PROGRESS, POVERTY AND POPULATION

Re-reading Condorcet, Godwin and Malthus

JOHN AVERY

H.C. Ørsted Institute, University of Copenhagen

FRANK CASS
LONDON • PORTLAND, OR

Published in 1997 in Great Britain by
FRANK CASS PUBLISHERS
Newbury House, 900 Eastern Avenue
London IG2 7HH

and in the United States of America by
FRANK CASS PUBLISHERS
c/o ISBS, 5804 N.E. Hassalo Street
Portland, Oregon 97213-3644

Website http://www.frankcass.com

British Library Cataloguing in Publication Data

Avery, John
Progress, poverty and population : re-reading Condorcet, Godwin and Malthus
1. Population
I. Title
304.6'2

ISBN 0 7146 4750 0 (cloth)
ISBN 0 7146 4404 8 (paper)

Library of Congress Cataloging-in-Publication Data

Avery, John, 1933–
Progress, poverty and population : re-reading Condorcet, Godwin and Malthus / John Avery.
p. cm.
Includes bibliographical references (p.) and index.
ISBN 0–7148–4750–0 (cloth) 0–7146–4404–8 (paper)
1. Progress. 2. Malthusianism. 3. Condorcet, Jean-Antoine -Nicolas de Caritat, marquis de, 1743–1794 — Views on progress. 4. Godwin, William, 1756–1836 — Views on progress. 5. Malthus, T. R. (Thomas Robert), 1766–1834 — Views on progress. I. Condorcet, Jean -Antoine-Nicolas de Caritat, marquis de, 1743–1794. II. Godwin, William, 1756–1836. III. Malthus, T. R. (Thomas Robert), 1766–1834. IV. Title.
HM101.A94 1997
303.44—dc21 97–30117
CIP

Typeset by Vitaset, Paddock Wood, Kent
Printed in Great Britain by
Bookcraft (Bath) Ltd, Midsomer Norton, Avon

To my mother
Margaret Ann Avery
with love and gratitude

CONTENTS

List of Illustrations ix

Acknowledgements xi

Introduction xiii

Condorcet 1

Godwin 13

Frankenstein's Monster 41

Malthus 55

The Iron Law 77

Epilogue: Who Was Right? 95

Appendix: Condorcet's *Sur l'admission des Femmes au droit de Cité* 121

Bibliography 129

Index 145

ILLUSTRATIONS

1. Marquis de Condorcet 5

2. William Godwin 17

3. Mary Godwin 36

4. Percy Shelley 45

5. Thomas Malthus 60

ACKNOWLEDGEMENTS

THIS BOOK IS BASED on my contributions to the Pugwash Conferences on Science and World Affairs which took place in Beijing (1991), Berlin (1992) and Stockholm (1993), and on the discussions which took place in the working groups on sustainability at these meetings. I am grateful to the Committee on Security and Disarmament of the Danish Foreign Ministry (SNU) for travel grants that allowed me to attend the Pugwash Conferences. I am also extremely grateful to two Pugwash colleagues, Dr Anne Ehrlich of Stanford University and Professor Jack Steinberger of CERN for their help and encouragement. Very great help, both practical and moral, came from my close personal friend, Lektor Keld Helmer-Petersen of Denmark's Royal College of Art, who suggested numerous detailed corrections and improvements. Finally, I would like to thank Professor Dudley Herschbach, Professor Roy McWeeny, Professor Serguei Kapitza and Dr M. Voldstedlund for their interest and encouragement.

INTRODUCTION

In the 1950s and 1960s there was great hope that the transfer of technology from the industrialized nations to the developing countries would lead to prosperity in all parts of the world. As a mark of this hope the United Nations designated the 1970s to be a Development Decade. Progress, however, was blocked by exploding populations. In the words of Halfdan Mahler, former Director General of the World Health Organization, 'Country after country has seen painfully achieved increases in total output, food production, health and educational facilities and employment opportunities reduced or nullified by excessive population growth.' In Kenya, for example, population grew at almost 4 per cent per year, a rate which corresponds to a doubling time of only 18 years. In many other developing nations, the doubling time was less than 25 years. Governments struggling to provide education, jobs and homes for all their citizens found that, despite their best efforts, both the infrastructure per capita and the gross domestic product per capita were decreasing.

According to United Nations projections, the population of the world will reach 10 billion by the year 2050. Most of the increase will take place in the developing nations where there is a justifiable desire for a higher standard of living. If the aspirations of the developing countries are met, global energy use will increase sharply. It is estimated that a global population of 10 billion, using oil and energy at the same rate as present-day Americans, could exhaust the world's supply of petroleum in seven years and could burn all of the world's remaining reserves of fossil fuels in less than a century, producing a

catastrophic change in the Earth's climate through the release of greenhouse gases.

The optimism of the Development Decade and the disappointment that followed it recall the optimism of the Enlightenment and the disappointment that followed when it became apparent that the Industrial Revolution had produced great social dislocation and misery among the workers. The parallel between the expectations and disappointments of the Enlightenment and those of our own time makes it relevant for us to reread the writings of the economists and political philosophers of the late eighteenth and early nineteenth centuries, and in particular those of Condorcet, Godwin and Malthus.

During the period immediately preceding and following the French Revolution, there was a great spirit of optimism among the political philosophers of Europe. Encouraged by the triumphs of Newtonian mechanics, they believed that science, reason and education, together with the principles of political liberty and equality, would soon lead humanity forward to a new era of happiness. The *philosophes* of the Enlightenment visualized history as a long progression towards the discovery of printing, and of the scientific method. Once discovered, these techniques could never be lost; and they would lead inevitably (it was believed) to the material and moral improvement of society.

In France, for example, the Marquis de Condorcet wrote an enormously optimistic book, *Esquisse d'un Tableau Historique des Progrès de l'Esprit Humain*, not discouraged even by the fact that while he was writing he was in hiding and sentenced to death by the tribunals of Robespierre's reign of terror. In England, William Godwin published an equally optimistic book, *Political Justice*. Both Condorcet and Godwin believed that human nature is basically good, that any increase in knowledge must be beneficial, that truth and justice are in the long run invincible, and that the gradual progress of society is inevitable.

The utopian visions of Condorcet and Godwin soon found an opponent in Malthus. Thomas Robert Malthus (1766–1834) came from an intellectual family. His father, Daniel Malthus, was a friend of Rousseau, Hume, and Godwin. The famous book on population by the younger Malthus grew out of conversations with his father.

Daniel Malthus was an enthusiastic believer in the optimistic philosophy of the Enlightenment. Like Godwin, Condorcet and Voltaire, he believed that the application of scientific progress to agriculture and industry would inevitably lead humanity forward to a golden age. His son, Robert, was more pessimistic. He pointed out that the benefits of scientific progress would probably be eaten up by a growing population.

At his father's urging, Robert Malthus developed his ideas into a book, *An Essay on the Principle of Population*, which he published anonymously in 1798 and which he revised and expanded in 1803. In this famous book, Malthus pointed out that under optimum conditions, every biological population, including humans, is capable of increasing exponentially. Using empirical data from America, Malthus showed that the population there actually doubled every 25 years over a period of a century-and-a-half – a 64-fold increase.

Obviously, human populations cannot increase at this rate for very long since, if they did, the earth would be completely choked with people in a few centuries. Summarizing the extensive demographic data presented in his book, Malthus wrote, 'Population invariably increases when the means of subsistence increase, unless prevented by powerful and obvious checks'. These checks might be late marriage, celibacy or 'moral restraint'; but if these failed, other more painful checks must inevitably begin to act – the grim Malthusian forces of famine, disease and war.

Both Godwin and Condorcet realized that population might increase so much that it could nullify the economic gains conferred by science, but they felt that this threat was a distant one. Condorcet foresaw a time of excessive population, which he thought to be very far in the future, and he recommended that birth control should then be used to solve the problem. The reaction of Malthus to this suggestion was one of shocked innocence: 'To remove the difficulty in this way', he exclaims, 'will surely, in the opinion of most men, be to destroy that virtue and purity of manners which the advocates of the perfectability of man profess to be the end and object of their views!'

Looking back at this debate from the vantage point of the two centuries that have elapsed since it took place, what can we say about

it? Who was right? Or were both sides partially right? The basic idea put forward by Malthus is certainly beyond dispute: If left completely unchecked, any biological population will grow exponentially and, in a surprisingly short time, it will outrun its means of support. Given the mathematical characteristics of exponential growth and the finite size of the earth, there is simply no way around this basic fact. Does it follow however, that the improvement in the human condition visualized by Condorcet and Godwin is an impossible dream? Obviously not, since we have seen this dream realized, or partially realized, in many parts of the world.

Because of its importance for our own times, it is interesting to reread this early debate on progress versus population, to revisit Malthus, Godwin, Condorcet and their contemporaries, and to hear what they had to say.

CONDORCET

MARIE-JEAN-ANTOINE-NICOLAS Caritat, Marquis de Condorcet, was born in 1743 in the town of Ribemont in southern France. He was born into an ancient and noble family of the principality of Orange but there was nothing in his background to suggest that he might one day become a famous scientist and social philosopher. In fact, for several generations before, most of the men in the family had followed military or ecclesiastical careers and none were scholars.

Condorcet's father died when the boy was only four years old and his twice-widowed mother became excessively anxious to protect her son from any harm. To thwart the 'Evil Eye', she dedicated him to the Virgin and until her son was eight years old she dressed him as a girl. This prevented the young Condorcet from taking part in active physical exercise and it may have contributed to the delicate health that followed him throughout his life.

After an initial education received at home from his mother, Condorcet was sent to his uncle, the Bishop of Lisieux, who provided a Jesuit tutor for the boy. In 1758 Condorcet continued his studies with the Jesuits at the College of Navarre. After he graduated from the College, Condorcet's powerful and independent intelligence suddenly asserted itself. He announced that he intended to study mathematics. His family was unanimously and violently opposed to this idea. The privileges of the nobility were based on hereditary power and on a static society. Science, with its emphasis on individual talent and on progress, undermined both these principles. The opposition of Condorcet's family is therefore understandable but he persisted until they gave in.