

# **SOCIO-POLITICAL ISSUES IN THE CONTEXT OF DIFFERENT CONCEPTUALIZATIONS OF SUBJECTS**

Reinhard Hochmuth,

Leuphana University Lüneberg & Centre for Higher Education in Mathematics

**Abstract:** *The explication of a socio-political dimension within issues related to mathematics education in school, university and research is crucial for a full understanding of subjective experiences by students, teachers and researchers. Different conceptualizations of subjectivity within society by Radford & Roth, Brown and Holzkamp are discussed with respect to their possibilities and limits regarding socio-political aspects.*

**Keywords:** *socio-political dimension, cultural-historical approach, psychoanalytical categories*

## **BACKGROUND**

In a series of papers (Pais & Valero, 2011, 2012) claim that the political dimension is often neglected in the research on mathematics education. This is not only true for the so-called (quantitative and qualitative) “mainstream” in educational research but also for “critical approaches” following the paradigm of the cultural-historical school for example. This situation in research corresponds to the observation that socio-political issues typically do not play an important role in subjects’ reflections on individual experiences in the contexts of studying, teaching or researching, either. In (Pais & Valero, 2011), the authors argue that the disavowing of a political dimension “is precisely one of the strongest limitations for bringing equity and quality together.”

The poster is rooted in the conviction that the socio-political dimension does not only come up in the structure of schools and universities as “credit system”, “production of failure” or as the crucial ideological state apparatus in the reproduction of capitalism (Althusser, 2001). Beyond that, a socio-politically informed reading of school and university mathematics requires an adequate conceptualization of “subjects”. Categories are needed that allow in particular to analyze one’s own experience in the stream of life within a capitalistic society, its intertwined cognitive and emotional aspects like feelings of anxiety, anger or vague indispositions. The categories should enable subjects to relate themselves to the societal context such that its contradictions can be reflected, and that restricted actions which remain within a reproduction of those contradictions may potentially be overcome.

## THE POSTER

...compares the following three approaches all of which intend to contribute to an understanding of subjects within educational issues without disavowing the socio-political dimension:

- Emphasizing the cultural-historical approach (Roth & Radford, 2011) worked out a rather detailed and solid theory of learning mathematics in school.<sup>1</sup>
- On the basis of Lacan's theory (Brown, 2008a, 2008b) worked out a conception of subjectivity which potentially allows a broader view on the work of mathematics education research.
- (German) Critical Psychology (Holzkamp-Osterkamp, 1991; Holzkamp, 1991) was both rooted in the cultural-historical approach and applied reinterpretations of Freudian psychoanalytical categories, in particular the concept of defense mechanism.

Essential differences will be illustrated within two contexts: the interpretation of empirical data and the so called "Topaze effect".

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<sup>1</sup> Although Valero and Pais (16) argue that "the theory falls short of bringing an understanding of mathematics education practices within the political, even if that is its original intention", this approach is considered here since it allows a clear separation between general and historic specific societal considerations.

Roth, W.-M., & Radford, L. (2011). *A Cultural-Historical Perspective on Mathematics Teaching and Learning* (Vol. 2). Rotterdam: Sense Publishers.