

PHILOSOPHY OF MATHEMATICS AFTER
WITTGENSTEIN

Wittgenstein once said that his aim was to make philosophical problems “*completely* disappear,” a remark that has baffled philosophers ever since. In this book, Sorin Bangu reconstructs and defends Wittgenstein’s radical idea, and applies it to the *traditional* problems in philosophy of mathematics, setting out and explaining the subtleties of what is considered the most difficult area of Wittgenstein’s views. He also considers how, according to the later Wittgenstein, we should think of the relation between philosophy and mathematics, articulating Wittgenstein’s ‘normativist’ dissolution strategy and explaining his ‘therapeutic’ vision of the relation between the two disciplines. His book shows how these controversial views sit within the context of current debates in the philosophy of mathematics, and mounts a detailed and convincing defense of the eliminative claim that philosophy of mathematics after Wittgenstein is devoid of its traditional problems.

SORIN BANGU is Professor of Philosophy at the University of Bergen. He is the author of *The Applicability of Mathematics in Science: Indispensability and Ontology* (2012), and editor of *Naturalizing Logico-Mathematical Knowledge: Approaches from Philosophy, Psychology and Cognitive Science* (2018).

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For Laura

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*The true path is along a rope,
not a rope suspended way up in the air, but rather only just over the ground.
It seems more like a tripwire than a tightrope.*
Franz Kafka, *The Zürau Aphorisms*

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Abbreviations

- | | |
|-----------------|---|
| AWL | <i>Wittgenstein's Lectures, Cambridge 1932–35: From the Notes of Alice Ambrose and Margaret Macdonald</i> , 1979. Edited by A. Ambrose. Oxford: Basil Blackwell. |
| BB | <i>The Blue and Brown Books</i> , 1958. Oxford: Blackwell. |
| BT | <i>The Big Typescript: TS 213</i> , German English Scholars' Edition, 2005. Translated by C. G. Luckhardt and M. E. Aue. Oxford: Wiley-Blackwell. |
| CV | <i>Culture and Value</i> , 1980. Edited by G. H. von Wright, translated by P. Winch. Oxford: Blackwell. |
| LC | <i>Lectures and Conversations on Aesthetics, Psychology and Religious Belief</i> , 1966. Edited by C. Barrett. Oxford: Blackwell. |
| LFM | <i>Wittgenstein's Lectures on the Foundations of Mathematics</i> , 1976. Edited by C. Diamond. Ithaca, NY: Cornell University Press. |
| <i>Nachlass</i> | Interactive Dynamic Presentation (IDP) of Ludwig Wittgenstein's Philosophical Nachlass, 2016. Linked from http://wittgensteinonline.no . Edited by the Wittgenstein Archives at the University of Bergen under the direction of A. Pichler. Bergen: Wittgenstein Archives at the University of Bergen. |
| OC | <i>On Certainty</i> , 1969. Edited by G. E. M. Anscombe and G. H. von Wright. Translated by G. E. M. Anscombe and D. Paul. Oxford: Blackwell. |
| PG | <i>Philosophical Grammar</i> , 1974. Edited by R. Rhees, translated by A. Kenny. Oxford: Blackwell. |
| PI | <i>Philosophical Investigations</i> , 2009, 4th edn. Edited and translated by P. M. S. Hacker and J. Schulte. Oxford: Wiley-Blackwell (1st edn., 1953). |

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PR	<i>Philosophical Remarks</i> , 1964. Edited by R. Rhees, translated by R. Hargreaves and R. White. Oxford: Blackwell.
RFM	<i>Remarks on the Foundations of Mathematics</i> , 1978. Edited by G. H. von Wright, R. Rhees, and G. E. M. Anscombe, translated by G. E. M. Anscombe. Oxford: Blackwell. Revised edition (1st edn., 1956).
TLP	<i>Tractatus Logico-Philosophicus</i> , 1961. Translated by D. F. Pears and B. F. McGuinness. New York: Humanities Press.
WVC	<i>Wittgenstein and the Vienna Circle</i> , 1979. Conversations recorded by F. Waismann. Oxford: Basil Blackwell.
Z	<i>Zettel</i> , 1967. Edited by G. E. M. Anscombe and G. H. von Wright, translated by G. E. M. Anscombe. Oxford: Blackwell.

Citation of Wittgenstein's Works

I quote as follows:

- from RFM by indicating the part of the collection, followed by the numbered remark in that part (e.g., RFM II-22)
- from LFM by indicating the page number (e.g., LFM 15)
- from PI, TLP, PR, OC, Z by giving the number of the remark (e.g., PI §133, OC §655)
- from PG by providing the number of the remark and the page number (e.g., PG §32, p. 68) or, when the passage is not numbered, only the page number (e.g., PG, p. 381)
- from BB, BT, WVC, LC by giving the page number (e.g., LC 27)
- from CV by page number in the English translation (e.g., CV 43^e)
- from AWL by page number (e.g., AWL 215)

When the words or sentences I cite are not translated and included in the published works, I will refer to their location in the *Nachlass* by giving their 'Ms' or 'Ts' number, and the page number; I sometimes provide their German version. I will often compare this primary source with the existing English translations; when not satisfied with these, I will offer my own and indicate this.