The Feast of Malthus

Living within limits

by Garrett Hardin

or a few decades after the publication of Malthus's celebrated essay in 1798, population was much discussed in England; then at about the middle of the 19th century it became overshadowed by more narrowly economic problems. In the 20th century Malthus has, so to speak, been buried every year by his commentators—only to be dug up again the following year. Exactly why Malthus is so often repudiated is not clear because the funeral orations typically amount to little more than one brutal word: Discredited!

Reviewing many criticisms I have come to the conclusion that a single paragraph in Malthus accounts for much of the rejectors' passion. The offending passage occurs only in the second edition of his essay. Had Malthus retained this paragraph and justified it adequately in subsequent editions I think we would have been spared nearly two hundred years of unproductive brawling. As I see it, Malthus walked right past the heart of the population problem. In presenting my conclusions I shall follow the advice of the physicist George Uhlenbeck (1900-1988), who said: "First tell us what the problem is; then state your conclusions at once. Only thereafter should you go into details..."

The problem is simply this: can the necessity of population control be reconciled with the apparent demands of *individualism*, as that complex concept has developed since John Locke? I conclude that there is a fatal contradiction between these two necessities; and that the survival of civilization will require us to modify significantly the powers we

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now grant to individual "rights." This social revolution will be painful, but it cannot, I think, be successfully evaded.

Here is the offending paragraph of Malthus:

A man who is born into a world already possessed, if he cannot get subsistence from his parents on whom he has a just demand, and if the society do not want his labour, has no claim of right to the smallest portion of food, and, in fact, has no business to be where he is. At nature's mighty feast there is no vacant cover for him. She tells him to be gone, and will quickly execute her own orders, if he does not work upon the compassion of some of her guests. If these quests get up and make room for him, other intruders immediately appear demanding the same favour. The report of a provision for all that come, fills the hall with numerous claimants. The order and harmony of the feast is disturbed, the plenty that before reigned is changed into scarcity; and the happiness of the guests is destroyed by the spectacle of misery and dependence in every part of the hall, and by the clamorous importunity of those, who are justly enraged at not finding the provision which they had been taught to expect. The guests learn too late their error, in counter-acting those strict orders to all intruders, issued by the great mistress of the feast, who, wishing that all quests should have plenty, and knowing she could not provide for unlimited numbers. humanely refused to admit fresh comers when her table was already full.2

Reading this passage thoughtfully one is not surprised to learn that its author became, in James Bonar's phrase, "the best-abused man of the age." The "Feast" led critics to deduce that Malthus (as Bonar put it) "defended small-pox, slavery, and child-murder" (because they kept the population from growing too large) while he "denounced soup-kitchens, early marriage, and parish allowances"

(because they encouraged population growth).

The shocking Feast was spread before the public in 1803, in the second edition of the Essay. Malthus could hardly have chosen a worse time: a sort of "compassion revolution" was then well under way. During the 19th century the English-speaking world made great progress in the humane treatment of animals, in getting rid of slavery, in curtailing child labor, and in (reluctantly) giving a modicum of freedom to women. Bonar has said that "for thirty years it rained refutations of Malthus." Before Malthus died in 1834, four more editions of the Essay had been published, the last in 1826; but in none of them did the Feast appear for a second time.

Malthus was hurt by the reactions to his moving metaphor. In 1807, in a letter to a friend in Parliament, the author complained: "To those who know me personally, I feel that I have no occasion to defend my character from the

imputation of hardness of heart..."4 The most passionate of the refutations came from the literary community. One of its leaders, William Hazlett, called the Feast a pleasing allegory, saying of the author:

He frolics with his subject in the gaiety of his heart, and his tongue grows wanton in praise of famine. But ... I cannot admit the assertion that "at nature's mighty feast there is no vacant cover for the poor man." There are plenty of vacant covers but that the guests at the head of the table have seized upon all those at the lower end, before the table was full.5

Thus was the population argument maneuvered into the area of distribution, an enduring concern of unrelenting liberals for some two centuries.

Throughout this era invective was the preferred weapon of the literati. In 1820, the poet Shelley identified the author of the Essay as "a priest of course, for his doctrines are those of a eunuch and of a tyrant."6 One could reasonably expect a man as wealthy and as well-connected as Shelley to know that a priest of the English church (which Malthus was) was not sworn to celibacy: in fact, Malthus married in 1804, just a year after publishing the offending paragraph. As for the "eunuch" and

"tyrant" in Shelley's diatribe, they simply popped out of the poet's pen — not out of any known facts.

Worse was yet to come. Long after Malthus died, Karl Marx repeated Shelley's canard by asserting that the essayist "had taken the monastic vow of celibacy"; Marx was unaware of Malthus's three children. An error even more difficult to understand was that of the 20th century editor of the Essay in the Everyman edition, who asserted that Malthus practiced the principles of population control by begetting eleven girls. An obsession with the rigors of scholarship has not characterized Malthus's critics.

> A real "fun way" to combat unwelcome conclusions is to invoke an argumentum ad hominem. Marx referred to "superficial," Malthus as professional plagiarist," "the o f the agent landed aristocracy," "a paid advocate", and "the principal enemy of the

people."8 I think that a single overarching view accounts for these and many other invectives put forward by Marxists and liberals during the past century and a half: this is the tightly held denial of limits in the supply of terrestrial resources. Friedrich Engels, Marx's collaborator and financial supporter. asserted baldly that "The productivity of the land can be infinitely increased by the application of capital, labour and science."9 At about the same time a rather different voice, that of the American Henry George, boldly proclaimed:

I assert that in any given state of civilization a greater number of people can be better provided for than a smaller. I assert that the injustice of society, not the niggardliness of nature, is the cause of the want and misery which current theory attributes to overpopulation.¹⁰

The underlying attitude of anti-Malthusians is pre-Darwinian: it baldly assumes that the laws of nature which govern all other species of plants and animals were negated for man by the God of Genesis. Man is saved by the formula, "X will provide", where "X" may be God, Providence, or Science. As is apparent in the second sentence of George's assertion, this pleasantly acceptable thought is greatly empowered by coupling it with

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another: Injustice is the primary enemy. It is doubtful if any major reform of the past two hundred years has succeeded without a calculated reference to injustice. (For Darwinians, extinction is more disturbing than simple injustice.)

By Henry George's day, Science was a powerful god, so the author goes on to explain how he thought this new god had obliterated the dangers of overpopulation:

> I assert that the new mouths which an increasing population calls into existence require no more food than the old ones, while

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the hands they bring with them can in the natural order of things produce more. I assert that, other things being equal, the greater the population, the greater the comfort which an equitable distribution would give to each individual. I assert that in a state of equality the natural increase of population would constantly tend to make every individual richer instead of poorer.

A skeptical Darwinian might well respond, "Ah, now I see why it is that the lemmings jump off the cliff: they can't tolerate the luxury produced by their overpopulation!" Anti-Georgians can sarcastically offer the following advice to every one of the fifty million species of animals and plants: "Overpopulation is GOOD for you!"

Though not considered great, George was an economist of sorts. Sadly, his message is still repeated in our own time by many poorly trained economists. These odd-men-out make a good living by marketing this nonsense. Few things are pleasanter to committed capitalists than being assured that more people are always and forever better. Grow! Grow! Grow!

The belittling of the seriousness of overpopulation is not restricted to the quack-economists of our time: it is even found among a few of the leaders of the profession. To cite a single instance: Theodore W. Schultz, as late as 1945, boldly asserted that "The nightmare of overpopulation that oppressed Malthus and his contemporaries no longer troubles our minds." Following Henry George, growthmen even cite a principle to explain their anti-Darwinian stance: economies of scale. A

factory can turn out a million Rolls-Royces at less per unit cost than a single Ford. Too many economists act as if they think "Bigger is always better."

Scientists know better. At some level of

production, the balance shifts to diseconomies of scale. But if you search the indexes of a large sample of elementary economics texts you will find that "economies of scale" are discussed in most of them, while "diseconomies of scale" are seldom mentioned. Darwinians are astonished: in an anti-Darwinian world, elephants could be taller than

the World Trade Center, while — well, the reader can easily continue with this fantasy. But, in reality, there is no anti-Darwinian world: wherever there is growth, diseconomies of scale ultimately rule.

Many of the paradigms that guide us come from the Bible. *Genesis* 1:28 says: "Be fruitful and multiply" — without giving any hint of limits or diseconomies of scale. Yet in ancient days scarcity was a possibility that none dared forget. In our time most people accept as gospel society's ability to cure a shortage by increasing the supply. Not so, said the Preacher of *Ecclesiastes* (5:11): "When goods increase, they are increased that eat them." What was true in the 2nd century B.C. is still true: an increase in foodstuffs makes overpopulation worse, not better. We recognize this truth in herds of cattle grazing in nature; but we act as if our own species lives by some other law of nature.

In the 3rd century A.D. the church leader Tertullian firmly grasped this nettle of reality. He said: "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." The figure of speech "prune away" comes naturally to an agricultural people, who cultivate fruit trees the growth of which needs to be controlled to achieve the best production. More generally it may be said that, to survive and persist, every species needs its "enemies" to keep its numbers down. This truth was enlarged upon by Joseph Townsend, twelve years in advance of Malthus' essay. Traditionally, we regard a predator as the enemy of

a single prey animal; but the predators of a population are not, in the final analysis, enemies of the species. Without some sort of external control a species can eat itself out of house and home.¹⁴

One might expect this truth to be generally recognized among laymen, but the zoologist W. T.

Edmonson tells of a sociologist friend who found difficulty in believing that the multiplication of *Daphnia* (water-fleas) is inhibited by lack of food. ¹⁵ Familiar with the correlation of human poverty with large family size in the "Third World," the sociologist expected starved water-fleas to be more fertile than well-fed ones. He did

not realize that the behavior of human populations is anomalous and requires special explanation. He regarded the reproductive behavior of *Daphnia* as a surprising exception to what he thought was a general rule of biology. Small wonder that Malthusianism is so often rejected!

Many implicit assumptions are involved in Malthus's Feast. Among these are the following:

- a. The system of private property is ethically right,
 from which it follows that—
- b. Need does not create an unqualified right;
 and—
- c. Justice does not demand an equal distribution of goods; also—
- d. Though society may tolerate a beggar's successfully working "upon the compassion of some of [nature's] guests. [and] ... The order and harmony of the feast is disturbed, the plenty that before reigned is changed into scarcity; and happiness of the guests that before reigned is changed into scarcity..." And finally—
- e. Malthus implicitly makes a significant distinction between charity and philanthropy.

"Charity," derived from the Latin *caritas*, love, has a strong implication of a one-on-one relationship (as in the love of a wife for a man). "Philanthropy," by contrast, asserts a love (*phil*-) focused on mankind (*anthropos*), which is a very plural concept. Most people feel that the one-to-many love in philanthropy cannot be as intense as the one-to-one relationship in charity. We note that the promoters of philanthropic enterprises tend to muddle the distinction by referring to their work as

"charity." A philanthropic act is aimed at bettering a large population — perhaps the whole species — sometimes even at the expense of some individuals. The justification of philanthropy is found in the totality of its consequences (when compared with the consequences of the known alternative

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actions).

Adam Smith, before he changed his principal interest from ethics to economics, treated what we would now call "charity" under the rubric of "beneficence." He wrote: "Beneficence — is the ornament which embellishes, not the foundation which supports the building [of ethics]." In other words, charity is, as it were, a retail form of ethical behavior while philanthropy, focusing on larger populations, is a kind of wholesale ethics. Smith illustrates this distinction at some length (of which the following passage is a much shortened version):

Let us suppose that the great empire of China, with all its myriads of inhabitants, was suddenly swallowed up by an earthquake, and let us consider how a man of humanity would be affected upon receiving intelligence of this dreadful calamity ... provided he never saw [the victims], he will snore with the most profound security over the ruin of a hundred millions of his brethren ... would a man of humanity be willing to sacrifice the lives of a hundred millions of his brethren, provided he had never seen them? Human nature startles with horror at the thought.¹⁷

The image of *brethren* is borrowed from the picture of charity. No one has a million or a billion genuine brethren. To use this term as Smith did is to try to introduce a family attitude into our reactions to an unimaginable multitude of non-relatives. It won't work.

By his ambivalence Malthus spoiled the metaphorical utility of the "feast" for seven generations; the problem was finally revived with a different metaphor, the image of a "lifeboat." The same ethical problem is treated in the area of

military medicine under the title of "triage." 19

The "conservation of a favorable self-image" seems to be a rule of psychology. A self-image of great kindliness is devoutly to be desired, so the terms "feast," "lifeboat," and "triage" have been given the cold shoulder, despite the fact that all three offer us recipes for the conservation of goods in a limited physical world subject to limitless demands.

This brings us back to the wisdom of Koheleth, the Preacher, who asserted that it was general knowledge in his time (3rd century, B.C.) that: "When goods increase those who eat of them increase." After another two thousand years the inescapable implication of the Preacher's wisdom was given: "We can't cure a shortage by increasing the supply." Why can't we? Because every "shortage" of supply is equally a "longage" of demand. 21

Since we inhabit a limited world — (no other is

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practically available to our species) — the standard commercial competition favors individuals who refuse to reduce the longage of their demands. Unquestioning faith in the free enterprise system favors those who refuse to acknowledge essential shortages. As a result the dominant kind of competition favors the long-term suicide of the demanders. Ecologically oriented citizens (the intellectual descendants of the common man in Tertullian's day) are (for the present at least) at a competitive disadvantage.

Can this sociological malfunction be corrected? Initially, Malthus saw no escape from the ultimate tragedy of overpopulation; but Godwin and Condorcet pointed out that births could be controlled artificially. This proposal shocked Malthus, who suggested — not very enthusiastically — that reproduction could be minimized by extensively resorting to voluntary abstinence in marriage. This path clearly requires a super-potent conscience.

Following the Malthusian path, an individual

may have to restrict his (her) fertility in the interests of the community as a whole. Charitable impulses — concern for the feelings of the partner (not to mention the nation) —must yield to a philanthropic desire to make life better for psychologically distant "others" — one's own posterity as well as strangers on distant shores. To put the matter bluntly, real population control requires that the individualistic rights asserted by the descendants of Locke and Smith must be significantly curtailed.

Malthus did not see this clearly; and in our day the promoters of "Planned Parenthood" have perpetuated the confusion. Their literature implies that birth control will inevitably produce population control, though their official goal is only to make it possible for each woman to have the number of children she wants, when she wants them.

Though birth control (read, "planned parenthood") may help in preparing a psychologically favorable environment for stronger

measures, the intellectual descendants of Locke must insist that: birth control is NOT population control.

A childishly simple resort to numbers validates this conclusion. In present-day North American culture, 2.1 children per couple would produce a stable population size — but how can we ask any woman to

produce exactly 2.1 babies? More to the point, there is no biological mechanism to ensure that individual women will produce the number of children needed to achieve population stability in the entire group.

Conscience, other like individual characteristics, varies. One woman may be satisfied with one child, while another craves four. Intended or not, with no community control of reproduction, a competition in breeding will develop. In all other species of animals there is a genetic component to fertility; but anyone who suggests that genes also influence fertility in the human animal kindles the ire of genophobes — individuals who are intellectually repelled by the idea of genetic differences in humans. Fortunately, in the dispute over population control, it is not necessary to raise the genetic issue. It is enough to assume that there may be a sort of cultural heredity — that the advice and examples set by parents have some influence on the behavior of their children.²² (Understandably, of course, parents usually crave more than merely

"some".) With either genetic heredity or cultural heredity, a variant of Gresham's Law²³ is set in play: since high fertility tends to diminish the monetary wealth of a family, then (focusing only on economics) we must say that, over time, with uninhibited fertility, low living standards drive out high.²⁴ In a welfare-free social order this might not matter, because the extra childhood mortality associated with too numerous a family might correct for the parents' error; but with generous social welfare the children of an unwisely fertile couple may be saved to breed in the next generation. One of the major consequences of this fact has been succinctly stated by the economist Milton Friedman: "You can't have free immigration and a welfare state."25 To invite the overly fertile into a prosperous country to share in welfare riches is to pursue a policy of national suicide. (And, if generalized for the entire world, a policy of species suicide.)

Individualism rightly enjoys such high prestige that the reader may resent any suggestion that individual desires must sometimes be curbed for the good of the community. But think of bankrobbing. If the individual could get away with it he might well adopt this occupation; but if everyone robs, everyone pays for the robbing — and the individual is thwarted after all. Consciences vary. In a community in which there is complete freedom in reproduction, conscientious people will be eliminated: this is a particular example of the "competitive exclusion principle." ²⁶

When predators, disease and other population controls external to a species become much enfeebled, individual freedom must be infringed upon. The community must then take over the function formerly performed by external forces. Community interest takes precedence over individual desires. Coercion is essential, but in a democracy it should be only a coercion by laws which are agreed to by the majority. The necessary formulaic statement of democratic individualism is this: mutual coercion, mutually agreed upon.²⁷

The introduction of coercion into a discussion inevitably arouses existing antipathies to the word. The mind of the auditor is immediately flooded with images of violently coercive measures. The recollection of the horrors perpetrated by Hitler and Stalin freeze the mind into non-productive channels. We forget that a sweet "Pretty please!" from a dimpled girl can also be an effective coercion. More

generally (as has long been recognized), coercion occurs in two different forms: the carrot and the stick. The possibility of achieving the necessary population control in a growing population afflicted by diseconomies of scale depends on our ingenuity in discovering effective carrots.

Society has already had considerable experience in devising acceptable (though not entirely pleasant) controls over access to privileges whenever demand outpaces supply. Is the demand for unspoiled wilderness too great for the population size? Effective demand can be reduced by converting community property into salable private property, which is then sold by auction. Or temporary permits for entrance can be sold at sufficiently high prices. Or "first come, first served" can be declared the policy: this will favor people who are richer in time (for queuing up) over those who are merely rich in money.

Many other "gimmicks" can be used for allocating resources in a world overwhelmed by demand. To find the gimmicks that work well enough for population control we must first be convinced that the need exists. In the immediate future we must undo a great deal of mal-education already entrenched in our society by media-masters who appear to be under the direction of the minority of economists who do not quite understood the potency of exponential growth and the ultimate inescapability of diseconomies of scale. The task ahead is monumentally daunting.

As we have seen in discussing Malthus's Feast, the words "charity" and "philanthropy" can be usefully distinguished. The first refers to an individualistic goal; the second focuses on a community, sometimes on the entire species. To save humanity from eating itself to extinction we must abandon the dominant religion of the past three centuries — Lockean individualism — and dedicate ourselves to a new — and also very old — commitment to community. This change in overall ideals will require many changes in particulars. As concerns the problems here discussed we must recognize that—

One: Birth control is an individualistic goal, achievable by each individual (or couple) alone.

Two: Population control is a philanthropic goal, not achievable by charitable actions alone.

A social revolution is called for, and the fact that it may reasonably be interpreted as a counterrevolution inspired by earlier ideals does not make the achievement of it any easier. It is difficult for potent activators to foresee the details of any revolution-to-come. What we need are experiments — many experiments. Dreams of "One World" are not acceptable substitutes for actual experiments. Since most social experiments fail we need many experiments. This means that our species must continue to be subdivided into many nations. The overall attitude should be one of encouraging many locally designed experiments, coupled with a universal and almost religious observance of a strict policy of "Keep your (national) nose out of my (national) business!" That means we must discourage loose talk of "universal human rights,"28 for we can be sure that every partial success in the local control of a population will be achieved by adopting measures that are condemned by some nations somewhere.

We can learn from each others' mistakes. There is no better way.

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NOTES

- ¹ Abraham Pais: *A Tale of Two Continents*. Princeton, NJ: Princeton University Press, 1997. (p. 36)
- ² T. R. Malthus: *An Essay on the Principle of Population*, 2nd ed. London: J. Johnson, 1803. (Book IV, Chap. VI, p. 531.)
- ³ James Bonar: *Malthus and His Work*. London: Macmillan, 1885. (pp. 1-2.)
- ⁴ Thomas Robert Malthus: *A Letter to Samuel Whitbread, Esq., M.P.*, 2nd ed. London: J. Johnson. (Reprint, New York: Kelley, 1970.)
- ⁵ William Hazlett: *A Reply to the Essay on Population*. London: Longman, et al, 1807. (Reprint, New York: Kelley, 1967.)
- ⁶ Percy B. Shelley: "A philosophical view of reform." In *The Complete Works of Percy Bysshe Shelley*. London: Gordian, 1829. (vol. 7, p. 32)
- ⁷ William Petersen: *Malthus*. Cambridge, MA: Harvard University Press, 1979. (p. 22)
- ⁸ J. Dupaquier et al, eds.: *Malthus Past and Present*. New York: Academic Press, 1983. (p. 258)
- ⁹ John Passmore: *Man's Responsibility for Nature*. New York: Scribner's, 1974. (p. 150)
- ¹⁰ Henry George: *Progress and Poverty*, 1879. Reprint, New York: Schalkenberg, 1962. (pp. 141-142)
- ¹¹ Theodore W. Schultze: *Food For the World*. Chicago: University of Chicago Press, 1945. (p. 310)

- ¹² From De Anima.
- ¹³ Joseph Townsend: *A Dissertation on the Poor Laws, by a Well-Wisher to Mankind*. London: 1886. Reprint, Berkeley: University of California Press, 1971.
- ¹⁴ This is one of the problems associated with the origin of life. See Garrett Hardin: "Darwin and the heterotroph hypothesis," *Scientific Monthly*, 70(3):178-179. 1950.
- ¹⁵ W. T. Edmondson: *The Uses of Ecology: Lake Washington and Beyond*. Seattle: University of Washington Press, 1991. (p. 302)
- Adam Smith: *The Theory of Moral Sentiments*, 1759.
 (reprint, Indianapolis: Liberty Classics, 1969.) (p. 167)
 Ibid, p. 233.
- ¹⁸ Garrett Hardin: "Living on a lifeboat." *BioScience*, 24 (10):561-568. 1974. (As an indication of the ambivalence of our times it should be noted that this paper was first rejected by *The American Scientist*. The known reprintings of it in anthologies, etc., amount to 15.)
- ¹⁹ Garrett Hardin: *Promethean Ethics: Living with Death, Competition, and Triage*. Seattle: University of Washington Press, 1980. (pp. 56-71)
- ²⁰ Ecclesiastes 5:11. I have used the wording of the "Goodspeed Bible."
- ²¹ Garrett Hardin: *Living Within Limits*. New York: Oxford University Press, 1993. (pp. 309-310)
- ²² Mark Sagoff: "The philosopher as teacher." *Metaphilosophy* 11:307-325. (p. 315) This is a splendid display of genophobia. The author is also under the impression that non-human animals instinctively act so as to achieve population control, thus ignoring the insight of Tertullian some 17 centuries earlier.
- ²³ Garrett Hardin: *The Ostrich Factor: Myth & Myopia Meet Myopia*. (Chap. 17; in press)
- ²⁴ Garrett Hardin: "The cybernetics of competition" (1963). Reprinted in Hardin: *Stalking the Wild Taboo*, 3rd ed. Petoskey, MI: The Social Contract Press. (pp. 195-197)
- ²⁵ Milton Friedman, news item: *National Review*, 31 December 1997. (p. 4)
- ²⁶ Garrett Hardin: *Stalking the Wild Taboo*, 3rd edition. Petoskey, MI: The Social Contract Press, 1997. (pp. 195-197)
- ²⁷ Garrett Hardin: "The tragedy of the commons." *Science*, 162:1243-1248. 1968.
- ²⁸ Garrett Hardin: Living Within Limits. (pp. 277-278).