

- **Hermann Weyll, 1927.** Comments on Hilbert's second lecture on the foundations of mathematics. Response to Hilbert's 1927 lecture. Weyll defends Poincaré who had a problem (circularity in the justification) with the with the metamathematical use of mathematical induction. Most important point: in constructive mathematics, the rule of generalization and of induction blend.
- **Paul Bernays, 1927.** Appendix to Hilbert's lecture "The foundations of mathematics". This paper by Bernays presents a proof of Ackermann (second version) of the consistency of a certain system. The proof idea comes from Hilbert but is here formally worked out in a more general setting. The setting is not so general that it comprises all of analysis.
- **Luitzen Egbertus Jan Brouwer, 1927a.** Intuitionistic reflections on formalism. This text is the first paragraph of a longer paper by Brouwer. He comes back to an earlier statement of his that dialogue between logicism (?) and intuitionism is excluded. In this paper his list four point on which formalism and intuitionism could enter a dialogue. The relevant (subjective!) points concern the relation between finite metamathematics and some parts of intuitionism.
- **Wilhelm Ackermann, 1928.** On Hilbert's constructoin of the real numbers/ I cannot really match the title with the content of the introduction. Probably Hilbert uses primitive recursive functions in constructing his real numbers. Ackermann presents a study of a generalized version of the recursion schema by allowing functions of lower type to occur in the recursing definitions. A function is introduced which is shown to be larger than every primitive recursive function. This function can be represented by a type-1 recursion simultaious on two variables.
- **Thoralf Skolem, 1928.** On mathematical logic. Reduction of first order predicate logic to propositional logic by means of Skolemization. Non-satisfiability becomes decidable by means of some sort of Cut-elimantion. This also provides consistency proofs with a finitistic flavour. The paper also contains a rudimentary version of the completeness theorem in the sense of Skolem + Herbrand = Gödel. Although predicate calculus is undecidable, for some specific class of formulas the 'entscheidungsproblem' is solvable. In the end of the paper a proof of Langford's theorem on the decidability of the theory of open dense order is given.
- **Jacques Herbrand, 1930.** Investigations in proof theory: The properties of true propositions. This text is a chapter from Herbrand's thesis and contains a self-contained (flawed) presentation of Herbrand's theorem. One should read true as provable. In a very restricted sense Gentzen's sequent calculus can be seen as a generalization of this result although it is more natural to take the oposite viewpoint.

- **Kurt Gödel, 1930.** The completeness of the axioms of the functional calculus of logic. This is a rewritten part of his dissertation in which the completeness of a system reminiscent to Whitehead and Russell's is proved. Whitehead and Russell themselves had shown very little interest in semantical matters. Some very interesting notes are included on the arithmetization of the completeness theorem by people like Bernays, Wang and Kreisel.
- **Kurt Gödel, 1931.** Some metamathematical results on completeness and consistency, On formally undecidable propositions of *Principia mathematica* and related systems 1, *and* on completeness and consistency. No comments.
- **Jacques Herbrand, 1931b** On the consistency of arithmetic. In this paper the consistency for a very small part of PA is shown. Herbrand was killed by a fall on the day his paper was received at the journal. Some allusions to Gödel's result are included. Of course the consistency (finitistically) is shown not within the system itself.