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Book Review

The Son Also Rises

A review of Gregory Clark, *A Farewell to Alms: A Brief Economic History of the World*. Princeton University Press: Princeton, NJ, US. \$29.95 440 pp. ISBN-13: 978-0691121352

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For around 100,000 years, *Homo sapiens sapiens* hunted and gathered for a living. They moved around in small family groups, foraging for just a few hours a day, and differences in standards of living—both between societies, and within them—were small. Then, starting around 12,000 years ago in the Near East, there was an Agricultural Revolution. People settled down in much larger societies of thousands, most of them farmed for longer hours than they'd foraged, and differences in standards of living—mostly within societies, instead of between them—grew. Large numbers of the landless eked out a bare subsistence in one-room houses, but they supported a landed aristocracy that lived comfortably in 100-room palaces. Then, just 200 or so years ago in North America and England, there was an Industrial Revolution. Population rose again, workdays got longer for many, and differences in standards of living—this time between groups, rather than within them—increased. People in the poorest societies got poorer; and people in the richest societies got rich: the ratio became, by our own time, on the order of 50:1. It's that problem, "the great and enduring puzzle" of economic history, that Gregory Clark tries to explain.

He has, by his own account, spent 20 years at it. He's put together 123 figures, 73 tables, several simple equations, and a Technical Appendix. He's been open minded enough—like Jack Hirschleifer, Herbert Simon, Gary Becker, Ted Bergstrom, Herb Gintis, Samuel Bowles, Bob Frank and a handful of other economists—to use Darwinian theory: to consider children a more fundamental currency than money. And he's been rewarded with several eminent colleagues' praise. Among the endorsements on his book's back cover, there's one from Tyler Cowen, a George Mason University professor, who calls it "the next blockbuster in economics;" and there's another from George Akerlof, a Nobel Laureate and Koshland Professor of Economics at Berkeley, who says it offers a "brilliant and fascinating explanation" for the Industrial Revolution. *A Farewell to Alms* has been written up in *Science Times*; and it's been reviewed in *Time*. In short, having got no further than the introduction, I know that Gregory Clark has a) tackled a hugely ambitious problem, b) worked hard, for many years, to solve it, c) kept an open mind, and d) been highly praised, by eminent critics, for the answer he's come up with. I'm reluctant to say anything against

a book like this—especially in print. But, I have to. Because I think there are gaps in the evidence. And in the logic.

Clark argues that the Industrial Revolution happened in England, because the English were naturally selected for hard work. His evidence comes from a sample of 642 English wills, made over a period from 1620-1638 AD. Richer men in that group, who left £100 or more, fathered an average of 5.8 children; poorer men, who left less than £100, fathered just 4.2 (Table 4.6, Figure 6.2). That yields a fertility differential of 1.6, over a period of 18 years. But for Clark, that's enough to suggest how a "more patient, less violent, harder-working, more literate, and more thoughtful people" evolved. Why did the world wait so long to start living above subsistence level? And why did standards of living finally rise on "this tiny island," in a nation of shopkeepers who lacked any vision "beyond their next beef pudding?" Because, for hundreds of years, the rich had outreproduced the poor. "England found itself in the vanguard because of its long, peaceful history stretching back to at least 1200 and probably long before, [where] middle-class values, and economic orientation, were most likely being spread through reproductive advantage" (pp. 132, 183-84, 230, 259). Wow.

Like I say, there are gaps in that evidence. Demographers have been looking for correlations between wealth and fertility for decades. They'd already found them in England. But they'd found them on the Continent, too. And they'd found them pretty much wherever they looked—from Africa, to South America, to Australia, to the Arctic. Rich people *always* had more children than poor people, before the Industrial Revolution. The rich in 13th-century Halesowen had more children than the poor; ditto for 18th-century Lancashire, and 18th-19th-century Penrith. Ditto for the rest of Europe—from 15th-16th-century Portugal, to 17th-19th-century Germany, to 18th-19th-century Norway, to 18th-20th-century Finland, to 19th-century Sweden. And ditto for foragers from the straits of northern Australia to sub-Saharan Africa, and for gardeners and herders from the Amazon to Iran.ⁱ Clark concedes that, in any stable environment, men should be able to translate wealth into reproduction; but he believes that "the relationship may have been particularly strong in England" (pp. 128-29). It was not. The big differences in human fertility don't show up in late medieval British wills—or in Portuguese genealogies, or in early modern Scandinavian parish registers, or in censuses of the few hundred people often left in marginalized, "traditional" cultures. They show up in the historical record; and that means, mainly, in Asia.

People first settled down, and started to farm, around 12,000 years ago in the Near East's Fertile Crescent. By around 5000 years ago, they'd started writing history in Sumer. And the rich were already outreproducing the poor. Toward the start of the 24th-century BC, in the state of Lagash, for instance, where Urukagina's reforms were written into a pair of clay cones. Urukagina was a usurper, so he exposed the worst of the usurped: "the houses of the *ensi* and the fields of the *ensi*, the houses of the palace harem and the fields of the palace harem, the houses of the palace nursery and the fields of the palace nursery crowded each other side by side," he wrote. A generation later, *Sharrukin*, or "the true

king,” or Sargon the Great came down from the north. He put Lugalzagesi—the ruler of Umma, who’d won wars against Urukagina—in a dog collar, tore down various town walls in 34 campaigns, and built an empire that stretched from the Mediterranean (the Upper Sea) in the west, to the Persian Gulf (the Lower Sea) in the east. Then Sargon filled his palace with 5400 male dinner companions, and probably as many females in the women’s quarters—who begged the gods to “split the good place like a cucumber” in Sumerian proverbs.

After the 18th century, upriver on the Euphrates, Hammurabi put together another empire in Babylon. At Mari, one of the cities Hammurabi burned, king Zimri-Lim had sent a letter to his queen, asking her to send 30 weavers, “or however many are choice and attractive, who from their toenails to the hair of their heads have no blemish,” to be added to the women in his 300-room palace. Soon after, Assyrian emperors flourished on the Tigris—where, by the 7th century BC, Esarhaddon’s exorcist was congratulating him on the promotion of his numerous sons; and one son, Ashurbanipal, was getting crowned in the royal harem. Ashurbanipal had been born to a “women of the palace” (or *sa ekalli*, or bearers of heirs); but many of his brothers were the sons of “enclosed women” (or *sekretu*, or bearers of bastards). Some of the 20,000 plus clay tablets in Ashurbanipal’s library list “Harem Governesses and Weavers” and “Female Singers,” 36 governesses, 145 weavers, 52 maids, and at least another 194 miscellaneous bastard bearers.

By the 6th century, there was a House-of-the-Palace-Women in Nebuchadnezzar II’s Babylon, with provisioners and Overseers-of-the-Slave-Girls: when Nebuchadnezzar sent an army to Jerusalem in 597, they captured king Jehoiachin, along with “the king’s mother, the king’s wives, his officials, and the chief men of the land;” 10 years later, when Nebuchadnezzar’s army came to Jerusalem again, they killed king Zedekiah’s sons—but again, led his women back to Babylon (2 Kings 24:15; Jeremiah 38:23, 52:10). By the 4th century, there was another harem at Susa, where Xerxes might have met Esther. In that story, women were herded into the palace: “in the evening she went, and in the morning she came back to the second harem in custody of Sha-ash’gaz the king’s eunuch” (Esther 2:12-14). Experiences which had been matched, or exceeded, by Hebrew kings—said the scribes who finally returned from Mesopotamia to Judah. They remembered that Solomon had loved many women, with 300 concubines and 700 wives in his harem; and that David, the builder of the united kingdom and Solomon’s father, had collected wives and concubines in Jerusalem, and fathered at least 20 sons (2 Samuel 5:13; 1 Kings 11:3).ⁱⁱ

But the relationship between income and fertility was probably stronger in China. Asia has been continuously inhabited by people of the Middle Kingdom, or *Zhongguo ren*, since the beginning of recorded time. They farmed in villages on the Yellow River by the 7th millennium at least; and they may have lived under 5 apocryphal emperors by the 3rd millennium BC—within a few centuries of Sargon. By the 3rd century BC, they were living under *Qin Shihuangdi*, the First August Emperor of Qin, who left 7500 life sized terra cotta soldiers in his Mt Li tomb. Over the next 7 major dynasties—over the next 2100 years—Sons of Heaven ruled over the strongest empire on earth. China’s legendary progenitor, the

Yellow Emperor, is supposed to have gone to heaven *because* he had sex with 1200 women. And around 2400 years later, *Qin Shihuangdi* connected 270 palaces together, and filled them with 3000 girls—“beautiful women and bells and drums that he’d taken from the feudal rulers,” said China’s first historian, Sima Qian. Two centuries later the Han reformer, Wang Mang, sent Palace-Grandeess-Without-Specified-Appointments and Government Agents out, 45 of each, to inspect the empire for “virtuous young ladies:” former Han emperors collected 3000 women, and latter Han 6000, that way. By the 8th century, Tang emperors had 9 “ordinary consorts” every night, with thousands of other consorts in every palace; every girl Tang emperors slept with got an indelible cinnamon stamp that read “wind and moon are forever new”—wind indicating *yang*; moon indicating *yin*: no girl could claim imperial favors without one. And by the 16th century, Ming emperors kept one empress, Honored Consorts, Gracious Consorts, Worthy Consorts, Pure Consorts, Wholesome Consorts, and Consorts for Reverent Service—who were sent to the capital, 300 at a time; Ming dynasty eunuchs kept records of the pregnancies, pregnancy sicknesses, menstruations and spontaneous abortions of the emperors’ Forbidden City women. As always, the worst news came from usurpers. Kangxi—who consolidated the Qing—complained that, when he took over from the Ming, there were at least 9000 women in the palace at Beijing, which held more than 9000 rooms. ⁱⁱⁱ

Clark knows that civilization began thousands of years ago, somewhere around Babylon; and he devotes a full chapter to the question, “Why England? Why not China, India, or Japan?” Why weren’t the Near East and Far East the best candidates for the natural selection of a hard-working middle-class? Because, he says, civilization in and around Babylon was more “unstable” than in Britain; and because in China and Japan—it pains me even to type these words—“the demographic system in both these societies gave less reproductive advantage to the wealthy than in England.” Clark cites evidence that Qing emperors fathered only as many children as average Englishmen living at around the same time (pp. 89, 209, 271, Figure 13.4). But *of course* for Qing emperors, as for any other emperors, *legitimate* fertility was low: Chinese emperors, like Assyrian emperors, like all other emperors got heirs on just one empress at a time, their *legitimate* wives; but they got bastards on scores, or hundreds, of consorts. Who should have transmitted, if not the high ethical standards of their bastards’ fathers, at least their hard-working genes. ^{iv} So much for the evidence in *A Farewell to Alms*.

There are other gaps in the logic. I am aware of dozens of studies that show a relationship between reproductive success and wealth or rank (see note 1, below); but I’m aware of no study that shows a correlation between reproductive success and the “middle-class values” of patience, nonviolence, literacy, thoughtfulness, or hard work. Clark does establish a link between British literacy and wealth (p. 185, Figure 9.5); but that link had already been established elsewhere, long before. For 5000 years history has, by definition, been the work of literate men. Not all were reproductively inclined: in some places, like Egypt, scribes were drawn from a celibate caste—“hieroglyphics” are signs written by priests; and many civil servants in Assyria and China were eunuchs. But many were not.

Literacy was a grassroots movement in China from early on; and the importance of that civil service persisted into late Qing times. And rabbis have always been family men.^v

In short, Gregory Clark is right to feel frustration over the Great Divergence: to wonder why the vast differences between rich countries and poor countries have persisted into the 21st century. But he's wrong to attribute those differences to the exceptionally high reproductive success of the British rich. Personally, I have nothing against the English. Some of my best friends are English. One of my grandmothers was English. But I have a hunch that, given a chance to get rich in England or the modern US, many immigrants might prosper—even if they'd originated in China, or in the Levant.

Notes

ⁱ Historical demographic studies include Razi, 1980; Boone, 1986, 1988; Hughes 1986; Voland, 1988, 1990; Low, 1989, 1991; Roskaft, Wara & Viken 1992; Scott & Duncan 1999, 2000; Luumaa 2003. Betzig 1995 and 2002 discuss “soft” evidence on wealth and reproduction in England. Anthropological evidence is reviewed in Betzig 1997 and Smith 2004.

ⁱⁱ Dickemann 1979a,b, 1981 did the first “Darwinian” studies of historical societies. See Betzig 2005, 2007 on sex and politics in the ancient Near East.

ⁱⁱⁱ See Betzig, 1986, 1992a,b, and in preparation on politics and sex in ancient civilizations.

^{iv} Ted Bergstrom (1994) has written a wonderful paper on the Darwinian logic of succession by unigeniture. See too Betzig 1993, 1996 on succession and reproduction. The transmission of ethical standards as a means to wealth is an old argument, of course—as in Weber, 1904-05.

^v See Miyazaki 1976 on China's civil service.

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