

## **Whose hell and whose damnation? Reaction to Popkewitz's "Whose heaven and whose redemption?"**

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Tom Popkewitz's paper offers a Foucauldian analysis of school and schooling. Let us go back to Foucault's original exploration of the panopticon – that prison so designed that the eye of surveillance is both hidden and ever present so that inmates will assume themselves to be forever watched and so learn to monitor themselves, to self-regulate. In his paper Popkewitz is showing us how the regulatory practices of the alchemy conspire to generate a panopticon of regulatory practices. Further, the state, teachers, and researchers are all complicit in the production and maintenance of this panopticon as they generate in themselves and children the self-surveilling habits required by 'society' and the state. We are both the oppressors (we are part of the governance of souls) and the oppressed (our souls too are governed).

He is considering mathematics and mathematics education as sites of regulation. He does this by the complex layering of a series of metaphors; there is the dominant metaphor of alchemy, as well as metaphors of fabrication, the governance of the soul, and psychology as a translation tool.

His suggestion is that the alchemy involves both *magic transformations* and *processes that normalise and divide*. In his complex paper we see the affects of curriculum and psychology and the associated practices of assessment. We are told about the ways in which psychology is used to transform mathematics the discipline, into the curriculum. The ways in which the curriculum in turn is then used: to *make children visible and administrable*; to 'fix and stabilise knowledge'; and, in its current, 'reform' incarnation, to create the *active problem solving child*.

This is clearly an important perspective and it powerfully raises questions about:

- the effects of regulation;
- the ways in which maths education includes and excludes, renders visible/invisible, groups and individuals;
- the ways in which maths education validates or 'others' children and teachers and their achievements.

But, with my maths educator hat on it raises a different set of questions. As a maths educator and one who supports students in becoming maths educators, it is not clear how one might move forward with these insights. In allowing myself to be positioned as an oppressor and oppressed I feel myself to be in danger of imminent personal and professional paralysis.

The only way I can see forward is to look for chinks in the argument, to believe that nothing is totalising and to find the space for praxis – to temporarily

put aside the pessimism of the intellect and wheel out the optimism of the spirit, to look for the spaces to wriggle in.

Perhaps, like those 19<sup>th</sup> Century Australian landscape artists, my eyes are so conditioned that I am blind to see my own entrapment.

In what follows I present a series of questions that I take from my reading of the paper. These are but a selection and you may have had other questions raised you would rather explore.

- In pointing out that notions that *no child* is to be *left behind* and *all children will learn* is a myth and that *some children are never brought to the table* – what are we to do? Is there anything we can do? Is it enough, having spotted the enemy, to work continuously to monitor new myths as they are generated and their effects? My sense is that Foucauldians think it is – I'm not sure.
- There is some suggestion that perhaps things cannot be other than they are:  
Perhaps the research of schooling can be no other way as that is what science does – reclassifies and re-orders the experiences of the world. And one might say that whatever children are doing is an important instructional goal and the show should go on. Further, the research is good research as it enables a more effective instructional programme. These might be so but they are built on smoke and mirrors. Pedagogical principles have less to do with mathematics and more to do with administering the inner characteristics of the child.

Popkewitz appears to be angry or disappointed with everyone – part of my difficulty with this paper lies in the fact that he seems intent not only on uncovering and laying bare the workings of the panopticon, but also implicating and blaming maths educators at all levels. Research has demonstrated the powerful affects that individual learning experiences have on the construction of mathematical identities. Like all the rest of us, Popkewitz has been regulated by the experiences of learning maths at school and I want to ask him how bad a time he had with maths?

- What is education for? Why do we bother? Can education be other than a 'project' with aims? If an aim of 'reform' maths is to give children some voice is this 'bad'? and in what ways? Certainly the suggestion here and elsewhere is that this is a middle class project to advantage middle class children - that it marginalises those less fluent in the school's language, the 'less able' ('rural/urban') or the otherwise 'other'. This is a familiar critique of the move from product maths to process maths.
- In focussing on the US 'reform' movement and the 'Cognitively Guided Instruction' (CGI) group it is perhaps unsurprising that psychology appears so alchemical. This perspective/paradigm is contested in the US (as evidenced by the California 'maths wars') and elsewhere. However, the point he makes is well taken – it is hard to escape psychological framings although this is part of what people involved with MES seem to want to do.

And I must admit to a series of confusions that relate to the nature of mathematics as portrayed in the paper. Perhaps these are generated by my

misreading of Popkewitz's paper, or perhaps they are generated by my own marginal position in relation to maths (I have a fine art, not a maths degree). These might be worthy of discussion.

- One of Popkewitz's starting points is that there is there *a* maths discipline to transform. My understanding is that even the nature of mathematics is contested within the discipline – there are multiple understandings of what maths is even amongst mathematicians. How do these struggles within the field play out in education? And within 'the alchemy'? The totalising nature of the argument presented makes this question difficult to ask let alone answer – perhaps there is a need for some reflexivity within discourses we deploy to explore power/knowledge constructions.
- Popkewitz says that: *The teacher is to move the child from their intuitive understandings to the conventional knowledge of mathematics. This move occurs through the alchemy that makes mathematics as the psychological principles of ordering the being of the child.* I might ask: What else might we want a teacher to do? What else could they do? And would these be better or worse? and in what ways?
- Finally, if alchemy turns base metal into gold then turning subjects into the social spaces of schooling as it is being portrayed here might be better thought of as a reverse alchemy.

### **Some questions for further consideration**

- How does this sort of discussion help us to reformulate mathematics?
- Would such a reformulation be possible or desirable?
- Does Popkewitz's notion of *the soul* displace talk of identity and agency? And, if it does, what are the implications of this for his argument?
- Does the problem lie with the maths and maths teaching or elsewhere?
- What actions might be possible or desirable?
- What outcomes would be possible or desirable?
- With knowledge and recognition of the alchemy, how can we avoid personal and professional paralysis?

A final word. This is the text that I read as my reaction at the conference. Its purpose was to provoke discussion. As I said at the beginning, I do believe that the analysis and perspective offered by Tom Popkewitz in his paper are extremely important – the number of questions raised would appear to testify to this.