

Preface

This book introduces the reader to the life of a scientist and man of action, Émile Borel, well known in mathematical circles but little known by the public at large.

Borel was a member of the great French mathematical school of the beginning of the twentieth century, and an active participant in the remarkable scientific adventure of those pioneers of genius that revolutionised modern physics. But amid the profound upheavals that fell upon the continent, he also showed other talents: his energy and capacity to act decisively added a new, social and political dimension to his life.

Borel's theoretical and applied scientific works, so vast in number and scope, remain a permanent reference. However, apart from the short book *La vie et l'œuvre d'Émile Borel* written in 1965 by his former student Maurice Fréchet, little appears to have been written before the 1999 Colloque Émile Borel in Saint-Affrique to restore the memory of the man, his family life, his career, and his numerous and varied activities. Since then, a growing number of historians of mathematics, both in France and further afield, have manifested a real interest in his works: Hélène Gispert, Marie-France Bru, Bernard Bru, Roger Laurent, Gustave Choquet, André Warusfel, Laurent Mazliak, Jean-Michel Kantor, Jean-Baptiste Hiriart-Urruty, Henri Caussin, Jean-Michel Guieu, Alexandre Klein, Jean-Paul Pier, Loren Graham, among others.

Echoing the title of this book and underlying a renewed interest in Borel's life and works, the study meeting "Borel: savant et politique" was held on November 17–18, 2021 at the Centre Alexandre-Koyré,

a research institute in the history of science and techniques located in a suburb of Paris.

His wife, Marguerite (née Appell), a writer known by her pen name Camille Marbo, lived a dynamic and passionate existence at his side, but confessed to always having refused to write about the life of her husband of fifty years, as she writes in her last book *À travers deux siècles : souvenirs et rencontres (1883–1967)*:

Of such a complex man, what is to be said? One is simply struck by his extraordinary intelligence, his powerful will, his instinctive and rare kindness.

During a visit to the Princeton University Library in 1984, the author discovered on its shelves all the books written by Borel – in stark contrast with the handful of copies of his works held in the French National Library’s collection, in Paris. This prompted him to embark on a journey of historical research to restore the memory of his illustrious compatriot.

Chance, a concept central to Borel’s work on probability, brought together (virtually) author and translator, during the long months of a global pandemic. The result of their collaboration is this English version of the author’s *Émile Borel, 1871–1956: l’espace et le temps d’une vie sur deux siècles*, adapted for an international audience.

The reader will find a chronological analysis of Borel’s “space in time”, with a focus on the most significant moments and the principal events in his rich life, across two centuries and two wars and against the backdrop of a complex contemporary history. As for his mathematical works, important as they are, they are only briefly discussed in the context of his scientific career.

This book, which is also our way of marking the 150th anniversary of the birth of the great mathematician and statesman, would not have seen the light without the vision and enthusiasm of Apostolos Damialis, editorial director at European Mathematical Society Press, to whom we address a heartfelt “thank you”.

Écully and Sherbrooke

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