

Geometrical Logic versus Logical Geometry: the Case of Univalent Foundations

By Logical Geometry I mean a geometrical theory built on explicit logical grounds such as the theory of Hilbert's epoch-making *Grundlagen der Geometrie* first published in 1899 and its multiple heirs. The term "Geometric Logic" is presently used in a technical sense for referring to a class of geometrically motivated logical calculi. I use here the term "Geometrical Logic" more broadly for referring to any system and theory of Logic where Geometry, broadly conceived, is used as a principal motivation or as a foundation. I shall briefly review the history of complicated relationships between Logic and Geometry, touch upon the widely discussed issue of bounds of Logic in this context, and finally focus on the Univalent Foundations as a current episode of this continuing story.