

Brief Bio and (PR)²: Problems & Pitches – Rants & Raves by Noretta Koertge



Started out working in lab and then teaching chemistry, part of the time in Turkey. Switched to HPS and studied in London, not with Popper but attended his lectures & seminar. PhD thesis on relationships between pre- and post-revolutionary theories, using historical case studies. Taught at Ontario Institute for Studies in Education, then to Indiana University

I have such broad interests in HPS that before I got tenure I was advised that I needed to *focus* my research. As my vita shows, I ignored that advice. My philosophical style reflects the influence of Popper: work on stated problems and eschew wrangles over meanings of terms and foundations unless it's *absolutely* necessary. However, I do not follow Popper on induction, propensities, status of the Rationality Principle, etc.

I continue to be interested in the issues surrounding Snow's Two Cultures and the more recent Science Wars, and in combating scientific illiteracy in all forms and wherever it resides. Last, but not least, I have red hair accompanied by the stereotypical personality traits.

"Postmodernisms and the Problem of Scientific Literacy." *A House Built on Sand*. Edited by Noretta Koertge. New York: Oxford University Press (1998), 257-71.

"Gender and the Genealogy of Scientific Discoveries" in Cassandra L. Pinnick, Noretta Koertge, and Robert F. Almeder (eds.), *Scrutinizing Feminist Epistemology: An Examination of Gender in Science*. Rutgers University Press, 2003.

"What Science Can Offer Contemporary Democracy" in Noretta Koertge (ed.), *Scientific Values and Civic Virtues* (edited). Oxford University Press, 2005.

"A Methodological Critique of the Semantic Conception of Theories" in C. Cheyne & J. Worrall (eds.) *Rationality and Reality*. Springer, 2006, 234 – 254.

"The Moral Underpinnings of Popper's Philosophy" (forthcoming)

list of relevant projects you are working on: Scientific controversies; Ethical, political, religious constraints on science

link to your home page. <http://www.indiana.edu/~koertge/>

General Questions

1) What is (are) your main interest(s) in attending the workshop? Find out more about science map capabilities. My only occasion to use them so far was in connection with *The New Dictionary of Scientific Biography*. One of my tasks as Editor-in-Chief was to

choose Subject Editors. We figured we would probably need a half-dozen for the Biological Sciences but how should we sub-divide this big area into workable fields? Here we got valuable ideas from the clusters on the relevant science map.

2) What would you like to learn / achieve at the workshop? Perhaps influence future directions of science maps projects

3) ***If you are a philosopher or an historian of science:*** In what ways might people that study and map science benefit from your work? I'm going to turn this query around and instead raise some questions that interest me in order to find out whether you already have or could easily get relevant data!

1. First, using "map" in the geographical sense: Do certain scientific specialties cluster in certain locales? For an obvious example, people were concerned that stem cell research would shift away from the USA when restrictions were placed on Federal funding. (Did that in fact happen?) What sorts of research is unusually popular in Japan, or Iran, or France, and why?
2. There are two fairly recent edited volumes on Scientific Controversies in which philosophers and historians speculate on various reasons why some controversies seem to be prolonged while others are rather quickly resolved. Like wars, circumstances vary. But with a much larger database of disputes, one could hope to discover some patterns. What is the relevant importance of charismatic personalities, availability of funding, new experimental techniques, and theoretical breakthroughs?
3. How and why are new disciplines formed? Do they typically arise through fission (splitting away from a single parent discipline) or from the fusion of two previously separate disciplines? If there were a strong tendency towards one pattern, this would have implications for science education at the graduate level and the organization of research teams.
4. Funding policy experts still argue about the relative importance of pure vs. applied research in the development of new technologies. By looking backwards at the crucial steps leading to a new technology, where it was published and where it was done, we might find some interesting patterns.
5. Looking at the content of science textbooks (including college level) and popular science magazines may be out of your purview but there are lots of interesting questions about what gets emphasized, whether the order in which topics are introduced makes sense, and how long it takes really important new results to get disseminated. Cross-cultural comparisons would also be fascinating. (People have compared math education in East Asia and the US, but I'd like to extend that to science and also look at the role of the media.)

*Please send the completed document by June 1th, 2009
to Katy Borner <katy@indiana.edu> and Mark Price <maaprice@indiana.edu>*