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## ARCHAEO-GENEALOGICAL APPROACH FOR RESEARCH IN THE HISTORY OF MATHEMATICS EDUCATION

**Summary:** This study presents a Foucauldian approach to research in the history of mathematics education, emphasizing the concepts of archaeology and genealogy of knowledge. By focusing on provenance and emergence, it analyzes how discursive objects and educational practices take shape through power and knowledge relations. Drawing on studies of drawing and financial education, it highlights the discontinuities and contingencies that mark the formation of school knowledge. This perspective offers innovative methodological tools for historical writing and contributes to critical reflections on mathematics education, teaching, and teacher training.

**Keywords:** power, discourse, biopower, subject, knowledge

Studies in the History of Mathematics Education conducted by our research group explore the teachings of Michel Foucault, particularly his approach to historical practice. Foucault introduced the ‘archaeology of knowledge’, which examines the social and historical conditions shaping knowledge production, and genealogy, which traces the origins and development of practices and concepts. Rather than presenting a linear, progressive history, he emphasizes studying dispersions across fields, forming relations that allow knowledge to emerge. Our focus is on provenance and emergence. Provenance investigates the conditions and rules behind knowledge in different periods, going beyond content. Emergence analyzes forces that transition knowledge from backstage to center stage, highlighting events, power relations, and modes of objectification and subjectification. The aim is to study discursive objects’ history, emphasizing discontinuities and singularities, setting this approach apart from hermeneutic or interpretative methods.

In this context, our study on ‘Methodology of Research in the History of Mathematics Education’, highlights a theoretical and methodological approach to historical writing. For example, Rosilene Beatriz Machado in 2016<sup>1</sup> examined the historical content of drawing, analyzing practices in cartography, arts, architecture, and engineering, asking how social drawing practices became school content. Jéssica Ignácio de Souza, in 2021<sup>2</sup>, studied discursive practices that shaped financial education in school mathematics, showing its evolution as part of control mechanisms forming a *homo economicus* in the 20th c. Both studies critically analyze power and knowledge relations, emphasizing the complexity and contingency of historical practices.

This approach constitutes a valuable contribution to research in the history of mathematics education for its innovative, critical perspective and focus on the origins of knowledge, encouraging researchers to adopt new methods, especially from a Foucauldian view, when studying educational institutions, school knowledge, teaching, and teacher training.

### Bibliography

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<sup>1</sup> R.B. Machado, *Cartografia, Saber, Poder: Da emergência do desenho como disciplina escolar*, PhD Thesis, Federal University of Santa Catarina, Florianópolis 2016.

<sup>2</sup> J.I. de Souza, *Educação Financeira: práticas discursivas na Educação Matemática*, PhD Thesis, Federal University of Santa Catarina, Florianópolis 2021.

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