism" (Latin *alter* = other) was first used in 1853, following the introduction in 1722 of the word "egoism" (Latin *ego* = I). Were people unable to discuss motivation and the consequences of human actions before these nouns were coined? Certainly not: contrasting adjectives ("generous" and "selfish") and their related verbs ("to give" and "to take") sufficed to deal with the contrasting phenomena of social life. But the creation of the nouns—substantives—moved the discussion to another plane by suggesting that there was a substance as it were behind each kind of action. In the Indo-European languages (and many others) nouns imply a reality that is greater or more substantial than that suggested by verbs and adjectives.¹ Once a substantive is created it is all too easy to assume a material reality behind the word.

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An unsophisticated public is inclined to put the burden of proof on the iconoclast who doubts the substantive. This stance is 180° wrong. None the less, in the case of the substantive "altruism," biologists have accepted the burden and have shown that, strictly speaking, altruism does not exist; or to put the matter more exactly, altruism, though it may exist discontinuously in space and momentarily in time, cannot *persist*, expand and displace the natural egoism of a species.

Many people find this disturbing news. Fortunately we need not give up "altruism" altogether. We use many colloquial words that are, from a strictly scientific point of view, indefensible. For example we speak of the "cold" of a winter's day (note the substantive), although physicists have convinced us that there is no such thing as cold, only degrees of heat. Instead of complaining of the "cold" of -13° Fahrenheit we should speak of the "heat" of $+248^{\circ}$ Kelvin. But that is pedantry; not even physicists use such language in everyday life. When employed with sufficient care, inexact colloquial expressions do no harm. "Cold" is one such colloquialism; "altruism," as we shall see, is another.

The sufficient care that we must exercise with "altruism" is this: we must modify the substantive "altruism" with the adjective "discriminating" or use the noun in such a way that the audience infers the missing modifier. Pure altruism is so rare and unstable that policy need make little allowance for it, but impure forms of altruism—discriminating altruisms—are the very stuff of social life.

THE IMPOSSIBILITY OF PURE ALTRUISM

Before we comfort ourselves with the impure altruisms that can exist and persist, we need to accept this basic fact: *A species composed only of pure altruists is impossible.* The simple theoretical proof of this fundamental principle is found in the following thought-experiment.

Let us suppose that I am God. I wish to construct a species of animal in which every individual is a pure altruist, that is, a being that prefers serving others to serving itself. Put another way, when there is a conflict between serving others and serving self, the individual acts in such a way that the benefits of his actions accrue more to others than to himself. Since (by hypothesis) I am God, there is nothing to prevent my creating such a species.

However, not even God can make altruism persist. Why not? At this point we depart from pure theory to commit ourselves to a single empirical fact, namely the inevitability of random mutations. ("Random" means random in terms of the species' need, not in terms of the chemistry of the genetic material.) In the language of the thought-experiment we assume that not even God can put an end to the

mutation process. In creating the elements with the properties they have, God committed the living world to change.

Those who like to reinterpret the story of Genesis in the light of new ideas and facts might note that the firmament, which surely must include what today are regarded as the elements of the periodic table, was created on the second day but living things were created later, plants on the third day and animals on the fifth. The belief, often espoused today by Fundamentalists, that God's creation was final and incorrigible implies that the dynamic, unstable characteristics of atoms and molecules were inherent from the beginning, leading inescapably to the instability of the genetic code of plants and animals. (This paradox needs to be called to the attention of those Fundamentalists who rest their faith on the unchangeability of biological species.)

Once we recognize the inescapable fact of mutability we must acknowledge that the hypothesized pure altruist cannot be what taxonomists call the "type" of any species. Whenever a mutant arises that is less than purely altruistic, the actions of this mutant necessarily benefit its possessor more than the actions of altruists benefit altruists. The egoistic mutant flourishes at the expense of the altruists. If the benefit is translatable into greater fertility (as it must be to make biological sense) then, as the generations pass, the descendants of the egoist will replace those of the altruists. Perhaps this will not happen completely—those familiar with genetics will think of the phenomenon of "balanced polymorphism"—but the egoists will become the "type" as altruists diminish in relative frequency to become no more than rare variants in the population.

Mutation and selection, inescapable and ubiquitous, make pure altruism unstable. Our attention then must be turned to impure altruism, to the other-serving actions of an individual that in some way serve himself as well.

The best known other-serving action is parental care. That this is not pure altruism becomes obvious the moment we shift our focus from the individual to his or her genes. By caring for his young the parent increases the probability that his genes will survive to remote generations. This care may result in some loss to the parent, in some instances to the greatest loss imaginable, the loss of the parent's life. There is a species of cricket in which the mother permits her numerous brood of offspring to eat her up, thus getting a good start in life.² At the individual level her action is purely altruistic. At the genetic level, however, it is not at all altruistic. The mother cricket does not permit any young cricket that happens to be around to eat her. Those who eat her are her own children and they carry her genes. The mother's self-sacrifice is not "for the good of the species"; rather, it serves the good of her germ line. The genes that cause her to behave

in this way are, in a genetic sense, behaving selfishly. This is the insight that led Richard Dawkins to entitle his book *The Selfish Gene*.³ Some people regard the term “selfish genes” as a perversion of language, but significant new insights often put old language on the stretch.

It is an irony of history that the term “altruism” was no sooner coined than the pure form of it was shown to be nonexistent. Just six years after it was introduced, in 1859 to be exact, Charles Darwin, discussing the possibility of one species acting altruistically toward another, wrote in his *Origin of Species*: “Natural selection cannot possibly produce any modification in a species exclusively for the good of another species. . . . If it could be proved that any part of the structure of any one species had been formed for the exclusive good of another species, it would annihilate my theory, for such could not have been produced through natural selection.”⁴

Persistent pure altruism is impossible not only between species but also within a species, as the earlier thought-experiment showed. Darwin realized this, as is evident in scores of passages in both the *Origin* and *The Descent of Man*, although he nowhere expressed the point in a brief and quotable way. Nevertheless, it is not too much to say that the entire literature of the currently fashionable topic “sociobiology” is an extended gloss on Darwin.

ALTRUISM AND THE ENVIRONMENT

Sociobiology has been one of the stimulants to a revival of interest in altruism; another has been the concern for the environment, which has burgeoned in the past two decades. The exact denotation of the word “environment” is often far from clear but discussions of environmental problems seldom continue for long without demands that individuals set aside their selfish desires in favor of the needs of their contemporaries, posterity, or even of an ill-defined “environment.”⁵

In general, environmental goods and the costs of environmental abuses are shared by many people, usually without consent. Environment is a common good (or a common bad). Actions, however, have to be carried out by individuals. Proposing that the individual work for the common good raises old questions about the care and nurture of altruism. Must the individual sometimes act against his own interests to achieve the common good? Or will self-serving actions suffice?

In the economic context Adam Smith is widely (though not correctly) thought to have answered “Yes” to the last question.⁶ His model of the “invisible hand” works well enough (in the absence of monopoly and collusion) to insure that enterprisers sell at the lowest price: seeking their own interest they unintentionally serve the public

interest. But the invisible hand fails to prevent ruinous soil erosion when each farmer seeks only his own (short-term) interest, as the history of America's "Dust Bowl" has shown.⁷ People often must act in concert, generally though not necessarily through government, to bias the free enterprise system so that self-interest becomes congruent with public interest. In general, environmental problems that have not yet been solved are ones that still await the political and social engineering needed to bring about such congruence. Willing assent to engineered changes in the political system requires that many egos be concerned with something other than their *immediate* self-interest. Putting the matter in personal terms, my long-term interest is an interest in my future self, a self who may never be because of intervening death. This future self is a sort of "other"; certainly its interests can conflict with those of my present self. Posterity is another sort of "other"; it too is often served only by some sacrifice of present interests. Concern for the environment cannot be separated from the problems of altruism.

At the most superficial level of analysis, the best of all conceivable worlds for a conscienceless egoist is one in which his egoistic impulses are allowed full reign while his associates are urged to behave altruistically. Unfortunately for the egoist's hopes the symmetry of "sauce for the goose is sauce for the gander" results in other actors operating from the same standpoint. The conflict threatens to produce a stalemate in a world made up of egoists only. But our world is not in stalemate, so it must not be made up of wholly egoistical individuals. There is at least the appearance of a great deal of altruistic activity, and the appearance needs to be accounted for.

ALTRUISM AND DISCRIMINATION

We easily make sense of other-serving actions once we abandon the search for pure altruism and look for modified or limited altruisms. A significant advance was made when the term "kin altruism" was coined as a name for genetically selfish but individually altruistic actions, like that of the mother cricket.⁸ The central characteristic of all forms of altruism is this: *discrimination is a necessary part of a persisting altruism*. A few examples from among thousands that could be cited will illustrate this point.

A bird does not take care of eggs until it has laid its own. Then it does not care for just any eggs but only for those in its own nest, and the nest has to be in the right place. If an experimenter moves the nest a few feet, even though the bird sees the action, it will not sit on its own eggs in its own nest once the total gestalt fails to match that demanded by the genetic program in its brain. Caring *and* discrimination are both genetically programmed.

In some species the male helps in the feeding of the young. If the father is killed the mother soon takes on a new consort. The new male ignores nestlings until, first, the offspring of his "wife" have grown up and left the nest and, second, he has had a chance to mate with the female, who then produces a new family. In human terms the bird doesn't give a hoot for his stepchildren.⁹ Quite a few words are required to state the necessary discriminating characteristics, and our description is probably never complete, but heredity manages to "write" all these discriminations into the genetic code.

Language is treacherous. We are tempted to say that a bird is programmed to take care of his or her offspring. This would be strictly true only if the individual bird were miraculously capable of recognizing his or her offspring, an ability that technological man, with all his scientific instruments, still cannot do with certainty. What a parent recognizes is a complex sequence of phenomena that identifies, with nothing more than a high degree of probability, offspring that are probably his own.

That this is the correct interpretation of the facts is shown by the success of the cuckoobird in exploiting the discrimination system of another species. A cuckoo lays its egg in a nest of the host species, thus taking advantage of the fact that the host bird does not really recognize its own eggs, reacting merely to eggs of an appropriate size and appearance found in the proper place. When the young cuckoo hatches it proves to be far from altruistic: it grows faster than the young of the host and soon pushes the host nestlings out of the nest, thus securing all the parental care for itself.

Is altruism inherited? Yes, but it must be analytically decomposed into inherited helping behavior and inherited ability to discriminate. Among nonhuman animals with limited intellect, analyzing altruism into these two components may seem rather academic, but for the human species this analysis is of the utmost importance.

Culture, a by-product of inherited intelligence, can modify the inherited rules of discrimination almost without limit. Culture is extragenetic: it is transmitted from generation to generation by tradition (principally through words). Culture mutates in ways that are quite different from gene mutation.

A complete catalog of all the ways in which human beings have coupled discrimination with caring would be unwieldy. Nevertheless we need some sort of map through the jungle. I present here a grouping of discriminating altruisms that includes the most important altruisms of our time (see fig. 1).

The various behaviors are arranged in the order of their inclusiveness. At the bottom of the list is *egoism* of the purest sort, a nonaltruistic behavior in which the individual literally cares only for himself. In

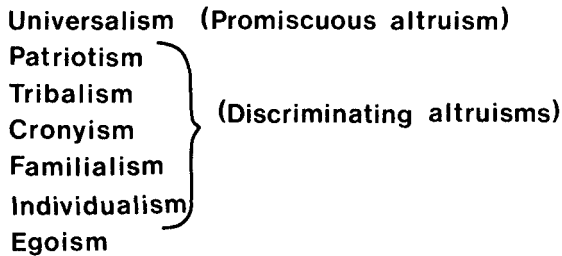


FIG. 1.—Egoism and the varieties of altruism, arranged by size of group. In a rough way, the historical sequence is as given, with the older categories toward the bottom of the list.

its pure form egoism is nonexistent. We are social animals of necessity. (If nothing else, parents must take care of children.) But the concept of pure egoism is a useful base for the assemblage of altruisms.

Immediately above egoism comes *individualism*. It may not be immediately evident that individualism differs from egoism, but individualism can be viewed as the most limited form of altruism. The individualistically oriented person *does* care for others but mostly on a one-to-one basis. “Love thy neighbor as thyself” is the ideal of an individualistic altruist.

Dealing with his neighbors one-by-one, the individualist could theoretically include the entire world within the circle of his discrimination. In practice, the circle is far smaller, leading to the rhetoric of individual “rights” which often work against the common good.¹⁰ It takes cooperative action under a majority rule to provide for a national defense force, municipal sewers, and mandatory smog control devices. “Libertarians,” the most extreme doctrinaire individualists of our time, have difficulty accepting the necessity of any altruism more inclusive than individualism.

Familialism is the term for the altruistic care that family members take of one another. Beyond parental care, familialism is not nearly as important in contemporary America as it is in other parts of the world. In India, for instance, the family is the greatest reality of social existence. In India, keen competition for jobs and social standing make strong family ties and obligations a necessity for individual survival. Indians regard nepotism as perfectly normal and ethical behavior. They are not alone in this. Familialism is powerful in every poverty-stricken, socially chaotic society. So far have Americans departed from time-hallowed familial discrimination that we have even passed laws against nepotism. When the Italian-derived Mafia practices a strong form of extended familialism on American soil we re-

gard this as distinctly unfair, even when their activities are perfectly legal per se.

Cronyism is a form of altruism in which discrimination is made on the basis of long association, regardless of genetic relationship. The word "crony" is derived from a Greek word for long lasting. Cronyism is an adaptive response to the anxiety-creating question, "How can I trust the *other*?" The extensive literature on "The Prisoner's Dilemma" attests to the importance of this question.¹¹ Because of the "egocentric predicament," *I* can never really know what goes on in the mind of the *other*.¹² Siblings may grow up blessedly untroubled by mutual doubt, but strangers do not enjoy this luxury. Cooperative work, particularly when combined with suffering, creates trust. This is why battle-tested military squads are many times more valuable than green squads. Cronyism then approaches brotherhood; the discriminative delight of it is well expressed by Shakespeare's King Harry:

We few, we happy few, we band of brothers;
For he that sheds his blood with me
Shall be my brother.¹³

The perils of social and commercial life are different from those of the battlefield but they are just as real; they too can nurture cronyism. Not only must cronies trust each other, but in the disorderly maelstrom of civic competition cronies often stand together against the rest of society. The mutual loyalty of cronies in government bureaus and business enterprises often neutralizes the public-spirited actions of "whistle-blowers" who seek to serve the common good by informing against work-associates whose actions violate public laws. Expecting praise, whistle-blowers are more often rewarded with abuse and exile.¹⁴

The crony-bias of adults has important roots in early childhood. We praise "good citizenship" to our children and proclaim the merits of serving the public; but at the same time we teach the young to detest, loathe, despise, abhor and condemn the "snitch," the informer, the tattletale, the squealer and the "stool pigeon." Where in all these condemnatory words is there a hint of the public interest? The two kinds of messages we give our children are incompatible. Faced with dissonant pressures in adult life the individual, more often than not, favors his cronies against the common good. Both biology and education are responsible for the resulting miscarriage of justice.

The way of the transgressor against cronyism is hard, as the following example shows. Beginning in 1966 officer Frank Serpico tried to reform his corrupt branch of the New York police department from within. After four years of failure he took his story to the *New York Times*. Publication led to an official investigation and the resignation

of many high-ranking officers. Serpico, regarded as a traitor by his fellow-officers, was shot in the face and almost killed in a police raid. The circumstances of this event were highly suspicious. In 1972 Serpico went into voluntary exile in Europe and did not return until 1980.¹⁵

Economic determinists might regard the loyalty of cronies in business as springing solely from mercenary motives. Economic self-interest certainly enters into the conscious or unconscious calculations of cronies but it surely is not the sole motive. When the member of a business team voluntarily leaves to join another firm the severance is usually final. If he becomes disenchanted with his new position he knows, or is soon told, that he cannot resume his old position. Such is the case at least nine times out of ten. His defection is viewed as a rejection of shared values; his former cronies feel themselves spurned by his departure and find it hard to regenerate their old trust in him. The erstwhile crony is perceived as an apostate; the benefits that might come from re-association seldom seem enough to take the risk. We will accept great objective losses before we will condone or forget apostasy. The spirit of revenge is sure evidence that human beings are far from being pure, or purely rational, egoists.

Tribalism is altruism operating within a tribe, a unit that defies easy definition. Tribal members need not be close kin, nor need they all know each other. They are usually of the same race but need not be. They share common beliefs, particularly of the sort we call religious. They have the same enemies and react to the same threats. Almost always they speak the same language. They may share geographic territory with other tribes but, if they do, they do so in a segregated way. Tribalism is the great reality that has interfered with the development of modern nations in Africa. Africans themselves are acutely aware of this, as one quickly learns by reading their newspapers.

Until recently tribalism has been a very minor kind of altruism in America, but some observers now see the rise of ethnicity and the insistent preservation of multilingualism as signs that America is moving into a tribalistic phase. The bloody conflict in Northern Ireland and the threat of national fission in Belgium are also viewed as tribalism on the rise. It should be noted that since the founding of the United Nations in 1945 there has been much fissioning of nations and no fusion. It would be naive to suppose that the days of tribalism are over.

Patriotism is nation-wide altruism. I prefer this term to "nationalism," the connotations of which are now so unfavorable as to discourage objective inquiry. Even "patriotism" is in some bad odor. Later I shall argue that patriotism can be a virtue. For the present, let us pass to the last and most inclusive altruism, namely universalism.

UNIVERSALISM, THE GRAND ILLUSION

Universalism is altruism practiced *without discrimination* of kinship, acquaintanceship, shared values, or propinquity in time or space. It is perhaps shocking, but entirely accurate, to call it *promiscuous altruism*. Its goal was aptly expressed by a now unknown poet soon after the end of World War I:

Let us no more be true to boasted race or clan,
But to our highest dream, the brotherhood of man.¹⁶

The roots of universalism are to be found in the writings of philosophers and religious leaders thousands of years ago, but the promiscuous ideal was given a great boost by the generalized idea of evolution in the nineteenth century. W. E. H. Lecky (1838-1903), in *The History of European Morals*, wrote: "At one time the benevolent affections embrace merely the family, soon the circle expanding includes first a class, then a nation, then a coalition of nations, then all humanity . . ." From this passage the contemporary philosopher Peter Singer derived the title of his book, *The Expanding Circle*.¹⁷ Singer believes, of course, that total universalism is not only praiseworthy but possible—perhaps even inevitable.

Universalism is commonly coupled with the political ideal of a world state. The fatal weakness of this dream was pointed out by Bertrand Russell: "A world state, if it were firmly established, would have no enemies to fear, and would therefore be in danger of breaking down through lack of cohesive force."¹⁸ By his phrase "if it were firmly established" Russell indicates that he has carried out a thought-experiment of the sort described earlier in demonstrating that a universally altruistic species could not persist. Russell "pulls his punches" however in saying that a world state would merely be "in danger of breaking down." In fact, it would be certain to break down.

To people who accept the idea of biological evolution "from amoeba to man," the vision of social evolution "from egoism to universalism" may seem plausible. In fact, however, *the last step is impossible*. The forces that bring the earlier stages into being are impotent to bring about the last step. Let us see why.

In imagination picture a world in which social evolution has gone no farther than egoism or individualism. When familialism appears on the scene, what accounts for its persistence? It must be that the costs of the sacrifices individuals make for their relatives are more than paid for by the gains realized through family solidarity. In the aggregate, individuals who practice familialism have a competitive advantage over those who do not. That is why the step from individualism to familialism is made.

The pattern of the argument just given is characteristically biological, but it is essential to realize that it does not depend on the genetic

inheritance of differences in behavior. It assumes no other inheritance than that of the impulse to help and the ability to discriminate. Both impulses can be presumed to be nearly universal in the species. That inherited *differences* are not required by the argument is shown by the following thought-experiment. Assume a random exchange of children resulting in all children being raised by foster parents. Culture alone can be assumed to dictate who does, and who does not, behave familially. If familialism is competitively advantageous over the lesser form of altruism (individualism), then familialism will persist. Since biology need not be invoked to account for this cultural step there is no reason for antiheredarians to take umbrage at the thought that familialism confers a selective advantage to its practitioners, "selective" being understood in the broadest sense.

Note also that a "higher" grade of altruism does not necessarily extinguish the grades below it. The word "environment" is a singular noun, but the actual social environment in which people have their being is a mosaic of many microenvironments, complicated beyond our ability to capture it in words. In some "spots" individualism will confer an advantage over familialism, in others the reverse is true. If this were not so social life would not exhibit the mosaic of behaviors that it does.

The argument that accounts for the step to familialism serves equally well for each succeeding step—except the last. Why the difference? Because the One World created by universalism has—by definition—no competitive base to support it. Familialism is supported by the competition of families with each other (which favors those with the greater family loyalty) and by competition of families with simple individualists. Similarly tribalism is supported by competition between tribes, and by competition of tribal individuals with individuals who give their loyalty only to smaller, less powerful groups. But those who speak for One World speak against discrimination and for promiscuity: "Let us no more be true to boasted race or clan." What in the world could select for global promiscuity? Only—as science fiction writers have often pointed out—the enmity (competition) of people from Mars, from other worlds. And if the unifying factor of an external threat were to come into being, it is highly probable that the idealists who now speak out for One World would then agitate for One Universe. Evidently what these idealists dislike is discrimination of *any* sort. Unfortunately for their dreams, the promiscuity they hunger for cannot survive in competition with discrimination.

Universalism is truly the Grand Illusion of many in the community of "intellectuals" in our day. How did it get established? This is a fascinating subject for scholarly research. Let me contribute a few pages to the monumental work that needs to be written. One of the

most significant short documents is a famous passage from John Donne, from the "Devotion" that Ernest Hemingway drew on for the title of his novel, *For Whom The Bell Tolls*: "No man is an island, entire of itself; every man is a piece of the continent, a part of the main. If a clod be washed away by the sea, Europe is the less, as well as if a promontory were, as well as if a manor of thy friends or of thine own were. Any man's death diminishes me, because I am involved in mankind; and therefore never send to know for whom the bell tolls—it tolls for thee."¹⁹

This is beautiful rhetoric and clearly the work of an "intellectual," as we now use that term. But what is an "intellectual"? Alas, it is all too often a person skilled in words but deficient in the imagination required to see the reality behind verbal counters. Consider carefully the images Donne's writing calls forth in the attentive reader. Imagine a promontory, say a cliff at the edge of the sea. If the pounding waves wash away a whole cliff is the loss no greater than if a mere clod were to be washed away? Clod and cliff are equal? And is the loss to you the same in these four cases: your house is destroyed—your friend's house is destroyed—a cliff (without houses) is destroyed—a clod is destroyed? No man of common sense asserts such absurdities.

Donne's prose is a paeon to promiscuity; on this foundation is the dream of universalism built. Denied are all distinctions between large and small, near and far, mine and thine, friend and foe. Yet we must not forget that for three billion years, biological evolution has been powered by discrimination. Even mere survival in the absence of evolutionary change depends on discrimination. If universalists now have their way, discrimination will be abandoned. Even the most modest impulse toward conservatism should cause us to question the wisdom of abandoning a principle that has worked so well for billions of years. It is a tragic irony that discrimination has produced a species (*Homo sapiens*) that now proposes to abandon the principle responsible for its rise to greatness.

We can understand how this has come about if we divide the proficiencies that education produces into three categories: literacy, numeracy and ecolacy.²⁰ Extending the dictionary meaning somewhat we may say that literacy is the ability to deal with words, whether written or spoken. John Donne was supremely literate: his evocation of man as a piece of the continent "mankind" at first compels our assent to the proposition that each person must be concerned with the welfare of every other person. In weaving his dialectical web the skilled but purely literate man constantly asks himself, "What is the appropriate word?"

The numerate man asks another sort of question: "How much? How many?" Numbers make a difference. If there were only one

hungry human being in the world, who would doubt that we should feed him? But what if the number of malnourished people is 800 million, as it probably is? And when the number grows to two thousand million, what then? Is it a matter of indifference whether I give a bushel of wheat to my literal neighbor, or to an equally hungry man twelve thousand miles away? Remember, energy must be used to transport the wheat, energy which cannot then be used to drive a tractor to grow more wheat next year. Quantities matter, distances matter, numbers matter.

The person whose education encompasses ecolacy is supremely sensitive to time and to the changes that come with time and repetition. The key question of the ecolate person is this: "And then what?"

"Ecolacy," derived from the word ecology, tries to take account of the total system in which reactions take place, including such phenomena as synergy, positive and negative feedback, thresholds, selection and boomerang effects. Do pests threaten our crops? Then, says the nonecolate person, let us generously douse them with "pesticides." (Note the appropriateness of the word.) But ecolacy points out the error: pesticides select for pesticide-resistant pests. Such selection can ultimately defeat our intent and make the situation worse off than before. For example, is there a housing shortage in our city? Then let us build more houses—surely this will cure the shortage? "Not so," says ecolate man. The city is part of a larger system: building more houses will attract more house dwellers to the city, leaving the housing situation as bad as ever and the traffic situation worse.

It becomes ever more apparent that the burning questions of our time need to be subjected to the discipline of the ecolate question, "And then what?" Unfortunately, this question is seen as threatening by many vested interests, none more than those philosophers who habitually deal with ethics in a purely literate way. Ethicists of the deontological persuasion attempt the impossible if they try to solve ethical problems only with such dull tools as sin, duty, right and obligation—all words blind to number and time-related processes. Consequentialist ethicists, by contrast, are both ecolate and numerate in their approach, insisting that numbers, time and consequences matter.²¹

THE UNEASY COEXISTENCE OF ALTRUISMS

The plurality of altruisms breeds dilemmas. The character of a culture is revealed in the traditional ways it employs to resolve these dilemmas. No characterization of our culture can be complete without some discussion of a famous statement by the novelist E. M. Forster:

I hate the idea of causes, and if I had to choose between betraying my country and betraying my friend, I hope I should have the guts to betray my country.

Such a choice may scandalise the modern reader, and he may stretch out his patriotic hand to the telephone at once and ring for the police. It would not have shocked Dante, though. Dante places Brutus and Cassius in the lowest circle of hell because they had chosen to betray their friend Julius Caesar rather than their country Rome. . . . Love and loyalty can run counter to the claims of the state. When they do—down with the state, say I which means that the state would down me.²²

Forster wrote this in 1939, just before the beginning of World War II. By this time many stories coming out of Nazi Germany told of patriotic Hitler Youth informing on their own parents when the latter were heard to make statements about Der Führer that were less than enthusiastic. Patriotism was given precedence over familialism. The world was shocked.

As Forster's final sentence implies, patriotism is theoretically capable of overwhelming altruisms of lesser scope. Why does it not always do so? Forster said it was because "loyalty can run counter to the claims of the state." The matter can be put more strongly and in quasi-numerate terms: the power of loyalty is *inversely* proportional to the size of the altruistic group. In contrast, political power to control and repress is *directly* proportional to the size of the group. The opposition of the two powers is indicated in figure 2.

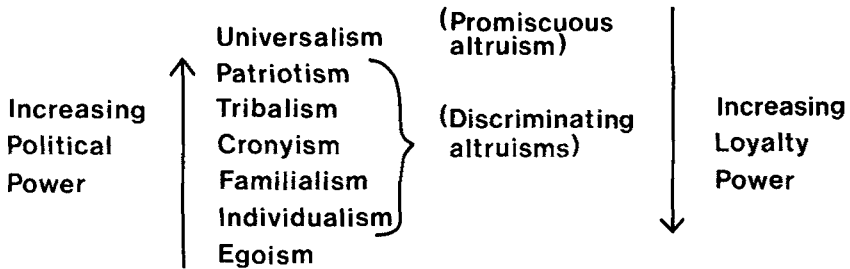


FIG. 2.—The conflict of powers that works against stabilization at any single level of altruism.

The ineradicable opposition of small group loyalty to the sheer political power of large numbers confutes the supposed drive toward universalism. Because of the egocentric predicament the inference of sincerity in the "other" is always risky, and the greater the number of "others" in a group the greater the risk. The power of loyalty is deeply rooted in innate biological responses to propinquity and repeated association. The power of loyalty to the few constantly erodes the political power of the many. Patriotism depends more on intellectual arguments than does cronyism: this is a key weakness of patriotism. This inherent weakness helps explain the adaptive significance of the theocratic state which proclaims the "divine right of kings." Whenever

the support of a state can be made a divine imperative, patriotic loyalty is removed from the realm of rational doubt and shielded from the corrosion of cronyism.

Do the opposing forces create an intermediate point of stability? This seems unlikely. The life histories of individuals vary immensely; the relative valence of political power and loyalty power in the character of each individual is determined by his particular experiences. A crude statistical average might be made for each culture, but there is no reason to think the average would be stable. History forever roils the social systems of the world. Compare the England of Rudyard Kipling with England in the 1930s with its pacifistic "Oxford Oath" taken by millions of young men. The Boer War and World War I moved the statistical balance point of the discriminations "downward" (on the list in figure 2—no ethical interpretation is implied). Then when Germany invaded Poland in September of 1939 the Oxford Oath was abruptly jettisoned and the balance point moved decisively "upward" toward patriotism. It has since fallen in England. In America it has fallen even more, as a result of the Vietnam war. The manifest dangers of nuclear war argue (to some) for a permanent abandonment of patriotism, but the argument is valid only if there are no reasons other than war for supporting discrimination at the national level. We will return to this point later.

THE MISSING MIDDLE TERM

"Liberalism" is an ill-defined term of constantly changing meaning; yet, whatever its meaning, it is not far off the mark to say that liberalism enjoyed more praise than power in the nineteenth century, whereas now it enjoys more power than praise. Hell, as someone said, is when you get what you want. With power, self-doubts have come to the liberals. The fashionable journals of the literate world are now pulsating with liberal threnodies.

The political philosopher Michael Novak has put his finger on a key weakness of what is, in our time, called liberalism: "The liberal personality tends to be atomic, rootless, mobile, and to imagine itself as 'enlightened' in some superior and especially valid way. Ironically, its exaggerated individualism leads instantly to an exaggerated sense of universal community. The middle term between these two extremes, the term pointing to the finite human communities in which individuals live and have their being, is precisely the term that the liberal personality disvalues."²³

That liberals should regard themselves as elite—literally "chosen"—means nothing more than that they are human. They enjoy an esprit de corps, a feeling which those outside a chosen circle identify as ethnocentrism (a sin, be it noted, especially deprecated by

contemporary liberals). What needs explaining is the apparent paradox, or irony as Novak calls it, of combining in the liberal personality individualism and universalism with no "middle term."

In the assemblage presented in figure 2, Novak's "middle term" is decomposed into four different altruisms. Of these, the most conspicuously lacking among contemporary liberals is patriotism. Forster's condemnation of this form of altruism could easily be matched by hundreds of other statements coming from the liberal, "intellectual," literate community. Patriotism has had a bad press ever since Doctor Johnson's offhand remark, "patriotism is the last refuge of a scoundrel."²⁴

Never has the defense of individual "rights" been as strong as it is in our time. Why then, to paraphrase Novak, does exaggerated individualism lead to exaggerated universalism? To a biologist this puzzle presents little difficulty. Among altruisms, individualism is clearly a borderline case; psychologically it is close to naked egoism. *Homo sapiens* is a social animal: his social appetite is not completely satisfied by an altruism that goes no farther than the I-Thou relationship of Martin Buber.²⁵ Our groupish hungers are seldom completely satisfied by purely dyadic relationships. A significant fraction—perhaps even a large fraction—of humankind craves identification with groups larger than I and Thou.

Radical individualism is often linked to hedonism. One sees this clearly in the multitude of magazines in the *Playboy* mode. A practicing playboy is not a complete egoist because "it takes two to tango," but his individualism is of a low order, for the other is little more than a sex object. In the past, women (more than men) may have been the guardians of community values; now there is a *Playgirl* magazine that seeks to erase the difference. For Americans, the Declaration of Independence has supplied a banner for hedonism: "the pursuit of happiness."

Hedonists of both sexes should be informed of what the nineteenth century philosopher Henry Sidgwick called the "Hedonistic Paradox": those who most actively pursue pleasure as a primary goal are least likely to achieve it. Personal happiness is best gained by indirection, by serving some larger cause. I think this can be taken as an empirical fact. By way of theoretical explanation I would point to two factors.

First, since we are social animals who find pleasure working with others, the horizon of our attention must be broadened beyond the bounds of egoism; perhaps the greater the cause the greater the pleasure in serving it. Secondly, human beings find so much pleasure in overcoming difficulties that they even seek out difficulties to overcome. We climb mountains that stand not in our way—and thus dis-

cover new ways to happiness. Behavior that to a simple rationalist might seem perverse plainly has contributed to the success and progress of the human species. Progress has selected for temperaments that find the simple hedonism of unalloyed individualism too low a peak for complete satisfaction. Not all human beings transcend the demands of simple hedonism, but enough do to affect the course of history. To forego short-term hedonistic gain for a dream that may—only *may*—be realized in the future is to fall into a behavioral pattern that supports altruism.

The dreams of today's more far-seeing individualists are most commonly universalist dreams: One World, the Brotherhood of Man and the like. Although universalists disparage the moral value of lesser groups, in furthering their cause they necessarily rely on cronyism. Ironically, cocktail parties to which liberals alone are invited are a great place to denounce elitism, the enemy of promiscuity. Thus is the cause of promiscuity advanced by discrimination.

All causes succeed through close-knit, small groups. The effectiveness of a great army, serving patriotic ends, is determined by the cronyism of multitudinous small squads, a fact long recognized by the military. Similarly, the effectiveness of liberals in pursuing universalist ends is determined by the cronyism developed in small groups. The grass roots of patriotism and universalism are the same, only the ends differ. Why has patriotism been rejected by contemporary liberals? It is to this that we now turn our attention.

SHARING THE ENVIRONMENT

The universe may or may not be finite, but prudence demands that we assume that the portion *practically* available to humankind is finite. Technology effectively expands this portion somewhat but at a rate that is less than the expansion of our expressed demands. Hence the unending complaints of scarcity. The analytical model for productive economic thinking must be that of a "closed system," a system in which input matches output (diminished somewhat by entropic loss). The enduring task of political economy is the allocation of scarce resources.

No sizeable, prosperous society has been able to persist for long under a rule of equal distribution of income, wealth or privilege. This empirical fact has not interfered with the persistence of the dream of distributing goods by the rule "to each according to his needs," to use Marx's language for an ideal furnished him by the religion he despised.

Empiricism is not enough. Before we can assent to an apparent impossibility we must understand it, that is we must find the theoretic-

cal “impotence principle” that sets the limits.²⁶ Why won’t a Marxian distribution work? To answer this we must ask, distribution of what? It makes a difference.

The “what’s” of the world come in three varieties: matter, energy, and information. Every redistribution of matter and energy is in accordance with zero-sum principles: the gain to A is exactly matched by the loss to B. Equations must balance: the mass (or quantity of energy) on the left side must match that on the right. Matter is conserved. Energy is conserved.²⁷ Matter and energy obey “conservation laws.”

However great our social impulses, evolution has selected for an irreducible minimum of egoism. Any proposal to transfer the goods of matter and energy from B to A is likely to be resisted by B.²⁸ Overpowering such resistance uses up “energy,” either in the physicist’s sense or in some other significant sense. It is highly doubtful that there ever was any initial state of equidistribution of human wealth or social power. Equidistribution, if at all possible, can be achieved only by some impoverishment of the group as a whole—in the case of violent revolution by massive impoverishment (and an invariable failure to achieve the goal of the instigators). Violence, which accelerates the drive toward entropy, creates a negative-sum game. This is the consideration that moderates the enthusiasm of the prudent man for distributive justice. Territorial behavior in other animals and property rights among human beings often serve the same cause—the cause of peace.

There are three basic politico-economic systems: privatism, socialism and commonism.²⁹ Privatism (under various names such as private enterprise, capitalism, and free enterprise) never takes equidistribution as a goal, though apologists often assert that a “trickle-down effect” slowly works toward that end. Socialism and commonism, however, seem congenitally committed to the ideal of equidistribution. Under socialism, the major part of the community’s wealth is kept as common property which is managed (supposedly) for the good of all by managers appointed more or less directly by the community. This property may be spoken of as a “managed commons.”

Under strict commonism, however, the commons is unmanaged, being left available to all under the Marxist rule, “to each according to his needs.” Under conditions of abundance, commonism may work very well. The hunting grounds of the pioneer days of America were a commons that worked. An unmanaged commons has the advantage that the cost of management is zero. But when people become crowded and resources scarce, an unmanaged commons does not work well because each individual is the judge of his own needs. With scarcity, commonism favors egoism over altruism. The would-be al-

truist, if he is to survive under scarcity, must become as egoistic as his competitors. In the name of freedom and distributive justice an unmanaged commons breeds harsh egoism, inequality, and injustice. So long as such a system endures men of good will are powerless to change the results: such is the "tragedy of the commons."

The commons that led the obscure English mathematician W. F. Lloyd to deduce its analytical properties a hundred and fifty years ago are now not very important.³⁰ This was the commons of English pasture land. But the commons of oceanic fisheries and the sea bed (from which valuable minerals can be extracted) still exist and promise to create international trouble in the future. So too does the commons of the atmosphere which serves as a sink for the "bads" of volatile pollutants.

Without being aware enough or honest enough to use the proper label we constantly create new commons. Insurance, which begins as a wager, tends towards a commons as the fraction of people insured approaches unity. Those who are insured pressure the system to make premiums equal while wanting payouts to be made according to unmonitored needs. To keep the costs of automobile accident insurance and fire insurance from ruinous escalation there must be constant monitoring by managers alert to arson and fraudulent repair claims.

Universalism is the ideal of One World in which clod equals cliff; the "rights" of all are equal whether friend or foe, native or foreigner, relative or stranger. A universalist is, whether he acknowledges it or not, a follower of Marx and a promoter of the tragedy of the commons. How, then, are we to account for Novak's observation above that the liberals of our time have hybridized the altruisms at the extremes of the scale, namely individualism and universalism?

The answer is to be found in the peculiar nature of words, the medium of the merely literate intellectuals who are so influential in our time. By words we convey information. Unlike matter and energy, *information is not subject to conservation laws.*

Agent B, in the act of giving information to A, loses nothing. In fact, if A reworks the information into an improved form and passes it back to B, both gain. Far from being a zero-sum game, information sharing can be a positive-sum game. When we deal with information there are strong reasons for sharing generously, even for maintaining a commons of information. Science could not have made its rapid progress had information been treated like a property subject to conservation laws.³¹ In espousing universalism professional literates are merely generalizing from their profession to the world at large, unaware of the significant difference between information on the one hand and matter and energy on the other.

What, then, accounts for the individualism of this group? This is no secret: Shakespeare's plays could not have been written by a committee. Creativity at the highest level is inescapably individualistic. There is no group mind to carry out the decisive act of creation.

The One World that universalists dream of is clearly a world freed of many of the restraints of lesser political units, a free world ("to each according to his needs"). It is easy for a radical individualist to embrace universalism while rejecting all intermediate altruisms. The strengths of individualism are unaffected by this hybridization of ideals precisely because no real universalist world exists to act as a restraint on the individualist who worships it as an ideal. Were One World to come into being, and were it to acquire the sanctions that all lesser associations have taken unto themselves, the individualist would find himself unhappier than ever. There would then be no larger ideal for him to aspire to.

Universalism is attractive in large part because the ideal is used as a weapon to beat off the restraints necessarily imposed on individuals by family, tribe, and nation. In deciding how much support to give individualism we are well advised to examine the track record of individualism. Philosophers and historians are pretty well agreed on the meaning of the Greek experience. Bertrand Russell writes: "The greatness of the Greeks in individual achievement was, I think, intimately bound up with their political incompetence, for the strength of individual passion was the source both of individual achievement and of the failure to secure Greek unity. And so Greece fell under the domination, first of Macedonia, and then of Rome."³² And Will Durant agrees: "Individualism in the end destroys the group, but in the interim it stimulates personality, mental exploration, and artistic creation. Greek democracy was corrupt and incompetent, and had to die."³³

It is exciting to live in a world of richly creative people, but the individualism that fosters creativity may, *unless it becomes self-conscious*, destroy the foundations of the society that supports it. "Becoming self-conscious" means that intellectuals must realize that the One-World commonism they aspire to is only a *natural, though fatal, inference from their craft*, which is the elaboration and distribution of ideas and information. Matter and energy, by contrast, must be distributed with discrimination, not promiscuously, else the tragedy of the commons will be set in train. Intellectuals must learn to praise virtues different from the ones that give them their craft-strength. The survival of a civilization in which intellectuals have great social power requires that this power be coupled with a degree of objectivity that is rare among people in all vocations.

Universalism is unattainable, and individualism is not enough—not in a competitive world where a larger group has the edge over smaller

ones. The last remark is, of course, to be understood *ceteris paribus*; but the thrust of the argument pushes us toward the conclusion that there will always be an important role for the altruism that is only one step below universalism. That is the altruism we call "patriotism."

Many concerned people today find this conclusion hard to swallow. Patriotism, war, nuclear holocaust, destruction of civilization—this chain of ideas has led many to believe that patriotism must be expunged to save civilization. The establishment of One World is seen as a way to dismantle the armaments of nations. But promiscuous universalism would destroy the world too, though in a different way: in T. S. Eliot's prescient formula, "not with a bang, but a whimper."³⁴

The whimper has begun, but so far as I know only one literary man has noticed the form it is taking, the French writer Jean Raspail in his novel *The Camp of the Saints*.³⁵ His argument is only implicit (as a good fiction-writer's should be), but it is easy to translate it into explicit stages. The logical steps in the developing disaster are these: (1) by virtue of their craft, opinion makers worship the ideal of promiscuous sharing: for them patriotism is unthinkable; (2) "to each according to his needs" means that when immigrants from a poor country knock at the door of a rich country they must be admitted; (3) the process of moving from poor to rich will continue until wealth is equalized everywhere; (4) but since there is no group limitation on individual freedom to breed it is not so much wealth that will be equalized as it is poverty, thus plunging everyone into the Malthusian depths.

Have we no choice other than between the whimper of common pauperization and the bang of thermonuclear destruction? I think we have. I am enough of an optimist to believe that we can create and sustain forms of patriotism based on national pride in the arts of peace—science, music, painting, sports and other arts of living. Excellence in these accomplishments can be the occasion for community pride or hubris, which has its dangers but without which life is not fully lived. Accompanying all this there must be the patriotic will to protect what has been achieved against demands for a worldwide, promiscuous sharing. A community that renounces war as a means of settling international disputes still cannot survive without that discriminating form of altruism we call patriotism. It must defend the integrity of its borders or succumb into chaos.

A LESSON FROM BIOLOGY

The caring impulse, generalized without limit, produces universalism which, though desirable in the realm of information, is destructive when it comes to matter and energy because promiscuous sharing of limited physical resources leads to the tragedy of the commons. Some people have revived the old motto "all men are brothers" with the

assertion that the pageant of Darwinian evolution gives it new meaning. Possibly so, but the conclusion that brotherhood requires us to perish in a commons is a *non sequitur*.

If biology is to be consulted for guidance we must take note of this supremely important fact: a species does not survive because its members act "for the good of the species," but because individuals act for the good of themselves, of their germ-lines, or of reciprocity-groups smaller than the total population. The survival of the species is, as it were, an accidental by-product of discriminating altruism. Biologists have known this more or less ever since Darwin, but it has become crystal clear only in the last two decades.

Completely promiscuous altruism in a species that has no important enemies would destroy both the species and its environment. A judicious mixture of discriminating altruisms is required for survival. The universalist's dream embodied in Saint Augustine's *City of God* can be realized only in the realm of ideas, which alone can be promiscuously shared with safety.³⁶ We must be chary of deducing any *material* consequences from the assertion that "all men are brothers." The pleasures of brotherhood are sweet, but only because they involve both caring *and* discrimination. As Pierre-Joseph Proudhon realized a century ago: "If everyone is my brother, I have no brothers."³⁷

Brotherhood requires otherhood. Civilization has been built upon, and can only survive with, a changeable mixture of discriminating altruisms.

NOTES

1. Benjamin Lee Whorf, *Language, Thought, and Reality* (New York: Wiley, 1956).
2. Richard D. Alexander, "The Evolution of Genitalia and Mating Behavior in Crickets (Gryllidae) and other Orthoptera," *Miscellaneous Publications of the Museum of Zoology, University of Michigan* 133 (1967): 1-62.
3. Richard Dawkins, *The Selfish Gene* (New York: Oxford University Press, 1976).
4. Charles Darwin, *The Origin of Species*, 6th ed. (New York: Macmillan, 1927), pp. 197-98.
5. Christopher Stone, *Should Trees Have Standing?* (Los Altos, Calif.: William Kaufmann, 1974).
6. Adam Smith, *The Wealth of Nations* (New York: Modern Library, 1937), p. 423.
7. Paul B. Sears, *Deserts on the March* (Norman: University of Oklahoma Press, 1980).
8. The first step in the development of the idea of altruism-as-discrimination was made by Robert Trivers in his article, "The Evolution of Reciprocal Altruism," *Quarterly Review of Biology* 46 (1971): 35-57. Early critics protested that behavior that followed the rule of "you scratch my back and I'll scratch yours" was not altruism at all—which indeed it was not, in the pure sense. Trivers freed our minds from the shackles of the idealist's unreciprocated altruism, thus turning our attention to discriminating altruisms, the essential elements of social existence.
9. Harry W. Power, "Mountain Bluebirds: Experimental Evidence against Altruism," *Science* 189 (1975): 142-43.
10. Garrett Hardin, "Limited World, Limited Rights," *Society* 17 (1980): 5-8.

11. Anatol Rapoport and A. M. Chammah, *The Prisoner's Dilemma* (Ann Arbor: University of Michigan press, 1965).

12. I have been told that Ralph Barton Perry (1876-1957) coined the term "egocentric predicament," but I have not verified this. The term is seldom used, which suggests that the underlying phenomenon is under something of a taboo. Social intercourse is facilitated by a belief in the sincerity of the "other," which is an unknowable. Most traditional ethics is concerned with intentions, which are also unknowable. The law wisely is built on actions, but it frequently lapses into inferring intentions, as in the case of "fraud." In our desire to shield our minds from the corrosion of doubt we usually suppress the sure knowledge that we can never know what goes on in the mind of the "other." Social life is permeated with this suppression.

13. William Shakespeare, *King Henry V*, act 4, sc. 3, line 60 (1599).

14. Many disturbing examples of the treatment of whistleblowers are to be found in Alan F. Westin, ed., *Whistle-Blowing: Loyalty and Dissent in the Corporation* (New York: McGraw-Hill, 1981). For the particular story of a high-level dissident in the General Motors Corporation, John Z. DeLorean, see J. Patrick Wright, *On a Clear Day You Can See General Motors* (New York: Avon, 1979).

15. Mitchell Satchell, "Frank Serpico is Coming Home," *Parade*, October 12, 1980, p. 9.

16. Thomas Curtis Clark, "The New Loyalty," in *The New Patriotism*, ed. Thomas Curtis Clark and Esther A. Gillespie (Indianapolis: Bobbs-Merrill, 1927).

17. Peter Singer, *The Expanding Circle: Ethics and Sociobiology* (New York: Farrar, Straus & Girous, 1981). The quotation from Lecky was taken from this source.

18. Bertrand Russell, *Authority and the Individual* (London: Unwin, 1949), p. 17.

19. John Donne, "Devotion XVII" (1624), in *The Complete Poetry and Selected Prose of John Donne & The Complete Poetry of William Blake* (New York: Modern Library, 1946), p. 332. I have modernized both spelling and punctuation.

20. Garrett Hardin, "An Ecolate View of the Human Predicament," in *Global Resources: Perspectives and Alternatives*, ed. Clair N. McRostie (Baltimore: University Park Press, 1980), pp. 49-71.

21. A good presentation of this view, written before the word "ecolate" was coined, is found in Joseph Fletcher, *Situation Ethics* (Philadelphia: Westminster Press, 1966). For a more recent discussion see Garrett Hardin, *Promethean Ethics* (Seattle: University of Washington Press, 1980).

22. E. M. Forster, "What I Believe," in *Two Cheers for Democracy* (New York: Harcourt, Brace & World, 1951), p. 68.

23. Micheal Novak, "The Social World of Individuals," *Hastings Center Studies* 2 (1974): 37-44.

24. Samuel Johnson made this remark in 1775, at the age of 66, but he was not condemning true patriotism. As Boswell said, "Patriotism having become one of our topicks, Johnson suddenly uttered in a strong determined tone, an apophthegm at which many will start: 'Patriotism is the last refuge of a scoundrel.' But let it be considered that he did not mean a real and generous love of our country, but that pretended patriotism which so many, in all ages and countries, have made a cloak for self interest" (*Life of Johnson*, James Boswell [New York: Dutton, 1976], 1:547-48). In other words, patriotism is the last of a scoundrel's many refuges, most of which bear the names of virtues.

25. Martin Buber, *I and Thou* (New York: Scribner's, 1970).

26. E. T. Whittaker, "Some Disputed Questions in the Philosophy of the Physical Sciences," *Proceedings of the Royal Society of Edinburgh* 61 (1942): 160-75.

27. The combination of matter and energy into Einstein's Law, $E=mc^2$, need not concern us here.

28. Garrett Hardin, "Living on a Lifeboat," *BioScience* 24 (1974): 561-68.

29. Garrett Hardin and John Baden, eds., *Managing the Commons* (San Francisco: W. H. Freeman, 1977). See particularly chapters 1, 2, 3, 7, 9, 11, 19, and 25.

30. William Forster Lloyd, "On the Checks to Population," (1833) in *Lectures on Population, Value, Poor-Laws and Rent* (New York: Augustus M. Kelley, 1968).

31. In passing, we note that sometimes there are advantages to treating information as property. Copyright and patent laws do so, and make it possible for the originators of

good new ideas to reap profits, thus encouraging others to be inventive. The transferability of these property rights makes it commercially possible for enterprisers to make the investment needed to convert idea into product, a possibility foreclosed to a public patent (which creates a commons). But property rights in information are difficult to police; note, for example, the pirating of computer software and tape recordings.

32. Bertrand Russell, *Authority and the Individual* (London: Unwin, 1949), p. 27.

33. Will Durant, *The Life of Greece* (New York: Simon & Schuster, 1939), p. 554.

34. The last two lines of *The Hollow Men* (1925) are: "This is the way the world ends/Not with a bang but a whimper" (T. S. Eliot, *The Complete Poems and Plays* [New York: Harcourt, Brace, 1952], p. 59). Exercising his right to be elliptical and ambiguous, a poet always leaves us wondering whether he is unusually prescient or merely lucky.

35. Jean Raspail, *The Camp of the Saints* (New York: Scribner's, 1975).

36. Robert Nisbet, *History of the Idea of Progress* (New York: Basic Books, 1980), p. 60.

37. Alexander Gray, *The Socialist Tradition* (London: Longmans, Green, 1946), p. 159.