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ABSTRACT

In this paper I offer an interpretation of the role of intuition in mathematical cognition in Kant's philosophy of mathematics based on two novel and very recent interpretations of Kant's epistemology. I argue, with Lucy Allais, that the primary role of intuition in cognition is in presenting objects and I argue, with Karl Schafer, that the contribution of these intuitions is in providing the concepts involved in the cognition with real possibility and determinate content. I argue that the primary role of intuition in mathematical cognition is in defining mathematical concepts. The essential contribution of intuition here is in establishing the real possibility of these concepts – that is, that there are objects that fall under these concepts. A secondary, non-essential, contribution is in displaying marks that belong necessarily to these concepts, but are not contained within them, that is, providing the concepts with determinate content. This secondary role is in presenting marks that are necessarily and universally predicable to the concepts, resulting in judgements that are thereby also verified. In the course of doing this, I also consider the relationship between the intuitivity and the syntheticity of mathematical judgements and contrast my position with both evidentialist and objectivist interpretations of the role of intuition in mathematical cognition.

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