

Defining mathematical problems with Wittgenstein and Feferman

Matteo de Ceglie

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Defining the right mathematical problem is the fundamental first step in mathematical practice. Wittgenstein remarks in his Nachlass that “[...] the correct formulation of the question is already the answer.” (Wittgenstein Nachlass Ms-305,1[4]). Wittgenstein starting position was that mathematical open problems were not genuine propositions, and have no proper sense (see 208, 50r of Wittgenstein (2012)). This position seems akin to Feferman (2014)), in which the interest of finding a solution to CH is challenged on the grounds that it is not a correctly formulated mathematical problem, and it is instead "senseless". However, Wittgenstein position later evolved towards a more balanced approach, in which the propositions forming a mathematical open problem are not completely devoid of meaning, and can in some sense still be understood. The reason why Wittgenstein can claim that there is some sort of understanding stems from the fact that mathematicians usually have (justified?) beliefs about open problems that tend to guide their practice (see, for example, Wittgenstein (2009) and Säätelä (2011)). In this talk I explore the similarities and differences between Wittgenstein’s and Feferman’s accounts of mathematical open problems. My overall goal in this talk is to show that (surprisingly) Feferman’s account doesn’t account for current set-theoretic practice as much as Wittgenstein’s (later) one.

References

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