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Epistemological and cognitivistic challenges of mathematical platonizm

Mathematical platonism is a recognized stance in the philosophy of mathematics that admits of the objective existence of mathematical entities. Inasmuch as it leads to a "richer mathematics" (i.e., the possibility of non-constructive proofs), it poses serious epistemological problems in regards to the nature of the cognitive power that enables contact with mathematical entities. Many supporters of mathematical Platonism, such as Kurt Gödel and Roger Penrose, maintain that a direct non-discursive power called *intuition* is responsible for this contact. From the epistemological point of view, however, the precise nature of intuition remains unknown and this notion operates in a variety of imprecise and approximate meanings. This article presents the assessment of intuition from the point of view of the mind-body problem that is presently vividly discussed in the philosophy of mind. Three solutions are proposed: (1) to affirm the existence of intuition in the context of phenomenology and hermeneutics, (2) to reject intuition with the claim that sense perceptions are sufficient to study mathematical objects and (3) to approach intuition from the point of view of neuroscience. In a conclusion, it can be stated that mathematical platonism is not an *a priori* declaration but can be accommodated within the existing standpoints in epistemology.