

The importance of three dots in mathematics

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We are all familiar with the use of the three dots (...) in mathematics (as we are in ordinary language). In the very same way that Menger (1956) showed the delicate and complicated use of variables in mathematics, it can be shown that three dots have multiple uses and meanings. Against the argument that, in order to avoid such difficulties, the three dots can always be eliminated, I will show how a formalization can be given (on the propositional level) of the (use of) three dots. In terms of mathematics education, this analysis of ‘...’ shows that it is anything but a trivial task for pupils to grasp its diverse meanings and uses. In terms of the philosophy of mathematics, this presentation can be seen as an exercise in the study of mathematical practices (see Van Bendegem (2018) for an overview, but see also Ferreiros (2015)).

References

FERREIROS, José (2015): *Mathematical Knowledge and the Interplay of Practices*.

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