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Growth, Quality, Happiness, and the Poor

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Part 3 of 13.
“Growth, Quality, Happiness,
and the Poor”

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*Bourgeois Dignity and Liberty:
Why Economics
Can't Explain
the Modern World*

[Vol. 2 of The Bourgeois Era]

Deirdre N. McCloskey

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To Readers: The argument is, I fancy, complete, but some details in
footnotes and references, and occasionally matters of routine calculation
in the main body, need to be cleaned up.

Abstract: Real national income per head in Britain rose by a factor of about 16 from the 18th century to the present. Other cases, such as that of the U.S. or Korea, have been even more startling, historically speaking. Like the realization in astronomy during the 1920s that most of the “nebulae” detected by telescopes are in fact other galaxies unspeakably far from ours, the Great Fact of economic growth, discovered by historians and economists in the 1950s and elaborated since then, changes everything. And 16, if one follows William Nordhaus’ persuasive arguments about quality improvements in (say) lighting, is a very low lower bound: the true factor is roughly 100. As Maxine Berg has argued, changing quality of products was as important as changes in process. But the gain is not to be measured by pot-of-pleasure “happiness studies.” These are questionable on technical grounds, but especially on the grounds that they do not measure human fulfillment. They ignore the humanities, pretending to scientific precision. It makes more sense to stay with things we economists can actually measure, such as the rise of human scope indicated by the factor of 16 or Nordhaus’ factor of 100, or by what Sen and Nussbaum call “capabilities.” Of course, what we really care about are the scope or capabilities of the poor. These have enormously expanded under “capitalism”---though a better word is simply “innovation,” arising from bourgeois dignity and liberty. It is the Bourgeois Deal: let me alertly seek profit, and I will make *you* rich.”

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Chapter 5: Modern Growth was a Factor of at Least Sixteen

The heart of the matter is, to fix ideas, sixteen. Real income per head nowadays exceeds that around 1700 or 1800 in, say, Britain and in other countries that have experienced modern economic growth by such a large factor as sixteen, at least.¹ You, oh average participant in the British economy, go through at least sixteen times more food and clothing and housing and education per person in a day than your ancestors did two or three centuries ago. You in the American or the South Korean economy, compared to the wretchedness of former Smiths in 1653 or Kims in 1953, have done even better. And if one accounts at their proper value such novelties as jet travel and vitamin pills and instant messaging, then the factor of material improvement climbs even higher than sixteen – to eighteen, or thirty, or far beyond. No previous episode of enrichment for the average person approaches it, not the China of the Song Dynasty or the Egypt of the New Kingdom, not the glory of Greece or the grandeur of Rome.

No competent economist, regardless of her politics, denies the Great Fact.

The economist Stephen Marglin, for example, emphasizes community, which he

¹ For the international comparisons Maddison 2006, and in particular pp. 437, 443 for the factor of sixteen from 1700 to 2001 in international Geary-Khamis dollars of 1990. When a figure such as this is not footnoted it will regularly be lifted from Maddison's amazing *oeuvre*, such as 2007. For Britain itself see Feinstein 1972, Feinstein in Feinstein and Pollard 1988 and Crafts 1985.

believes was undermined by the Fact and its accompanying rhetoric of prudence-only. As a convinced socialist he thinks that power and striving had more to do with the Fact than a free-market economist does.² But a neo-Marxist economist and a free-market economist both accept the great magnitude of the enrichment as a Fact. Likewise the economic historian Gregory Clark emphasizes a Darwinian struggle for eminence, which he believes explains the Fact. As a recently persuaded eugenicist he thinks that people are fated to be who they were born to be, which a true liberal finds ethically alarming, and anyway scientifically dubious.³ But a eugenic economist and a liberal economist both accept that the Fact broke the Malthusian curse.

Yet many non-economists or non-historians, in their politics left or right, are suspicious of innovation and hostile to markets, and remain unaware of the magnitude. They know something happened, of course, and that the vulgar bourgeois apologist will claim a “progress” of some sort, probably disputable and in any case deeply damaging to the poor or to a graceful life. But the non-economists and the non-historians (of whatever politics) have little idea of how very enriching the Fact has been of ordinary poor people. If you ask the regular readers of *The Nation* or of *The National Review* how much more material ease the average American had gained by the time of President Clinton as compared with President Monroe they will come up with a figure such as. . . go ahead: make a guess. . . perhaps, 200

² Marglin 2007.

³ Clark 2007.

percent or even 400 percent, maybe 800 percent – not, as is the case, 1700 percent, a factor of nearly 18, which is a lower bound on the American history.

The lack of precision in the estimates is worth the attention of specialists. But it is not important for the purpose here. The British or American or Japanese or South Korean increase could have been 8 or 10 or 35 times its level in 1700, rather than 16 or 18, and leave the heart of the matter undisturbed. People had always produced and consumed about \$3 a day. By now they consume \$30 a day if they are average denizens of the world, and \$137 if Norwegians. The scientific fact established over the past fifty years by the labors of economists and economic historians is that modern economic growth has been astounding. Simply astounding. Imagine getting along on \$3 a day in London or Seattle.

“Real national income per head” purports to measure what is earned by the average person in the nation as a whole, abstracting from merely monetary inflation. It measures the stuff per person we have – the pounds of bread or the number of haircuts, back and sides – not the mere dollars or yen. That’s why economists call it *“real,”* a word they favor. Thomas More disdained the grotesque consumerism of his early sixteenth-century England in which *“four or five woolen cloaks and the same number of silk shirts are not enough for one [very well-off] person, and if he is bit fastidious not even ten will do.”*⁴ Nowadays the merely average person in England has the equivalent of twenty or thirty. The fastidious boast hundreds.

⁴ More 1516, p. 65.

If your ancestors lived in Finland the factor of real material improvement is more like 29, the average Finn in 1700 being only 60 percent better off in material terms than the average African at the time. Look at what happened to the average Norwegian. In 1700 the Netherlands was the most bourgeois and therefore the richest country in the world, 70 percent better off per capita than the soon-to-be United Kingdom. So if your ancestors lived in the Netherlands the modern improvement is only a factor of roughly 10. But it is measured, as all these figures are, in the cautious way that does not take account of the high qualities of modern pills and housing and message-sending. The actual Dutch factor must be a great deal higher. In Japan the factor since 1700 is fully 35.⁵ In South Korea the cautiously measured factor since 1953, when income per head despite access to some modern technology (motor trucks, electric lights) was about what it had been in Europe 450 years before, is almost 18. The South Korean revolution was crammed into four decades instead of, as in the first and British case, stretched out over three centuries.

Like the realization in astronomy during the 1920s that most of the “nebulae” detected by telescopes are in fact other galaxies unspeakably far from ours, the Great Fact of economic growth, discovered by historians and economists in the 1950s and elaborated since then, changes everything.

* * * *

⁵ All these figure from Maddison 2001 (in 2006), Appendix B, Table 21, p. 264.

And in truth the amount by which average welfare multiplied under actually existing innovation exceeds by far the official and cautious statistics. Stuff unimaginable in 1700 or 1820 crowds our lives, from air conditioning to anesthesia. The new stuff makes the factors of 16 or 18 or even 30 gross understatements. William Nordhaus, a very useful economist at Yale, starts his paper on the economic history of lighting with the conventionally measured factor of 18 in American real income per head since 1800, or a factor of 13 if one is talking about real wages rather than real total income.⁶ But he notes what is known to all us expert economists (you amateurs will have to rely on common sense) – that the price indexes that are employed to take out the effects of inflation rise too steeply, because the stuff being priced gets better and gives more services for each supposedly inflation-corrected dollar. Air-conditioning instead of fans. Three-car garages in the standard house instead of one-car. Electric lights instead of candles.

It has happened recently, for example from 1970 to 1992, when the United States and many other countries saw a stagnation of real wages officially measured – the money wage divided by the official consumer price index. You will hear critics on the left saying that the ordinary person in the United States did not gain after 1970. They want to think that the Final Crisis of Capitalism is upon us. The leftward critics are not entirely wrong in their worry. But from 1970 to 1992 the conventional measure of prices didn't adequately reflect the rising space per dollar's worth of housing and the cheapening air-conditioning and the rarely puncturing

⁶ Nordhaus 1997.

automobile tires. Most economists reckon that on account of quality improvements the inflation rate conventionally measured was overstated in the period by about 1 percent a year (and continues to be to about the same extent).⁷ When allowing for the better quality of goods and services, therefore, the period of nominal stagnation in real wages witnessed a rise of about a third in the properly corrected real wage, which is what matters (together with health insurance supporting the Cadillac level of medical interventions that Americans insist on, which the talk of stagnating wages also doesn't include – allowing for example immediate access to by-pass surgery that wasn't used until the 1970s, and organ transplants even for some poor people, and none of the queuing for ordinary procedures that most other national systems have).⁸

A gain per head of merely 1 percent a year is not wonderful economic growth. The American average since 1820 has been more like 2 percent.⁹ Something bad did happen to the rate of innovation in the American economy 1970-1992, and the wages of ordinary folk did not rise at the rate they had 1945-1970. The event certainly bears examining, and lamenting. The economist Benjamin Friedman has shown how politics deteriorates as rates of growth decline towards zero.¹⁰ One percent is perilously close to zero, and sure enough the politics of the United States and other countries such as Britain in the period became correspondingly nasty. But

⁷ Boskin and others 1998. Gordon 2006 revises the figures up for one effect, down for another, leaving a 1.0 percent bias in the consumer price index. See the summary table on the earlier work in Moulton 1996.

⁸ Fogel 2008.

⁹ Maddison 2006, p. 265.

¹⁰ Friedman 2005.

neither was the growth among ordinary people literally zero, as the left so confidently and indignantly claims. Capitalism wasn't in crisis 1970-1992. During and after those years it raised the standard of living of poor people worldwide at the fastest rate in history (and by the way, according to the economist Robert Gordon, after the dot-com boom the American economy stopped rewarding the very rich disproportionately). The real welfare of workers in the United States 1970-1992 did not in fact stagnate—as you can see in the statistics of housing space per person or automobiles per person or restaurant meals per person. It modestly rose, from continuing innovation. Anyone who lived through the period knows that it did, though the official and uncorrected statistics can overcome her common sense.

And the poor got much better off materially, even in the recent period of growing inequality. Robert Fogel's point in his 2002 book is that the United States has a much smaller problem by now with the physical condition of the poor—this in contrast to 1900—than what he calls their “spiritual” condition.¹¹ Michael Cox and Richard Alm made some controversial assertions in a book of 1999 about the class mobility of the American poor. But their statistics on what the poor consume are not controversial. They conclude that “Poor households of the 1990s in many cases compared favorably with an average family in owning the trappings of middle class life. For example, almost half the poor households in 1994 had air conditioners, compared to less than a third of the country as a whole in 1971.”¹² That's right, as anyone knows who lived during the 1970s and knew poor people, or was poor.

¹¹ Fogel 2002, pp. 1, 2, 4, 236.

¹² Cox and Alm 1999, pp. 14-15.

During the 1940s, which some of us also lived through, really poor people in the American 1940s didn't have running water or electricity or access to penicillin, and the merely average poor person didn't have an automobile and lived in half the space that a poor person lives in now. In 1938 Americans had a car for every 4.4 people, in 1960 for every 2.4 people, in 2003 for every 1.26 of a person.

But the bigger, longer-term point is that correctly measuring the prices of things greatly increases the estimate of modern economic growth, 1800 to the present. Cox and Alm observe that a three-minute long-distance call across the U.S.A. in 1915 cost 90 hours of common labor.¹³ In 1999 it cost a minute and a half. No wonder your granny is always saying "This call must be costing you a fortune." It once did. In 1900, Cox and Alm note, a pair of scissors cost the modern per-labor-hour equivalent of \$67, which is why in the old days a middle-class Mother had the one pair, carefully guarded, and used it to make clothing, and only on special rainy days would she let Sis use it to cut up the old Sears catalogue for paper dolls. Fogel calculates that in 1875 in the United States the average family spent 74 percent of its income on food, clothing, and shelter. In 1995 it spent 13 percent.¹⁴

Nordhaus makes the point about the real cost of goods and services by studying over centuries the cost of one item, lighting.¹⁵ Illumination is easy to measure, in lumen hours per dollar of expenditure, say, or more to the point in the lumen hours per hour of human work to get the dollars. Conventional price indexes

¹³ Cox and Alm 1999, p. 43.

¹⁴ Fogel 2002, p. 266.

¹⁵ Compare Fouquet 2008.

of lighting can be measured year-by-year with the money price of, say, candles for a while in the early nineteenth century, when they were the main source of indoor lighting. But between 1800 and 1992 it would be crazy to take the price of candles (used nowadays of course only for ceremonial purposes) as “the price” of lighting. No, the service of lighting, Nordhaus observes, became much cheaper in the nineteenth century with the marketing of whale oil, and then a lot cheaper again with kerosene, and then a whole lot cheaper with electric lighting, which itself has continued to cheapen down to the fluorescent replacements for incandescent bulbs we are now beginning to use. Cheap LED lighting cannot be far behind. In other words, we can easily follow the price of each such form of lighting in its own era, but not well across eras. The problem is worse for many products less measurable than lighting. What’s the early nineteenth century price of penicillin? Movies on TV? The Internet? How much would you pay in 1850 to get from Chicago to London in seven and a half hours?

We can, however, follow the candlepower per hour generated by lighting of various sorts in actual use and compare it to the labor hours required to buy it. Nordhaus confirms what you might expect if you’ve watched a lot of historical movies on TV: that the growth in effective lighting has been very large, measured in the tens of thousands of lumen hours per hour of labor. On South Dearborn Street in Chicago stands the 17-storey Monadnock Building, lovingly restored to its historical ambiance down to every visible detail. (Half of the Monadnock, finished in 1891, was the last Chicago skyscraper to depend on thick, load-bearing masonry;

the southern half, started in 1891, was almost the first to depend on structural steel.) One of the restored details is the lighting in halls and elevators, with tiny incandescent lights reproducing the feeble glow of 1891. If you doubt that lighting has been revolutionized, visit the Monadnock Building.

Nordhaus reckons, to be roughly quantitative about it, that around 9000 B.C.E. it took 50 hours of labor to gather enough bundled sticks or whatever to achieve 1000 lumen hours of lighting (think of our ancestors deep in the Altamira caves drawing aurochs and horses and stick-figured humans hunting them). In 1800 with candles it took 5 hours (think of John Adams scribbling long letters to Talleyrand to prevent war with France). In 1900, thanks to kerosene and the new electric lights, feeble though they were, it took only 0.22 hours, a revolution. In 1992, thanks to the radical cheapening of electricity-based lighting, it took a mere 0.00012 hours. The outcome was a cheapening in eleven millennia by a factor of 417,000, and in the last two centuries alone by 41,700 (note the over-neat homology in the figures: Nordhaus is not claiming to measure very accurately; it is an order of magnitude he seeks). And the rate of fall in the past two centuries, of course, was immensely accelerated compared with the mere factor of 10 between the age of olive oil lamps in Roman times and the age of European candles in Georgian times— illustrating the stunning enrichment from very recent European technology. (And it casts a bright light, too, on the stunning Chinese exception as to the level of

technology, if not its modern rate of change. In the fourth century B.C.E the Chinese were using *natural gas* for lighting, and later carried the gas about in bags.)¹⁶

Look around your house or street this evening and assess the lighting you get and how many tallow candles would be its equivalent – if you could cram in the candles, in the style of the Great Hall scenes in Harry Potter movies. If you fancy that it would be oh-so-romantic to live back in such ill-lit days, then the economic and social historians suggest gently that you think again. In the days of candles the average adult slept ten hours a night in winter rather than the eight he now sleeps. The miserably cold and dark house of an evening was literally not worth the candle.

Nordhaus extends the argument, more speculatively but plausibly, to other inventions such as airplanes, insulin, radar, telephones, and the rest, and in a rough guess to all sectors of the economy. (The great student of national income, Angus Maddison, scorns his calculations under a sneering heading: “Hallucinogenic History: Nordhaus and [Bradford] DeLong.” But in the passage Maddison stays, uncharacteristically, at the level of indignation, and gives no reasons.¹⁷) The cost of what an hour of work could buy of lighting and all sorts of things, Nordhaus reckons, has dramatically fallen since 1800 if you take into account the rise in the quality of categories such as “lighting” and “housing” and “transportation” and “medical care” and the rest.

Take medical care. The doctor and essayist Lewis Thomas, Dean of Yale’s and New York University’s medical schools, “the father of modern immunology,”

¹⁶ Temple 1986 (2007), p. 89.

¹⁷ Maddison 2007, p. 320.

believed that until the 1920s going to a doctor lowered your odds of survival. Most medical care was done at home, and a middle-class home in 1920 was always supplied with a big medical encyclopedia about how to care for scarlet fever and how to deliver babies. The biggest improvement didn't come until the 1940s, with penicillin. Andrew Carnegie despite his wealth could not buy a cure for the pneumonia that killed his mother, a disease I myself have had twice, and was cured of the last time in three days.¹⁸ Or take psychiatry. Until the coming of psychotropic drugs, invented during the 1950s and in common clinical use by the 1970s, the psychiatrists had nothing to do for depression (and at one point for homosexuality) but to talk gently to you, and then in desperation apply electroshock.

Nordhaus concludes that from 1800 to 1992 in the American economy the real wage – the money wage divided by the prices of things, but properly corrected for their improving thingness – grew not by that conventionally and crudely measured factor of 13 but anywhere from a low estimate of a factor of 40 to a high of 190. One hundred and ninety. Good Lord. Call it as a rough and ready average a factor of 100. That's one hundred times greater ability to buy with an hour of work. Two orders of magnitude.

If you run your eyes around your room now and try to push back in imagination to the life of your great-great-great-great-grandmother, you will find pretty reasonable a factor of 100 in per capita capacity-to-buy-the-services-of-stuff. You are reading by a light many times brighter than the candlesticks your ancestor

¹⁸ The point about Carnegie is made by Otteson 2006, p. 165.

could bring to bear, and candles were anyway to be used sparingly, and only at dark of the moon, to get to the outhouse in Council Bluffs or to the end of a row in Salford without tripping and killing yourself. You by contrast have such light available in a score of places inside and outside your house. If you want to write to your lover it will be on a laptop with the calculating power of a building full of older “calculators” (until the 1940s the word meant “women employed to add up long columns of figures”), on which you can type effortlessly, and then e-mail the note to the other side of the world in a split second (instead of the gradually lengthening days or weeks the Postal Service requires). Or in scribbling a shopping list you can use a ball point pen which eases handwriting by a factor of perhaps six over quill and ink. You do not write much quicker, but you spend no time at all as your ancestor did sharpening quills or dipping ink – and the ink froze in the winter, because, remember, you have no central heating, and must write with gloves with those little holes at the tips of the fingers. And in any case the ball point with which you write, and the paper on which you write, costs a trivial amount of your time to buy, compared with earlier hours of work per fountain pen or paper sheet. When ball points were first introduced after World War II they were expensive like fountain pens, requiring many hours of your work to buy. Now you have 40 or 50 of them jammed in various coffee mugs around your house – by actual count I myself have about 100 (but after all my work is scribbling). The clerk in the store often forgets to take back his pen when you sign a credit-card slip. The credit facilities you enjoy are many times more efficient than the means of payment in

1800. The book you bought with the credit card costs a fraction of what a book did in 1800 in terms of human labor. The paper is cheap, the printing electronic, the binding is done by machine. Some bookstores now have automatic book-making machines with any of *two million* out-of-print titles available in twenty minutes. For this and thousands of other similar reasons your real income is vastly higher than that of your ancestors – and so you can have many more books than even Thomas Jefferson did, if you are a bookish sort, purchased with ease from Sandmeyer’s Books in Chicago or Powell’s Books in Portland or amazon.com in the ether. That is your widened scope. And on and on.

You can see the factor of 100 from the other, producing side of the economy in the frantic development of new and improved products for consumers. The economic historian Maxine Berg has argued persuasively for “incorporating product innovation [that is, new stuff] into the analysis of the industrial revolution.”¹⁹ She cites an American economic historian the late Kenneth Sokoloff arguing that new products drove a good deal of industrial innovation in the United States early in the nineteenth century, giving demand a role in innovation.²⁰ Neglecting product innovation is what Nordhaus is complaining about: it results in a gigantic understatement of the rising scope of modern economies, because a light bulb (if you have electric service in your house, that is) is a much better consumer product than a candle. Against the focus on process innovation usual in studies of the Industrial Revolution, Berg finds in British patents in the eighteenth century an

¹⁹ Berg 1998, p. 140.

²⁰ Sokoloff 1988; Sokoloff and Khan 1990.

astonishing proliferation of carved or molded glass, retractable toast racks, japanning (with a polite bow to the reverse engineering of eastern inventions), tin plate buttons, and 115 patents for stamping, pressing, and embossing metals.²¹

Not that process innovations are to be set aside. But process innovation is itself entangled with product innovation. Berg notes that “producers of small tools as well as complex lathes and engines” that made for faster production of a given product “were often the same individuals producing ornamental stamped brassware, medallions and mechanical toys.”²² Products for consumers led to producers’ goods for factories. And the correct measurement of producers’ goods has the same problem of better and better quality that the measurement of consumers’ goods has. With an ingenious use of Sears, Roebuck catalogues as historical sources, and with the econometrics of hedonic price indices, Robert Gordon found that the rate of rise of the prices of producers’ goods (lathes, motors, and so forth) have like consumer goods been substantially overstated by not including their improving quality.²³ In short, we’re *much* better off now compared to 1800 than the conventional measures of national product suggest.

²¹ Berg 1998, pp. 146-148.

²² Berg 1998, p. 154.

²³ Gordon 1990.

Chapter 6:

Increasing Scope, Not Pot-of-Pleasure “Happiness,” is What Mattered

To be sure, the new and better and more abundant stuff – which remember covers non-stuff stuff like haircuts and education and entertainment – does not include all of human fulfillment and does not measure even what it claims to measure perfectly well. The forests primeval and the hosts of golden daffodils have shrunk (though on the other hand ordinary people with more leisure and more means of travel can reach the remaining spots more cheaply in hours of labor spent). And marginal utilities of the gigantic new pile of stuff, as the economists say, diminish. You may own 18 time more chairs than your ancestors in 1700, but you don't enjoy 18 times more chair-sitting pleasures. In other words, all this radical, 100-fold increase is an increase in possibilities, and is not measured on the same scale as happiness viewed as cat-like pleasures of the day, or even as the deeper goal of human fulfillment. In discussing Nordhaus' results the (equally useful) economists Timothy Bresnahan and Robert Gordon note that the utility from the last unit of increase of lighting, from 99 to 100 fold (which after all is only 1 percent), is surely a great deal less than that from the first few, from 2 to 3 to 4 fold.²⁴ The 100th ball point is less pleasure-producing than the second or third. “Diminishing

²⁴ Bresnahan and Gordon 1997, p. 19.

returns,” or more exactly in this case diminishing “marginal utility,” is one of the pieces of economic jargon that have slipped into the common tongue (like “GDP” or “the balance of payments”). You are pretty much right in your idea of what it means.

Doubtless, if she were lucky enough in 1800 to miss the smallpox and malnourishment, the Scottish nut-brown maiden, “Her eye so mildly beaming/ Her look so frank and free,” equaled in happiness (viewed in pot-of-pleasure terms) the average person on the streets of Glasgow nowadays. That at any rate is what recent research on “happiness” claims, and plausibly so.²⁵ The economist, historian, and demographer Richard Easterlin, who pioneered the modern field of happiness studies applied to economics, concluded recently that “how people feel they ought to live . . . rises commensurately with income. The result is that while income growth makes it possible for people better to attain their aspirations, they are not happier because their aspirations, too, have risen.”²⁶ A poor Glasgow maiden with an IQ of 140 in 1800 could aspire to no better position than head cook in an aristocratic house, and was very glad of that – her equally intelligent mother aspired to milkmaid. The cook was “happy.”

Easterlin argues, against the “freedom-from-want” claims of scholars like Abraham Maslow and Ronald Inglehart (believing that the hierarchy of needs can in fact be satisfied), that “economic growth is a carrier of a material culture of its own that ensures that humankind is forever ensnared in the pursuit of more and more

²⁵ Easterlin 1976.

²⁶ Easterlin 2003, p. 349. See also Easterlin 1996, and 2002.

economic goods.”²⁷ The “happiness” literature, you can see, is predisposed to find modern levels of consumption vulgar and corrupting. The field has become one of the scientific legs of the century-old campaign by the clerisy against the “consumerism” to which the non-clerisy are so wretchedly enslaved, as described in the writings of the economist Robert Frank or the sociologist Juliet Schor or indeed the sociological economist of a century ago, the great Thorstein Veblen.²⁸

Admittedly, we are “ensnared,” even “enslaved.” But social science since Veblen has discovered a reply: any level of income a “carrier of a material culture,” \$3 a day as much as \$137 a day. The anthropologists point out that any meal-taking or shelter-building or tale-telling “ensnares” its people, the Bushmen of the Kalihari no less than the Floor Traders of Wall Street. “Consumerism” characterizes all human cultures – which rather reduces the scientific usefulness of the term. Easterlin urges us to resist consumerism and become “masters of growth.”²⁹ One wants to be wary of such urgings that “we” do something, since the “we” is so easily corrupted, for instance by rabid nationalism, or by the mere snobbery in the clerisy. Easterlin would agree. But surely in an ethical sense he is right. “We” need to persuade each other to take advantage of modern enrichment for something other than watching television and eating more Fritos and strutting about in a world of status-confirming consumption. We are ensnared, admittedly. But we want the ensnaring to be worthy of the best versions of our humanness, ensnared by Mozart

²⁷ Easterlin 2004, p. 52.

²⁸ Frank 1985; Frank and Cook 1995; Schor 1993, 1998, 2004; Veblen.

²⁹ Easterlin 2004, p. 53.

or by the celebration of the mass or by a test match for the Ashes at Lord's on a perfect London day in June. But that advice, to be nobly ensnared, has been a staple of world literature since the invention of writing. It has nothing much to do with the Great (and Liberating) Fact of modern growth, except that thanks to the Fact a vastly larger percentage of humanity is open to the advice.

Which raises another, humanistic criticism of the recent literature on "happiness." The literature pays no attention to reflections on happiness that are non-quantitative or non-mathematical. ("Quantitative" and "mathematical," by the way, are not the same thing; and often in the recent literature the two have no scientific connection, though trotted out separately to give an air of verisimilitude to an otherwise bald and unconvincing tale). In his recent book, *Happiness: A Revolution in Economics*, the brilliant insider critic of economics, Bruno Frey, devotes exactly one sentence to thinking about "happiness" before "measurement": "For centuries, happiness has been a central theme of philosophy."³⁰ (That's it. He does not mention that it has been a central theme, too, of poetry and stories and biography and religion.) The lone footnote attached to the lone sentence cites six items on "how philosophers have dealt with the topic of happiness, six out of the approximately 670 items in the book's long bibliography. In the next sentence Frey turns firmly away from such stuff, towards "the empirical study of happiness" – as though Sophocles' *Antigone* or Plato's *Republic* gave no insight into happiness worthy of the word "empirical" (from the Greek for "experience"), at any rate by

³⁰ Frey 2008, p. 13.

comparison with asking random Greeks on the streets of Athens whether they are “happy” on a non-interval scale.

The result is that “happiness,” setting aside such pointless ruminations as the Hebrew Bible or the life and works of Buddha or Aristotle or Rumi or Shakespeare or for that matter Adam Smith, is reduced to self-reported declarations – added up scores 1 to 3 (“not too happy” = 1, “pretty happy” = 2, “very happy” = 3). An interviewer surprises you on the street, puts a microphone in your face, and demands to know, “Which is it, 1, 2, or 3?” Even the merely technical problems with such calculations are formidable. For one thing, a non-interval scale is being treated as an interval scale, as though a unit of 1.0 were God’s own view of the difference between “pretty” and “very.” It would be like measuring temperature by asking people to rate things as “pretty hot” = 2, “very hot” = 3, and expecting to build a science on the “measurements” thus generated. For another, the literature regularly depends on misuse of the bankrupt notion of “statistical significance.” Virtually every paper using survey results takes “statistical significance” to be the same thing as scientific significance. For still another, the measurement and the mathematical theory, as I’ve noted, live on different planes.

And the so-called “empirical” result thus achieved is often scientifically unbelievable on its face. Bruno Frey for example reports on results from 1994-1996 in the United States that claim the bottom decile of income earners to be “happy” to the extent of 1.94 on the 3-point scale, as against 2.36 for the top decile. One is gratified that the result is based on a massive, carefully done survey by the National

Opinion Research Center. That's great. It can be compared and averaged and regressed, at any rate if one is willing to ignore the philosophical and technical problems. But does anyone actually believe that someone earning \$2,596 a year in 1996 prices (that's the figure) and living in crime-ridden public housing is only 18 percent less happy in a seriously relevant sense than someone earning \$61,836 and living in an apartment building with a doorman? I realize that many of my respected colleagues are willing to go along with such a fiction. I wish I could:

"I can't believe *that!*" said Alice.

"Can't you?" the Queen said in a pitying tone. "Try again: draw a long breath, and shut your eyes."

Alice laughed. "There's no use trying," she said "one *can't* believe impossible things."

"I daresay you haven't had much practice," said the Queen. "When I was your age, I always did it for half-an-hour a day. Why, sometimes I've believed as many as six impossible things before breakfast."

One of the proponents of happiness studies, the eminent British economist Richard Layard, is fond of noting that "happiness has not risen since the 1950s in the US or Britain or (over a shorter period) in western Germany."³¹ Such an unbelievable allegation merely casts doubt on the relevance of "happiness" so measured. No one who lived in the U.S. or Britain in the 1950s (I leave judgments on West Germany in the 1970s to others) could believe before or after breakfast that the age of *Catcher in*

³¹ Layard 2009.

the Rye or *The Loneliness of the Long-Distance Runner* was more fulfilling than recent life. Even in their own dubiously “measured” terms, further, such facts have been plausibly disputed, for example by Inglehart and associates in 2008 arguing on the basis of large data sets. “Happiness [even measured in the unbelievable way] rose in 45 of the 52 countries for which substantial time-series data were available.

Regression analyses suggest that that the extent to which a society allows free choice has a major impact on happiness.”³² Even in the allegedly depressive U.S., Britain, and West Germany the “change in percentage of those saying they are very happy from earliest to latest survey for all countries with a substantial time series” was very large – if, again, “large” in such numbers is meaningful in God’s eyes.

But the main problem, as I said, is that the insights of poets and historians and philosophers from the second millennium B.C.E. to the present into what human happiness actually is have simply been bypassed. “Happiness” viewed as self-reported mood is surely not the point of a fully human life. The point is made by numerous modern philosophers – Mark Chekola (2007), for example, as it was earlier by Robert Nozick, David Schmidtz – and by other philosophers and theologians and poets back to Confucius.³³ If we economists are not going to get any deeper than the pot-of-pleasure theory of happiness, perhaps we ought to stick with what we can in fact know scientifically – namely, national income properly measured, as “potential” or “scope” or what Amartya Sen and Martha Nussbaum

³² Inglehart and other 2008, abstract. The next quotation is from the caption of Fig. 6, p. 277.

³³ Nozick 1974, pp. 42-44; Schmidtz 1993, p. 170. I discuss these in McCloskey 2006a, pp. 123-125.

call “capabilities” – the ability to read, for example, or the potential to become an artist.

The scope to do more, whether or not the opportunity has been fully seized by everyone, is what modern economic growth has achieved – it being pointless to urge a Higher Life on people dying on the streets of Calcutta (that was Mother Teresa’s project, and one can reasonably doubt its ethical value, if not in its own terms its theology). Sen and Nussbaum for example wisely turn away from pot-of-pleasure “happiness” and focus on the more objective measurement of their definitions of capabilities, which surely are much larger in Norway today than in India in 1800.³⁴ The ancestors of the very clever professors, whether advocating or disputing pot-of-pleasure measures of happiness – Easterlin, Frank, Schor, Veblen, Frey, Leyard, Chekola, Nozick, Schmitz, Cowen, Sen, Nussbaum, and I – were illiterate peasants or impoverished shoemakers (well . . . perhaps not Amartya’s). Unless by chance they were among the tiny group of privileged rajahs or bishops, or the still tinier group who achieved through spiritual exercises nirvana or blessedness, they were not close to the “happiness” in any fully human sense as we enjoy.

You can take a pessimistic line and claim with many critics of innovation that a “materialistic and individualistic culture,” as Easterlin puts it, is created by economic growth. The evidence seems weak. For all the chatter in the journals of opinion about the wretched materialism of modern life, studies in the psychology of

³⁴ Nussbaum and Sen 1993; Sen 1999; and Nussbaum 1999.

goods find that poor people in poor countries put more, not less, value on the possessions they have than people who possess more. In rich countries the museums and concert halls are full. Among the thirty democratic countries of the Organization for Economic Cooperation and Development nowadays some 27 percent of the adult population 25 to 64 years old have completed tertiary education, ranging down from Canada's 47 percent down to Turkey's 10 percent.³⁵ The university graduates of Europe therefore probably now exceed its total population in 1800. The economist of culture Tyler Cowen points out that modern life has produced more artists alive today than have lived in all previous ages combined.³⁶ During the 1960s more professors were hired in American post-secondary institutions than in the entire history of American education, and the expansion of higher education resulted, for example, in a big audience for literary fiction.³⁷

Terry Eagleton, a brilliant, useful, and left-wing literary critic, makes the conventional claim that the bourgeois are to be blamed for the "monstrously egoistic civilization they have created" – as though he had not encountered Chaucer and his Pardoner, or Shakespeare and his Iago, representatives of monstrously egoistic civilizations of church and aristocracy.³⁸ To yearn for a simpler time when getting and spending was not too much with us is mostly a version of the pastoral, repeated in every world literature in every age, quite independent of the sociological evidence. Theocritus and after him Horace lamented the passing of a golden age of

³⁵ OECD 2009, p. 12.

³⁶ Cowen 1998.

³⁷ Menand 2009, p. 109.

³⁸ Eagleton 2009, p. 40; the later quotation from Ferguson is on Eagleton, p. 19.

nymphs and shepherds. In 1767 Adam Ferguson, notes Eagleton, lamented the “detached and solitary” people of Scotland, whose “bands of affection are broken.” Disraeli and Carlyle three-quarters of a century afterwards lamented it, too. We are always already lamenting becoming urban and selfish and alienated. The years when our parents were children are always seen as blessed times of familial and social solidarity, whether the years are the 1920s or the Golden Age of Cronos. It isn’t so.

In any event the modern Glaswegian descendent of the Nut-Brown Maiden, in which the old intelligence shines, has gigantically greater scope, whether or not she is persuaded to take full human advantage of it. She has hugely greater opportunities – capabilities, potential, life plans, second-order preferences – for what Wilhelm von Humboldt called in 1792 that *Bildung*, that “self-culture,” “self-development” which is success in life. She can do 100 times more of many things, leading a fuller life – fuller in travel, education, ease of housekeeping, ease of listening to “The Nut-Brown Maiden” in English and Gaelic on the internet. A well-fed cat sitting in the sun is “happy” in the pot-of-pleasure sense of happiness studies. What the modern world offers to men and women and children, as against cats, is not merely such “happiness” but a uniquely enlarged scope to be fully realized human beings. Sure ‘tis that one can turn down *Bildung*, and watch reality TV all day. But billions are enabled to do more – and they can have nowadays, too, in proper moderation, more cat-like, materialistic, economist-pleasing “happiness” if they wish. Bring on the Baskin-Robbins.

Chapter 7:

And the Poor Won

Nor during the Age of Innovation have the poor gotten poorer, as people are always saying. So sophisticated a writer as Eagleton leaves his readers in the book mentioned with a socialist *cri du coeur* against a “political system which is incapable either of feeding humanity or yielding it sufficient justice.”³⁹ This is mistaken. The system has delivered in bulk the feeding (\$30 a day vs. \$3 a day, West Germany in 1989 versus East German, Norway now versus Norway in 1800) and the justice (democracy, anti-colonialism, a free press, the end of lynching, equality for women, independence for the Irish Republic). In every half-century if not in every single decade the within-country equality of distribution has improved, and never has it much worsened. Eagleton’s ancestors and mine in mad Ireland were dirt poor. In real comfort they stood hat in hand far below their Anglo-Irish masters. Look at us now. In 2002 Ireland’s GDP per capita in purchasing-power-parity dollars was third in the world, just ahead of the U.S.’s, where many of the once-Irish then lived.⁴⁰

Look at your own ancestors compared your present condition. You are much better off, and have much more scope to pursue *Bildung*. Admittedly you don’t own a 75-foot yacht. Too bad. But being an adult person of sense who reads books and

³⁹ Eagleton 2009, p. 326.

⁴⁰ UN/World Bank common data base at <http://globalis.gvu.unu.edu/indicator.cfm?IndicatorID=19&country=BZ#rowBZ>

thinks for herself, you know that such pleasures of the rich and famous exceed yours only a little in actual human value – there’s the truth in happiness studies, that is, the truth that pot-of-pleasure happiness has sharply diminishing marginal utility. “Gie fools their silks, and knaves their wine;/ A man's a man for a' that.” As the historical anthropologist Alan Macfarlane puts it, “there has been a massive leveling. . . . There has recently [in the late twentieth century] been a tendency for the gap between rich and poor to open up again. At a wider view, however, there is no longer a vast gap between the 1-5 percent who have 1000 times the income of the average. . . . There is a more gradual gradient of wealth.”⁴¹ I just now considered the statistical claim that the American poor have done badly in the late twentieth century. In relative terms the claim is true and lamentable, as I said, a result of an education-hungry economy facing a stagnation in already-rich countries in the percentage of college-educated people (education leapt up in such places during the expansion of the 1960s, but then leveled off), and a globalization that brings \$30 a day to the very poor of the earth but with the side effect of eroding the wages of auto workers in rich countries.⁴² A similar rise in the British and American premium on skill is said to explain somewhat growing inequality in the early nineteenth century.⁴³ The division of the pie has for such reasons fluctuated a little now and then – though on the whole the income distribution is remarkably stable over centuries. Gini coefficients and Pareto parameters, the economists observe, don’t

⁴¹ Macfarlane 2000, p. 5.

⁴² Goldin and Katz 2008.

⁴³ van Zanden 2003, p. 57. The finding is not uncontroversial.

change very much. And anyway over those recent centuries the size of the pie has grown so fast that the poor are absolutely better off.

Economic historians agree that the poor have benefitted the most from modern economic growth. Your ancestors, mine. Even in properly bourgeois economies of course the pie is not divided out perfectly equally, then or now, here or there. But that is true of any system. If you think full-bore communism was egalitarian, think again. In logic, of course, someone always occupies the bottom ten percent of the income distribution, except in Lake Woebegone. It would be true even if the average world income were Norway's \$137 instead of its actual \$30 per day. But since 1800 the whole distribution has moved up. In statistics and in substance the very poorest have benefited the most. The economist and demographer Robert Fogel, a careful student of such matters, notes that "the average real income of the bottom fifth of the [American] population has multiplied by some twentyfold since 1890, several times more than the gain realized by the rest of the population."⁴⁴ The bottom ten percent have moved from dangerous under-nutrition to over-nutrition (sometimes also dangerous). That means more to you and me, the descendents of groveling peasants, Monty-Python style, than does the gain to Her Ladyship in the big house from increasing her stock of jewelry from one diamond necklace to sixteen (as blameworthy as such profligacy is). Famine has lessened worldwide – this contrary to the alarms from environmentalists such as the paleontologist Niles Eldridge, who predicted confidently in 1995 that "the have-nots

⁴⁴ Fogel 2002, p. 37.

will. . . increasingly succumb to famine."⁴⁵ No, they won't, and don't, and haven't. As the economic historian Cormac Ó Gráda wrote in 2009, "famines are less frequent today than in the past and, given the right conditions, less likely in the future." He notes that "even in Africa, the most vulnerable of the seven continents, the famines of the past decade or so have been, by historical standards, 'small' famines."⁴⁶

And when income distribution has worsened *between* countries, such as between Hong Kong and People's Republic of China from 1948 to 1978, or between West and East Germany from 1949 to 1990, or South and North Korea from 1953 to the present, or Little Havana in Florida and Big Havana in Cuba 1959 to the present, or Turkey and Iraq 1950 to the present, or Botswana and Zimbabwe from 2000 to the present, it has usually been because the stagnating countries rejected openness and innovation, often in spectacularly perverse style.⁴⁷ Their masters dishonored the bourgeoisie and did not give it the liberty to innovate. They jailed millionaires and enslaved women and planned the economy with a corrupt or power-hungry or merely stupid purpose. Many on the European left still admire Kwame Nkrumah (1909-1972), as a socialist idealist. But his idealism 1955-1966 ruined the poor of Ghana. One of the richest economies of Africa became in a decade one of the poorest. The rulers of failed economies, when not motivated by such growth-killing ideologies of left or right, accomplished the same result by simply stealing, as in

⁴⁵ Eldridge 1995, p. 7.

⁴⁶ Ó Gráda 2009, pp. 2, 1

⁴⁷ Maddison estimates per capita real income in Turkey as rising (rather slowly) 1950 to 2002, rising slower in Baathist Syria during the same period, and rising smartly in Iraq and Iran until the 1970s, and then until 2002 actually falling (in Iraq's case to 20 percent of its peak per capita income, achieved in 1979). See Maddison 2006, pp. 564-565.

Nigeria or Gabon, or as in some parts of Europe before the bourgeois age (and in some parts still). The pie under such rulers does not get larger, and so the misgoverned countries fall behind the pie-enlarging countries (for all their imperfections) such as West Germany or Turkey.

Even somewhat sluggishly growing countries – Brazil comes to mind – have been able to make up in part for their low rates of income growth (at least by the standards of the rapidly growing and free-market places like Korea or Singapore) by having better death and illness rates. Such betterment, of course, is an imported fruit of modern and bourgeois economic growth. In truth Brazil under President Luis Inacio Lula da Silva, he of rational populism, has grown pretty smartly, with a better political foundation for sustaining the growth, perhaps, than the other of the four “BRICs” (Brazil, Russia, India, and China). A place like the often Communist-governed Kerala state in southwest India still expresses in hard form the hostility to bourgeois innovation that characterized all of India in the three decades after Independence. Kerala makes up for low growth of income with the lowest rates of illiteracy and the highest life expectancies in South Asia – compliments of medical and other discoveries by bourgeois innovators elsewhere, and of a Karalese history of excellence in education and honesty in government. Compare the city of Bologna in Italy, which for a long time was governed well by Communists. Kerala, however, is also known as the Indian capital of the brain drain, since its policies are irrationally hostile to enterprising people. They leave.

The economic history of innovation therefore fulfils the so-called difference principle of the philosopher John Rawls, most famously the author of *A Theory of Justice* (1971). The principle is that a change is ethically justified when it helps the very poorest. Markets and innovation did. (Rawls, by the way, is properly read in his wider *oeuvre* as non-socialist, maybe even a little pro-market.⁴⁸) No one of sense views multiple mansions for millionaires as the payoff of modern economic growth chiefly to be admired. Neither did Rawls. Neither did the actually existing Age of Innovation, not over the long run.

The over-cautiously measured factor of sixteen or eighteen, or its correctly measured and much higher equivalent, has solved a lot of problems of poverty. You can see the solutions in bits of the larger story. The surviving descendants of the poor people in Alabama whom Walker Evans photographed in 1936 for his book with James Agee, *Let Us Now Praise Famous Men*, are today perhaps 10 or 20 times materially better off (in the cautious metric) than their famous ancestors. They graduate from college, often, and always drive a car. Some of them teach English at Duke. The surviving children of the poor people of Great Plains agriculture whom John Steinbeck wrote about in 1939 in *The Grapes of Wrath* are easily 8 or even 16 times better off than their parents were then. They have substantial houses in El Cerrito and buy their coffee at Peet's. Some of them teach economics at Berkeley. All the more revolutionary, therefore, has been the change since 1700 in the scope for the average resident of Britain, or since 1820 for the average resident of the

⁴⁸ Rawls 1993; Buchanan 2003.

United States, or since 1868 for the average resident of Japan, or since 1978 for the average resident of China. All these people started out unspeakably poor, living on one to four dollars a day. Let the economy around them innovate and their children and grandchildren soon become well-to-do bourgeois.

* * * *

“Capitalism developed,” we say. We say it especially about what came later as a result of the rhetorical Revaluation—Europe and its offshoots became more and more “capitalistic,” right down to intercontinental jet travel and the sub-prime mortgage crisis. Europeans prefer to call their system a “social market economy,” yet admire innovators, and for the most part do not trammel the innovations (the long struggle over Sunday-closing laws in Germany and France and the Netherlands illustrates the temptation to trammel). The Chinese insist on calling what they do when they buy low and sell high “communism.” Mainland Chinese graduate students visiting American universities have as a result no grasp of the central ideological distinction of the twentieth century. All right. Americans more readily accept the word once used to sneer at markets and innovation and private property, “capitalism.” American graduate students have as a result a much firmer grasp of the history.

But the word “capitalism” — a coin which like “ideology” was struck around 1800 and whose value in our scientific rhetoric is due mainly to Marx’s

appropriation of it— points in the wrong direction, to money and saving and accumulation.⁴⁹ It brings to mind Scrooge McDuck in the Donald Duck comic books, with his piles of money. Or in a slightly more sophisticated version it brings to mind Charles Montgomery Burns in *The Simpsons*, with his piles of factories. What's wrong with such images? This: the world did not change by piling up money or capital. Economists since the eighteenth century have favored the notion of piled-up capital as the maker of modernity, because it emphasizes cost, about which they are expert, and because it is easy to describe mathematically. Since the late nineteenth century the master mathematical expression claiming that piles of capital acquired at great cost, K , together with existing labor, L , cause our enrichment measured in "Quantity" of goods and services— namely, $Q = F(K,L)$ — has thrilled the economists, and has satisfied their Augustinian-Calvinist theology.⁵⁰ But the cartoonists are off the mark, and so are the economists. The routine repetition of investment, arranged in capital accumulation, doesn't swing ("two chords and a backbeat," the jazz musicians snicker).⁵¹ Innovation does. If it ain't got that swing/ It don't mean a thing. Piling up is not the heart of economic growth. Innovation is. Let's retire the fraught and misleading C-word.

We'll do better to call what was born in Europe in early modern times, enriching the world during the nineteenth and twentieth centuries beyond all

⁴⁹ True, Marx himself didn't use *Kapitalismus* much. In the German of *Das Kapital*, Vol. 1, he used *Kapital* and *kapitalische* on nearly every page, but rarely *Kapitalismus*. The English translation used "capitalism" only twice. Carlyle twenty-three years before, in *Past and Present* (1843), uses "mammonism." Later, and especially in the twentieth century, that age of multiple -isms, "capitalism" became common.

⁵⁰ The reference to theology is not merely ornamental. See Nelson 1991, 2001, and 2010.

⁵¹ Marsalis and Ward 2008, p. 131.

expectations, by some word without the misleading connotations of “capitalism.” If you like neologisms you can call it if you wish “innovism,” but the best of a weak field seems to be simply “innovation.” The economic historian Nick von Tunzelmann notes that “technological change became cumulative. . . . The breakthroughs . . . led to a succession of further advances. . . . Earlier changes involved a period of disequilibrium [when, say, the undershot waterwheel had been introduced] followed by a return to some kind of equilibrium as the . . . change was absorbed. . . . Instead, [in the last two centuries] a systemic change took hold in which entrepreneurs had to suppose that any improvement . . . might soon be eclipsed.”⁵² Bill Gates fends off claims that Microsoft is a monopoly by noting that at the very moment he is speaking some bright entrepreneurs in a garage might be devising the innovation that will overturn Microsoft—just as Steve Jobs and he overturned Big Blue. The new rhetoric which in time made the modern world has also been called “the triumph of entrepreneurship” or “the honoring of commercial and mechanical innovation” or “continuously emergent novelty” or “the invention of invention” or “creative destruction” of an old product by an old (or sometimes, as Tunzelmann argued, “creative accumulation” of new qualities in an old product, or an entirely new product) or “good capitalism” (as Baumol, Litan, and Schramm 2007 describe American entrepreneurial capitalism) or, in a phrase that Wynton Marsalis and Geoffrey Ward improvised recently to describe the social significance of jazz, an

⁵² Tunzelmann 2003, p. 85.

“explosion of consensual creativity.”⁵³ Using an expression like “The Age of Innovation” as a synonym for the misleading “Modern Capitalism” will point in the right direction. As the economist Allyn Young put it in 1928, it was “an age when men had turned their faces in a new direction and when economic progress was not only consciously sought but seemed in some way to grow out of the nature of things.”⁵⁴

The enrichment of any nation which has allowed innovation and the bourgeois virtues to do their work – that is, the enrichment by historical standards of the average person, the truly poor person as well as the captain of industry – argues in favor of innovation and the bourgeois virtues. It supplies so to speak a practical justification for the bourgeois sin of being neither a soldier nor a saint. You might reply, and truly, that money isn’t everything. But as Samuel Johnson replied in turn, “When I was running about this town a very poor fellow, I was a great arguer for the advantages of poverty; but I was, at the same time, very sorry to be poor.”⁵⁵ No one who bought a lottery ticket has yet turned down a check for her winnings. Or you may ask the inhabitants of India (average per capita income in 1998 in 1990 dollars \$1,746) or China (\$3,117 then) whether they would have liked an American income at that time (\$27,331), a lottery of birth. The figures are only a little less tilted

⁵³ “Entrepreneurship” is from Schumpeter and his Austrian tradition (for example Schumpeter 1926 [1934] and “creative destruction” is from Schumpeter 1942 (1950), pp. 82-85 (borrowed from Werner Sombart’s *Krieg und Kapitalismus* of 1913), “continuously emergent novelty” from Usher 1960, p. 110; “invention of invention” from various hands, such as Nathan Rosenberg, David Landes, and Joel Mokyr, and ultimately from Whitehead 1930, p. 120, quoted in Tunzelmann 2003, p. 85; “creative accumulation” in Tunzelmann 2003, p. 88; and jazz from Marsalis and Ward 2008, p. 167.

⁵⁴ Young 1928.

⁵⁵ Boswell 1791, for 1763, Aetat. 54, (Vol. 1, p. 273).

to the American side now. Or you can note the direction of permanent migration then, and more so now, West Africans waiting in Libya to make a perilous crossing to Italy, or Mexicans braving the deserts of the American Southwest to engage in the terrible crime of working north of the border. As an Hispanic comedian said early in the 2008-2009 recession, "You will know that things are *really* bad in the U. S. when the Mexican *stop coming*." In the 1930s actually they did stop coming, and many fewer came in 2009 than in 2007.

The thing to be explained, then, is the gigantic material enrichment of the modern world, an enrichment permitting lives of greater spiritual and intellectual scope. In Britain it was (very conservatively measured) a factor of sixteen since 1700. Even including the world's regions that have not been able to take full advantage of innovation and of the bourgeois virtues, the real and cautiously measured income per head of the world has increased since 1800 by a factor of ten—this in the teeth of a rise in population of a factor of 6½. Why?

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