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The Crippled Mind
Rebuttal of Peters

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332 words of text
(excluding references but including epigraph)

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Formulas are crutches; if we were logical, we wouldn't need them. – Professor Theodor Harder, sociologist and methodologist, University of Bielefeld, ca. 1980

Theo Harder, with characteristic pithiness, captured the tension between humans and their numbers. Once infants realize that the world offers countable things, all hell breaks loose: there are absolute and relative numbers, transformations, derivatives, and eventually imaginaries. It is easy to trip up even the Harders of this world if we make the problem hard enough. This presents a problem for psychological theory and research. How much and what kind of numerate skill may we demand? How much of this skill should be automatized in a

System 1 kind of way, and how much should remain in the domain of painful reflection?

With the rise of technology, we must also ask about the symbiosis of humans with their spreadsheet programs and their apps. I, for example, found an app on my phone, seductively labeled ‘Numbers.’ What it might do for me?¹ Psychologists of my generation remember doing analyses of variance with pens on paper. Are we more numerate than our students who dance with their data on platforms such as JASP (Love, Selker et al., 2018)? Do they know what they are doing? Do they know what a mean squared error is? Do they need to?

I find myself in broad agreement with Ellen Peters. We both think there is a thing called numeracy, and that, in general, more of it is better than less of it. Whether numeracy maps well enough on a two-systems model of mind is less clear to me though than it is to her. I am not even sure there is such a ‘thing’ as ‘System 2.’ The mind, I think, flows along heuristically and adaptively (Krueger, 2012). Mistakes occur, and they are as much a matter of the ecology as they are a matter of mind (Gigerenzer, 2014). You can count on it.

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¹ Upon googling it, I learned that Numbers is a spreadsheet program.