

IHPST

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## **Expressive Means vs Logical Foundations in Philosophy of Mathematics**

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Case studies bring out philosophically striking contributions of expressive strategies in mathematics: shifting expressive means while treating a given topic mathematically.

This is also a key strategy in Logical Foundations of Mathematics: we re-cast (“formalize”) mathematics so as best to focus on foundational questions, subject only to “can I get this in my system?”.

Such formalization, however, has tended to render invisible important roles of expressive strategies distinctive of mathematical areas outside Logic.

This, and related habits of 20th-century Anglo-American thought, threaten to blind the *Philosophy* of Mathematics to key aspects of mathematical thought beyond provability-in-principle.