

Leopold Infeld

LEOPOLD INFELD's life is in microcosm the life of our century. Born in Cracow, August 20, 1898, he passed his "Matura" with first-class honours in 1916 and was drafted into the Austrian Army. His Jewish background and academic interests did not help his career as a soldier and as soon as possible he returned to Cracow to study physics at Poland's ancient Jagiellonian University. Feeling the need for wider academic contacts, he spent the year 1920-21 in Berlin, where he met Einstein and produced his first paper entitled "Light Waves in the Theory of Relativity." This work yielded a doctor's degree from Cracow, which was the first given for theoretical physics in Poland.

The next ten years were full of frustration for Infeld. He taught physics in high schools and struggled to keep up his research. Finally he obtained an appointment as "Docent" at Lwow in 1930. In 1932 he visited Leipzig and met Heisenberg and van der Waerden, with whom he wrote an important paper on "Spinors in Riemannian Geometry". The account of this period of his life in his autobiography *Quest* makes tragic reading. His beloved wife Halina took sick and died. Because of the combination of personal sorrow and the lack of academic opportunity he finally decided to leave his native land for Cambridge on a Rockefeller Foundation Fellowship. From 1933 to 1935, he worked with Max Born and produced six joint papers. These were significant and fruitful years in England, but they saw the rise of anti-semitism in Germany, which soon spread to Poland. Returning in 1935, he saw that the die was cast and, on Einstein's suggestion, he accepted a fellowship from Princeton in 1936.

Infeld's life in the new world began auspiciously. His collaboration with Einstein on the popular *Evolution of Physics* paved the way for his invitation from J. L. Synge to come to Toronto in 1938. All this is recorded in *Quest* with much colour and detail. After describing his hopes for his new life in Canada he writes:

But will I be able to destroy the restlessness which up to now has grown from the years of my childhood? Perhaps I will miss the atmosphere of fight and struggle which I have breathed for so many years. Have I really crossed all the bridges leading to the outside world from the island on which I was born? Perhaps I will be forced to retreat and to start my wanderings again if darkness and hate spread over the world.

Passively to await the future means to approve of the world of today and to share the responsibility for its fate. Where is my place in the world?

---

This obituary article is reprinted from the Proceedings of the Royal Society of Canada with the kind permission of the Honorary Editor, Dean A. G. McKay, McMaster University and the author Professor G. de B. Robinson.

Seen in the light of future events this seems like a prophecy. He could not remain passive enjoying a quiet academic life with his new wife Helen amongst the tensions of 1939–45. He did what he could to fight Naziism while continuing to instruct and supervise an increasing number of brilliant graduate students. He was a stimulating lecturer and his enthusiasm was communicated to his students. After the war his wife, a graduate from Cornell in mathematics, lectured to engineers while bringing up their two children Eric and Joan. They were busy times in the Infeld family, and Leopold's success did not pass unnoticed in the outside world. In 1949 he was offered a visiting professorship at Princeton for the second half of the academic year. It was not possible to arrange this, and the disappointment contributed to a growing feeling of restlessness in the University, encouraged by the strenuous efforts of the Polish Ambassador to attract him back to Poland.

Leopold Infeld's last year in Toronto was full of frustration for him and his friends. The conflicting pressures of his loyalty to his adopted country and the recognition offered by his native land made him hypersensitive to criticism of any kind. This was a time of tension in American universities produced by the cold war and the activities of Senator McCarthy, and the Canadian press and some politicians could not resist the temptation to comment on his return to Poland for a visit in the summer of 1949 and again in the spring of 1950. Infeld was fundamentally a mathematician, proud of his struggle against adversity in many forms, and we who knew him considered his involvement in the politics of the day unfortunate but inevitable and the published attacks on him without foundation.

Infeld returned to Warsaw in 1950 as a member of the Praesidium of the newly formed Polish Academy and Head of the Institute of Theoretical Physics as well as Director of the same Institute in the University. He who had been ignored before the war was now accorded the highest honours. The years 1950–68 were full of scientific activity as evidenced by the publication of more than forty papers and his book with J. Plebanski *Motion and Relativity* in 1960. His involvement in his new life in Warsaw precluded any interest in maintaining his Canadian citizenship. This was not surprising, but the withdrawal of the citizenship of his two children, born in Toronto, came as a cruel blow. It is hoped that this may to some extent be ameliorated for his family by the recent assurance from the Secretary of State that citizenship would be restored to Eric and Joan should they wish to take up residence in Canada.

Leopold Infeld died in Warsaw on January 15, 1968. He was elected a Fellow of the Royal Society of Canada in 1947. During his varied life he struggled against the evils of our day. Together with other scientists he signed the Einstein–Russell appeal that gave birth to the Pugwash Movement for peace and against the armament race. All these problems remain with us today, and are perhaps more acute than ever. In his own terms, he reached a solution. May our generation be equally successful!

G. DE B. ROBINSON

LEOPOLD INFELD



LEOPOLD INFELD