

On Eisenstein's Copy of the *Disquisitiones*

André Weil

To Kenkichi Iwasawa as a token of friendship

In 1979, Professor B. Artmann, of the *Technische Hochschule*, Darmstadt, having become aware of my deep interest in Eisenstein, very kindly informed me of an interesting discovery he had made some fifteen years earlier, while browsing in the library of the Mathematical Institute of Giessen University. As he explained, he had casually taken down from the shelf a bound volume bearing the title “GAUSS, *Disquisitiones Arithmeticae*”. This turned out to have been Eisenstein's own copy, not of the original edition of the *Disquisitiones*, but of its French translation, *Recherches Arithmétiques*, published in Paris in 1807 ([1]). The volume was interfoliated; the first blank page bore Eisenstein's name, and the others bore copious annotations in his hand. Bound with the *Recherches* were two of Dirichlet's most famous papers ([2a, b]), perhaps a gift from Dirichlet, whose lectures Eisenstein had attended as early as 1840.

Of course, after this discovery, the book was put under lock and key; but Professor Artmann indicated that the librarian, Frau Helga Bertram, might be willing to let me have it for consultation for a limited time. Naturally I wrote Frau Bertram at once, and, through her kindness, the precious volume arrived promptly in Princeton.

As to its previous history, Frau Bertram told me of the results of her investigations. It has been one of a number of volumes that had belonged to the mathematician Eugen Netto and had come to the Mathematical Institute after his death; Netto had been a professor at Giessen from 1888 to 1913 and had retired there as emeritus. The previous history cannot be ascertained; but it is of interest to note that Netto's teacher at the Friedrich-Werdersche Gymnasium in Berlin had been the same renowned K. Schellbach who had been Eisenstein's teacher there many years before. Thus one may fancy that the book came into Schellbach's hands after Eisenstein's premature death in 1852, and passed from there into those of Netto, who must have seemed a fit recipient for this valuable gift.