

# AN ESSAY ON THE PRINCIPLE OF POPULATION

THOMAS ROBERT MALTHUS



EDITED BY PHILIP APPLEMAN

A NORTON CRITICAL EDITION  
SECOND EDITION

A NORTON CRITICAL EDITION

---

Thomas Robert Malthus  
AN ESSAY ON THE  
PRINCIPLE OF POPULATION



INFLUENCES ON MALTHUS  
SELECTIONS FROM MALTHUS' WORK  
NINETEENTH-CENTURY COMMENT  
MALTHUS IN THE TWENTY-FIRST CENTURY

Second Edition

*Edited by*

PHILIP APPLEMAN  
INDIANA UNIVERSITY

---

W • W • NORTON & COMPANY • *New York • London*

---

W. W. Norton & Company has been independent since its founding in 1923, when William Warder and Mary D. Herter Norton first published lectures delivered at the People's Institute, the adult education division of New York City's Cooper Union. The Nortons soon expanded their program beyond the Institute, publishing books by celebrated academics from America and abroad. By mid-century, the two major pillars of Norton's publishing program—trade books and college texts—were firmly established. In the 1950s, the Norton family transferred control of the company to its employees, and today—with a staff of four hundred and a comparable number of trade, college, and professional titles published each year—W. W. Norton & Company stands as the largest and oldest publishing house owned wholly by its employees.

---

Copyright © 2004, 1976 by W. W. Norton & Company, Inc.

All rights reserved.

Printed in the United States of America.

Manufacturing by the Courier Companies, Inc.

Book design by Antonina Krass.

Production manager: Ben Reynolds.

Library of Congress Cataloging-in-Publication Data

Malthus, T. R. (Thomas Robert), 1766–1834.

An essay on the principle of population : text, sources and background, criticism / Thomas Robert Malthus ; edited by Philip Appleman.—2nd ed.  
p. cm.—(A Norton critical edition)

Includes bibliographical references and index.

ISBN 0-393-92410-6 (pbk.)

1. Population. I. Appleman, Philip, 1926– II. Title.

HB861.M36 2003

304.6—dc21

2003048741

W. W. Norton & Company, Inc., 500 Fifth Avenue, New York, N.Y. 10110  
[www.wwnorton.com](http://www.wwnorton.com)

W. W. Norton & Company Ltd., Castle House, 75/76 Wells Street, London  
W1T 3QT

1 2 3 4 5 6 7 8 9 0

---

## Preface to the Second Edition

---

In the preface to the first edition of this book, I observed that an anthology is always a compromise between the richness of the outside world and the meager insides of a book. This new edition, the first one of the twenty-first century, is no exception: the literature of Malthusianism is vast and various, and to try to represent it in a single volume is a frustrating task. I hope that this collection at least indicates some of the more important influences that Malthus' thinking has had, both on his own world and on ours.

Malthus' *Essay on the Principle of Population* is represented here by the 1798 text, plus additional significant passages from his second edition of 1803. I have taken the editorial liberty of modernizing the antique *s*'s and *c*'s of the original and also of deleting a multitude of commas, colons, and semicolons (and inserting a few of my own) to conform to contemporary usage.

I would like to thank all of those who offered various kinds of advice and assistance in the planning of the first edition, and also those who helped me in this new edition: Ronald Bleier, Lynton K. Caldwell, William R. Catton Jr., Antony Flew, Robert Gillispie, H. Scott Gordon, Garrett Hardin, Jay Keller, James R. Kincaid, J. Kenneth Smail, and Michael Wolff. None of them, of course, bears responsibility for any faults remaining in the volume.

Special thanks are due to my editor at W. W. Norton & Company, Carol Bemis, and also to Brian Baker and to James L. Mairs, editor of the first edition.

And I am happy to record once again my gratitude to my wife, Margie, for her acute and creative criticism.

Philip Appleman

---

# Introduction

---

## I

At the end of each day, the world has over 225,000 more mouths to feed than it had the day before; at the end of every week, 1.5 million more; at the close of each year, an additional 80 million plus. In the world's poorest countries, where population growth is most rapid, the lives of hundreds of millions of people are constantly plagued by hunger and by diseases aggravated by malnutrition. Humankind, which numbered 4.5 billion in the 1980s, is now well over 6 billion and is caught in an ambush of its own making. Economists call it the "Malthusian trap," after the man—Thomas Robert Malthus—who, in his famous essay of 1798, most forcefully stated our grim biological predicament: population growth tends to outstrip the supply of food.

Malthus was born in 1766, in a country house near the town of Dorking, in England, the son of a gentleman who prided himself on his advanced ideas and was an admirer and friend of both Hume and Rousseau. Young Robert (he was never called Thomas) was at first privately educated; then, in 1784, he went up to Jesus College, Cambridge, where he graduated creditably as Ninth Wrangler (an honors degree in mathematics) in 1788. In that same year he took holy orders and later was appointed to a rectory. In livelihood, however, he was less a "parson" (as his detractors have often chosen to call him) than a college professor, for in 1805 he became the first professor of political economy in the English-speaking world, at the new East India College, in Hertfordshire, a post he held until his death in 1834.

Malthus was amiable, gentle, and good-natured—"one of the most serene and cheerful" of men, the contemporary writer Harriet Martineau called him. He was a devoted family man: he married Harriet Eckersall, one of his "pretty cousins," in 1804, and they had three children, two of whom survived to maturity. He was a faithful friend: his correspondence with the economist David Ricardo covered the last dozen years of Ricardo's life in amicable and generous disagreement ("I should not like you more than I do," Ricardo wrote him, "if

you agreed in opinion with me"). And Malthus was a prophet of what might be called long-range benevolence: "My ultimate object," he wrote, "is to diminish vice and misery." When he died, he was remembered fondly by his friends, one of whom wrote for his epitaph at Bath Abbey:

The spotless integrity of his principles,  
The equity and candour of his nature,  
His sweetness of temper, urbanity of manners,  
And tenderness of heart,  
His benevolence and piety,  
Are the still dearer recollections of his family and friends.

Yet this was the man whose social views were immediately and persistently assailed by humanitarians and social reformers all over Europe: "this abominable tenet" (Coleridge); "the dismal science" (Carlyle); "that black and terrible demon that is always ready to stifle the hopes of humanity" (Godwin); "this vile and infamous doctrine, this repulsive blasphemy against man and nature" (Engels). "Unless Mr. Malthus can contrive to starve someone," Hazlitt fumed, "he thinks he does nothing." James Bonar wrote, "He was the 'best-abused man of the age.' For thirty years it rained refutations."<sup>1</sup> And the chorus of disapproval has continued into our own time (pp. 233–246).<sup>2</sup>

It is not difficult to understand this bitter and sustained hostility toward the genial Malthus and his work, for the basic idea he enunciated—that population tends to increase at a faster rate than its food supplies—is indeed an ominous one, and few people are fond of prophets of doom. How did Malthus arrive at such a bleak view of the human condition?

It helps to recall that Malthus grew up during the Enlightenment, was ten years old when the American Revolution began, and came to maturity at the time of the French Revolution. Hume and Rousseau had visited at his father's house when Robert Malthus was a baby, and the dates of his life also overlap those of Voltaire, Diderot, and d'Alembert, as well as Washington, Jefferson, and Franklin. The late eighteenth century was for European nations what the twentieth century was for much of the developing world: on the one hand, a time of economic hardship and social despair; on the other hand, a time of intellectual ferment, of movements for social and political reform, a time of energetic speculation about the possible improvement of societies and of people. Enthusiasm for science ran high; and hopes that science, applied to society, would transform the

1. James Bonar, *Malthus and His Work* (London, 1885), pp. 1–2.

2. Parenthetical page references are to passages in this volume.

world, were reinforced by the recent discoveries of "paradises"—supposedly "perfect" societies—in the South Seas. "Our hopes for the future condition of the human race," wrote Condorcet, "can be subsumed under three important heads: the abolition of inequality between nations, the progress of equality within each nation, and the true perfection of mankind." To these ideals, European intellectuals were giving their sympathetic attention, and often their loyalty. It may have been the worst of times for some people, but it was the best of times for visionaries.

Then in 1789 came the French Revolution, and in its wake regicide, the Reign of Terror, and the savaging of half of Europe by that imperialistic Jacobin, Napoleon Bonaparte. The Directory then governing France was rumored to be planning an invasion of England. British suspicion of French institutions and French intentions, never at that time far below the surface, boiled up in widespread alarm and hostility. In England it was no longer the best of times for social reformers; and yet the infection of "French philosophy" was still there, and determined social critics like William Godwin went on with their work. Godwin's influential *Enquiry concerning Political Justice* appeared in 1793, and in 1797 he issued a collection of essays called *The Enquirer*, in one of which, "Of Avarice and Profusion," he continued his examinations of the "first principles of morality," "justice between man and man," and "the extensive diffusion of liberty and happiness." Robert Malthus and his father read that essay, with far-reaching results.

As it happened, the two men differed on precisely Godwin's question of whether "the extensive diffusion of liberty and happiness" was possible in human affairs. The elder Malthus, true to his progressive ideas, held that it was. Robert disagreed; the reasons for his pessimism were fundamental. He had been reading Hume and Robert Wallace on the question of whether human populations had grown or declined since ancient times (Hume believed they had grown; Wallace, the reverse) and Adam Smith on how the numbers of laborers affect wages ("The demand for men, like that for any other commodity, necessarily regulates the production of men"); and Robert had arrived at a theory of population that, if "certainly not new" (as he said), had just as certainly never been presented as forcefully as he was now to present it. "I mean to place it in a point of view," he wrote, "in some degree different from any that I have hitherto seen"—a remarkable understatement, as it turned out. In his systematic way, he immediately wrote down his thoughts in a manuscript that he titled *An Essay on the Principle of Population, as It Affects the Future Improvement of Society*. He published it anonymously in London in 1798.

## 2

Parts of what Malthus had to say on his subject were indeed “not new.” He had been anticipated in the book of Ecclesiastes by twenty-five hundred years: “When goods increase, they are increased who eat them”; and by thinkers as diverse as Confucius and Plato, who had explored similar notions. More to the point, contemporary social theorists like Hume, Smith, and Benjamin Franklin had shown an awareness of the tendency of populations to increase very rapidly unless somehow “checked.” Eighteenth-century thinkers, however, viewed population growth as a mark of social well-being, not as a threat to the “improvement of society.” An increase in people was generally taken to imply an increase in wealth. Hume wrote, “Every wise, just and mild government, by rendering the condition of its subjects easy and secure, will always abound most in people, as well as in commodities and riches” (p. 3).

Malthus saw it differently. He began with the awesome redundancy of nature: “Through the animal and vegetable kingdoms,” he wrote, “nature has scattered the seeds of life abroad with the most profuse and liberal hand. . . . The germs of life contained in this spot of earth, with ample food and ample room to expand in, would fill millions of worlds in the course of a few thousand years.” That observation may not have been “new” with Malthus; but it always *seems* new, simply because it is always, upon contemplation, staggering. And it always gives rise to the inevitable next question: if all organisms have this potential for rapid multiplication, if any single species could, in a comparatively brief time, overrun the earth—why does it not happen?

In *The Wealth of Nations* (1776), Adam Smith had already implied the question and given the answer: “Every species of animals naturally multiplies in proportion to the means of their subsistence, and no species can ever multiply beyond it.” Nature, Malthus asserted, “has been comparatively sparing in the room and the nourishment necessary to rear them.” “Room,” then, is one of Malthus’ two ineluctable limitational factors; but his emphasis in the *Essay* falls on the second one: “nourishment.” Malthus could not reasonably anticipate (or, as he put it, “The most enthusiastic speculator cannot suppose”) an increase in food supply that was greater than arithmetical, each generation. It follows that the tendency of population to multiply, if unchecked by other means, will be checked by “vice and misery”; people will simply (and of course only temporarily) overrun the supply of food. This is the most brutal and final of “positive” checks to population growth.

For Malthus’ contemporaries, the immediate force of his argu-



ment derived from the quasi-scientific way he chose to illustrate his premises. The former mathematics student could not resist a mathematical illustration: population can increase *geometrically*, whereas agricultural production can only increase *arithmetically*. He wrote:

Taking the population of the world at any number, a thousand millions, for instance, the human species would increase in the ratio of—1, 2, 4, 8, 16, 32, 64, 128, 256, 512, &c. and subsistence as—1, 2, 3, 4, 5, 6, 7, 8, 9, 10, &c. In two centuries and a quarter, the population would be to the means of subsistence as 512 to 10, in three centuries as 4096 to 13, and in two thousand years the difference would be almost incalculable [p. 23].

It was a persuasive illustration, partly because of its stark simplicity and partly because the first half of it—the geometric power of population increase—is true on its face: the reproductive potential of any plant or animal species verifies it. (Charles Darwin and Alfred Russel Wallace, impressed with Malthus' argument, found in it the key to the theory of natural selection; see p. 154.) The other half—the arithmetical maximum for agricultural production—was a conjecture rather than an observation, and its history is more complicated. It certainly seemed a safe supposition when Malthus wrote his essay; to imagine agricultural production increasing even by arithmetic progression each generation, given the farming methods of the eighteenth century, seemed generous. Malthus tried always to be empirical, which is why he steadily took issue with the Utopians of his time. The *Essay* persistently appeals to experience:

—We shall be assisted in our review by what we daily see around us, by actual experience, by facts that come within the scope of every man's observation.

—Such establishments and calculations may appear very promising upon paper, but when applied to real life they will be found to be absolutely nugatory.

—How little Mr. Godwin has turned the attention of his penetrating mind to the real state of man on earth will sufficiently appear . . .

And so on, throughout the *Essay*.

Ironically, when he came to the crux of his own argument, Malthus himself had to speculate. No better than others at foreseeing the future, he extrapolated from the best evidence he had, which was the agricultural practice of the late eighteenth century. The steam engine had been invented in that eventful year 1776, but it was not yet apparent in 1798 that the emerging shift from muscle power to machine power would revolutionize agriculture, making possible unprecedented increases in food supplies. (The application of mod-

ern biochemistry and genetics to agriculture was of course still further in the future and even less conceivable in Malthus' time.) When this began to happen, in the course of the nineteenth century, Malthus' celebrated ratios seemed to be discredited; and by the early twentieth century (as people of the industrialized countries increasingly chose to have smaller families), when someone spoke of the "population problem," he was as likely to mean the threat of underpopulation ("race suicide," it was often called) as of overpopulation. Malthus' fears then seemed distant and groundless. But after World War II, when death rates in many of the developing countries were abruptly reduced to the levels of the industrialized countries, population growth rates shot up, and Malthus' handwriting once again appeared, clear and portentous, on the wall.<sup>3</sup>

Today, even in the face of a Malthusian crisis of vast proportions, people in the West tend to remain the philosophical heirs of the eighteenth- and nineteenth-century prophets of Progress. Inclined to be problem solvers, they pattern the future on the success of the recent past. And yet, the rapidly increasing food production of the last two centuries may be as misleading a guide as was the relatively static situation in Malthus' time. Many people are now becoming uneasy about our reliance on agricultural and industrial technologies, which often have hidden, sometimes devastating costs. Accelerated agricultural productivity has become the norm for a modern society; however, it may be a splendid but temporary luxury, a historical aberration. For it is increasingly clear that the necessity of supplying food to very large and rapidly growing populations has pollution and resource-depletion effects that are more imminent and far more destructive than they would be in a less densely populated world. For example, the large amounts of pesticides and herbicides that are required to protect high crop yields in Sri Lanka or Indonesia, so that larger and larger populations can be supported there, are inevitably being carried down to the sea, with toxic effects, often widespread and persistent, on the living resources of the ocean. So the short-range gain in rice will be paid for by a long-range loss of much of the world's supply of protein-rich sea food. And the spectacular productivity of American agriculture is based on methods

3. Although he did not foresee the great increases in food production of the nineteenth and twentieth centuries, Malthus believed that his theory allowed for such a possibility without loss of force. See, e.g., his letter to Nassau Senior, dated March 23, 1829: "The meaning which I intended to convey . . . was, that population was always ready, and inclined, to increase faster than food, if the checks which repressed it were removed; and that though these checks might be such as to prevent population from advancing upon subsistence, or even to keep it at a greater distance behind; yet, that whether population were *actually* increasing faster than food, or food faster than population, it was true that, except in new colonies, favorably circumstanced, population was always pressing against food, and was always ready to start off at a faster rate than that at which the food was actually increasing." (See Nassau W. Senior, *Selected Writings on Economics* [New York, 1966], p. 61.)

that demand such massive investments of fossil fuels and machinery that the energy required to produce some foods has long since become greater than the energy obtained from them.<sup>4</sup>

Thus, even with the “green revolution” fresh in our memories, Malthus’ speculation about agriculture seems less mistaken these days than it once did. The validity of Malthus’ argument depends, after all, not on the mathematical accuracy of his two ratios, but on their long-range relation to each other. And if Malthus was right—if population growth does, in the long run, have a tendency to outstrip food supplies—what, then, could he have hoped for by way of “the future improvement of society”? The answer is that, as of 1798, he saw no real hope for permanent improvement, because he thought of the ratios as representing a law of nature as immutable as Newton’s; and he saw no effective way of averting the grim consequences of that law. In Malthus’ time, after all, there were only the crudest and most barbarous kinds of birth control: undependable methods of contraception or abortion by shockingly dangerous self-induced means or infanticide. To Malthus all of these were unacceptable on moral grounds, and they therefore played no part in his first *Essay*<sup>5</sup>—which means that he was left without any practicable options, any effective way of preventing that excessive growth of population that is decreed by the redundancy of nature. So, he wrote, “This argument appears to be conclusive . . . against any marked and striking change for the better . . . [against] any great and decided amelioration of the condition of the lower classes of mankind.”

That is almost how he left it at the end of his first *Essay* in 1798—but not quite. Despite the relentless logic that drove him to this gloomy judgment, he apparently could not feel comfortable in a conclusion that seemed to recommend only an inhumane and fatalistic acquiescence in human misery. Malthus therefore recommended policies that would help alleviate human suffering: land reform, the transfer of laborers from luxury manufactures to farming, and a shift of national emphasis from foreign trade to agriculture.

Still, his conclusion was undeniably “melancholy,” as he himself called it, and in his preface he apologizes for that, pleading “that he has drawn these dark tints from a conviction that they are really in the picture, and not from a jaundiced eye.” He would have been pleased, he says, to believe the optimistic visions of a Godwin or a

4. See, e.g., Eric Hirst, “Food-Related Energy Requirements.” *Science*, 184 (1974), 134–38.

5. When in 1822 Francis Place suggested contraception as a remedy for overpopulation, he felt obliged to put it in the most circumspect and defensive terms (p. 139), and for more than a century thereafter, those who publicly advocated birth control risked imprisonment. Ironically, although Malthus himself disapproved of birth control, contraceptives were often called “Malthusian appliances” later in the century; see Peter Fryer, *The Birth Controllers* (London, 1965).

Condorcet, but (in an ironic thrust) he "has not acquired that command over his understanding which would enable him to believe what he wishes, without evidence."

## 3

That is where the matter rested with Malthus in 1798. Then, for five years, he pondered it further, as he collected new evidence, and in 1803 brought out a revised edition of the *Essay*, which was greatly enlarged (from 50,000 to 250,000 words) and less pessimistic than before. In those five years of reconsideration, Malthus had thought of the possibility of "another check to population which does not come under the head of either vice or misery." He called this check "moral restraint"; by which he simply meant delayed marriage. "It is clearly the duty of each individual," Malthus wrote, "not to marry till he has a prospect of supporting his children."

The importance of recognizing this third potential check to population growth was that it admitted into Malthus' equation for the first time a conscious and potentially benevolent human element, a possibility that undesirable population growth could conceivably be brought under human control. This tended, as Malthus said, to "soften some of the harshest conclusions of the first *Essay*"; and it prompted Malthus' new way of viewing his grim subject—no longer simply as a sort of biological juggernaut, but rather in terms of a moral imperative:

If moral restraint be the only virtuous mode of avoiding the evils arising from this principle [of population], our obligation to practise it will evidently rest exactly upon the same foundation as our obligation to practise any of the other virtues (p. 127).<sup>6</sup>

Malthus' first *Essay*, by not accounting for the possibility of effective human intervention, described a real biological tendency without showing all of the possible alternatives. The second *Essay*, by allowing for conscious human intervention, showed the same consequences as before, plus one more possibility, and a far preferable one; but the biological problem represented in the first *Essay*

6. Walter Bagehot later commented acidly, "He does not seem to see that he has cut away the ground of his whole argument . . . In its first form the *Essay on Population* was conclusive as an argument, only it was based on untrue facts; in its second form it was based on true facts, but it was inconclusive as an argument" (*Economic Studies* [London, 1880], p. 179). Bagehot's analysis of Malthus' position, however, is itself defective. It is not the "facts" that are changed in Malthus' second edition; they remain exactly as before and are as true, or untrue, as they had previously been. What Malthus changed was the range of possible alternatives in the face of these facts, now for the first time admitting the possibility of human intervention into a situation he previously considered unalterable.

remained the same in the second *Essay* and remains a problem to this day. Whether or not people will in fact interpose prudential checks to catastrophic population growth seems to have been answered in the affirmative for the industrialized countries, but not for the eight hundred million people of Africa, currently doubling their numbers in twenty-eight years, or for Central America or western Asia, doubling their numbers in thirty-three years, or for other rapidly growing areas of the developing world. There is a vast difference between the abstract possibility of problem solving and the actual achievement of solutions.

For Malthus the human obligations were clear:

We are not, however, to relax our efforts in increasing the quantity of provisions, but to combine another effort with it; that of keeping the population, when once it has been overtaken, at such a distance behind as to effect the relative proportion which we desire; and thus unite the two grand *desiderata*, a great actual population and a state of society in which abject poverty and dependence are comparatively but little known; two objects which are far from being incompatible [p. 128].

That reasoning and that kind of optimism, cautious and qualified, have never been improved upon.

After two centuries of criticism of the so-called Malthusian gloom, it may seem odd to hear Malthus called optimistic; but the conventional labels have been misleading. It is often the cheery voices of the self-proclaimed optimists of the far right (theologians, businessmen, and technologists who argue that bigger is better, and that unlimited population growth and material growth are not only possible but desirable) that encourage the neglect of pressing social problems, thereby condemning multitudes of unfortunate people to continuing misery; whereas the doomsayers, the so called pessimists, are often the ones to raise an alarm, thus sometimes producing effective social action. (By writing *Silent Spring*, the "pessimistic" Rachel Carson, passionately opposed to the indiscriminate use of DDT, was a more genuine benefactor of humanity and, therefore, a truer optimist than her smooth-spoken antagonists in the pesticide industry.) Similarly, the "optimists" of the far left, by obdurately refusing to recognize rapid population growth as a threat to social improvement, have compromised their own—and others'—attempts to deal with poverty, crime, racial injustice, and other problems.

What Malthus did was to set a tough-minded empiricism against the often woolly-headed Utopianism so popular during his youth. Only after he had done this could Malthus propose a different sort of optimism, a qualified and wary optimism, about a future for

humankind that recognizes and accounts for the dangers implicit in our biological nature. Concluding his revised *Essay*, Malthus wrote:

Though our future prospects . . . may not be so bright as we could wish yet they . . . by no means preclude that gradual and progressive improvement in human society which, before the late wild speculations on this subject, was the object of rational expectation (p. 133).

To call this attitude, this message, a "warning against all attempts to ameliorate the condition of society" or a "gospel of despair" is obviously a misreading.<sup>7</sup> John Maynard Keynes' tribute to Malthus is far more accurate. Commenting in 1933 on the *Essay on Population*, he wrote:

The book can claim a place amongst those which have had great influence on the progress of thought. It is profoundly in the English tradition of humane science—in that tradition of Scotch and English thought, in which there has been, I think, an extraordinary continuity of *feeling*, if I may so express it, from the eighteenth century to the present time—the tradition which is suggested by the names of Locke, Hume, Adam Smith, Paley, Bentham, Darwin, and Mill, a tradition marked by a love of truth and a most noble lucidity, by a prosaic sanity free from sentiment or metaphysic, and by an immense disinterestedness and public spirit. There is a continuity in these writings, not only of feeling, but of actual matter. It is in this company that Malthus belongs.<sup>8</sup>

Malthus' theory of population originated, as we have seen, in an argument with his father about "the future improvement of society"; significantly, nearly all of the subsequent controversies, still animated after more than two hundred years, ultimately turn on that question. Discussions of "Malthusianism" have always been, and still are, compounded less of economics, narrowly defined, than of social philosophy, and less of demography than of moral exhortation. The early followers of Malthus included classical economists like David Ricardo, Nassau Senior, and James and John Stuart Mill. The long

7. About the "willful misrepresentations" of Malthus' ideas that are frequently assigned to the adjective "Malthusian," William Peterson writes: "Is this word ever used to designate, say, the first significant economist to recognize the importance of effective demand and thus the only nineteenth-century figure in the main line of classical economic thought to suggest the serious lacks in laissez-faire policies; or, in social thought, a pioneer advocate of universal education, the initiator of social science as a university discipline: or, specifically with respect to population, the theorist who analyzed both the relation between humans and resources and the effect of social man's rising aspirations on his fertility? Very little of the full and well rounded thought of Professor Thomas Robert Malthus is recalled in the commentary even of professionals" ("The Malthus-Godwin Debate, Then and Now," *Demography*, 8 [1971], 25).

8. John Maynard Keynes, *Essays in Biography* (New York, 1933), p. 120.

correspondence between Ricardo and Malthus, in fact, bears little on the question of population, simply because Ricardo agreed so thoroughly with Malthus on that subject, differing only in certain emphases. Similarly, Senior wrote that Malthus' theory places him "as a benefactor to mankind on a level with Adam Smith" (p. 143); though Senior was more optimistic than Malthus about the effectiveness of "preventive" checks to population growth.

John Stuart Mill published his *Principles of Political Economy* in 1848. By that time he was heir not only to Malthus' original generalizations but also to the subsequent discovery of the law of diminishing returns in agriculture, made almost simultaneously by Malthus, Ricardo, and two other British economists. Malthus' 1814 essay on the Corn Laws had described the operation of diminishing returns. In fact, as early as the second edition of the *Essay on Population* (1803), he had casually anticipated his own later discovery:

It must be evident to those who have the slightest acquaintance with the agricultural subjects, that in proportion as cultivation extended, the additions that could yearly be made to the former average produce, must be gradually and regularly diminishing.<sup>9</sup>

However, he made only passing reference to diminishing returns in the *Essay on Population*, thinking perhaps that his essay rested on other generalizations that were already sufficiently convincing. When John Stuart Mill published his *Principles of Political Economy*, however, he regarded diminishing returns as fundamental to agricultural production:

It is vain to say, that all mouths which the increase of mankind calls into existence, bring with them hands. The new mouths require as much food as the old ones, and the hands do not produce as much [p. 148].

Mill's work was so influential that he may be said to have shifted permanently the post-Malthusian emphasis away from Malthus' ratios and onto the law of diminishing returns. In doing so, he gave new force to the Malthusian principle.

Meanwhile, the anti-Malthusians, who were largely well-intentioned social reformers of various persuasions, were rallying against the hated notion that population growth is an inevitable and insuperable "natural" obstacle to human betterment. Malthus, having argued for the retention of the protectionist Corn Laws (and thus for higher food prices) and for the abolition of poor relief, was soon characterized as a "hard-hearted" public enemy of poor people, despite his sincere insistence that these short-range severities were in their long-range best interest. Malthus may have been a "serene

9. Malthus, *An Essay on Population*, Everyman's Library ed., Vol. I, p. 11

and cheerful" man, as Harriet Martineau said, but some of his social nostrums seemed undeniably hard-hearted in the short run:

—I should propose a regulation to be made, declaring that no child born from any marriage . . . should ever be entitled to parish assistance.

—With regard to illegitimate children . . . they should not be allowed to have any claim to parish assistance.

—The infant is, comparatively speaking, of little value to the society, as others will immediately supply its place.

Stripped of their context of "long-range benevolence," these notions have the odor of barbarity about them. At any rate, nineteenth-century humanitarians refused to accept the inevitability of Malthus' grim "law" of population and his draconian remedies, stressing instead the need to reform society itself in order to rescue humanity from poverty and misery. Godwin (Malthus' original target) responded:

Man is to a considerable degree the artificer of his own fortune. We can apply our reflections and our ingenuity to whatever we regret [p. 138].

Moralists throughout the nineteenth century repeatedly voiced their distaste for Malthus, and some well-known economists joined the assault. Walter Bagehot's ill-considered criticism, in his *Economic Studies* (1880), has already been noted. In the same year, Henry George wrote, in *Progress and Poverty*:

I assert that in any given state of civilization a greater number of people can collectively be better provided for than a smaller. I assert that the injustice of society, not the niggardliness of nature, is the cause of want and misery which the current theory attributes to over-population. . . . I assert that, other things being equal, the greater the population, the greater the comfort.<sup>1</sup>

It is revealing that many literary people in the nineteenth century were also anti-Malthusians—revealing, because it demonstrates how deeply Malthus' message offended humanitarian values. "The voice of objective reason," Keynes said of Malthus' theory, "had been raised against a deep instinct which the evolutionary struggle had been implanting from the commencement of life." That same voice spoke against the religious command to "increase and multiply"; and, despite Malthus' protestations from 1803 on, his doctrine was also held, by socialists and other radical reformers, to be an immovable obstacle to any human action for social betterment. It was no won-

1. Henry George, *Progress and Poverty* (New York, 1942), pp. 141–42.



der, then, that nineteenth-century writers, characteristically thinking of themselves as humanitarians, resisted the Malthusian propositions. Shelley (Godwin's son-in-law), Coleridge, Wordsworth, and Hazlitt all spoke out against them; Carlyle's sarcasm is well known; Dickens' Scrooge, in his most misanthropic moods, speaks as a pseudo-Malthusian ("If they would rather die . . . they had better do it, and decrease the surplus population"); and others of Dickens' villains are Malthusian caricatures:

"A man may live to be as old as Methuselah," said Mr. Filer, "and may labour all his life for the benefit of such people as those; and may heap up facts on figures, facts on figures, facts on figures, mountains high and dry; and he can no more hope to persuade 'em that they have no right or business to be married, than he can hope to persuade 'em that they have no earthly right or business to be born. And *that* we know they haven't. We reduced it to a mathematical certainty long ago!"<sup>2</sup>

#### 4

Part IV of this book illustrates why Malthus, regardless of his many detractors, would now feel vindicated by history. As is shown in "Population Growth in the Twenty-First Century" (p. 165), world population is continuing to grow at the unmanageable rate of eighty million plus per year, despite some successes in reducing birth rates in China and elsewhere in the developing world. The earnest effort of many governments to encourage birth control, together with a new self-reliance among better-educated women in the developing countries (and thus their acceptance of family planning), has helped bring total world growth rates down somewhat. But birth control information and assistance are not available everywhere, which is one reason that global growth rates are still ominously elevated. Realistic mid-range projections show world population rising from six billion in 2000 to over nine billion by 2050—a 50 percent increase in only fifty years. Such rapid growth, so long continued, is causing human demands to overshoot not only the world's finite resource base but also its environmental carrying capacity, with tragic results for our own and future generations.

"Population and Food Supplies in the Twenty-First Century" (p. 185) shows that this environmental overload is already causing dramatic losses of much-needed cropland, due to salination, waterlogging, and erosion as well as to urban sprawl, road building, and other effects of larger populations. Rangeland and fisheries are also

2. Charles Dickens, *The Chimes*, in *Works* (New York, 1911), Vol. 16, p. 97.