Book Review

The Private Lives of Albert Einstein

By Robert Highfield and Paul Carter Faber and Faber, London, 1993, pp 355 £ 8'99 ISBN 0-571-17170-2

In recent years, some four hundred books have appeared on the life and work of Albert Einstein. Apart from his scientific contribution, people are naturally interested in his private life as well. What kind of relationship did he have with his family, what disappointments and sorrows he suffered, what were his feelings when he moved from one country to another changing his nationality twice, how much truth was there in stories about his womanising answer to come of these questions a general reader, who cannot anyway grasp the full significance of Einstein's theories — would like to know. This book deals with such private and intimate matters about Einstein.

When Einstein died in 1955, his friend Dr Otto Nathan and his secretary — house-keeper for 27 years, Helen Dukas were granted the control of his entire literary estate, according to Enstein's will. This included letters and documents spanning his whole life. Dukas and Nathan were anxious to protect the image of Einstein as a perfect genius and saint. They withheld from researchers all controversial material, such

as, his letters to his two wives. In 1982. however, all of Einstein's papers were handed over to the Hebrew University of Jerusalem as he had wished. One could not find clues to his thinking and previously concealed facts about his private life in the tens of thousand papers in the archive. Still hidden are some material judged too sensitive for contemporary eyes. In addition, about two hundred letters between Michele Besso, Einstein's dearest friend and Einstein were located in 1968. All this combined with their own extensive research and interviews lie at the root of Highfield and Carter's book which appeared in 1993. It is thus both an authentic and an absorbing book, It is a deeply melancholic and moving tale dealing with the enigma of the Einstein myth, as one critic writes.

Albert Einstein was born as the second child of Hermann and Pauline Einstein in Ulm, Germany on the 14th of March, 1879. When he was a year-old, the family moved to Munich. His father did well in business and the family lived in considerable material comfort until it moved in 1894 to Italy. Albert was not happy being left behind in Munich to finish his school. He did not like the authoritarian style in Germany nor what he called the philistine formality of the Germans. Einstein enjoyed reading popular science and developed an atheist attitude while at school. He left school one and half year before matriculation and went to

Switzerland. At the insistence of his parents he tried half-heartedly for admission in the Swiss Federal Polytechnical School in Zurich (ETH). He failed in the entrance examination and went in 1895 to finish his study to Aarau, 20 km from Zurich before trying again. Einstein stayed as a boarder in the house of Professor Winteler. He spent a happy time with the Winteler family for the entire three semesters he stayed in Aarau. He played the violin and appeared a confident clear thinker. The daughter of the family, Marie Winteler, was Einstein's first sweetheart. This romance was ended by another woman who later became his wife.

In October 1896, Einstein enrolled at the Polytechnic in Zurich and started his studies in physics in earnest. Here he met a fellow student, a Serb from northern Yugoslavia, Mileva Maric. She was a small, silent girl with large dark eyes, a brilliant student. Despite her plain looks and a limp, Einstein fell passionately in love with her which was amply returned. Einstein looked on her as his intellectual comrade. A shared love of music formed a bond between them. Mileva was three and a half years older than Einstein and his parents were strongly against their marriage. Navertheless the romance continued and led to the birth of a child Lieserl in 1902 before their marriage in January 1903. Before that, life for both Einstein and Mileva was far from easy. In the summer of 1900 Einstein somehow passed the final examination, but Mileva failed. Einstein, who had obtained Swiss nationality in 1900, had great difficulty in getting any job. He gave tuitions in mathematics to survive. Finally he got the post of an engineer, second class, in the Swiss Patent Office in Berne on 3500 Swiss Francs a year which was hardly enough to support a growing family. Einstein worked in the Patent Office from 1902 to 1911, carrying on his research in spare time. Lieserl's birth was hushed up and she was perhaps given away for adoption leaving no trace for later biographers. After her, two sons were born to Enstein and Mileva, Hans Albert in 1904 and Eduard in 1910. Eduard developed mental illness and spent many years detained in a Swiss psychiatric clinic, unvisited by his father, and died in miserable circumstances. Einstein's marriage with Mileva lasted until 1919. It spanned the most important years of his life, covering the majority of his creative activity. The full story of the relationship between Einstein and Mileva has begun to emerge only in the last few years. The book under review provides an excellent summary of the Einstein-Mileva episode.

In the year 1905, when Einstein was just 26, and still an employee at the Patent Office, he published three papers which shook the foundations of physics. They were on photo-electricity, Brownian movement and relativity. Einstein was awarded his belated Nobel Prize in 1922 for his work on photo-electricity. His scientific fame started to grow slowly although he had to

wait for some time before he could obtain an academic position. In 1911, he left the Patent Office to take up a full professorship in Prague. Later, he was given a 10-year contract by the Swiss Federal Polytechincal School, where he was rejected for admission in his youth. In 1913, Max Planck and Walther Nernst personally came down to Zurich to offer him a prestigious job in Berlin, membership of the Grand Prussian Academy of Sciences and a Chair at the Berlin University with complete freedom to devote all his time to research. Einstein could not resist this offer despite his dislike of much that he felt Germany stood for, authoritarianism, conformity, intellectual rigidity. His work continued to flourish leading to the completion of the general theory of relativity, its experimental verification and winning of the Nobel Prize for Physics in 1921. His fame and popularity increased repidly. He became a legend, an international celebrity to be worshipped by even those who did not understand his mathematical theories.

Simultaneously to Einstein's rise to fame, he suffered a miserable private life with estrangement from his wife and children. Mileva and Einstein were finally divorced in 1919. The authors write (p 187): Rather than wanting to acknowledge Mileva's contribution to relativity, as some have claimed, Einstein offered the (Nobel) prize

proceeds to Mileva simply as the best way to obtain a divorce. Einstein had not got the Nodel Prize till then, but he was sure since 1918 that he would get it. Einstein had first been nominated for the prize of 1910, and his name had been put forward every year thereafter save two. Shortly after obtaining his divorce from Mileva, Einstein married his cousin Elsa whom he had known since childhood. Elsa looked after Einstein protectively, with motherly care till her end. Elsa was no intellectual match for Einstein. The marriage, although under considerable strain, continued until Elsa's death in 1936. Outside Berlin Einstein had a summer house in Caputh where he could relax and enjoy boat rides. In 1928, Einstein met Helen Dukas who was to replace Elsa as his mothering protector.

With the rise of anti-semitism in Germany, Einstein knew that his days in Germany were numbered. In October 1933, Einstein, Elsa and Helen Dukas set sail for a new life in the United States. In the newly formed Institute for Advanced Studies in Princeton, Einstein found his last permanent position. Einstein took up US citizenship in October 1940. He died on 18th of April, 1955 at the age of 76.

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