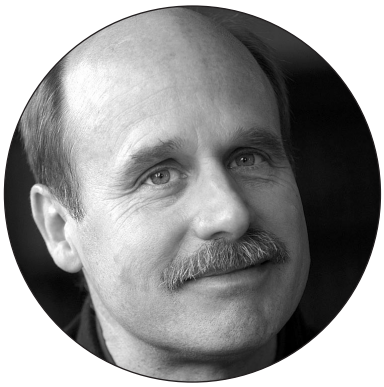
THIS ISSUE'S EDITOR



PAUL SAFFO

Paul is a forecaster and strategist with over two decades experience exploring long-term technological change and its practical impact on business and society. He is director and Roy Amara Fellow at the Institue of the Future, a 30-year old foundation that provides strategic planning and forecasting services to major corporations and government agencies. Paul is also chairman of the Samsung Science Board, and serves on a variety of other boards and advisory panels, including the Stanford Advisory Council on Science, Technology and Society, and the Long Now Foundation (www.longnow.org), as well as the boards of several public and pre-public companies located the United States and abroad. Paul is also a fellow of the Royal Swedish Academy of Engineering Sciences and has served as an advisor and forum fellow to the World Economic Forum, which in the late 1990s named Paul one of its "100 Global Leaders For Tomorrow." Paul's essays have appeared in numerous publications, including *Business 2.0*, *Fortune*, *The Harvard Business Review*, *The Los Angeles Times, Newsweek*, *The New York Times*, the *Washington Post,* and *Wired*. Paul holds degrees from Harvard College, Cambridge University, and Stanford University.

Photo—Mikkel Aaland

The GBN Book Club Newsletter is sent out with book mailings to GBN members. All past reviews may be perused at www.gbn.com. Nearly all of the books may be purchased at www.amazon.com. Please address service requests to Jeanne Scheppach at jeanne_scheppach@gbn.com or at GBN's Emeryville office, and send book comments and suggestions to Nancy Murphy at nmurphy@gbn.com.

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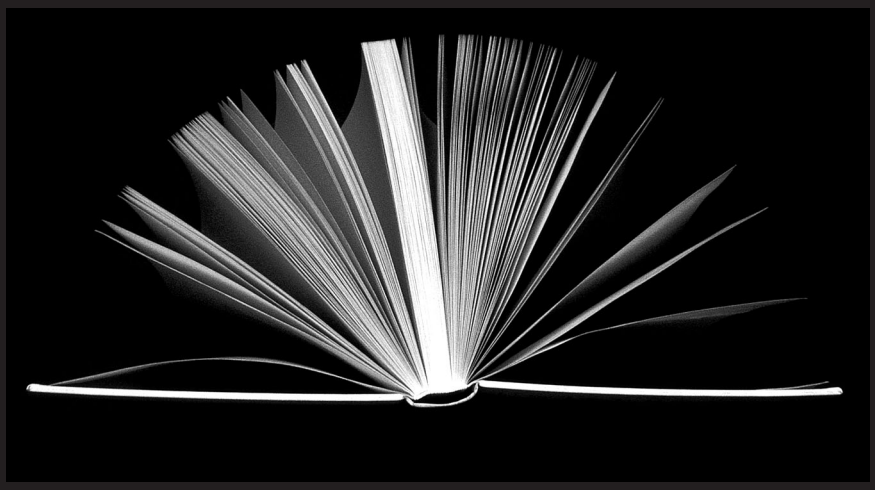
GBN Global Business Network Book Club

INTELLECTUAL TOOLS FOR THE YEARS AHEAD



The bubble may have burst, but the technology revolution shows no sign of abating. If anything, the tempo of technological change is accelerating, driven by the relentless exponentialism symbolized by Moore's Law. The result is a horizon on which outcomes proliferate and nothing seems too outlandish to seriously consider—up to and including a human takeover of our collective evolutionary trajectory.

This month's GBN Book Club looks back at the surprising history of the PC revolution, ahead to the weird trajectory of human evolution, and beyond to transcendence past modernism and its dilemmas. We begin with *What the Dormouse Said*, in which John Markoff reveals how the '60s counterculture shaped the PC and the Internet. Next, Joel Garreau's *Radical Evolution* takes us on a toboggan ride down Moore's exponential curve, visiting the edge—surfers contemplating a world where humans control (or at least attempt to control) their evolutionary destiny. Then we reach back 60 years to close with Herman Hesse's masterful and prophetic *The Glass Bead Game*, which describes a world preoccupied with challenges eerily similar to the ones we face today and tantalizes the reader with glimpses of how to transcend the modern predicament.

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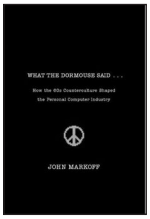


What the Dormouse Said: How the '60s Counterculture Shaped the Personal Computer Industry

John Markoff

Viking, 2005; 336 pages; $25.95
ISBN: 0-67003-382-0

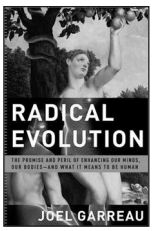
We take the PC revolution for granted, but imagine a present where the device on your desk is as closed as a TV set, and the Internet (if it existed at all) is as rigidly controlled and programmed as your cable box. This bleak scenario did not come to pass only because the '60s counterculture movement spawned a tiny elite of hippie-geeks who trumped the technology establishment and architected revolution into the souls of our desktop machines.

It is astonishing that this fascinating story hasn't been told until now, but John Markoff does such a masterful job that his book is well worth the wait. For starters, *Dormouse* makes it clear that the influence of the counterculture on the shape of the PC was far more profound than even its inventors realized. I have heard pieces of this story for years, but even the first-person tale-tellers tend to dismiss their peace-marching and drug-experimentation as mere footnotes to their storied roles as industry pioneers. Reading *Dormouse* made me realize that even the participants missed just how big and important this story really is.

Dormouse is chock-full of great stories, from Fred Moore's invention of the sit-in at Berkeley to a blow-by-blow description of Doug Engelbart's landmark 1968 oNLine System demo. Markoff's long tenure as the dean of technology reporters gives him a wealth of knowledge beyond what any outsider could ever glean, and thus we hear Steve Jobs bare his soul on how drugs altered his computing vision, and how the first e-commerce transaction happened in 1972, a marijuana purchase between Stanford's SAIL lab and MIT's AI lab. Don't start reading this book before bed, or you may end up reading way past your bedtime!

Markoff confines himself to telling the counterculture history, but the present-tense implications are at once stark and obvious. The subversive, liberating architecture of the PC and the Internet was no accident, and it was far from inevitable. All new technologies contain the values of their inventors, and society is fortunate that our current systems reflect the values of revolutionaries, not reactionaries.

Armed with this knowledge, we must realize that the future trajectory of cyberspace as a place amenable to values like openness and free expression is no sure thing. Cyberspace is under threat at every turn from monopolist-obsessives like Bill Gates to Telco lobbyists and faceless bureaucrats in the vast new homeland security complex. *Dormouse* reminds us that the price of freedom is constant vigilance. If cyberspace is to remain a home for innovation and free expression, we all need to take inspiration from the counterculture geeks who started this revolution and fight not only to preserve what we have but also to extend the architecture of subversive openness into newer technologies appearing on the horizon.



Radical Evolution: The Promise and Peril of Enhancing Our Minds, Our Bodies—and What It Means to Be Human

Joel Garreau

Doubleday, 2005; 368 pages; $26.00
ISBN: 0-385-50965-0

The last half-decade has witnessed an active and very public debate over the impact of technology on mankind's future and the future shape of the human species. This is well-plowed ground for GBN members; all of the key players have either appeared at GBN conferences or their scribblings have arrived in prior Book Clubs. Many of them are featured in *Radical Evolution*, so I picked up the book expecting little more than an elegant and orderly reprise of well-known territory.

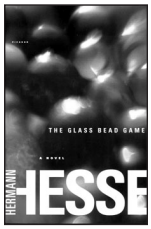
My mistake. The names are familiar, but the conversations are new. Joel has a knack for asking questions that deliver unexpected answers. I have known some of the people in this book for over two decades, and yet I caught myself surprised again and again. Alone, these details would not amount to much, but collectively they are "ground truth" in a map that Joel builds of this emergent landscape of techno-human co-evolution.

Joel is a long-time GBN Network member and it shows in the scenario structure of *Radical Evolution*. After an elegant review of Moore's Law and the magic of exponentials, he devotes the balance of the book to laying out four possible futures. "Heaven" is the improbable cloud-cuckoo land of

extropians typified by the touching optimism of Ray Kurzweil, revealed to have an extreme form of middle-aged obsession with approaching mortality. "Hell" is of course the opposite, a dystopian world of funky, out-of-control technologies gone bad, painted in sepia tone by the dour, doomsaying Bill Joy.

Joel reports "Heaven" and "Hell" with workmanlike professionalism, but it is clear he believes neither is plausible. One can almost feel him exhale with satisfaction as he tucks into his third scenario, "Prevail," a future where technology continues along its exponential path while humankind continues to muddle through, on its way toward a world neither heavenly nor hellish. Joel's spirit guide in "Prevail" is brilliant polymath Jaron Lanier, who charms the reader with a calm level-headedness notably absent among others Joel meets along the way.

Joel closes *Radical Evolution* with "Transcend"—a fourth, hopeful scenario that is clearly Joel's preferred outcome. Joel himself is the guide this time, assembling snatches of conversations with bits of intellectual popcorn (for example, "transhuman" was coined by T.S. Eliot) and references to dead visionaries like Teilhard de Chardin to deliver a rousing closer that is heart-warming but unpersuasive. Scenario professionals will applaud Joel for mapping the full range of possibilities and then return to "Prevail" as the future Joel really believes is most likely.



The Glass Bead Game

Hermann Hesse
Translation by Richard and Clara Winston

Picador, 2002; 576 pages; $11.20
ISBN: 0-31227-849-7

The Glass Bead Game is Hesse's meditation on the dilemmas of modernity and the proper role of the individual in balancing reflection and action in the face of burgeoning crises. It is also most probably what won Hesse the 1946 Nobel Prize in Literature, and the central fixture of the book, a vaguely described epistimological "glass bead game," has become an enduring meme in modern culture.

The Glass Bead Game is thus a classic, officially blessed as one of the most important books of the twentieth century—which is a disaster because it gives it the sort of fusty, serious mantle that has made it a book more referred to than read. It is a long book, but it speaks eloquently to the problems we face and is a great read, even if one approaches it as a mere escapist piece of science fiction. It is also a deep book; only a philosopher or a philologist will get to the very bottom. But as every aging hippie will recall from reading Siddhartha and Steppenwolf, Hesse knows how to wrap his message in a good yarn.

The Glass Bead Game is set in a distant future where the relentless press of novelty and fashion have driven intellectuals to a near-monastic life, the apex of which is Castalia, a remote utopian academy built around playing the Glasperlenspiel—glass bead game—whose play generates a mystical synthesis of all of humankind's intellectual and esthetic arts. The book is confected as the biography of protagonist Joseph Knecht, who arrives at Castalia as a youth and rises meteorically to the top of the Castalian order, becoming the "Magister Ludi," only to discover that the future of his beloved Castalia is threatened by its very success. Anyone running an organization will thus instantly empathize with Knecht's dilemma, namely, to continue to serve ("Knecht" translates as "servant") by staying in his circumscribed role, or to transcend into something that fulfils the Castalian ideals but may in fact destroy Castalia and with it the tradition of the Glasperlenspiel.

Hesse's twenty-fifth century world reflects the tumultuous events of the first half of the twentieth century: world war, cultural erosion, and social upheaval. All of these events seem newly relevant after 9/11, while others are eerily prescient. For example, Hesse refers repeatedly to an earlier "Age of Feuileton," a time when serious intellectual activity and literature was dumbed-down to broadsheet light fiction and fluff. Hesse was thinking of the teens and twenties, but it resonates uneasily with today's media diet of reality TV, talk shows, and blogger-blather. Just staring at the vast amounts of inbox spam or pop-ups is enough to make anyone wish to retreat to Castalia.

The Glasperlenspiel itself is a particularly bewitching part of Hesse's book. Hesse never actually describes the game because it is an allegory, but that has not stopped generations of readers from attempting to create it. Earlier generations raised on marbles and monopoly built physical board games; today there is an active cyber-community building games out of electrons. Vannevar Bush's description of "Memex" in 1945 is evocative of the synthetic qualities of the Glasperlenspiel, so perhaps it is not surprising that some have claimed that the World Wide Web is itself a virtual Glasperlenspiel. Of course this is nonsense, just as attempts to create the Glasperlenspiel are nonsense, but the fact that people try is itself a compelling recommendation to pick up this book. It will most certainly draw you in, and its ideas will resonate like a distant mirror on the present.