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Gregory Clark: A Farewell to Alms

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1 Introduction: The Sixteen-Page Economic History of the World

He may therefore be justly numbered among the benefactors of mankind, who contracts the great rules of life into short sentences, that may be easily impressed on the memory, and taught by frequent recollection to recur habitually to the mind. —Samuel Johnson, *Rambler* No. 175 (November 19, 1751)

The basic outline of world economic history is surprisingly simple. Indeed it can be summarized in one diagram: figure 1.1. Before 1800 income per person —the food, clothing, heat, light, and housing available per head—varied across societies and epochs. But there was no upward trend. A simple but powerful mechanism explained in this book, the *Malthusian Trap,* ensured that short-term gains in income through technological advances were inevitably lost through population growth.

Thus the average person in the world of 1800 was no better off than the average person of 100,000 BC. Indeed in 1800 the bulk of the world's population was poorer than their remote ancestors. The lucky denizens of wealthy societies such as eighteenth-century England or the Netherlands managed a material lifestyle equivalent to that of the Stone Age. But the vast swath of humanity in East and South Asia, particularly in China and Japan, eked out a living under conditions probably significantly poorer than those of cavemen.

The quality of life also failed to improve on any other observable dimension. Life expectancy was no higher in 1800 than for hunter-gatherers: thirty to thirty-five years. Stature, a measure both of the quality of diet and of children's exposure to disease, was higher in the Stone Age than in 1800. And while foragers satisfy their material wants with small amounts of work, the modest comforts of the English in 1800 were purchased only through a life of unrelenting drudgery. Nor did the variety of material consumption improve. The average forager had a diet, and a work life, much more varied than the

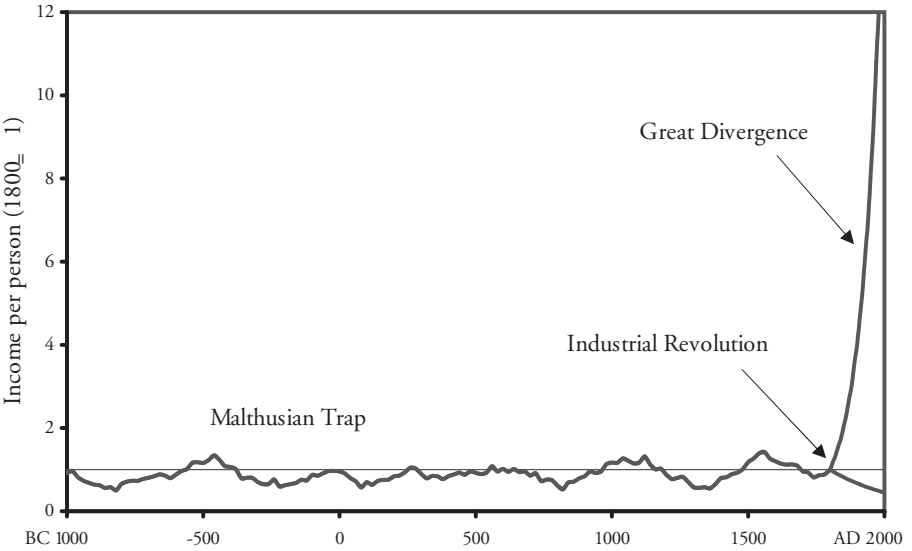

Figure 1.1 World economic history in one picture. Incomes rose sharply in many countries after 1800 but declined in others.

typical English worker of 1800, even though the English table by then included such exotics as tea, pepper, and sugar.

And hunter-gatherer societies are egalitarian. Material consumption varies little across the members. In contrast, inequality was pervasive in the agrarian economies that dominated the world in 1800. The riches of a few dwarfed the pinched allocations of the masses. Jane Austen may have written about refined conversations over tea served in china cups. But for the majority of the English as late as 1813 conditions were no better than for their naked ancestors of the African savannah. The Darcys were few, the poor plentiful.

So, even according to the broadest measures of material life, average welfare, if anything, declined from the Stone Age to 1800. The poor of 1800, those who lived by their unskilled labor alone, would have been better off if transferred to a hunter-gatherer band.

The Industrial Revolution, a mere two hundred years ago, changed forever the possibilities for material consumption. Incomes per person began to undergo sustained growth in a favored group of countries. The richest modern economies are now ten to twenty times wealthier than the 1800 average. Moreover the biggest beneficiary of the Industrial Revolution has so far been

the unskilled. There have been benefits aplenty for the typically wealthy owners of land or capital, and for the educated. But industrialized economies saved their best gifts for the poorest.

Prosperity, however, has not come to all societies. Material consumption in some countries, mainly in sub-Saharan Africa, is now well below the preindustrial norm. Countries such as Malawi or Tanzania would be better off in material terms had they never had contact with the industrialized world and instead continued in their preindustrial state. Modern medicine, airplanes, gasoline, computers—the whole technological cornucopia of the past two hundred years—have succeeded there in producing among the lowest material living standards ever experienced. These African societies have remained trapped in the Malthusian era, where technological advances merely produce more people and living standards are driven down to subsistence. But modern medicine has reduced the material minimum required for subsistence to a level far below that of the Stone Age. Just as the Industrial Revolution reduced income inequalities *within* societies, it has increased them *between* societies, in a process recently labeled the *Great Divergence.*[1] The gap in incomes between countries is of the order of 50:1. There walk the earth now both the richest people who ever lived and the poorest.

Thus world economic history poses three interconnected problems: Why did the Malthusian Trap persist for so long? Why did the initial escape from that trap in the Industrial Revolution occur on one tiny island, England, in 1800? Why was there the consequent Great Divergence? This book proposes answers to all three of these puzzles—answers that point up the connections among them. The explanation for both the timing and the nature of the Industrial Revolution, and at least in part for the Great Divergence, lies in processes that began thousands of years ago, deep in the Malthusian era. The dead hand of the past still exerts a powerful grip on the economies of the present.

The focus on material conditions in this history will strike some as too narrow, too incidental to vast social changes over the millennia. Surely our material riches reflect but a tiny fraction of what makes industrialized societies modern?

On the contrary, there is ample evidence that wealth—and wealth alone—is the crucial determinant of lifestyles, both within and between societies. Income growth changes consumption and lifestyles in highly predictable

1. Pomeranz, 2000.

ways. The recent demise first of the American farmer and then of the manufacturing worker were already preordained when income began its upward march during the Industrial Revolution. Had we been more clear-sighted, we could have foreseen in 1800 our world of walk-in closets, his-and-her bathrooms, caramel macchiatos, balsamic reductions, boutique wines, liberal arts colleges, personal trainers, and $50 entrees.

There are surely many surprises ahead for mankind in the centuries to come, but for the most part the economic future is not an alien and exotic land. We already see how the rich live, and their current lifestyle predicts powerfully how we will all eventually live if economic growth continues.[2] Anyone who has visited the British Museum or the Sistine Chapel, for example, has had a foretaste of the relentless tide of tourism set to be unleashed on the world by another few decades of strong economic growth.[3] Even the high-income demand for unique and individualized travel and dining experiences is now catered to on an industrial scale.

Just as we can see the future through the lives of the rich, so the small wealthy elite of the preindustrial world led lives that prefigured our own. The delight of the modern American suburbanite in his or her first SUV echoes precisely that of Samuel Pepys, the wealthy London civil servant, on acquiring his first coach in 1668.[4] A walk through the reconstructed villas of Pompeii and Herculaneum, frozen in time on the day of the eruption of Vesuvius in AD 79, reveals homes that suburban Americans would happily move into: "Charming home with high ceilings, central courtyard, great room, finely detailed mosaics, and garden water feature—unobstructed Vesuvian views."

Thus I make no apologies for focusing on income. Over the long run income is more powerful than any ideology or religion in shaping lives. No God has commanded worshippers to their pious duties more forcefully than income as it subtly directs the fabric of our lives.

The Malthusian Trap: Economic Life to 1800

The first third of the book is devoted to a simple model of the economic logic of all societies before 1800, and to showing how this accords with historical

2. Thus when Bill and Melinda Gates were expecting a third child in 2002 they expanded their house, in light of their greater space needs, to its current 50,000 square feet.

3. The major export of New Zealand, for example, is now tourism services.

4. Pepys, 2000, November 28, 1668.

evidence. This model requires only three basic assumptions, can be explained graphically, and explains why technological advance improved material living conditions only after 1800.

The crucial factor was the rate of technological advance. As long as technology improved slowly, material conditions could not permanently improve, even while there was cumulatively significant gain in the technologies. The rate of technological advance in Malthusian economies can be inferred from population growth. The typical rate of technological advance before 1800 was well below 0.05 percent per year, about a thirtieth of the modern rate.

In this model the economy of humans in the years before 1800 turns out to be just the *natural* economy of all animal species, with the same kinds of factors determining the living conditions of animals and humans. It is called the Malthusian Trap because the vital insight underlying the model was that of the Reverend Thomas Robert Malthus, who in 1798 in *An Essay on the Principle of Population* took the initial steps toward understanding the logic of this economy.

In the Malthusian economy before 1800 economic policy was turned on its head: vice now was virtue then, and virtue vice. Those scourges of failed modern states—war, violence, disorder, harvest failures, collapsed public infrastructures, bad sanitation—were the friends of mankind before 1800. They reduced population pressures and increased material living standards. In contrast policies beloved of the World Bank and the United Nations today—peace, stability, order, public health, transfers to the poor—were the enemies of prosperity. They generated the population growth that impoverished societies.

At first sight the claim of no material advance before 1800 seems absurd. Figure 1.2 shows Nukak hunter-gatherers of the modern Amazonian rain forest, naked, with a simplicity of possessions. Figure 1.3 in contrast shows an upper-class English family, the Braddylls, painted in all their finery by Sir Joshua Reynolds in 1789. How is it possible to claim that material living conditions were on average the same across all these societies?

But the logic of the Malthusian model matches the empirical evidence for the preindustrial world. While even long before the Industrial Revolution small elites had an opulent lifestyle, the average person in 1800 was no better off than his or her ancestors of the Paleolithic or Neolithic.

The Malthusian logic developed in this book also reveals the crucial importance of fertility control to material conditions before 1800. All preindustrial

Figure 1.2 The Nukak, a surviving hunter-gatherer society in the Colombian rain forest.

societies for which we have sufficient records to reveal fertility levels experienced some limitation on fertility, though the mechanisms varied widely. Most societies before 1800 consequently lived well above the bare subsistence limit. That is why there has been plenty of room for African living standards to fall in the years since the Industrial Revolution.

Mortality conditions also mattered, and here Europeans were lucky to be a filthy people who squatted happily above their own feces, stored in basement cesspits, in cities such as London. Poor hygiene, combined with high urbanization rates with their attendant health issues, meant incomes had to be high to maintain the population in eighteenth-century England and the Netherlands. The Japanese, with a more highly developed sense of cleanliness, could maintain the level of population at miserable levels of material comforts, and they were accordingly condemned to subsist on a much more limited income.

Since the economic laws governing human society were those that govern all animal societies, mankind was subject to natural selection throughout the Malthusian era, even after the arrival of settled agrarian societies with the Neolithic Revolution of 8000 BC, which transformed hunters into settled agriculturalists. The Darwinian struggle that shaped human nature did not end

Figure 1.3 *The Braddyll Family,* Sir Joshua Reynolds, 1789. Wilson Gale-Braddyll was a Member of Parliament and Groom to the Bedchamber of the Prince of Wales.

with the Neolithic Revolution but continued right up until the Industrial Revolution.

For England we will see compelling evidence of differential survival of types in the years 1250–1800. In particular, economic success translated powerfully into reproductive success. The richest men had twice as many surviving children at death as the poorest. The poorest individuals in Malthusian England had so few surviving children that their families were dying out. Preindustrial England was thus a world of constant downward mobility. Given the static nature of the Malthusian economy, the superabundant children of the rich had to, on average, move down the social hierarchy in order to find work. Craftsmen's sons became laborers, merchants' sons petty traders, large landowners' sons

smallholders. The attributes that would ensure later economic dynamism—patience, hard work, ingenuity, innovativeness, education—were thus spreading biologically throughout the population.

Just as people were shaping economies, the economy of the preindustrial era was shaping people, at least culturally and perhaps also genetically.[5] The Neolithic Revolution created agrarian societies that were just as capital intensive as the modern world. At least in England, the emergence of such an institutionally stable, capital-intensive economic system created a society that rewarded middle-class values with reproductive success, generation after generation. This selection process was accompanied by changes in the characteristics of the preindustrial economy, due largely to the population's adoption of more middle-class preferences. Interest rates fell, murder rates declined, work hours increased, the taste for violence declined, and numeracy and literacy spread even to the lower reaches of society.

The Industrial Revolution

The stasis of the preindustrial world, which occupied most of the history of mankind, was shattered by two seemingly unprecedented events in European society in the years 1760–1900. The first was the Industrial Revolution, the appearance for the first time of rapid economic growth fueled by increasing production efficiency made possible by advances in knowledge. The second was the demographic transition, a decline in fertility which started with the upper classes and gradually encompassed all of society. The demographic transition allowed the efficiency advance of the Industrial Revolution to translate not into an endless supply of impoverished people but into the astonishing rise of income per person that we have seen since 1800. The second third of the book examines these changes.

The Industrial Revolution and the associated demographic transition constitute the great questions of economic history. Why was technological advance so slow in all preindustrial societies? Why did the rate of advance

5. I first became interested in this idea in 1989. Clark and McGinley, 1989, argued through a simulation exercise that the logic of the Malthusian era implied that people evolved after the Neolithic Revolution toward greater patience and lower fertility. At the time these ideas seemed to conflict with the historical record and biological possibilities. My interest was reignited by a theoretical paper, making the same argument, by Oded Galor and Omar Moav; Galor and Moav, 2002.

increase so greatly after 1800? Why was one by-product of this technological advance a decline in fertility? And, finally, why have all societies not been able to share in the ample fruits of the Industrial Revolution?

There are only three established approaches to these puzzles. The first locates the Industrial Revolution in events outside the economic system, such as changes in political institutions, in particular the introduction of modern democracies. The second argues that preindustrial society was caught in a stable, but stagnant, economic equilibrium. Some shock set forces in motion that moved society to a new, dynamic equilibrium. The last approach argues that the Industrial Revolution was the product of a gradual evolution of social conditions in the Malthusian era: growth was endogenous. According to the first two theories the Industrial Revolution might never have occurred, or could have been delayed thousands of years. Only the third approach suggests that there was any inevitability to it.

The classic description of the Industrial Revolution has suggested that it was an abrupt transition between economic regimes, as portrayed in figure 1.1, with a change within fifty years from preindustrial productivity growth rates to modern rates. If this is correct then only theories that emphasize an external shock or a switch between equilibria could possibly explain the Industrial Revolution.

The classic description has also suggested that significant technological advances across disparate sectors of the economy contributed to growth during the Industrial Revolution, again pointing toward some economywide institutional change or equilibrium shift. This implies that we should be able to find the preconditions for an Industrial Revolution by looking at changes in institutional and economic conditions in England in the years just before 1800. And waves of economists and economic historians have thrown themselves at the problem with just such an explanation in mind—with spectacular lack of success.

The conventional picture of the Industrial Revolution as a sudden fissure in economic life is not sustainable. There is good evidence that the productivity growth rate did not experience a clean upward break in England, but instead fluctuated irregularly over time all the way back to 1200. Arguments can be made for 1600, for 1800, or even for 1860 as the true break between the Malthusian and modern economies.

When we try to connect advances in efficiency to the underlying rate of accumulation of knowledge in England, the link turns out to depend on

many accidental factors of demand, trade, and resources. In crucial ways the classic Industrial Revolution in England in 1760–1860 was a blip, an accident, superimposed on a longer-running upward sweep in the rate of knowledge accumulation that had its origins in the Middle Ages or even earlier.

Thus, though an Industrial Revolution of some kind certainly occurred between 1200 and 1860 in Europe, though mankind crossed a clear divide, a materialist's Jordan at the gates of the Promised Land, there is still plenty of room for debate about its precise time and place, and hence debate about the conditions which led to it. An evolutionary account of gradual changes is a much more plausible explanation than has previously been appreciated.

Despite the dominant role that institutions and institutional analysis have played in economics and economic history since the time of Adam Smith, institutions play at best a minor direct role in the story of the Industrial Revolution told here, and in the account of economic performance since then. By 1200 societies such as England already had all the institutional prerequisites for economic growth emphasized today by the World Bank and the International Monetary Fund. These were indeed societies more highly incentivized than modern high-income economies: medieval citizens had more to gain from work and investment than their modern counterparts. Approached from the Smithian perspective, the puzzle is not why medieval England had no growth, but why today's northern European countries, with their high tax rates and heavy social spending, do not suffer economic collapse. The institutions necessary for growth existed long before growth itself began.

These institutions did create the conditions for growth, but only slowly and indirectly over centuries and perhaps even millennia. Here the book argues that the Neolithic Revolution, which established a settled agrarian society with massive stocks of capital, changed the nature of the selective pressures operating on human culture and genes. Ancient Babylonia in 2000 BC superficially possessed an economy remarkably similar to that of England in 1800. But the intervening years had profoundly shaped the culture, and maybe even the genes, of the members of agrarian societies. It was these changes that created the possibility of an Industrial Revolution only in AD 1800, not in 2000 BC.

Why an Industrial Revolution in England? Why not China, India, or Japan?[6] The answer hazarded here is that England's advantages were not coal,

6. Landes, 1998; Pomeranz, 2000; Mokyr, 2005.

not colonies, not the Protestant Reformation, not the Enlightenment, but the accidents of institutional stability and demography: in particular the extraordinary stability of England back to at least 1200, the slow growth of English population between 1300 and 1760, and the extraordinary fecundity of the rich and economically successful. The embedding of bourgeois values into the culture, and perhaps even the genetics, was for these reasons the most advanced in England.

Both China and Japan were headed in the same direction as England in 1600–1800: toward a society embodying the bourgeois values of hard work, patience, honesty, rationality, curiosity, and learning. They too enjoyed long periods of institutional stability and private property rights. But they were headed there more slowly than England. David Landes is correct in observing that the Europeans had a culture more conducive to economic growth.[7]

China and Japan did not move as rapidly along the path as England simply because the members of their upper social strata were only modestly more fecund than the mass of the population. Thus there was not the same cascade of children from the educated classes down the social scale.

The samurai in Japan in the Tokugawa era (1603–1868), for example, were ex-warriors given ample hereditary revenues through positions in the state bureaucracy. Despite their wealth they produced on average little more than one son per father. Their children were thus mainly accommodated within the state bureaucracy, despite the fixed number of positions. The Qing imperial lineage was the royal family of China from 1644 to 1911. They too were wealthy through the entitlements that fell to persons of their status. They produced more children than the average Chinese, but only modestly so.

Thus, just as accidents of social custom triumphed over hygiene, marriage, and reproduction to make Europeans richer than Asians in the Malthusian era, they also seem to have given Europe a greater cultural dynamic.

Whatever its cause, the Industrial Revolution has had profound social effects. As a result of two forces—the nature of technological advance and the demographic transition—growth in capitalist economies since the Industrial Revolution strongly promoted greater equality. Despite fears that machines would swallow up men, the greatest beneficiaries of the Industrial Revolution so far have been unskilled workers.

7. Landes, 1998.

Thus, while in preindustrial agrarian societies half or more of the national income typically went to the owners of land and capital, in modern industrialized societies their share is normally less than a quarter. Technological advance might have been expected to dramatically reduce unskilled wages. After all, there was a class of workers in the preindustrial economy who, offering only brute strength, were quickly swept aside by machinery. By 1914 most horses had disappeared from the British economy, swept aside by steam and internal combustion engines, even though a million had been at work in the early nineteenth century. When their value in production fell below their maintenance costs they were condemned to the knacker's yard.

Similarly there was no reason why the owners of capital or land need not have increased their shares of income. The redistribution of income toward unskilled labor has had profound social consequences. But there is nothing in the happy developments so far that ensures that modern economic growth will continue to be so benign in its effects.

The Great Divergence

The last third of the book considers why the Industrial Revolution, while tending to equalize incomes within successful economies, has at the same time led to a Great Divergence in national economic fortunes. How did we end up in a world where a minority of countries has unprecedented riches while a significant group has seen declining incomes since the Industrial Revolution? This disparity is reflected in ever-widening gaps in hourly labor costs across countries. In 2002, for example, apparel workers in India cost $0.38 per hour, compared to $9 in the United States (see figure 16.15). As the World Trade Organization labors to gradually dissolve remaining trade barriers, does this imply the end of all basic manufacturing activity in advanced economies? Do we face a future dystopia for rich societies in which the wages of the unskilled plummet to Third World levels?

The technological, organizational, and political changes spawned by the Industrial Revolution in the nineteenth century all seemed to predict that it would soon transform most of the world in the way it was changing England, the United States, and northwestern Europe. By 1900, for example, cities such as Alexandria in Egypt, Bombay in India, and Shanghai in China were all, in terms of transport costs, capital markets, and institutional structures, fully integrated into the British economy. Yet the growth in a favored few nations

was followed haltingly in others, leading to an ever-widening income gap between societies.

This divergence in incomes is an intellectual puzzle on a par with that of the Industrial Revolution itself. And it provides a further severe test of theories of the Industrial Revolution. Can these theories be reconciled with the increasing divergence within the world economy?

A detailed examination of the cotton industry, one of the few found from the earliest years in both rich and poor countries, shows that the anatomy of the Great Divergence is complex and unexpected, and again hard to reconcile with economists' favorite explanations—bad institutions, bad equilibria, and bad development paths. In fact workers in poorly performing economies simply supply very little actual labor input on the job. Workers in modern cotton textile factories in India, for example, are actually working for as little as fifteen minutes of each hour they are at the workplace. Thus the disparity in hourly labor costs across the world is actually much less than it would appear from the differences in wage rates between rich and poor countries. Labor may cost $0.38 per hour in India, but its true cost per unit of work delivered is much higher. The threat to the living standards of unskilled workers in the United States from free trade with the Third World is less acute than hourly labor costs suggest. The new technologies of the Industrial Revolution could easily be transferred to most of the world, and the inputs for production obtained cheaply across the globe. But the one thing that could not be replicated so easily or so widely was the *social environment* that underpinned the cooperation of people in production in those countries where the technologies were first developed.

One reason why the social environment could not be replicated seems to be the comparatively long histories of various societies. In *Guns, Germs, and Steel* Jared Diamond suggested that geography, botany, and zoology were destiny.[8] Europe and Asia pressed ahead economically, and remained ahead to the present day, because of accidents of geography. They had the kinds of animals that could be domesticated, and the orientation of the Eurasian land mass allowed domesticated plants and animals to spread easily between societies. But there is a gaping lacuna in his argument. In a modern world in which the path to riches lies through industrialization, why are bad-tempered zebras and hippos the barrier to economic growth in sub-Saharan Africa? Why

8. Diamond, 1997.

didn't the Industrial Revolution free Africa, New Guinea, and South America from their old geographic disadvantages, rather than accentuate their backwardness? And why did the takeover of Australia by the British propel a part of the world that had not developed settled agriculture by 1800 into the first rank among developed economies?

The selection mechanisms discussed earlier can help explain how an initial advantage in establishing settled agrarian societies in Europe, China, and Japan, possibly from geography, was translated into a persistent cultural advantage in later economic competition. Societies without such a long experience of settled, pacific agrarian society cannot instantly adopt the institutions and technologies of the more advanced economies, because they have not yet culturally adapted to the demands of productive capitalism.

But history also teaches us that, even within societies of the same tradition and history, there can be regions and periods of economic energy and regions and periods of economic torpor. The economic fortunes of the north and south of England reversed after World War I; Ireland has become as rich as England after being significantly poorer for at least two hundred years; southern Germany has overtaken northern Germany.

These variations in the economic vitality of societies existed across the Malthusian era, and they continue to exist to this day. But in the Malthusian era the effects of these variations were dampened by the economic system. They mainly determined population densities. Polish farm workers in the early nineteenth century, for example, were allegedly slovenly, idle, and drunken compared to their British counterparts.[9] Yet living standards were little higher in England than in Poland. Instead Poland was very lightly populated. Since the Industrial Revolution such differences in the economic environment show up as variations in income levels.

Shifts in the nature of production technologies have further widened international income gaps. While Polish workers had low hourly outputs in farm tasks compared to workers in preindustrial England and the United States, the quality of their output was not markedly inferior. Polish wheat could still, after rescreening, be retailed at full price on the British market. When the majority of the tasks in agriculture consisted of such things as digging drainage ditches, spreading manure, and beating straw with a stick to extract the grain, the attitudes of the workers were not particularly important.

9. Jacob, 1826, 30, 65, 79–80.

However, modern production technologies, developed in rich countries, are designed for labor forces that are disciplined, conscientious, and engaged. Products flow through many sets of hands, each one capable of destroying most of the value of the final output. Error rates by individual workers must be kept low to allow such processes to succeed.[10] The introduction of such techniques in nineteenth-century England was accompanied by greater attention to worker discipline. When workers in poor countries lack these qualities of discipline and engagement, modern production systems are feasible only when little is demanded of each worker, to keep error rates as low as possible. This concept helps explain the dramatically lower observed work efforts of textile mill workers in such poor countries as India. It is cheaper to have frequently idle workers than idle machinery or defective output.

The Rise of Wealth and the Decline of Economics

Economics as a discipline arose in the dying decades of the Malthusian era. Classical economics was a brilliantly successful description of this world. But the torrent of goods unleashed by the Industrial Revolution not only created extremes of wealth and poverty across nations, it also undermined the ability of economic theory to explain these differences.

Thus there is a great irony in economic history. In most areas of inquiry —astronomy, archaeology, paleontology, biology, history—knowledge declines as we move away from our time, our planet, our society. In the distant mists lurk the strange objects: quasars, dwarf human species, hydrogen sulfide–fueled bacteria. But in economics the Malthusian era, however odd, is the known world. Preindustrial living standards are predictable based on knowledge of disease and environment. Differences in social energy across societies were muted by the Malthusian constraints. They had minimal impacts on living conditions. Since the Industrial Revolution, however, we have entered a strange new world in which economic theory is of little use in understanding differences in income across societies, or the future income in any specific society. Wealth and poverty are a matter of differences in local social interactions that are magnified, not dampened, by the economic system, to produce feast or famine.

The final great surprise that economic history offers—which was revealed only within the past thirty years—is that material affluence, the decline in

10. Kremer, 1993a.

child mortality, the extension of adult life spans, and reduced inequality have not made us any happier than our hunter-gatherer forebears. High incomes profoundly shape lifestyles in the modern developed world. But wealth has not brought happiness. Another foundational assumption of economics is incorrect.

Within any society the rich are happier than the poor. But, as was first observed by Richard Easterlin in 1974, rapidly rising incomes for everyone in the successful economies since 1950 have not produced greater happiness.[11] In Japan, for example, from 1958 to 2004 income per person rose nearly sevenfold, while self-reported happiness, instead of rising, declined modestly. It is evident that our happiness depends not on our absolute well-being but instead on how we are doing relative to our reference group. Each individual—by acquiring more income, by buying a larger house, by driving a more elegant car—can make herself happier, but happier only at the expense of those with less income, meaner housing, and junkier cars. Money does buy happiness, but that happiness is transferred from someone else, not added to the common pool.

That is why, despite the enormous income gap between rich and poor societies today, reported happiness is only modestly lower in the poorest societies. And this despite the fact that the citizens of poor nations, through the medium of television, can witness almost firsthand the riches of successful economies. It thus might be that there is no absolute effect of income on happiness, even at the lowest income levels. The people of the world of 1800, in which all societies were relatively poor and communities were much more local in scope, were likely just as happy as the wealthiest nations of the world today, such as the United States.

Since we are for the most part the descendants of the strivers of the preindustrial world, those driven to achieve greater economic success than their peers, perhaps these findings reflect another cultural or biological heritage from the Malthusian era. The contented may well have lost out in the Darwinian struggle that defined the world before 1800. Those who were successful in the economy of the Malthusian era could well have been driven by a need to have more than their peers in order to be happy. Modern man might not be designed for contentment. The envious have inherited the earth.

11. Easterlin, 1974; Blanchflower and Oswald, 2004.