

The Religion of Technology

1. The United States has always understood itself in technological terms. America is founded on literate technology, documents such as the original Declaration of Independence and the Constitution. Its people are the product of the initiative and industry of generations of migrants. Even those referred to as “Native Americans” are the sons and daughters of migratory hunter gatherer bands who drew upon their stone age technology to cross forbidding arctic steppes into a new world of plenty.
2. For European immigrants, this new world bore religious connotations from the start. For many it was a refuge from religious persecution, a chance to liberate humanity itself from a spent and tired Old World and begin afresh in a new Eden. For them whose story would become America’s founding myth, their migration to this new world was a response to a religious calling to build the Kingdom of God on earth.
3. In other words, the American story has always had millennialist expectations. The back of the dollar bill heralds America as the coming of a “new order of the ages.”
4. One of the essential engines of this new millennial age was believed to be its newly emergent industrial technology.
5. While viewed as old, corrupt and exhausted by American refugees, Industrial Europe in the nineteenth century was not immune to such millennialist aspirations either. The industrial age, so accelerated the pace of technological change that it seemed to many that technology would soon usher in a Golden Age.
6. Steam power could be harnessed to run assembly lines enabling the mass production of a virtually limitless profusion of goods.
7. Such mass production required mass urbanization to provide mass employment in urban factories. (1) It also required a mass market fueled by mass consumption stimulated by mass marketing. Technological progress seemed limitless and unstoppable.
8. In short technology became itself a religion. People did not just believe *that* technology would continue to progress, they believed *in* progress.
9. Technology would eliminate the evils and exorcise the demons of the human condition-- poverty, famine, disease, even natural disasters would all be mastered, controlled, vanquished. The golden age of humanity lie not in the past, but ahead, indeed in the near future.

10. We can learn some of the dreams of the industrial millennium by studying World Fairs. In 1851 newly emergent industrial Victorian England held “The Great Exhibition of the Works of Industry of All Nations.” in London’s Hyde Park. To house the exhibition an immense “Crystal Palace” was constructed out of sheer glass over an iron skeleton.
11. It was a sensation, visited by over six million people, a full third of the entire population of Britain.
12. Other expositions soon followed suit, most notably the 1889 Paris “Universal Exposition. Its entrance portal was an awe-inspiring tower of iron, the tallest edifice ever built. Fittingly it’s still known to this day by the name of the engineer whose company designed and built it, Gustav Eiffel.
13. The United States entered the action, first with the 1876 Centennial Exposition in Philadelphia commemorating the hundredth anniversary of the Declaration of Independence. Again it was a paen to new industrial technology and the golden age it was beginning to usher in.
14. Two seminal inventions were introduced at the fair, a personal portable printing press, the typewriter, and the first electronic device to transmit voice, the telephone.
15. The grandest exposition in the United States was the Columbian Exposition held 17 years later in Chicago to commemorate the 400th anniversary of the “discovery” of this “new world.”
16. Several huge exhibition halls showcased the latest technological improvements both in industry and in the home. It was the first large scale demonstration of outdoor electric lighting.
17. There was also a whole pavilion introducing visitors to the wonders of this newest source of energy. (1) Even industrial entertainment was on display in the “midway” amusement park. Its signature attraction, indeed the most popular feature of the exposition itself was a giant rotating iron wheel powered by one thousand horsepower steam engines, that would lift 40 circulating 60 person cars 264 feet high above the park to give fair goers an unprecedented “bird’s eye” view of the fairgrounds. Like the Eiffel Tower, it too was eventually to be named after its designing engineer, George Ferris.
18. Many of the subsequent World’s Fairs, particularly in the United States, now the leading industrial power in the world, would similarly showcase ongoing technological progress.

Ten years after Chicago, in 1904, St. Louis sponsored a World's Fair and Olympics to commemorate the hundredth anniversary of the Louisiana Purchase. It covered twice the acreage of the Chicago Fair and had 25 million visitors in the seven months it was open.

19. Of a dozen imposing main buildings 7 showcased various industries. There was an additional outside exhibit space for outsized machines,
20. Although the palace of transportation was able to showcase a 100 ton locomotive on a revolving turntable and two acres of recently invented automobiles from a hundred different manufacturers.
21. The stunning \$400,000 Palace of Electricity and Machinery (\$ 11.3 million in 2019 dollars) summed up the fair's optimistic technophilic mood: "The remarkable advance in electrical engineering and the new discoveries of the science in the last ten years made possible the most comprehensive exhibit ever assembled."
22. Chicago held a second World's Fair in 1933, entitled "A Century of Progress" commemorated the hundredth anniversary of the city's founding. Thanks to the railroads and the ensuing mass manufacturing and retailing that the railroads enabled, Chicago had grown in a scant hundred years from a rural village on Lake Michigan to a world metropolis. The city's meteoric rise mirrored the ever accelerating pace of industrial technology itself. The newest technological "miracles" were showcased in halls sponsored not only by nations, but also by new global corporations.
23. New York sponsored its own World's Fair in 1939 forecasting "The World of Tomorrow"
24. and another in 1964 which housed such displays as "the Home of the Future" complete with a videophone. Global religion also made its mark with the Vatican transporting the Michaelangelo's Pieta for the denizens of the New World to behold.
25. The Seattle World's Fair in 1962 commemorated technology's extension into outer space. With a future oriented title, the "Century 21 Exposition" constructed an updated Eifel Tower, named the "Space Needle". It also showcased the next technological innovation that promised to transcend lingering limitations not only of steam power, but even diesel powered locomotives—the magnetic powered, computer automated Monorail, without human operator and frictionlessly hovering above its own iron rails. In this shift from biopower to computer automated electro-magnetic fields, the Seattle World's Fair could

be said to have cross the threshold to the virtual age. Within a half century Seattle would itself become a world hub of new virtual technologies, the actual world home not only of aerospace leader Boeing, but also of virtual technology's corporate start-ups, most especially Microsoft and Amazon. Just as the railroads had not won market share but had created their own new markets *ex nihilo*, generating unprecedented wealth, so would the most successful of these virtual technology start-ups earn their visionary founders even greater wealth rivalling the entire budgets of some developing countries seeking to enter if not catch up with this new virtual age.

26. Spokane World's Fair in 1974 was also a harbinger of the future, this time celebrating less technology than the natural world technology was increasingly seen to be threatening. Expo 74 showcased new eco-friendly industrial innovations and celebrated a reconnection to nature, as the new sacred. The fair called for enlisting technology to heal the wound inflicted by early industrial culture and restore the natural world and our place in it.
27. And while the ecological movement has increasingly reshaped cultural sensibilities, the millennialist lure of technology as continued unabated for many in its newest virtual manifestation. Not only is technological progress continuing to accelerate, but its acceleration itself is accelerating, leading visionaries to extrapolate a transcendence of the human condition itself and the evolution of a new posthuman life. Transhumanists project a day when virtual reality fully replaces its human ancestry with a reality that is no longer even hybrid but fully virtual, populated not merely by cybernetically enhanced humans but cybernetic intelligence beyond all human control.
28. Raymond Kurzweil, one of the leading transhumanist visions was once asked at a religious conference to which he was invited whether he believed that God existed. His answer, "Not yet."