PAUL KENNEDY

PREPARING FOR THE TWENTY-FIRST CENTURY

BY THE AUTHOR OF
THE RISE AND FALL OF THE GREAT POWERS

PREPARING FOR THE TWENTY-FIRST CENTURY

Paul Kennedy

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PREPARING FOR THE TWENTY-FIRST CENTURY

To the East China Institute of Politics and Law —

With gratitude and deepest thanks for your generous cooperation and assistance in helping me to perform my filial obligation —

And in honor and memory of my parents, Philip Beach Sullivan and Bess Lipscomb Sullivan, who lived and worked on this campus from 1922 to 1943.

Daniel P. Sullivan
(Resident on this campus from 1929 to 1940)

[illegible] 1993

To the Hamden under-fifteen
Boys' Soccer Team from their Coach

FOREWORD AND ACKNOWLEDGMENTS

THIS BOOK HAD ITS ORIGINS IN A DEBATE which took place between me and a large group of economists at the Brookings Institution in Washington in the spring of 1988, and which centered upon my newly published work *The Rise and Fall of the Great Powers.* In the course of a lively evening, one critic—not known to me—declared that he couldn't understand why such a fuss was being made about *Rise and Fall* by everyone. It was, after all, a very traditional sort of book, focusing upon the nation-state as the central actor in world affairs. Why hadn't I used my time better, to write about much more important and interesting issues, those forces for global change like population growth, the impact of technology, environmental damage, and migration, which were *trans*national in nature and threatened to affect the lives of us all, peasants as well as premiers?

I left it to others that evening to weigh in with opinions about why *Rise and Fall* might be of some pertinence, especially in the American presidential campaign of 1988, but I found my critic's comment sufficiently arousing to begin initial readings in subjects (global warming, demography, robotics, biotech) that were then totally foreign to me. Before long, I was making clippings of newspaper and journal articles upon those subjects and filing them away. After a further while, I realized that I had the makings of a new book, very different from *Rise*

and Fall in its subject matter and structure and yet—as I explain in Chapter 1—closely related in its concerns and purpose. Both are an attempt to write what David Landes calls "large History." Whether the present work provokes the same interest as the previous study will be for the reader to say.

In the course of researching and preparing this book, I have become obliged to an embarrassingly large group of individuals, only a few of whom can be mentioned here. I am deeply indebted to Sheila Klein and Sue McClain, who once again typed repeated drafts of the manuscript with wonderful efficiency and dispatch. Old friends Gordon Lee and J. R. Jones read and commented on every aspect of the initial draft, then upon the revisions. Jonathan Spence, Richard Crockatt, David Stowe, W. H. McNeill, Paul Golob, André Malabré, James O'Sullivan, Bill Foltz, and Bill Cronon read and made notes on parts or all of this work. Kenneth Keller, Bill Nordhaus, and Maria Angulo tried to keep me from going too far wrong in my coverage of environmental issues.

I was also blessed by the assistance of a large number of Yale graduate students. For the past few years, Maarten Pereboom, Karen Donfried, Richard Drayton, Geoff Wawro, Kevin Smith, Fred Logevall, and Reynolds Salerno have successively grappled with the mountains of files, documents, correspondence, and other materials, reducing them to some order. David Rans did statistical analysis for me. My son John Kennedy took a summer off to reorganize and list the entire archive. Fred Logevall and Reynolds Salerno prepared the bibliography and checked the endnote references.

When, in the summer of 1990, it became clear that I was being overwhelmed by the sheer mass of literature upon the subjects I proposed to cover, I was rescued by a group of five research assistants, all Yale students. Zhikai Gao, with wonderful computing skills, organized a computer search of the literature held in the Sterling Library's extensive collections, providing the results to the rest of us. Tony Cahill investigated and prepared an extensive report on environmental issues. Gary Miller did the same on comparative education. Sameetah Agha reported on robotics, automation, high technology, and related issues,

as well as advising on the developing world, Islam, India, and China. David Stowe was amazingly efficient in providing reports on demography, globalization, and biotech agriculture and also gave more general assistance. Without these five, the work would never have been completed. I remain, of course, solely responsible for all lingering errors, as well as for the general and specific arguments made in the text.

I am especially indebted to my literary agents, Bruce Hunter and Claire Smith, who have supported me throughout the project. Stuart Proffitt, my London editor at HarperCollins, has also been wonderfully supportive throughout this project, exchanging ideas and information, reading and gently criticizing the various drafts, and helping to give an overall shape to the work. I know the completed manuscript arrived later than he would have wished, but I hope he will find that the extensive revisions have been worthwhile.

My two greatest critics, Jason Epstein of Random House and my wife, Cath, deserve special mention. Being edited by the former is the literary equivalent of Marine Corps boot camp, but although the process of revision is a painful one, there is no doubt in my mind that the manuscript benefited immensely from Jason's line-by-line editing and from his insistence that the chapter themes be much more closely interrelated than they were in the first draft.

The manuscript was also vastly improved by the many amendments suggested by my wife; the Part Two chapters especially benefited from her advice.

This is dedicated to the Hamden under-fifteen Boys' Soccer Team, which I have had the pleasure of coaching for the past four years and hope to be with until they go to college. Coaching can be frustrating at times—usually when the team loses—but it is also a wonderful escape from one's books, files, and statistics. Some authors can be single-minded scholars. This one cannot; but I feel much the better, and much refreshed, for having been coach as well as professor during the writing of this work.

Paul Kennedy
Hamden/Branford, Connecticut
May 1992

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TABLES

CHARTS

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PART 1

GENERAL TRENDS

1

PROLOGUE: OLD CHALLENGES AND NEW CHALLENGES

TWO HUNDRED YEARS AGO, AS THE EIGHTEENTH century was drawing to a close, observers of social and political trends in Europe were deeply troubled. A revolutionary tide, which had first surged in France in 1789, was spreading to neighboring states, bringing down regimes from Italy to the Netherlands. Instead of peaceful constitutional change to a more representative political system, here a revolution was feeding upon itself, producing demagogues, angry street mobs, violence, and a new pan-European war. As a consequence, authorities in nations as different as Georgian Britain and czarist Russia reacted by suppressing revolutionary tendencies. Moderate voices, as happens so often, found themselves scorned by the left and threatened by the right.

Although the French Revolution had specific causes—for example, worsening state finances during the 1780s—many felt that there were deeper reasons for these social upheavals. One such was obvious to anyone who visited Europe's crowded cities or noted the growing incidence of rural underemployment: it was the sheer press of human beings, all needing food, clothing, shelter, and work in societies not well equipped to meet those demands, at least on such a scale. Countryside hovels teemed with young children. Town authorities grappled with a rising tide of homeless vagrants. In the larger cities, a floating popula-

tion of tens of thousands of unemployed slept on the ground overnight and poured into the streets the next day. Jails, pauper houses, foundling hospitals, and lunatic asylums were packed with human casualties who had not yet arrived at their common grave.

Concerned observers did not need statistics to know that their societies were experiencing a population boom. Had the data been available—the taking of a national census was only just being introduced around this time—the figures would have confirmed their judgment. The population of Europe (including Russia) had been about 100 million in 1650, was almost 170 million a century later, and by 1800 was well past 200 million.[1] The population of England and Wales grew by a mere 1 percent in the 1720s, by 4 percent in the 1750s, and by over 10 percent per decade as 1800 approached—and was still accelerating.[2] The major cities, swelled by the drift of population from the countryside, grew even faster. On the eve of the French Revolution, Paris had a total of between 600,000 and 700,000 people, including up to 100,000 vagrants—combustible materials for a social explosion. London's total was even larger, its 575,000 inhabitants of 1750 having become 900,000 by 1801, including a mass of the bustling street hawkers, pickpockets, urchins, and felons so well captured in contemporary prints. With more and more "have-nots" being born in a world of relatively few "haves," was it any wonder that the authorities were fearful and tightened up restrictions upon public assemblies, pamphleteering, "combinations" of workers, and other potentially subversive activities?

This late-eighteenth-century surge in population, which was also taking place in countries as far removed as China and America, had various causes. An inexplicable decline in the virulence of diseases like smallpox was one. So also was the increasing use of vaccination techniques. Improvements in food supply and diet, at least in parts of Western Europe, were another cause. In certain societies, women were marrying younger.[3] Whatever the exact combination of reasons, there were many more children in most parts of the world than there had been a century earlier. As the population expanded, it pressed upon existing resources.

The prospect of a growing mismatch between people and resources deeply troubled a learned and inquisitive English country curate named

Thomas Robert Malthus, who in 1798 committed his thoughts to paper in a work which has made him world-famous. In his *Essay on Population,* * Malthus focused upon what appeared to him the greatest problem facing the human species: "that the power of population is indefinitely greater than the power in the earth to produce subsistence for man."[4] This was so, he argued, because the populations of Britain, France, and America were doubling every twenty-five years whereas—although fresh land was also being opened up—there was no certainty that food supplies could increase at the same rate repeatedly. Indeed, while the output of farm produce might conceivably be doubled over the following twenty-five years, to suppose such a doubling could occur again, and again, and again was "contrary to all our knowledge of the qualities of land."[5] As Britain's population geometrically increased from 7 million† to 14 million over the next quarter century, and to 28 million over the following quarter century, and then to 56 million and 112 million, Malthus forecast there would be an ever greater gap between the people's food demands and the land's capacity to meet them. The result, he feared, would be increasing starvation and deprivation, mass deaths through famine and disease, and a rending of the social fabric.

It is not necessary here to follow all the debates between Malthus and his contemporaries, except to note that he had deliberately penned his *Essay* to contest the arguments of certain writers (Godwin, Condorcet) about the perfectibility of man. Those optimists had concluded that while things were troubled at the moment, the growth of human understanding, the capacity for self-improvement, and breakthroughs in knowledge would one day lead to a society that was much more equitable, free of crime and disease, free even of war.[6] The pessimistic Malthus, by contrast, felt that population growth meant that the human condition would worsen, with the existing gap between the "haves" and the "have-nots" exacerbated by the pressures upon the earth's resources.

This debate between optimists and pessimists has, in one form or

*More accurately, *An Essay on the Principle of Population as It Affects the Future Improvement of Society* (London, 1798). This is also known as Malthus's "first" essay on population, since it was rewritten in 1803 and there were later editions.

†It was actually larger, about 10 million, at this time.