
Preface

If one takes the year of Brouwer's dissertation, 1907, as the birth year of intuitionism, it has now reached the age of 100. It is in good shape, but has known a turbulent past. After the First World War, the conflict between Brouwer and Hilbert inflamed the mathematical and philosophical communities alike. This 'Grundlagenstreit' came to a violent end in the Annalen-affair. For some fifteen years, Brouwer kept silent; when he started publishing again, after the Second World War, his work reached but a handful of specialists. The future looked bleak. Then a number of developments began that again drew attention to intuitionism and constructivism in general. We mention some examples. In 1958, Gödel devised an interpretation of intuitionistic arithmetic as the required extension of the finitary standpoint to achieve Hilbert's aim, a consistency proof of classical arithmetic. With the posthumous publication of Wittgenstein's *Remarks on the Foundations of Mathematics* in 1956, also Brouwer's ideas again sparked a lively interest among philosophers. Bishop presented and developed constructive mathematics in his *Foundations of Constructive Analysis* from 1967. In 1969, the Curry-Howard isomorphism was introduced, and in 1972, Martin-Löf presented his intuitionistic type theory. Dummett, in his paper 'The philosophical basis of intuitionistic logic' from 1973, argued that the most convincing reasons to reject the principles of classical logic and to adopt those proposed by Brouwer instead, are to be found in a philosophy of language of a Wittgensteinian kind. In combination with the idea that metaphysics has a logical basis, it is intuitionism that led Dummett to his arguments in favour of anti-realism. In the mid-1980s, phenomenological interest in intuitionism saw a revival, which presents an alternative to Wittgensteinian interpretations.

The aim of the meeting *1907–2007: One Hundred Years of Intuitionism*, held in Cerisy, France, from June 5–12, 2007, was twofold. One objective was to complete and review the already rich historical account of intuitionism (in particular in relation to other varieties of constructivism, such as the pre-intuitionism of Poincaré and Borel). The other goal was to provide a forum for continuing philosophical and technical work on intuitionism. As time was

limited while the subject is not, not as many topics could be covered as one would have hoped. We regret in particular that we have not been able to give due attention to the Russian contributions to intuitionism starting with Kolmogorov, nor to the school of intuitionistic non-standard analysis in Strasbourg.

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