19th February 1907. L. E. J. Brouwer discusses his Ph.D. thesis entitled “Over de Grondslagen der Wiskunde”. 183 pages in which the talented young student attempts to humanise mathematics: the mother of the sciences, Brouwer tells us, is not a set of objects and symbols distant and remote from us. Not at all. Mathematics is just the product of the human mind. At the time, these ideas were revolutionary. And the revolution which ensued came to be known as Intuitionism. Nowadays, one hundred years afterwards, Intuitionism represents one of the principal foundations of mathematics proposed in the twentieth century. Intuitionistic logic is perhaps still the most pertinent alternative to classical logic, used even by theoretical computer science. In short, not bad for a Ph.D. thesis! A thesis that, for its centenary, M. van Atten, P. Boldini, M. Bourdeau, G. Heinzmann have decided to commemorate, first with a meeting that took place at Cerisy from 5 to 12 June 2007, and then with a collection of the presentations made during the meeting: the book “One Hundred Years of Intuitionism (1907-2007)”.

The book has the simple structure of a tree: the first part, the roots, is dedicated to Brouwer himself, the founding father of Intuitionism; the second part, the trunk, is dedicated to those who influenced, developed and dialogued with Brouwer and his theories; the third part, the branches, is dedicated to the most recent applications and developments of Intuitionism. Less metaphorically the book is composed of three parts:

Brouwer and Brouwerian Intuitionism. We can split this first part of the book in two sections. One section, with articles by D. van Dalen, C. Posy, C. Mac Carthy, J. Dubucs, G. Sundholm and M. Van Atten, contains clarifications and analyses of several different points of Brouwer’s thought – from his conception of Infinity to his proof of the Bar’s Theorem. By contrast, in the second section, Brouwer is compared with other Titans of philosophy: R. Tieszen attempts to conceptually intersect him with Husserl; M. Marion historically interfaces him with Wittgenstein; M. Ardeshr interprets him with the work of S. hrawardi and Abu al-Barakat; H. Barendregt creates a link between Brouwer and mysticism.

Kindred Spirits. In this second part the focus moves away from Brouwer himself and concentrates on Intuitionism. Which thinkers can be associated to this conception of mathematics? This section contains discussions of the relationships between several important mathematicians and intuitionistic thought. A. Michel, G. Heinzmann and P. Nabonnand, and M. Guillaume deal with Poincaré, Borel, Lebesgue and König who have, in different terms and ways, anticipated some of Brouwer’s ideas. J. Fichot and P. Schroeder-Heister are, for their part, interested in Gödel and Lorenzen, respectively, and in their contributions to Intuitionism.

Mathematical Perspectives. The final part of the book presents a wide list of heterogeneous papers, bearing witness to the importance of Intuitionism for current thinking about mathematics, logic, and philosophy. These papers range from linear logic and mathematics presented by M. Okada to the role of dynamism in logic proposed by G. Sambin. Per Martin-Löf presents, in a “fake” question, the solution to the controversy between Hilbert and Brouwer. A. Setzer, D. Bridges, W. Veldman deal
with more technical problems: Martin-Löf type theory, Brouwer’s Fan theorem and Brouwer’s thesis on Bars, respectively.

Our way is ended. Our last curiosity is contented with the full Brouwer bibliography of D. van Dalen. It only remains for us to join the conclusions drawn by Sir M. Dummett: we must thank Brouwer and the editors (as well as organizers of the conference at Cerisy) of this book that have widely explained and sum up these first one hundred years of Intuitionism. That is to say, 1907-2007.

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