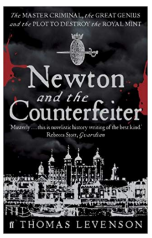
Newton and the Counterfeiter, Faber and Faber, 2009 (330 p.) by *Thomas Levenson*





Thomas Levenson

In this well documented account, some less known episodes of Newton's life are portrayed by Levenson. The biography of Newton is summarized up until he published his *Principia* in 1687 and became famous. Newton got also heavily involved in alchemy research for more than twenty years. He was not alone. Also Robert Boyle was a passionate explorer of that domain. When Boyle died, Newton was eager to obtain "Mr. Boyle's Red Earth" through John Locke. According to Levenson, in this search to transform mercury in gold, Newton saw the demystification of God, and so it became almost a religious quest, but he stuck to his scientific method carefully noting down the quantities, temperatures, times, etc. It was also kept mostly a secret because the clergy was not happy with that, but also Newton thought that the creation of gold was a divine power and exposing it to the people was dangerous. It came to a climax in 1693 when he seems to have found something, but we shall never know what. It is also in the period of approximately 1692-1693 that Newton had some period of a depression or burn-out.

Nicholas Fatio de Duillier, born in Basel was working with Huygens in Holland but when Mary and her husband Willem of Orange inherited the throne, Fatio got introduced to the Royal Society, where he met Newton in 1689, and he became a kind of sorcerer's apprentice in Newton's intense alchemy research. Levenson only suggests that Newton, who had a reputation of having a cold sulky character, seemed to enjoy Fatio's company in an unfamiliar way. When Fatio declines Newton's help when he was sick and when he preferred to work with a "new friend" instead of Newton, their relation stops abruptly. Could it be that this contributed to Newton's breakdown? Probably not says Levenson. There is no proof or evidence that this friendship was more than strictly scientific.

William Chaloner was, like Newton, born in the countryside, but he grew up skilled in criminal activity that he performed with a lot of bravoure. He learned to work with metal as a nail maker in Birmingham, but later used it to counterfeit coins. In those days money was worth the gold or silver that it contained. Mixing the alloy with iron or other cheaper material made a great profit. The image was originally applied with a stamp and a hammer. Later inscriptions were added on the rim, but also this could be attained by counterfeiters who built their own machines. Chaloner's criminal career in London includes prostitution, quack doctor, and double agent to turn in Jacobite conspirators, but most of all he was known among counterfeiters as a master coiner delivering high quality work. He left the circulation of his coins to others who were often arrested but he always stayed out of prosecution or could talk himself out of trouble.

There was also an arbitrage problem between England and the continent. The silver that was used in the English coins could be traded for gold at a better exchange rate on the continent, and that gold was used to obtain more silver in England causing a massive silver drain. So the Royal Mint decided to recoin all their money, which was actually useless without a devaluation. Newton had been looking for a position that would bring him to London where all the important things were happening. The occasion came in 1696 when he was appointed Warden of the Mint. Also Chaloner tried to have his pawn inside the Mint, but failed. Newton supervised the recoining efficiently and also had to prosecute all counterfeiters and financial criminals. His strategy was often to release some smaller cogs in the criminal machine and hire them as informants. Once released however, they used their position often to blackmail their companions for their own benefit. Chaloner still trying to infiltrate the Mint criticized its functioning and even accused Newton of incompetence. Some plates had disappeared and that was supposed to be counterfeiting activity from inside the Mint. Nevertheless Chaloner got arrested under loud protest and about half the book is about the clash of the masterminds: Chaloner versus Newton. Chaloner trying all the trick he had up his sleeve and that had worked before, but that were not successful with Newton as an opponent. Chaloner was hanged on March 22nd 1699 at the Tyburn tree, the execution place outside 17th century London, close to where now Marble Arch is.

This book in an entertaining read that fills some gaps not covered by other biographies about Newton. It is historically well documented by an anonymous biography of Chaloner and Newton's notes, but it reads like a modern thriller. It is also informative about 17th century society, its monetary system, the political squabbling, and the emergence of paper money in England.

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