

JAVIER LEGRIS, *On Two Conceptions of Formality in 19th Century Symbolic Logic*.
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This paper deals with two conceptions of formality underlying 19th Century symbolic logic. The nature of formal objects and, consequently, of formal theories was understood in various ways. As a consequence, the very formal nature of logic received different interpretations. In a paper from 1885 [1], Frege argued for a particular conception of formal theories in Arithmetic: A theory for arithmetic is formal if every law of the theory is logically derived only from logical notions via definitions. He connected this characterization explicitly with his idea of universality: The concept of number is *universally* applicable. It can be applied to entities of every kind. Frege opposed his conception of formal theory to the idea of symbolic systems whose elements had no meaning at all. Ernst Schröder with his program of an abstract algebra had just advocated before for the latter idea of formal theory: Formal algebra could be applied to different domains, and the operations received diverse interpretations depending on the domain considered (see [2]). This *general applicability* of formal algebra suggested a new idea of *universality*: Formal algebra is universal in the sense that it can be applied to every domain. The two cases of Frege and Schröder show that two different conceptions of formal theories correspond to different conceptions of universality. So, Formalism and universality were strongly related notions at the end of the 19th Century.

[1] G. Frege, *Über formale Theorien der Arithmetik*. ***Sitzungsberichte der Jeaneischen Gesellschaft für Medizin und Naturwissenschaft*** vol. 12 (1885), pp. 94-104.

[2] E. Schröder, ***Lehrbuch der Arithmetik und Algebra***. Leipzig, B. G. Teubner, 1873.