historiographically useful--nor even historically correct--to say that seventeenth-century mathematicians *understood* the essence of mathematics, as if it were some single, transcendent truth. Rather, they *created* a form of mathematics that has since become the core of the discipline. Both the creation and the eventual hegemony have historical explanations. See my "Anfänge der algebraischen Denkweise im 17. Jahrhunder", *RETE* 1(1971), 15-30.

3. What, for that matter, is the immediate utility of any part of the *Doctrine*, and why should that form a criterion for abridging an historical document when one is supposedly offering an edition of it?

ADA, COUNTESS OF LOVELACE: BYRON'S LEGITIMATE DAUGHTER. By Doris Langley Moore. New York (Harper & Row). 1977. $25.00.

Reviewed by Anthony Hyman,
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Ada Lovelace is a gift from the gods to so rigorous a subject as the history of mathematics. Beautiful, charming, temperamental, her own life a minor tragedy, as Byron's daughter she acquires the romance that attaches to everyone associated with that magnificent *poète maudit*.

Doris Langley Moore is the chronicler of the Byron family. Her biography of Ada Lovelace follows earlier books on Lord Byron himself. Ada Lovelace's mathematical work plays a small part in the book. Indeed but for her association with Charles Babbage she has no claim to a position in the history of mathematics Ada's mother, the odious Lady Noel Byron, took her to Babbage's house in 1833, but it was only some years after Ada married Lord King (later Earl of Lovelace) that she began to see a great deal of Babbage. He was addicted to the company of beautiful and intelligent women and for more than a decade she played an important part in his life.

Ada Lovelace was an enthusiastic student of mathematics, becoming proficient at a time when it was exceedingly rare for a woman to do so; and she was an aristocratic hostesss: the mathematicians of the day were fascinated. There is no evidence that she ever did original work in mathematics: all that remains are student exercises. If she did attempt anything original it was probably developed in the "Book", her mathematical scrapbook which passed back and forth between her and Babbage; long since disappeared. But she translated and made extensive notes to Menabrea's famous paper on Babbage's Calculating Engines. These notes were made under Babbage's careful supervision and Babbage himself carried out the calculation of the Bernoulli numbers. Thus her notes are by far the most important statement we possess

of Babbage's views on the general powers of the Analytical Engines. In assessing them it must be remembered that they were written in the decade before Boole published his famous papers and they represent a fairly early stage in the development of Babbage's thought on the powers of Analytical Engines.

Ms. Langley Moore has written the definitive biography of Ada Lovelace: clear, sensitive, accurate. We are fortunate in having a first class biography of a minor figure. In doing so Ms. Langley Moore has clarified one corner of the befogged story of the life of Charles Babbage.