Who Was Kurt Gödel? 
Four Different Answers: 
Viennese playboy, 
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Abstract
A review of four Gödel biographies plus the story of the reviewer’s connection with Gödel.


Let us praise our heroes. A new biography of Gödel by the historian Stephen Budiansky is a cause for celebration, but let us not forget some other illuminating biographies of this tortured soul.

1 A Visitor from Buenos Aires in the United States

What do I have to do with Gödel?
In the first few months of 1974 I traveled from Buenos Aires to New York as a “summer visitor” at the IBM T. J. Watson Research Center in Yorktown Heights. I lived in the White Plains YMCA and commuted to the Watson Center by train and taxi.

It was during this visit that I discovered or invented the halting probability Omega. I remember the exact moment. I had been invited to give a lecture at a university somewhere in the United States, and was flying back to New York. At the precise moment that I realized that the halting probability was irreducible or algorithmically random, I was looking out the window and saw an unmistakable sight, the Pentagon in Washington, DC.

By the way, the halting probability was originally low-case Greek Omega, but the set theorist Robert Solovay, who was then visiting the Watson Research Center, suggested to me that a capital Omega might be better because in set theory low-case Omega stood for the set of natural numbers 0, 1, 2, 3, etc.

During this visit I corrected the proofs of one of my first publications on incompleteness, destined to appear later in the year, an invited paper “Information-theoretic computational complexity” in the *IEEE Transactions on Information Theory*, with an appendix giving the mathematical details, which proofs I was to send to Gödel, as I will tell below.

And I had two very interesting experiences.

The first was that I attended a lecture at the New York Academy of Sciences in Manhattan by a mathematician I admired, Mark Kac. The lecture was on randomness, and Kac’s thesis was that randomness was an interesting but slippery notion that resisted precise definition. He concluded his lecture with the following words: “In spite of this, a definition of randomness has been proposed by Kolmogorov and by a young fellow in Argentina, Gregory Chaitin.” I stood up and said, “No, I’m here now!” Pandemonium, over which Kac declared, “This was not rehearsed!”

After the talk a gentleman came up to me and said, “I’m Dennis Flanagan, the Editor of *Scientific American*.” And he told me the following story about Gödel. At the time Flanagan was living in Princeton, New Jersey, and he had just published a wonderful article, “Gödel’s Proof” by Ernest Nagel and James R. Newman (1956), later expanded into a small book that completely obsessed me from the moment it appeared in the New York City public library (at that time I lived in Manhattan). Gödel was not known to the general intellectual public yet—that article and that book were to change that—and few people had seen a photo of Gödel and knew how he looked. However, Flanagan had sent the well-known portrait photographer Arnold Newman to Princeton in order to be able to include an image of Gödel in the article about him in *Scientific American*, resulting in a stark and somewhat surreal portrait of an angry-to-be-disturbed Gödel sitting in front of a bare blackboard that has been reproduced many times.
So Flanagan knew how Gödel looked. And one hot, humid summer day Flanagan was walking down the street in Princeton, a small town, and saw Gödel approaching. He prepared to introduce himself as the publisher of the article about Gödel’s proof. At that moment, however, a scantily clad beautiful young female student (we used to call them “co-eds” from the word “co-education”) passed by, and Gödel stopped dead in his tracks to admire her. As they say in French, “La belle opportunité est perdu!” Flanagan did not dare to interrupt Gödel!

The second amazing experience was that I somehow managed to make a phone call to Gödel’s office at the Princeton Institute for Advanced Study (IAS), a cold call as they say in the world of sales, and Gödel himself picked up the phone. “Professor Gödel,” I said, “I am extremely fascinated [obsessed would have been more accurate] by your incompleteness theorem, and I have a new proof based on the Berry paradox instead of the Epimenides paradox [the paradox of the liar, ‘This statement is false’].” He replied, “It doesn’t matter which paradox you use!” In fact, he says this in the introduction to his famous 1931 paper, which I was familiar with. So I was prepared, and I immediately answered, “Yes of course, but this suggests to me a new information-theoretic view of incompleteness, which I would very much like to visit you and tell you about.” He replied, “Send me a paper of yours on this subject, and I will take a look at it and decide if I give you an appointment.” So I sent him the proofs of my as-yet-unpublished 1974 IEEE paper. Then I called him back, and he commented “Very interesting, your complexity measure is an absolute notion [like computability as contrasted with provability, which depends on the axioms].” And he gave me an appointment!

The great day arrived, and I had already figured out how to take the train from Yorktown Heights into New York City and from there to Princeton, New Jersey, and how long that would take. It was the week before Easter, and that weekend I was supposed to leave NY and fly back to Buenos Aires. There had been a Spring snowstorm, nothing serious, nothing that would stop me from visiting my hero, Kurt Gödel. I was about to leave my office at IBM for the train station, when the phone rang, and a voice, a terrible voice, that of Gödel’s secretary, announced that Gödel was very careful about his health and because it had snowed he was not coming into his office that day and therefore my appointment was canceled!

So this is how I spoke to Gödel on the phone twice but never met him. In retrospect, I think this is a much more interesting story than if I had actually met Gödel. It illustrates the surreal quality of interactions with Gödel, such as the fact that he would meticulously reply to all the letters he received, his secretary would type up his replies, but Gödel would never sign the letters she prepared for him nor put them in the mail!

Years later my friend Cristian Calude from the University of Auckland was visiting me at the Watson Research Center, and we decided to make a pilgrimage to Princeton. We found Einstein’s former home near the IAS, Gödel’s former
home in a much poorer part of town, and Gödel’s and John von Neumann’s graves in the Princeton Cemetery. By the way, Einstein is not there. He was cremated and his ashes were scattered at an undisclosed location, as he had wished.

Figure 1: Cris Calude and Greg Chaitin at Gödel’s grave in Princeton, New Jersey

Furthermore, as we stood looking at Gödel’s home, the couple who were renting it from the current owner came out and invited us in. It turns out that much remained exactly as it had been when Kurt and his wife Adele lived there, in particular the heavy sound-proofing so that Gödel could work undisturbed in his study, and a shrine to the Virgin Mary in the garden, but not Adele’s infamous pink flamingo, which Gödel found “charming.” And here is another example of Viennese humor: Gödel, when asked how things were in Vienna under Nazi rule, replied only, “The coffee is wretched!”

2 Gödel in Sexy, Sophisticated Vienna

This young Gödel is normal looking, happy, productive, and an extrovert. He enjoys the cafés and the nightclubs, the naughty Die Fledermaus, the immoral La Ronde; Gustav Klimt, the painter of the sumptuous, sensual ladies of the gilded elite, Egon Schiele, the painter of the suffering lower classes; the believer in Mitteleuropäische Kultur Stefan Zweig, author of the graceful biographies, the novel Beware of Pity, the short story The Royal Game; the acerbic, aphoristic social critic Karl Krause of “Vienna, a laboratory for the apocalypse!” Budiansky’s new book portrays the Vienna from which Gödel emerges very well, and Karl Menger, one of his professors, reinforces this picture of a happy, young Gödel.
3 Gödel in Solitary Confinement at the Institute for Advanced Study

Emaciated, unhappy, unproductive, introverted, this is the older version of Gödel that most people know about. Gödel in exile in Princeton. His only friends: besides the German physicist Albert Einstein, there are the Hungarian mathematician John von Neumann and the Austrian economist Oskar Morgenstern, who are the co-authors of *Theory of Games and Economic Behavior*, a book I greatly admire. No classes, no students! Not enough intellectual stimulus.

4 Gödel the Philosopher [Rebecca Goldstein]

Universally praised, but totally misunderstood! Gödel is not a logician. He is an anti-logician. According to Gödel reason is not a path to all knowledge, there is also direct intuition of the platonic world of ideas. Gödel is an ardent student of Leibniz, but Leibniz is a much more sophisticated rationalist than Gödel is, because Leibniz speaks of chains of reasoning so long that only God can comprehend them, but we cannot.

5 Gödel the Madman [Cassou-Noguès]

In spite of Gödel the philosopher, in spite of his proof of the limitations of formal reasoning, in spite of all of this, we finally have Gödel, the victim of reason. How can the axiom that the universe may be apprehended by reason lead one so badly astray? How can you prove to him that he must eat?! Only his wife could do that, and unfortunately she was hospitalized, so Gödel stopped eating and starved himself to death.

The biography of Pierre Cassou-Noguès has the merit of plumbing the full incongruity of Gödel’s unlimited faith in reason, which is so inappropriate when it is considered as the driving force behind the real world, a weird picture that emerges from immersing himself in Gödel’s *nachlass*. And he devotes equal space to the nearly forgotten genius Emil Post, whom some place at the level of Gödel and Turing, and who has his own interesting quirks, perhaps not as substantial as Gödel’s, but nevertheless nearly incapacitating.

Recall that Karl Menger tells of a happy young Gödel in Vienna, completely different from the sad, emaciated Gödel of Princeton. What went wrong? Is this what the lack of cafés, nightclubs and sexy operettas does?

And on pp. 222–224 of the chapter of Karl Menger’s book entitled *Memories of Kurt Gödel*, he tells the following bizarre story, starting with an account of a
conversation between Menger and Gödel:

“How could the founding of the [Austrian] Academy [of Sciences] be kept secret for centuries? How could its Proceedings disappear without a trace? Who had an interest in destroying Leibniz’s writings?” “Naturally those people who do not want man to become more intelligent,” he replied. Since it was unclear to me whom he suspected, I asked after groping for a response, “Don’t you think that they would sooner have destroyed Voltaire’s writings?” Gödel’s astonishing answer was: “Who ever became more intelligent by reading the writings of Voltaire?” Unfortunately at that moment someone stepped into the room and the conversation was never concluded.

Later, I once discussed Gödel’s ideas on Leibniz with a common friend, the economist Oskar Morgenstern. He described to me how Gödel one day took him to the Princeton University Library and piled up two stacks of publications: on the one side, books and articles that appeared during or shortly after Leibniz’ lifetime and contained exact references to writings of the philosopher published in collections or series (with places and years of publication, volume and page numbers, etc.); on the other side, those very collections or series. But in some cases, neither on the cited page nor elsewhere was there any writing by Leibniz; in other cases, the series broke off just before the cited volume or the volume ended before the cited page; in still other cases, the volumes containing the cited writings never appeared. “The material was really highly astonishing,” Morgenstern said.

Perhaps the best way to end is with the comment of a Pontifical Catholic University of Rio de Janeiro professor of philosophy who was himself going mad: “Logic is too sharp a knife to cut reality!”