

# A PROPHETIC SEER POTENTIATING US IN THE PRESENT

*by Curtis L. Thompson*

*Abstract.* In his book *Radical Evolution* Joel Garreau functions as a prophet and a seer. In presenting a narrative of the future that includes an optimistic view of human nature, he warns that because of the GRIN technologies (genetics, robotics, information technology, and nanotechnology) the quickening evolution of “The Curve” is upon us and could well soon culminate in the mind-boggling social change of “The Singularity.” Garreau considers three scenarios of the technological future: the Heaven Scenario, the Hell Scenario, and the Prevail Scenario. The third wins favor because the heavenly envisionment with its evolution of a superintelligent human who could engineer a species with a greatly extended lifespan is too blissful and the hellish prognostication with its destruction of the human species within the next quarter century is too pernicious. Just right is the middle-of-the-road perspective of the Prevail-Transcend depiction of the future. This third view is indeed more appropriate than the first two scenarios, but a more nuanced form of the third perspective—emphasizing similarly the role of human freedom and responsibility in continuing to reshape human nature but drinking less deeply of the transhumanist elixir and more deeply of a pantransentheistic position—would constitute a more suitable vision of the future.

*Keywords:* The Curve; evolution; genetics; human nature; nanotechnology; possibilizing; robotics; scenarios of the future; The Singularity; transhumanist

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*Radical Evolution: The Promise and Peril of Enhancing Our Minds, Our Bodies—and What It Means to Be Human.* By JOEL GARREAU. New York: Broadway, [2005] 2006. 273 pages + Suggested Readings, Notes, and Index. Paper. \$15.95.

Prophets of the Hebrew Bible issued passionate words about possible future events that were unfolding. Their purpose usually was not to predict what a closed future was deterministically bringing but to awaken awareness and to engender appropriate action in relation to an open future so that disaster could be averted. Joel Garreau functions similarly in issuing passionate words about possible future events that are unfolding in our present age. His book *Radical Evolution* includes prophetic oracles, but it delivers more as well. Its rich interdisciplinary narrative includes the articulation of possible scenarios that together function as an apocalyptic vision that fascinates, frightens, and agitates the reader. In addition to being a prophet, then, Garreau is a seer who has conversed with a number of visionary thinkers who have helped him to look ahead into the future. As prophet and seer he spins his engaging narrative of the future, always with an eye on making a difference in the present. Ultimately his interest lies not so much in human engineering as in addressing the question of the future of human nature (p. 13).

Garreau's vision is apocalyptic because it refers to a future that is coming soon. This imminent future is based on The Curve, which can be seen in the quickening pace of human evolution: It took 4 billion years to form multicellular organisms; 400 million for the first mammals; 150 million for the first primate monkeys; 30 million for the hominid species; 16 million for humans to walk erect; 4 million to paint on cave walls; 10,000 for permanent settlements; and 4,000 for the invention of writing, at which point "biological evolution was trumped by cultural evolution," which allowed humans to progress collectively in the arts, sciences, and economics and not just individually (p. 58). This led to an even faster acceleration of The Curve: "Four thousand years to the Roman Empire, 1,800 years to the Industrial Age, 169 years to the moon and 20 more years to the Information Age" (p. 58). That brings us up to the present.

The exponential change of radical evolution upon us now is seen in various exponential curves, not least important of which is the fact that "the power of information technology will double every 18 months, for as far as the eye can see" (p. 49). Fueling this rapid change are developments in the four interrelated "GRIN" technologies—genetics, robotics, information technology, and nanotechnology.

Genetic engineering will make possible designer babies through the addition of an extra chromosome pair to function "as a universal delivery vehicle for gene modules" and their controls, which could be plugged in to provide for up-to-date genetic modifications and through an off switch

could be deactivated if future generations wanted to undo what had been done (pp. 116–17). Robotic technology, making many recent advances, intends to allow “machines increasingly to behave like living things, and living things increasingly to be enhanced by machines—blurring the line between the made and the born” (p. 53). Most of us know well the developments in information technology—the invention of the computer chip, character-recognition devices, the computer workstation and desktop computer, computer graphics and games, cell phones, and so forth. Nanotechnology, which means “manipulating the unimaginably small” (p. 118), “is really the end result of miniaturization” (p. 95). A nanometer, one billionth of a meter, “is the length of five carbon atoms in a row” (p. 95). Nanotechnology reduces big things to tiny things, such as happened with transistors. It also stacks individual atoms into large things, and this, one proponent says, “promises godlike powers, immortality and unimaginable wealth” (p. 95). Combined with robotics, nanotechnology looks to create “nanobots,” tiny “mechanical surgeons” or “robots the size of blood cells” that can travel to trouble spots inside the body, be it to serve “as diagnostic scouts and patrols” for early identification of problems (p. 102) or to travel “the human bloodstream to gobble up cancer or fat cells” (p. 12).

These four transformative GRIN technological forces are currently ushering us out of the second age of human evolution, the cultural, and into the third age, the engineered or technological. Some futurists interpret our present age as approaching “The Singularity,” “a metaphor for mind-boggling social change,” driven by The Curve, when “our everyday world stops making sense” because things are “fundamentally out of control” (pp. 71–72). Life on the other side of the sweeping changes brought by The Curve will include three classes of people: “the Enhanced,” who have the accessibility and the resources to indulge in enhancement technologies; “the Naturals,” who have the accessibility and money but decide against indulging; and “the Rest,” who do not have either the accessibility or money or both and therefore are excluded from the chosen (p. 8).

Garreau considers three scenarios or “idea maps” of the future and chooses a colorful visionary to serve as the primary spokesperson for each scenario. The Heaven Scenario—represented by Ray Kurzweil, who invented the flatbed scanner, the character-recognition device, and the text-to-speech synthesizer and who personally plans to live for a thousand years (pp. 89, 91)—is “one in which, in the next two generations, humanity is rapidly replaced by something far more grand” (p. 12). With the appearance of “an ultra intelligent critter,” there would suddenly be the intellect for creating even more intelligent machines at an even faster pace than humans could do, and this technological spiraling would lead to “an intelligence explosion” culminating in a superhuman intelligence (pp. 73–75). This view envisions humans living easily to 150 years, likely much longer, and

possibly becoming immortal as flesh merges with machine and our bioheritage is preserved through machine technology (p. 127).

The next view is the opposite of the heavenly. The Hell Scenario—represented by Bill Joy, who is called “the Edison of the Internet”—depicts humanity meeting its end in the next 25 years (p. 12). This view sees the technology developed after The Singularity “getting into the hands of psychopaths, opening the door to evil” (p. 73), because utopias become dystopias (p. 152). This perspective regards the Heaven Scenario as selfish, with its “techno utopia” centering on the individual being able to avoid disease and death and enjoy enhanced intelligence, with “the individual” usually referring to the “men in their 50s” who are conjuring up this view (p. 180). The only way to offset this scenario is “to limit development of the technologies that are too dangerous, by limiting our pursuit of certain kinds of knowledge” (p. 140). This view advocates following the “precautionary principle,” that “humans should not create something new unless they are reasonably certain something awful will not result” (p. 167).

The first two scenarios regard the future as predetermined, in the first case toward heavenly bliss and in the second toward perdition; however, in both views the future is unstoppable, a force of nature that is an extension of evolution (p. 94). The Prevail Scenario—represented by Jaron Lanier, who is an intriguing blend of “philosopher, creative artist, and computer scientist” but best known for inventing “virtual reality” (pp. 190–91)—is the view Garreau himself favors, although he states that he tries not to advocate for any of the scenarios (p. 12). It is a more complex view “in which humans shape and adapt it [technology] in entirely new directions” (p. 95). This scenario envisions a future that is messier and more chaotic, but one in which humans and not technology would be in control (p. 194). Here, in what would be like an infinite game, the human would progress in “the search for a complex, evolving, inventive transcendence” that means ever greater intersubjective connectivity (pp. 200–201). Garreau’s personal position shines through his decision to devote a separate chapter, “Transcend,” to transhumanists such as Nick Bostrom who are “keen on the enhancement of human intellectual, physical and emotional capabilities, the elimination of disease and unnecessary suffering, and the dramatic extension of life span” (p. 231). This chapter adds “specificity, measurements and means to the goal of controlling our evolution in the fashion of The Prevail Scenario” (p. 235). It also speaks to a concern that seems to animate Garreau to a significant extent, as expressed in his innocently asked question: “Will we forever keep mum about our obviously intense desire to break the bonds of mortality?” (p. 264).

Throughout his book Garreau introduces relevant examples from philosophy, literature, film, and occasionally religion. On the question of human nature, he brings into his discussion in passing most of the perspectives that I would want to lift up in protesting the Prevail-Transcend view that

he settles upon as finally most fitting. Those protesting perspectives center particularly on two realities and claims: (1) human sinfulness, and the empirically established propensity for human decision making to be self-centered in character, and (2) divine promise, and the empowering of the human that comes when one lives out of that promise. The first acknowledges limits on human possibilities, limits that raise questions about the feasibility of blithely marching “from prehuman to early human to human to transhuman to posthuman” (p. 257). The mere fact that the author draws on DARPA (the Defense Advanced Research Projects Agency of Washington D.C.) and especially on DSO (the Defense Sciences Office of DARPA) for many of his examples of cutting-edge technology is a case in point against viewing such developments as occurring in a pristine, value-free as opposed to a “defensive” context of one sort or another. The second draws on new possibilities made available through relating to the Possibilizer, which results in pushing back the line between the possible and the impossible and facilitating genuine transcending. “With God all things are possible” might not translate into a basis for the transition to a gnostic reality of bodiless angelic existence, but it does witness to the power of creative transformation that becomes accessible in and through lives marked by spiritual ecstasy. Garreau is correct to emphasize human freedom and responsibility and to affirm that part of human nature is human-made (p. 236), as he does in the *Prevail* and *Transcend* chapters. As prophet and seer he, through effective proclaiming and engaging envisioning, is potentiating or possibilizing us now for the major change soon to come. But human nature, although surely continuing to evolve, is riddled with ambiguity. Therefore, the book would have been more balanced and realistic if it had also included chapters on “Flounder” and “Limit” as respective counterpoints to his “*Prevail*” and “*Transcend*” chapters.