

The Two Collective Memories of Mathematics

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Abstract: From the *Renaissance Man* promoting geometry in the quarrel of the Ancients and the Moderns to Enlightenment authors regarding mathematics as a way to approach perfect and ultimate reason, mathematical research has long been utilized to measure societal success. In its rich history, mathematics has been considered a tool to foster progress and, since the dawn of early modernity, steadily overtaken theology as the generally accepted pinnacle of knowledge. In fact, the promise that the complexities of the universe can be tamed by mastering the powers of mathematics has inspired generations and fueled their curiosity. Yet how can we fathom the impact of the past on contemporary mathematicians? Through the lens of mnemohistory, we seek to shed new light on this problem, providing historians as well as social scientists with a new instrument to grasp the inner workings of the mathematical community.

Concretely, we argue that said community is shaped by the existence and gradual formation of two distinct collective memories, an internal and an external one. Influenced by the Platonic tradition, the internal memory enshrines all the incrementally built layers of knowledge that are essential to the discipline. It is reflected in the centrality of abstraction and proof, and complemented by an external memory which, in turn, centers around different modes of representation and remembrance. In our talk we will outline some noteworthy interactions between both memories, and illustrate their role with regards to the teaching of ethics to mathematicians by contextualizing recent efforts to mathematize fairness as a social and political problem.

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