

The Myth of Human Rationality

"Liberal Fresco on a Prison Wall"

Chris Mooney

The Republican Brain: The Science of Why They Deny Science — and Reality

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[1] Marie-Jean-Antoine-Nicolas Cariat, the **Marquis de Condorcet**, was born in 1743 into the French penny aristocracy. His family held a title, but not any wealth. His father, a soldier, died just after he was born. His mother, devoutly religious, dressed him like a girl; soon he was off to study under the Jesuits, whose dogmatism he righteously hated. No wonder he would turn from it all, rebel, and pursue a life of science and reason.

Moving to Paris, Condorcet blasted to the top of French science with an early study on integral calculus. He would eventually become permanent secretary of the French *Academie des Sciences*, and a round denouncer of religion and superstition in all its forms—a flagrant atheist of the sort that it had only recently become possible to be . . .

[2] As he ascended in Enlightenment circles, Condorcet got to know luminaries like Voltaire, Benjamin Franklin, Thomas Jefferson, and Tom Paine. But he embarked on an intellectual quest perhaps more ambitious than any of theirs, seeking nothing less than to derive a "science of society." Condorcet's motto was "social mathematics," and his creed probability. We can't know much with certainty, he reasoned, but for many things we can at least know their likelihood—a fact with vast political implications. Applying such principles would make government more enlightened, *scientific*.

As the revolutionary period neared—and the political distinctions of "left" and "right" were first defined, based upon whether or not one wanted to overthrow France's *ancien regime*—Condorcet got to test his ideas. He was elected to the newly formed Legislative Assembly in 1791 and became its president. He was also elected to the 1792 Convention, the new republic's first governing body, and served as its vice president. Yet in this maelstrom, reason did not prevail—and neither did Condorcet.

[3] He wasn't a very good politician; he was a man of too much nuance at a time of too strong passions, and before long he fell on the wrong side. Condorcet's allies, the moderate Girondists, were thrust out of the convention on June 2, 1793. Condorcet had played a central role in drawing up a constitution for the new republic, based on his probabilistic principles. But it was tainted with the perception of Girondism, and the Convention ultimately rammed through an alternative, *Jacobin* constitution instead.

Here was Condorcet's fatal mistake—he couldn't keep silent. He had to stand up for reason and argue back. So he circulated an anonymous pamphlet blasting this constitution, but his identity was exposed and the Jacobins called for his arrest. He escaped, went into hiding, and started writing his greatest work, the *Sketch for a Historical Picture of the Progress of the Human Mind*.

[4] Condorcet would have been laboring over it as his Girondin friends were guillotined, and when he himself was condemned to death for conspiring against the Republic. The *Sketch's* greatness thus derives not solely from its contents, but also from its unique character as an unfolding nonfiction tragedy. It's the literary equivalent, wrote the famed anthropologist James George Frazer, of a "great fresco on a prison wall," After reading Condorcet, you can never think about "reason" in the same way again.

. . . I can't think of a book that moves me more; but then, I'm a liberal who cares about science and ensuring a more enlightened society. I would love it, wouldn't I? But Condorcet's vision doesn't just stir me—it *saddens* me deeply. Reading Condorcet is like dousing liberal-scientific assumptions about human rationality in what Ted Koppel once called an "acid bath of truth."

[5] Condorcet began at the dawn of humanity with "man" in a "state of nature." He then showed how humanity had proceeded to elevate itself to an apotheosis of reason that has no boundary, save the "absolute perfection of the human race." The "perfectibility of man is truly indefinite," Condorcet claimed—meaning that "truth alone will obtain a lasting victory."

Granted, there would be some setbacks along the way. In Condorcet's narrative, the enemies of progress are always the same two baddies: dictators and priests—especially Christianity . . . The good guys in the story are science and its heroes—Copernicus, Galileo, and so on; let us call them the "liberals"— and a series of great innovations: the alphabet, the printing press, global trade and the 16th- and 17th-century voyages of discovery. And they, ultimately, are the winners of the grand pageant of history.

[6] In Condorcet's account, free inquiry and critical thinking— "that spirit of doubt which submits facts and proofs to severe rational scrutiny"— must prove unstoppable. It's virtually a law of nature. In the long run, our better faculties will enable not only the expansion of human reason, but the creation of political systems based upon universal human rights, social contracts, majority rule, and so on— precisely the sort of constitution Condorcet tried to enshrine in France as the terror descended.

In Condorcet's vision, [irrational] nonsense is stamped out by the widespread dissemination of reasoned arguments—aided by one key technology, **the printing press**. For Condorcet, this machine is the savior of mankind. It ensures that "no science will ever fall below the point it has reached"— because once knowledge can be recorded, stored, and widely disseminated, it's impossible to suppress.

[7] And the enlightenment imparted by printed arguments isn't just for the elites, Condorcet explained, but for the masses. "Any new mistake is criticized as soon as it is made," he wrote, "and often attacked even before it has been propagated; and so it has no time to take root in men's minds." Before long, he forecast, every individual would be equipped "to defend himself against prejudice by the strength of his reason alone; and finally, to escape the deceits of charlatans who would lay snares for his fortune, his health, his freedom of thought and his conscience under the pretext of granting him health, wealth, and salvation."

In Condorcet's future, there would be no fortune tellers, no lotteries or casinos, and no convincing the public that Saddam Hussein had weapons of mass destruction and was working with Al-Qaeda. People would see through it all, and run the hucksters out of town. Condorcet really believed that if you put the facts out there, the best arguments will prevail and people will become more enlightened and reasonable. True to form, that's exactly what he did when he signed his death warrant by publicly criticizing the Jacobin constitution. But that's what he had to do: Reasoned argument was, for him, the core mechanism driving the "progress of the human mind."

[8] Condorcet wasn't just consistent—he was heroic in that consistency. Although they might not state it quite so frankly, today many liberals and scientists would appear to agree with Condorcet. They love to argue, and strive to disseminate reason as widely as they can. This is the modus operandi of our universities, our think tanks and foundations, our media and publications. In a sense, we're all Condorcets now—or at least we act like it . . .

For if we apply Condorcet's favorite tools— science and reason— to how human beings process information, we quickly perceive why his vision has a fatal flaw. That will be our task in the coming pages, where we'll learn that, contrary to Condorcet's account, scientific and fact-based arguments often don't work to persuade us; education often doesn't protect us from lies and misinformation; more information and more knowledge sometimes just give us more opportunities to twist and distort—and worst of all, the two groups that we'll broadly call "liberals" and "conservatives" have an array of divergent traits that sometimes make them unable to perceive or agree upon the same reality. (In this schematic, Condorcet was an anti-authoritarian and change-embracing "liberal," through and through.)

[9] All of which leaves scientists, and liberals who want to operate in the Condorcet mode, in quite an . . . awkward situation. It turns out that there are facts about why we deny facts. It turns out there's a science of why we deny science.

But the sadness of reading Condorcet, the tragedy, does not merely arise from the realization that we cannot defeat misinformation or achieve public enlightenment through rational argument. It's more situational. We know in reading this text that Condorcet— this brilliant mind, this champion of reason in politics and in everyday life, who bravely risked his life by publishing attacks on the murderous Jacobins, and trying to keep the ideals of the French Revolution intact despite the mounting bloodshed— is about to die.

[10] Picture Condorcet in hiding, writing steadily, smuggling out notes to his beloved wife and daughter, to whom he will soon have to bid eternal farewell. Could you have clung to such an impassioned view of the future of humanity—against all odds, when there was absolutely nothing to feel optimistic about? Could you have maintained the dream even as the nightmare inched ever closer?

Here is the final paragraph of the *Sketch for a Historical Picture of the Progress of the Human Mind*, showing how Condorcet's dream of reason and Enlightenment must have kept him going through it all:

How consoling for the philosopher who laments the errors, the crimes, the injustices which still pollute the earth and of which he is often the victim is this view of the human race, emancipated from its shackles, released from the empire of fate and from that of the enemies of its progress, advancing with a firm and sure step along the path of truth, virtue, and happiness! It is the contemplation of this prospect that rewards him for all his efforts to assist the progress of reason and the defense of liberty. He dares to regard these strivings as part of the eternal chain of human destiny; and in this persuasion he is filled with the true delight of virtue and the pleasure of having done some lasting good which fate can never destroy by a sinister stroke of revenge, by calling back the reign of slavery and prejudice. Such contemplation is for him an asylum, in which the memory of his persecutors cannot pursue him; there he lives in thought with man restored to his natural rights and dignity, forgets man tormented and corrupted by greed, fear or envy; there he lives with his peers in an Elysium created by reason and graced by the purest pleasures known to the love of mankind.

[11] On March 25, 1794, Condorcet left his place of hiding, hoping to protect his own protector—one Madame Vernet—who ran the risk of being guillotined herself if he was discovered under her roof . . . After two days of wandering, the authorities arrested Condorcet on March 27, 1794. He was placed in a prison at Bourg-la-Reine, which had been temporarily renamed Bourg-Egalite in honor of the Revolution. The next day—some speculate from suicide, others say from simple exhaustion—his body was found on the floor of his cell.

Charles P. Pierce

Idiot America: How Stupidity Became a Virtue in the Land of the Free — Introduction [excerpts]

Dinosaurs with Saddles (August 2005)

[1] There is some art—you might even say design—in the way southern Ohio rolls itself into the hills of northern Kentucky. The hills build gently under you as you leave the interstate. The roads narrow beneath a cool and thickening canopy as they wind through the leafy outer precincts of Hebron, a small Kentucky town named, as it happens, for the place near Jerusalem where the Bible tells us that David was anointed the king of the Israelites. This resulted in great literature and no little bloodshed, which is the case with a great deal of Scripture.

[2] At the top of the hill, just past the Idlewild Concrete plant, there was an unfinished wall with an unfinished gate in the middle of it. Happy, smiling people trickled in through the gate on a fine summer's morning, one minivan at a time. They parked in whatever shade they could find, which was not much. They were almost uniformly white and almost uniformly bubbly. Their cars came from Kentucky and Tennessee and Ohio and Illinois and from as far away as New Brunswick, in the Canadian Maritimes. There were elderly couples in shorts, suburban families piling out of the minivans, the children all Wrinkle Resistant and Stain Released. All of them wandered off, chattering and waving and stopping every few steps for pictures, toward a low-slung building that seemed to be the most finished part of the complex.

[3] Outside, several of them stopped to be interviewed by a video crew. They had come from Indiana, one woman said, two impatient toddlers pulling at her arms, because they had been homeschooling their children and they'd given them this adventure as a field trip. The whole group then bustled into the lobby of the building, where they were greeted by the long neck of a huge, herbivorous dinosaur. The kids ran past it and around the corner, where stood another, smaller dinosaur. Which was wearing a saddle.

[4] It was an English saddle, hornless and battered. Apparently, this was a dinosaur that performed in dressage competitions and stakes races. Any dinosaur accustomed to the rigors of ranch work and herding other dinosaurs along the dusty trail almost certainly would have worn a sturdy western saddle. This, obviously, was very much a show dinosaur.

[5] The dinosaurs were the first things you saw when you entered the Creation Museum, the dream child of an Australian named Ken Ham, who is the founder of Answers in Genesis, the worldwide organization for which the museum is meant to be the headquarters. The people here on this day were on a special tour. They'd paid \$149 to become "charter members" of the museum.

[6] "Dinosaurs," Ham said, laughing, as he posed for pictures with his honored guests, "always get the kids interested." AiG is dedicated to the proposition that the biblical story of the creation of the world is inerrant in every word. Which means, in this interpretation, and among other things, that dinosaurs co-existed with humans (hence the saddles), that there were dinosaurs in Eden, and that Noah, who certainly had enough on his hands, had to load two brachiosaurs onto the Ark along with his wife, his sons, and his sons' wives, to say nothing of the green ally-gators and the long-necked geese and the humpty-backed camels and all the rest.

(Faced with the obvious question of how Noah kept his 300-by-30-by-50-cubit Ark from sinking under the weight of the dinosaur couples, Ham's literature argues that the dinosaurs on the Ark were young ones, who thus did not weigh as much as they might have.) "We," announced Ham, "are taking the dinosaurs back from the evolutionists!" And everybody cheered.

[7] This was a serious crowd. They gathered in the museum's auditorium and took copious notes while Ham described the great victory won not long before in Oklahoma, where city officials had announced a decision— which they would later reverse, alas—to put up a display based on Genesis at the city's zoo so as to eliminate the discrimination long inflicted upon sensitive Christians by the statue of the Hindu god Ganesh that decorated the elephant exhibit. They listened intently as Ham went on, drawing a straight line from Adam's fall to our godless public schools, from Charles Darwin to gay marriage. He talked about the great triumph of running Ganesh out of the elephant paddock and they all cheered again.

The heart of the museum would take the form of a long walkway down which patrons would be able to journey through the entire creation story. The walkway was in only the earliest stages of construction. On this day, for example, one young artist was working on a scale model of a planned exhibit depicting the day on which Adam named all the creatures of the earth.

[8] Adam was depicted in the middle of the delicate act of naming the saber-toothed tiger while, behind him, already named, a woolly mammoth seemed on the verge of taking a nap. Elsewhere in the museum, another Adam, this one full-sized, was reclining peacefully, waiting to be installed. Eventually, he was meant to be placed in a pool under a waterfall. As the figure depicted a prelapsarian Adam, he was completely naked. He also had no penis.

This seemed to be a departure from Scripture. If you were willing to stretch Job's description of a "behemoth" to include baby Triceratops on Noah's Ark, as Ham did in his lecture, then surely, since he was being depicted before his fall, Adam should have been out there waving unashamedly in the paradisiacal breezes. For that matter, what was Eve doing there, across the room, with her hair falling just so to cover her breasts and her midsection, as though in a nude scene from some 1950s Swedish art-house film?

[9] After all, Genesis 2:25 clearly says that at this point in their lives, "the man and the woman were both naked, and they were not ashamed." If Adam could sit there courageously unencumbered while naming the saber-toothed tiger, then why, six thousand years later, should he be depicted as a eunuch in some family-values Eden? And if these people can take away what Scripture says is rightfully his, then why can't Charles Darwin and the accumulated science of the previous hundred and fifty-odd years take away the rest of it?

[10] These were impolite questions. Nobody asked them here by the cool pond tucked into the gentle hillside. Increasingly, amazingly, nobody asked them outside the gates, either. It was impolite to wonder why our parents had sent us all to college, and why generations of immigrants had sweated and bled so that their children could be educated, if not so that one day we would feel confident enough to look at a museum full of dinosaurs rigged to run six furlongs at Aqueduct and make the not unreasonable point that it was batshit crazy, and that anyone who believed this righteous hooley should be kept away from sharp objects and their own money. Instead, people go to court over this kind of thing.

Dinosaurs with saddles?
 Dinosaurs on Noah's Ark?
 Welcome to your new Eden.
 Welcome to Idiot America.

[11] The title of this book very nearly was *Blinking from the Ruins*, and it very nearly was merely a tour of the extraordinary way America has gone marching backward into the twenty-first century. Unquestionably, part of the process was the shock of having more than three thousand of our fellow citizens killed by medievalist murderers who flew airplanes into buildings in the service of a medieval deity, and thereby prompted the United States, born of Enlightenment values, to seek for itself the medieval remedies for which the young country was born too late: Preemptive war. Secret prisons. Torture. Unbridled, unaccountable executive power. The Christian god was handed Jupiter's thunderbolts, and a president elected by chance and intrigue was dressed in Caesar's robes. People told him he sounded like Churchill when, in fact, he sounded like Churchill's gardener. All of this happened in relative silence, and silence, as Earl Shorris writes, is "the unheard speed of a great fall, or the unsounded sigh of acquiescence," that accompanies "all the moments of the descent from democracy."

[12] That is why this book is not merely about the changes in the country wrought by the atrocities of September 11, 2001. The foundations of Idiot America had been laid long before. A confrontation with medievalism intensified a distressing patience with medievalism in response, and that patience reached beyond the politics of war and peace and accelerated a momentum in the culture away from the values of the Enlightenment and toward a dangerous denial of the consequences of believing nonsense. Let us take a tour, then, of one brief period in the new century, a sliver of time three years after the towers fell. A federally funded abstinence program suggests that the human immunodeficiency virus can be transmitted through tears. An Alabama legislator proposes a bill to ban all books by gay writers. The Texas House of Representatives passes a bill banning suggestive cheerleading at high school football games. And the nation doesn't laugh at any of this, as it should, or even point out that, in the latter case, having Texas ban suggestive cheerleading is like having Nebraska ban corn.

[13] James Dobson, a prominent Christian conservative spokes-man, compares the Supreme Court of the United States with the Ku Klux Klan. Pat Robertson, another prominent conservative preacher man, says that federal judges are a greater threat to the nation than is Al Qaeda and, apparently taking his text from the Book of Gambino, later sermonizes that the United States should get on the stick and snuff the democratically elected president of Venezuela. And the nation does not wonder, audibly, how these two poor fellows were allowed on television.

[14] The Congress of the United States intervenes to extend into a televised spectacle the prolonged death of a woman in Florida. The majority leader of the Senate, a physician, pronounces a diagnosis from a distance of eight hundred miles, relying for his information on a heavily edited videotape. The majority leader of the House of Representatives, a former exterminator, argues against cutting-edge research into the use of human embryonic stem cells by saying "An embryo is a person. . . . We were all at one time embryos ourselves. So was Abraham. So was Muhammad. So was Jesus of Nazareth." Nobody laughs at him, or points out that the same could be said of Hitler, Stalin, Pol Pot, or the inventor of the baby-back rib.

And finally, in August 2005, the cover of Time—for almost a century, the clear if dyspeptic voice of the American establishment—hems and haws and hacks like an aged headmaster gagging on his sherry and asks, quite seriously, "Does God have a place in science class?"

[15] Fights over evolution—and its faddish camouflage, "intelligent design," a pseudoscience that posits without proof or method that science is inadequate to explain existence and that supernatural sources must be studied as well—roil through school boards across the country. The president of the United States announces that he believes that ID ought to be taught in the public schools on an equal footing with the theory of evolution. And in Dover, Pennsylvania, during one of these controversies, a pastor named Ray Mummert delivers the line that ends our tour and, in every real sense, sums it up. "We've been attacked," he says, "by the intelligent, educated segment of our culture." And there you have it.

[16] Idiot America is not the place where people say silly things. It is not the place where people believe in silly things. It is not the place where people go to profit from the fact that people believe in silly things. That America has been with us always—the America of the medicine wagon and the tent revival, the America of the juke joint and the gambling den, the America of lunatic possibility that in its own mad way kept the original revolutionary spirit alive while an establishment began to calcify atop the place. Idiot America isn't even those people who believe that Adam sat down under a tree one day and named all the dinosaurs. Those people pay attention. They take notes. They take time and spend considerable mental effort to construct a worldview that is round and complete, just as other Americans did before them.

[17] The rise of Idiot America, though, is essentially a war on expertise. It's not so much antimodernism or the distrust of the intellectual elites that Richard Hofstadter teased out of the national DNA, although both of those things are part of it. The rise of Idiot America today reflects—for profit, mainly, but also, and more cynically, for political advantage and in the pursuit of power—the breakdown of the consensus that the pursuit of knowledge is a good. It also represents the ascendancy of the notion that the people we should trust the least are the people who know best what they're talking about. In the new media age, everybody is a historian, or a scientist, or a preacher, or a sage. And if everyone is an expert, then nobody is, and the worst thing you can be in a society where everybody is an expert is, well, an actual expert.

[18] This is how Idiot America engages itself. It decides, en masse, with a million keystrokes and clicks of the remote control, that because there are two sides to every question, they both must be right, or at least not wrong. And the words of an obscure biologist carry no more weight on the subject of biology than do the thunderations of some turkeyneck preacher out of the Church of Christ's Own Parking Structure in DeLand, Florida. Less weight, in fact, because our scientist is an "expert" and, therefore, an "elitist." Nobody buys his books. Nobody puts him on cable. He's brilliant, surely, but no different from all the rest of us, poor fool.

[19] How does it work? This is how it works. On August 1, 1005, a newspaper account of the intelligent design movement contained this remarkable sentence:

"They have mounted a politically savvy challenge to evolution as the bedrock of modern biology, propelling a fringe academic movement onto the front pages and putting Darwin's defenders firmly on the defensive."

"A politically savvy challenge to evolution" makes as much sense as conducting a Gallup poll on gravity or running someone for president on the Alchemy party ticket. It doesn't matter what percentage of people believe that they ought to be able to flap their arms and fly: none of them can. It doesn't matter how many votes your candidate got: he's not going to be able to turn lead into gold. The sentence is so arrantly foolish that the only real news in it is where it appeared.

On the front page.

Of the *New York Times*.

[20] Consider that the reporter, one Jodi Wilgoren, had to compose this sentence. Then she had to type it. Then, more than likely, several editors had to read it. Perhaps even a proofreader had to look it over after it had been placed on the page—the *front page*—of the *Times*. Did it occur to none of them that a "politically savvy challenge to evolution" is as self-evidently ridiculous as an "agriculturally savvy" challenge to Euclidean geometry would be? Within three days, there was a panel on the topic on Larry King Live, in which Larry asked the following question:

"All right, hold on, Dr. Forrest, your concept of how you can out-and-out turn down creationism, since if evolution is true, why are there still monkeys?"

And why, dear Lord, do so many of them host television programs?