An Okapi Hypothesis: non-Euclidean geometry and the professional expert in American mathematics Jemma Lorenat

Open Court began publishing The Monist in 1890 as a journal "devoted to the philosophy of science" and regularly included mathematical contributions. The audience was understood to be "cultured people who have not a technical mathematical training" but nevertheless "have a mathematical penchant." With these constraints, the mathematical content varied from recreations to logical foundations, but everyone had something to say about so-called modern geometry. While debates around non-Euclidean geometry ranged from psychology to semantics, the focus here will be on the contested value of mathematical expertise in legitimating what should be considered as mathematics. While some mathematicians urged The Monist to uphold disciplinary standards of geometrical reasoning, other authors opposed to non-Euclidean geometry aligned their reasoning with practical applications, universal know-how, and non-hierarchical democracy. As one contributor inquired "how is the professional expert better fitted to see more lucidly in dealing with the elements of geometry than any other person of good geometric faculty?"