Bonnie Gold* (bgold@monmouth.edu). Philosophy (but not philosophers) of mathematics does influence mathematical practice. Preliminary report.

Since most philosophers of mathematics tend to ignore current mathematical practice outside of foundations, it is not surprising that mathematicians tend to ignore current philosophy of mathematics. I will argue, however, that in a deeper sense a mathematician’s philosophy of mathematics, even if not coherently articulated, does affect his/her mathematical activities: the types of questions considered, whether (s)he focuses more on individual problems or on mathematical structures, the general direction of mathematical work over a time interval. Further, investigating, rather than suppressing, these underlying motivations can lead to interesting philosophical questions. (Received September 21, 2011)