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## Doomsayers Beware, a Bright Future Beckons

By JOHN TIERNEY

Long before "sustainable" became a buzzword, intellectuals wondered how long industrial society could survive. In "The Idea of Decline in Western History," after surveying predictions from the mid-19th century until today, the historian Arthur Herman identifies two consistently dominant schools of thought.

The first school despairs because it foresees inevitable ruin. The second school is hopeful — but only because these intellectuals foresee ruin, too, and can hardly wait for the decadent modern world to be replaced by one more to their liking. Every now and then, someone comes along to note that society has failed to collapse a might go on prospering, but the notion is promptly dismissed in academia as happy talk from a simpleton. Predicting that the world will not end is also pretty good insurance against a prolonged stay on the best-seller list. Have you read Julian Simon's "The State of Humanity"? Indur Goklany's "The Improving State of the World"? Gregg Easterbrook's "Sonic Boom"?

Good books all, and so is the newest addition to this slender canon, "The Rational Optimist," by Matt Ridley. It does much more than debunk the doomsaying. Dr. Ridley provides a grand unified theory of history from the Stone Age to the better age awaiting us in 2100.

It's an audacious task, but he has the intellectual breadth for it. A trained zoologist and former editor at The Economist, Dr. Ridley has established himself in previous books, like "The Origins of Virtue" and "Genome," as the supreme synthesist of lessons from anthropology, psychology, molecular genetics, economics and game theory. This time he takes on all of human history,

starting with our mysteriously successful debut. What made Homo sapiens so special? Dr. Ridley argues that it wasn't our big brain, because Neanderthals had a big brain, too. Nor was it our willingness to help one another, because apes and other social animals also had an instinct for reciprocity.

"At some point," Dr. Ridley writes, "after millions of years of indulging in reciprocal back-scratching of gradually increasing intensity, one species, and one alone, stumbled upon an entirely different trick. Adam gave Oz an object in exchange for a different object."

The evidence for this trick is in perforated seashells from more than 80,000 years ago that ended up far from the nearest coast, an indication that inlanders were bartering to get ornamental seashells from coastal dwellers. Unlike the contemporary Neanderthals, who apparently relied just on local resources, those modern humans could shop for imports.

"The extraordinary promise of this event was that Adam potentially now had access to objects he did not know how to make or find; and so did Oz," Dr. Ridley writes. People traded goods, services and, most important, knowledge, creating a collective intelligence: "Ten individuals could know between them ten things, while each understanding one."

As they specialized and exchanged, humans learned how to domesticate crops and animals and sell food to passing merchants. Traders congregated in the first cities and built ships that spread goods and ideas around the world.

The Phoenician merchants who sailed the Mediterranean were denounced by Hebrew prophets like Isaiah and Greek intellectuals like Homer. But trading networks enabled the ancient Greeks to develop their alphabet, mathematics and science, and later fostered innovation in the trading hubs of the Roman Empire, India, China, Arabia, Renaissance Italy and other European capitals.

Rulers like to take credit for the advances during their reigns, and scientists like to see their theories as the source of technological progress. But Dr. Ridley argues that they've both got it backward: traders' wealth builds empires, and entrepreneurial tinkerers are more likely to inspire scientists than vice versa. From Stone Age seashells to the steam engine to the personal computer, innovation has mostly been a bottom-up process.

"Forget wars, religions, famines and poems for the moment," Dr. Ridley writes. "This is history's greatest theme: the metastasis of exchange, specialization and the invention it has called forth, the 'creation' of time."

You can appreciate the timesaving benefits through a measure devised by the economist William D. Nordhaus: how long it takes the average worker to pay for an hour of reading light. In ancient Babylon, it took more than 50 hours to pay for that light from a sesame-oil lamp. In 1800, it took more than six hours of work to pay for it from a tallow candle. Today, thanks to the countless specialists producing electricity and compact fluorescent bulbs, it takes less than a second. That technological progress, though, was sporadic. Innovation would flourish in one trading hub for a while but then stagnate, sometimes because of external predators — roving pirates, invading barbarians — but more often because of internal parasites, as Dr. Ridley writes:

"Empires bought stability at the price of creating a parasitic court; monotheistic religions bought social cohesion at the expense of a parasitic priestly class; nationalism bought power at the expense of a parasitic military; socialism bought equality at the price of a parasitic bureaucracy; capitalism bought efficiency at the price of parasitic financiers."

Progress this century could be impeded by politics, wars, plagues or climate change, but Dr. Ridley argues that, as usual, the "apocaholics" are overstating the risks and underestimating innovative responses.

"The modern world is a history of ideas meeting, mixing, mating and mutating," Dr. Ridley writes. "And the reason that economic growth has accelerated so in the past two centuries is down to the fact that ideas have been mixing more than ever before."

Our progress is unsustainable, he argues, only if we stifle innovation and trade, the way China and other empires did in the past. Is that possible? Well, European countries are already banning technologies based on the precautionary principle requiring advance proof that they're risk-free. Americans are turning more protectionist and advocating byzantine restrictions like carbon tariffs. Globalization is denounced by affluent Westerners preaching a return to self-sufficiency.

But with new hubs of innovation emerging elsewhere, and with ideas spreading faster than ever

on the Internet, Dr. Ridley expects bottom-up innovators to prevail. His prediction for the rest of the century: "Prosperity spreads, technology progresses, poverty declines, disease retreats, fecundity falls, happiness increases, violence atrophies, freedom grows, knowledge flourishes, the environment improves and wilderness expands."

If you're not ready to trust an optimist, if you still fear a reckoning is at hand, you might consider the words of Thomas B. Macaulay, a British poet, historian and politician who criticized doomsayers of the mid-1800s.

"We cannot absolutely prove," he wrote, "that those are in error who tell us that society has reached a turning point, that we have seen our best days. But so said all who came before us, and with just as much apparent reason."