

# Hacking's critique against the contemporary philosophy of mathematics (including structuralism)

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In his recent book, Ian Hacking raises the question *Why Is There Philosophy of Mathematics At All?* (2014) and gives a clear answer: the experience of proof and the richness of applications of mathematics. Proof and application are the two reasons why so many thinkers from ancient times have been invited to philosophical thinking about mathematics.

This answer is also intended to be a kind of critique against the contemporary philosophers of mathematics, especially those who belong to the analytic tradition. According to him, the platonism/nominalism debate, the central issue of the field these past thirty years, does not have much to do with the original interest of philosophy of mathematics.

The aim of this talk is to consider how productive his critique can be. It indeed appears that philosophical thought of the type he favors and that of analytic style are simply different enterprises. In other words, they look just talking past each other. The present-day philosophy of mathematics is conducted with its own origin and interest anyway. Then, why or how much do analytic philosophers have to care about Hacking's complaints?

I will first give a look at Hacking's discussion on mathematician's attitudes toward Platonism (or non-Platonism), which are closely related to the *raison d'être* of the philosophy of mathematics he argues for, but of rather different nature from philosophers' agenda. Then it will be made clear how he diagnoses as misguided the contemporary debate, in particular, its most lively branch, i.e. structuralism. Based on this, I will examine whether (and how) a useful dialogue is possible between Hacking and structuralist.