Bru, Bernard  
**Poisson, the probability calculus and public education.** (English)  

This is a translation with some comments (by Glenn Shafer assisted by Laurent Mazliak and José Sam Lazaro) of the author’s essay Poisson, le calcul des probabilités et l’instruction publique from Siméon Denis, Poisson et la science de son temps. Editors, M. Métivier, P. Costabel, P. Dugac. Palaiseau, Editions de l’École Polytechnique (1981), pp. 51–94.

Bru provided an important account of Poisson, the probabilist and educator (1781–1840). It is set against the background of the French turbulent society of the time and written without due regard for non-French readers. The description (p. 11) of one of Fourier’s lecture notes is faulty; his statement (p. 12) to the effect that, given enlightened specialists, statistical data are barely needed is attributed to Poisson, but only in a recent private communication; Poisson’s influence on Chebyshev is not mentioned; and, finally, the Bibliography is substandard and the references lack page numbers.

Poisson began in 1811–1812 by non-remarkably abstracting Laplace’s memoirs and his “Théorie analytique” and he misunderstood Laplace’s loose presentation of the estimate of the population of France (not recorded by Bru). Later, Poisson had been following Laplace filling in several missing points, explaining unclear circumstances and furthering his results, Thus, since Laplace had originated an academic method of least squares issuing from a large number of observations and drawing on his non-rigorously proven central limit theorem, Poisson continued in the same vein. To his own detriment, he never mentioned Gauss, let alone applied any of his results. This, however, Bru has not discussed.

Again, like Laplace (but unlike Lagrange), Poisson had subordinated methods of research to concrete applications. Together with a slipshod introduction of his most important law of large numbers, this led to his work being undervalued. As Bru commented, in 1881 no-one thought of celebrating his centennial.

From 1820 to his death Poisson, the notorious unbeliever, had been member of the Conseil Royal de l’Instruction Publique and its treasurer since 1822. He proved himself indispensable and had been able to manoeuvre politically. The Conseil governed supreme over appointments, creation of positions, curriculums and sanctions, and, as treasurer, Poisson had to examine the accounts of all the royal colleges.

Bru reasonably explains the decline of French mathematics in the mid-century by its excessive centralization rather than by Poisson’s personal or scientific traits.

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**Biographic references:**

Poisson, S. D.;
Laplace, P. S.

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