Albert Einstein’s year in Prague FREE

Einstein in Bohemia. , Michael D. Gordin, Princeton U. Press, 2020, $29.95 Buy on Amazon

Don Howard

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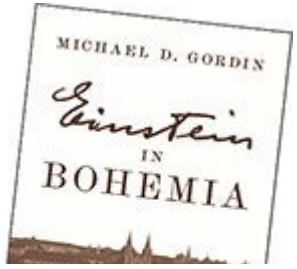
Albert Einstein lived in Prague from April 1911 through July 1912, during which time he occupied the chair in theoretical physics at the German University. Perhaps because of the brevity of his tenure in Prague, most of Einstein’s biographers give those 16 months short shrift. But it was a critical time in Einstein’s life both professionally and personally, not only because the appointment in Prague was his first as a full professor. Giving Einstein’s Prague sojourn the full attention it merits is the aim of *Einstein in Bohemia*, the new book by Princeton historian of science Michael Gordin.

An early 20th-century postcard of Old Town, Prague.

It was in Prague in 1911 that Einstein resumed focused work on what would emerge four years later as the general theory of relativity. Einstein had known since 1907 that the equivalence principle—which asserts that gravitational forces are indistinguishable from the effects of an accelerated frame of reference—entailed both a gravitational redshift and the bending of light in a gravitational field. When he returned to those ideas with a more careful exploration of the consequences of coupling a static gravitational field with a nonstatic electromagnetic field, he realized for the first time that the bending of light could be tested not only on a laboratory scale, where the tiny magnitude of the effect makes measurement almost impossible, but also on an astronomical scale, where the effect should easily be observable.



That insight eventually led to Arthur Eddington’s confirmation of the light-bending effect with his 1919 eclipse observations and turned Einstein into an international star. Einstein soon recognized the limitations of the so-called static theory, and he was off and running with a clear understanding that Lorentz transformations would not suffice in a fully general theory of relativity. Thus, he was primed to begin what proved to be a crucial collaboration with his mathematician friend Marcel Grossmann when he returned to Zurich in 1912.

Two personal situations came to a head during the months in Prague. First, Einstein’s marriage to Mileva Marić, which had been strained for several years, continued to deteriorate. Gordin speculates that the cultural and political situation in Prague played a role in the marital troubles. Einstein moved mainly in a German professional environment and a Jewish cultural milieu in Prague. One example of that was his occasional participation in Berta Fanta’s culturally important, weekly salon that drew other prominent German-Jewish intellectuals and writers, such as Max Brod, Franz Kafka, and Samuel Hugo Bergman.

Mileva, a Serbian Catholic, had many friends in the less ethnically charged atmosphere of Zurich; Gordin suggests that she may have felt out of place in Prague, in part due to tensions between Czechs and Serbians. In any case, there is abundant evidence that Mileva was lonely and unhappy in Prague. Albert and Mileva formally separated two years after they returned to Zurich, and the

marriage ended in a bitter divorce in 1919.

The second situation was that Einstein began to connect more seriously with his Jewish identity. Having turned away from his religious upbringing in his teens, Einstein thought of himself in his Swiss years as someone with no religious affiliation. But in Prague, he found himself in a rich and vibrant Jewish cultural space that included many prominent figures in the Zionist movement. One influential friend was Bergman, an early and ardent member of the Zionist student group the Bar-Kochba Association who later became the founder of the Hebrew National Library in Jerusalem and dean of the Hebrew University. Einstein never supported the establishment of a Jewish national state in Palestine, but within a few years of leaving Prague, he became a prominent supporter of cultural Zionism, as demonstrated by his 1921 trip to the US to raise money for the establishment of the Hebrew University.

Gordin tells the story of Einstein in Prague in much greater detail than any previous writer has done, and he does so with subtlety and nuance. But in order to situate and appreciate this moment in Einstein’s life, Gordin does much more than narrate Einstein’s story. Readers learn about Prague as the capital of the Holy Roman Empire when Tycho Brahe served as court astronomer to Emperor Rudolf II and Johannes Kepler served as Brahe’s assistant. We follow the long and complicated history of Bohemia, the larger region around Prague, and its relations with its national and imperial neighbors. We learn about the religious and ethnic history of Prague and the surrounding region, as the balances shift among the Czech, German, and Jewish inhabitants. Gordin tracks the effects of those demographic developments on politics, which explains, among other things, why

during Einstein's time in Prague there was both a German-speaking and a Czech-speaking university.

We learn about philosophy in Prague, from neo-Aristotelian philosopher of psychology Franz Brentano to physicist-philosopher Philipp Frank, a prominent representative of the group known as the Vienna Circle and an advocate for its logical empiricist philosophy of science. Einstein strongly recommended Frank as his successor in Prague, and Frank went on to become one of Einstein's most important biographers after they resumed their acquaintance as émigrés in the US in the 1930s. And we learn about the place the theory of relativity occupied in the charged intellectual and political space of Eastern Europe and the Soviet Union after World War II. By then Czech-Jewish communist and philosopher of science Arnošt Kolman had emerged as a prominent arbiter of the interpretation of relativity in the communist East.

Gordin's *Einstein in Bohemia* affords us a refreshingly different kind of perspective on Einstein in context. The book treats its location in space and time—Prague in 1911 and 1912—not merely as a backdrop, but as an integral part of the drama.

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