

**THE MAN FROM THE FUTURE: THE  
VISIONARY LIFE OF JOHN VON NEUMANN**  
(ANANYO BHATTACHARYA)

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This is a disappointing book. Not awful, but not good. *The Man from the Future* manages to take the life of the polymath John von Neumann and to make it dull, never giving us any real sense of the man, although we do get some sense of his accomplishments. Beyond that, it's filled with bad history about ancillary matters, making the reader wonder about the veracity of core biographical matters. And worst of all, the author, Ananyo Bhattacharya, wastes our time by endlessly trying to shoehorn into von Neumann's story fantasy contributions by supposedly marginalized people, who are unknown because they did nothing worth noting. All this turns what might have been an excellent book into a chore.

Von Neumann has the reputation of being the smartest of the super-intelligent men who made the twentieth century a technological wonderland. Bhattacharya panders to this perception. He begins the book with an often-heard quote from Edward Teller, wondering if von Neumann talked to men like Teller in the same way as von Neumann talked to Teller's three-year-old son. The implication is that von Neumann was a unique genius. But although von Neumann was a lot smarter than me, the evidence doesn't bear out that he was qualitatively different from other geniuses. Moreover, he seems to have, to a great extent, frittered away his talents by never sticking with one field enough to make truly earthshattering contributions. To be sure, being a polymath performing at the highest levels in different (though related) fields, most of them entirely new, is itself impressive. Nonetheless, one wonders whether if von Neumann had stuck with one field he would have accomplished unique feats—or if, on the other hand, he switched among fields seeing that he was not able to achieve unique feats.

Von Neumann was born in 1903 in Budapest. His father, Max, was a well-connected and very successful businessman, part of a wealthy extended family. In 1913, he was awarded a heritable title of minor nobility for services to the government, elevating him socially above the mere bourgeoisie. In Hungary, at that time, people belonging to the nobility,

lower or higher, generally had an extra name (*praedicatum* in Latin) before their family name, theoretically and often actually designating the village where the family had its lands in the past. It is (or was, I presume) generally used only in formal settings, but sometimes it was used more often, especially to differentiate individuals with similar family names. Max chose as his *praedicatum* “*margittai*,” that is, “of Margitta,” a town in Transylvania (later stolen by the Rumanians), because his wife’s name was Margit (he had no other connection to the town).

This is where the “von,” a German, not Hungarian, mark of nobility, came from. John von Neumann was born simple Neumann János Lajos, in the Hungarian naming style (family name first). He started using the “von” when studying in Switzerland as a teenager because he wanted to signify to his German classmates he was noble, and the *praedicatum* was too unwieldy for this. Perhaps giving us a clue to von Neumann’s personality, this was a bit pretentious. Noble titles are rarer in Germany and Austria than they were in Hungary (something like ten percent of the Hungarian population had such titles, which originally exempted the holder from many taxes, and required him to fight).

You’re probably wondering, why does Haywood care about the nuances of von Neumann’s family name? Ah, because this discussion by Bhattacharya struck a chord with me, because my maternal grandfather was also Hungarian minor nobility, something I knew as a young child, and tried to use it (unsuccessfully) to lord over my classmates (some would say I am still trying to lord it over others). His *praedicatum* was *rácalmási*, after Rácalmás, a village south of Budapest. (My family got noble status in 1686 for killing Turks, not, like Max, for economic advice to the state.) I did not inherit; titles do not pass through the female line, although I suppose I could petition Karl von Habsburg to allow the descent, and in fact I got my grandfather, before he died, to sign a paper indicating his desire for this. I doubt I will ever execute this plan, however.

Anyway, back to von Neumann. He was a prodigy as a child, able to multiply large numbers in his head, read voraciously far above his age level, perform feats of memory, and so forth. (Strangely given its association with mathematical genius, he was bad at chess.) His parents aggressively fed his abilities, though his father was skeptical of mathematics as a career, regarding it as not a good way to earn a living, and

von Neumann was exposed to social and intellectual life at the highest Budapest levels, with a constant whirl of fascinating dinner guests. It was a charmed life, like much bourgeois city life in turn-of-the-century Central Europe, before it all went wrong.

Still, World War I did not touch the family in any meaningful way. What did touch the family was events after the war, in 1919, when the Communist regime of Béla Kun viciously implemented the standard reign of terror that takes place whenever any Left group gains complete power. Bhattacharya gets most of the details of this Red Terror wrong, and ludicrously claims that the post-Red Terror punishment of the guilty under Miklós Horthy was far worse than the Red Terror. Bizarrely, Bhattacharya even imagines that the aftermath of the Red Terror endangered the family. He says that “The von Neumann’s were spared by Horthy’s forces,” as if there were any chance that a man such as Max von Neumann would be sought for punishment—something Bhattacharya implicitly admits in the same sentence, when he says that “von Neumann’s schooling continued through the [post-Communist] upheaval more or less undisturbed.” No surprise, like most Hungarians, von Neumann became and remained violently opposed to Communism, something that fed his later work with nuclear weapons.

Von Neumann’s education progressed in the European style—excellent teachers at demanding schools. At this same time other Hungarians important in the future were swimming in the same circles, of which more later: Edward Teller, Leo Szilard, Paul Erdős, John Kemeny, and Eugene Wigner among them. Von Neumann wrote his first mathematical paper, related to set theory, at seventeen, which he refined a few years later to become his doctoral thesis. Then he moved to Germany, to Göttingen, an important research center for mathematicians, because Germany at that time led the world in all forms of science (America was a backwater). There he met Werner Heisenberg, and involved himself in early development of quantum theory. He wrote a book, *Mathematical Foundations of Quantum Mechanics*, as well as numerous papers, not only on quantum physics but also on game theory and continuing work in areas related to set theory. Much of this is quite interesting. Throughout the book, to give credit where credit is due, Bhattacharya does a good job explicating complicated mathematical concepts in a way that makes them reasonably comprehensible to the reader.

In 1929, seeking a tenured professorship, von Neumann moved to Hamburg, but in 1930 was lured away by a massive paycheck to lecture at Princeton, in a scheme to use Rockefeller money to kick-start American intellectual progress in mathematics. This was the Institute for Advanced Study, which later also hired Albert Einstein and many other famous scientists. Von Neumann's move to America had nothing at all to do with a feeling of anti-Semitism (as we will discuss, he was Jewish) or premonitions of future problems in Hungary or Germany; it was just for the money, no doubt in part because von Neumann had just gotten married to his childhood sweetheart. Soon enough, though, it became unwise to return to Germany—Jews were being limited in positions they could get, and some Jews were being fired. This loss was America's gain, and von Neumann, and a great many other Jews, stayed (or came, if they were not already here).

From then on, von Neumann exhibited his lifelong tendency to bounce around, focusing on different topics and fields that caught his interest. Most notably, somehow he became interested in the mathematical modeling of explosions, in particular shaped charges, which led to his recruitment as a consultant by various segments of the American military. He ended up doing quite a bit of work, albeit not full-time, for the Manhattan Project (the plutonium bomb Fat Man used shaped charges). It was von Neumann who discovered that nuclear blasts maximized destruction (though not fallout) if airburst, and he continued defense work until his death.

That wasn't all he did in the 1940s and 1950s. He became interested in the new field of computing, being introduced to computers through his defense work, and he worked on the early computers ENIAC and EDVAC. In the late 1940s, he worked on cellular automata—algorithms that simulated life, first on paper, and then with computers (the game "Life" is an example, not created by von Neumann), coming up with the first universal constructor, an algorithm that can replicate itself (and he theorized about what are now called von Neumann probes, self-replicating spacecraft that might be used to explore the vast distances of interstellar space). Unlike most men of the first intellectual rank, whose special abilities and contributions tend to decline after age forty, von Neumann never seemed to slow down, and he involved himself in several other fields. Still, even Bhattacharya sees that von Neumann

lacked focus. Mentioning his work on the molecular basis of life, he says “In his usual way, von Neumann dabbled brilliantly, widely and rather inconclusively in the subject but intuitively hit upon a number of ideas that would prove to be fertile areas of research for others.”

He was a difficult man personally. He had distinct signs of obsessive-compulsive disorder, such as always flipping a light switch seven times. In 1937 he and his first wife divorced, supposedly due to his inattention; he remarried a woman who divorced her second husband for him, and seems to have been a gold-digger. Other than these flashes, Bhattacharya gives us little sense of the man, what he thought, what his emotions were. This is most obvious in the author’s inadequate treatment of von Neumann’s illness and death. In 1955 he was diagnosed with metastatic bone cancer, and he died hard in 1957, aged fifty-three. He was terrified of death, and although he returned to practicing his Catholic faith right before the end, it seems to have given him little solace. But Bhattacharya gives us only the most cursory treatment of these matters. Maybe von Neumann left little first-hand evidence of his own thoughts; he does not seem to have been a frequent letter-writer, for example. Still, he was a social man, not a hermit, so a more competent biographer could no doubt have spun a more substantial and interesting story about this and all the other personal elements of von Neumann’s life.

One reason why von Neumann is still remembered, more than peers who were pure mathematicians, is that the things in which he interested himself in the 1940s and 1950s became extremely important technologies later—most notably the computer. As many have pointed out, it is notable how many of these mid-century men who created the technologies that defined the twentieth century were Hungarian Jews, mostly from Budapest. Their joke during the Manhattan Project, where they were very prominent, was that they were Martians, seeded here to help Earth.

I have never found this hugely surprising. As everyone who’s not a science-denier knows, Jews have naturally high average IQs, so you’re starting with a deep pool of talent. You add cultural pressure to excel (similar to Asians today, resulting in similar resentment and similar limitations on advancement put in place by those otherwise shut out). And then you have to realize that Budapest had a very large number of Jews at the turn of the century and onwards. A quarter of Budapest’s

entire population was Jewish, and Budapest was by an order of magnitude the largest city in the country. The Jews of Budapest were very integrated into the larger society, and a high percentage converted to Christianity, naturally, tightening their ties with wider society. (Von Neumann's father did not, but after his death in 1928, he and his brothers all converted to Catholicism.)

Before the war, Jews dominated Hungarian professional and bourgeois groups. They were seventy percent of the journalists in Budapest, for example, and thirty-five percent of those nationwide. (My own great-grandfather was a prominent journalist in Budapest at the turn of the century, who died young of tuberculosis. He wasn't Jewish, although within our family we did have Jewish intermarriage.) They were eighty percent of those who worked in finance, and not because, in the common myth, finance was where Jews could be employed. They were sixty percent of the doctors in private practice, and these figures continued across the professions. Among this ferment, it seems inevitable that twenty or thirty men, the cream of the crop, all from rich, successful, elite families able to feed their talents, would rise to the top—although simple happenstance, luck, no doubt had something to do with it.

Bhattacharya raises this topic, but botches the analysis. He ascribes much of the Martians' success to a fear that "the tolerant climate of Hungary might change overnight," requiring excellence as a protective device. That's midwit hindsight bias; Bhattacharya offers no contemporaneous evidence of any such fear. Hungary was much less anti-Semitic in the early twentieth century than America, and Jews, like the vast majority of Europeans, simply did not see the catastrophe looming on the horizon (part of the reason why, even in the far more anti-Semitic atmosphere of Germany or Austria, only a few Jews left before it was very late, or too late). Bhattacharya's claim is akin to the fiction heard more and more in America, variations on "My grandfather volunteered to fight in the war because he wanted to help the Jews." Sure he did. The reality is that Jews did extremely well in Hungary, attracting more Jews, and in the nature of a statistical distribution some were talented beyond measure.

Beyond the relatively narrow, though important, question of the Martians, it is true (though I am biased) that Hungarians, Jews and otherwise, do seem to punch above their weight (including those who

fled after the 1956 revolution). Relative to their population, for a long time Hungarians have been very prominent in chess, certain sports (such as fencing), and Nobel prizes. Maybe part of this is due to the Hungarian personality, which is fond of fighting until the last dog dies. The National Museum in Budapest is filled with canvases of heroic battles which the Hungarians lost, but went down with style. Perhaps this is tied to attitudes that drive less fatal, but still spectacular, achievements. It is hard to say.

Finally, however, let's talk about the worst fault of this book—its desperate desire to “elevate marginalized voices,” that is, to give undue and unwarranted attention to people of no importance and no accomplishments, who fit into approved identity buckets. Any time any woman scientist appears in this book, she is always praised as a genius (“brilliant” is Bhattacharya’s go-to word for women). For example, one of the thousands of scientists who discussed von Neumann’s book on quantum physics in the 1930s was someone named Grete Hermann, an obscure German who purported to be both a philosopher and mathematician. We are treated to several pages about her, with the usual silly claim that even though her ramblings were ignored at the time, now we know they are incredibly important, although why specifically somehow never seems to make it onto the page.

I’ve written about this annoying authorial phenomenon before, focusing on the fictions that the sister of Isambard Kingdom Brunel, Sophia Brunel, was a genius engineer, and that the daughter of Lord Byron, Ada Lovelace, was the first computer programmer. Such lies are everywhere, and fresh ones are piled constantly onto the steaming heap. A few weeks ago a picture was going around Twitter of one Margaret Hamilton, who worked for the Apollo space program, next to a stack of bound printouts as tall as her. The claim was that this was the code she had written for the Apollo program. False. Hamilton (who is still alive) was a mathematician, one of the rare women who had interest and expertise in computer programming. In the late 1950s and early 1960s she bounced around to various government programming jobs. All the accounts about her career with Apollo are pretty vague (which probably means untruths are floating around), and the flavor of falsehood is not helped by that most anecdotes of supposedly important work done by Hamilton were offered only by Hamilton herself, and

then parroted by a sympathetic audience. But it appears she was hired as an Apollo programmer, and then put in bureaucratic charge of a programming team. Thus, the stack of documents was work done by other programmers, which she had coordinated, not written by her at all. A decent work effort, but nothing particularly notable, or superior to the work done by thousands of men working on Apollo. Yet you can be sure that soon NASA will name buildings after her, schools will exalt her, and men will be told to know their place while the real geniuses of history are unveiled.

The most expansive pack of such lies is that portrayed in the book and later movie *Hidden Figures*, profiling some black women who were hired in the space program (along with white women) as “computers.” These women were fungible workers of average intelligence hired to do a low-level job—performing rote manual calculations at the instruction of engineers doing the actual work, who compiled and applied the results to their work. Such “computers” were the norm before digital computers became common enough to take over all calculations. Women were used because women are more tolerant of, and more careful in doing, repetitive drudge work, something I know from running a manufacturing plant. ENIAC, a giant web of wires and vacuum tubes, for example, as Bhattacharya notes, was designed exclusively by men, but physically built mostly by women following the plans laid down by the men. What none of these women were was intellectually relevant to the space program. As individuals, they were completely unimportant.

In fact, Bhattacharya, an Englishman, missteps ideologically when he mentions such “computers” in his book, as part of the Manhattan Project. “[T]he ‘computers’ at Los Alamos were nearly all women working with mechanical desk calculators. . . . [M]any of these human computers were the wives of physicists and engineers already working on the project.” This indirectly slurs the women recently celebrated in America, by not ascribing the success of the Manhattan Project to them and by accurately implying that randomly-collected women could do the work, but Bhattacharya probably isn’t familiar with every nuance of American ideological fantasies. That doesn’t stop him from adding his own fantasies; he claims that von Neumann’s wife was the chief programmer of ENIAC, but, no surprise, this has “only recently come to light,” meaning only recently been made up. (She did do some



programming with ENIAC, implementing von Neumann's musings on using it for meteorological purposes, in another tangent he took.)

Again, as with the *praedicatum*, why does Haywood care so much? Because this idea that women can be top scientists, or have much desire to focus on the hard sciences at all, is extremely damaging to our society. (You certainly don't see it in China, which is focused on winning the future, not pandering to the emotionally needy.) My son is now studying computer science at college, and it is a wonder to behold the resources that are thrown at women, that is, taken from men, to whom they should be rationally assigned, to encourage women to enter STEM fields, where very few women have any real interest (and those that do enter usually soon enough exit the field), and then to coddle them. For example, at my son's high school, winners of a large scholarship for computer programming were announced with great fanfare, all girls. We asked him why he hadn't applied for the competition—only to be told that it was strictly limited to girls, and certainly no scholarships at all were available for boys. It is disheartening, on a personal and societal level, to see the waste of talent this creates, and the catastrophic damage being done to our society's advancement. No doubt there are, very rarely, women scientists of the second rank, though none of the first rank, given the statistical distributions of men's and women's IQs. But that does not justify the resources put into pampering them, and the harms done to young men, who are the backbone of scientific achievement. Women, in fact, should be discouraged from entering the sciences at all and men should be given preference; a well-run society allocates sex roles appropriately and in keeping with the nature of men and women.

To offer a related example, at the risk of boring my readership, Bhattacharya is obsessed with making Alan Turing relevant to von Neumann's life, even though there is exactly zero evidence of any influence. Turing is famous today. Not because he was a peerless mathematician—he was, it appears to a layman, a second-rank mathematician, with no important conjectures or proofs to his name, but relevant to codebreaking in World War II, and remembered, until recently, only because of his thought experiment of the "Turing test" and some other musings related to early computers. Nonetheless, today he is held up as a world-bestrident hero, because he was a homosexual punished for illegal sexual activity, who died (maybe by suicide) shortly thereafter,

and can therefore be apotheosized as a tragic Suffering Servant, even more wonderful and important than other homosexuals. I can prove this. Google Ngram, which allows you to view usage of a term in books over time, shows that until 1980, Turing was almost never mentioned in any context. He was mentioned a little in the 1980s and 1990s, as personal computers took hold (and artificial intelligence became something talked about). But mentions of him have exploded since 2005, because propaganda pushing the homosexual agenda has likewise exploded. QED.

There is no evidence Turing and von Neumann ever met, or collaborated, or cared in the least about each other. Lacking evidence, Bhattacharya repeatedly tells us they “almost certainly met” at one time or another, and breathlessly quotes hearsay from some elderly collaborator of von Neumann that “I’m sure von Neumann understood the significance of Turing’s work when the time came.” Turing was English, and neither was in the other’s country more than a handful of times. In 1942, sent on a secret mission to England, we are told that von Neumann developed his ideas “perhaps [in] a high-octane tête-à-tête with Turing,” even though this is wholly imaginary, and von Neumann was studying explosives in England, not math in general, and not codes or computers. “That the two men would seek each other out seems likely.” No, it doesn’t.

Why are books today filled with this annoying propaganda? (My wife, who unlike me reads modern fiction, says every present-day book she reads has multiple homosexuals forced into the plot.) Part of it is simple authorial bias. But more of it is probably an attempt by authors at insulation, the throwing on of some fresh new clothes for the emperor. The right people will be sure to praise you for compliance with the regime line, and anyone who criticizes a book that burns incense at the right altars must be racist, sexist, and a Klan member, so even if you don’t actually like it, you best be sure to line up to praise my book! Some of it also is publishers, either for the same reasons, or because the ugly little trollops who do the actual work for publishing houses these days are allowed to dictate their employers’ business practices, for some reason. (You can be sure if I ran a business where anyone at all told me what the company should do politically, he would be instantly fired.) Whatever the reason, it detracts greatly from the book.

There is apparently a 1992 biography of von Neumann, by Norman MacRae. Maybe that's better than this book. I suppose if you have a particular interest in the mathematical topics, this book might be worth reading. Not otherwise.