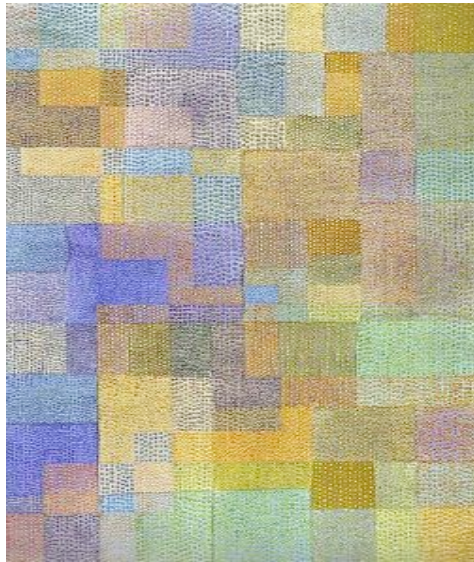


Mathematics Education Research Unit
Unité de Recherche Éducationnelle en Mathématiques
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History of Mathematics, Otherness and Empathy



Professor David Guillemette
February 17th 2015 4:00 -6:00 pm LMX 477

For years, many researchers and thinkers are questioning the potential of the history of mathematics in the teaching and learning of mathematics. During my doctoral research, I leaned on a recurring concept in literature : *the reorientation (dépaysement épistémologique)*. In the context of teacher's trainee, this concept emphasizes that the history of mathematics shakes familiar perspectives on the discipline by highlighting its historical-cultural dimension and by bringing a critical look at the social and cultural aspect of mathematics. Supported by several conceptual elements from the theory of objectification, my study's objective was to describe the *dépaysement épistémologique* experienced by future mathematics teachers through activities concerning history of mathematics, especially the reading of historical texts. Six students were recruited and participated in several reading activities. A phenomenological approach was adopted to show the meaning of the experience of the learners. In addition, the dialogic perspective carried by the theory of objectification has oriented few elements of methods, so that the description provided by the thesis takes the form of a polyphonic narrative. This particular kind of description has provided several looks and experiences, which, set in tension, are carriers of fruitful discourses on the experience of the *dépaysement épistémologique*. This polyphonic narrative suggests that the *dépaysement épistémologique* involved, for the students, the deployment of an empathy for the author and that this empathy could also be deployed in the mathematics classroom. These elements suggest that the readings of historical texts, through the *dépaysement épistémologique* its create, support a non-violent mathematics education.