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Being in research and doing research on history and mathematics education in a Bakhtinian dialogical perspective.

Abstract

At the beginning of the 20th century, Mikhail Bakhtin developed a critical mode of literary analysis based on the dialogic principle. Going far beyond literary criticism, to the point of disrupting the foundations of the human sciences, this dialogical principle emphasizes that each utterance of a discourse is necessarily “in dialogue” in a given sphere of communication. That said, this dialogue is not simply heard as a sequence of linguistic and grammatical utterances. These aspects would be only the superficial manifestation of dialogism that “could be universal and cross all human discourse [...] in a general way, everything that has a meaning and a value” (Bakhtin, 1929/1977, p. 77). For Bakhtin, these utterances are following one another according to laws of appreciative convergence in a close dependence on historical conditions. In a way, he gave the description of an indissoluble dialectical interaction between psychism and what could be called ideology.

Bakhtin’s philosophy has often been summoned in human sciences. For instance, it has inspired many researchers to establish or develop theoretical foundations in mathematics education (e.g. Barwell 2016, Radford 2011, Sfard 2008), but also, closer to us, in history and mathematics education (e.g. Barbin 2011, Guillemette 2017, Radford, Furinghetti & Katz 2007).

In this paper, we will try to show how Bakhtin’s thought can support reflection, not on history, mathematics or mathematics education *per se*, as it has often been discussed, but on our ways of being in research and doing research within or field of research. Through our reading of Bakhtin’s works, we will propose new ways of thinking about the role and position of the researcher and the participants, but also that of history of mathematics, in such a context of research. This will include ways to appreciate and account for the dialogical interaction between researchers, participants and the history of mathematics (understood as a third party interlocutor) that this perspective suggests. To support our point, and to reach more “applied” or “practical” issues, some examples of interaction between researchers and participants from our own research concerning mathematics teachers’ education will be discussed within this dialogical perspective.

References:

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