Compendium of Mathematical Sciences of Başhoca İshak Efendi : A calculus textbook in the reign of Mahmud II

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Abstract : Arguably the most profound and consequential of the reformist rulers of imperial Turkey, Mahmud II (1785-1839) personally encouraged the production of Turkish textbooks for the students of the straggling military engineering colleges of his domain, institutions which were the embryonic forerunners of the present day Istanbul Technical University. Written by Bashoca Ishak Efendi during the relatively stable later stage of the Mahmudian era, Compendium of Mathematical Sciences is a four volume textbook devoted mainly to calculus along with substantial passages on trigonometry, conic sections, mechanics and astronomy topped off with a collection of delightful forays into optics, biology, geosciences, biology and chemistry. The gargantuan opus and its mysterious author are important witnesses of the romantic and hazardous reign of Mahmud II. After a brief account of the little that is known about the life of İshak Efendi, the speaker will present samples of the original Ottoman Turkish text itself and discuss the mathematical content and pedagogical quality thereof.