

Fellow in 1672). He was the first scientist to be knighted, in 1705. In his home in London – of which his brilliant and charming niece Catherine Barton was hostess (Newton never married) – he received the greatest intellectuals of Europe. Alexander Pope wrote Newton's epitaph when he died:

*“Nature and Nature's laws lay hid by night:
God said Let Newton be! and all was light.”*

Newton was buried in Westminster Abbey. The pall bearers to this farmer's son were three earls, two dukes, and the Lord Chancellor; they were followed by the Fellows of the Royal Society. The rather elaborate monument at his grave bears the inscription *“Hic depositum est, quod mortale fuit Isaaci Newtoni.”* The immortal remains of Isaac Newton cannot be so neatly contained. Pope's anodyne epitaph speaks only of Newton the master of self-consistent natural philosophy. Yet this reasonable Newton was only a part of, and perhaps a result of, a complex and contradictory creature whose measure we cannot easily take. Perhaps a more appropriate epitaph to Newton would be the defiant words of the mystical American poet Walt Whitman in *Song of Myself*: “Do I contradict myself? Very well, then, I contradict myself. I am large, I contain multitudes.”

*Bikram Phookun
Senior Lecturer in Physics
St Stephen's College, Delhi 110 007, India.
Email: bphookun@yahoo.com*

Isaac Newton and the Royal Mint

Isaac Newton began to seek public office by 1690, and there was a glimmer of hope when Charles Montague, a former student and a close friend of Newton, was appointed Chancellor of the Exchequer in late 1695. On 19th March of 1696, he wrote to Newton that at last he could give ‘a good proof of my friendship’ with the offer of the post of Warden of the Mint’ which was worth approximately 500 pounds a year. Montague also informed that the office ‘has not too much bus'neese to require more attendance than you may spare’. Earlier wardens, Newton was informed, ‘came very seldom to the place



and did not do anything of service more than to come and ask how the affairs of the Mint were.' It was uncharacteristic of Isaac Newton, however, to take anything less than seriously, and he found himself caught up in one of the most dramatic events in the history of British coinage.

Before the middle of the 17th century, British coins were produced by hammering a die. From the time of Charles II, however, a machine was used which not only produced a clear impression but added a milled edge to the coins. Both hammered and milled coins were allowed to circulate. But the old coins, without a clearly defined edge, were easy to clip and counterfeit, and over the years their reliability became suspect. No one would willingly give a full-weight milled coin if one could pass instead a hammered coin with much less silver in it. Consequently, the milled coins became practically reserved for illegal activities and melting pot and the hammered coins bore the burden of mass circulation. A committee was formed in 1695 comprising scholars such as John Locke, Christopher Wren and Newton, to advise the government on this matter of grave concern, and the committee recommended recoinage. After Newton's appointment as the Warden, he supervised the entire operation of recoinage with an efficiency that befitted him.

As Warden, part of Newton's duties was the detection, capture and prosecution of counterfeiters. Earlier Wardens had left this job to clerks, but Newton, unwilling to delegate and incapable of taking his duties lightly, undertook the supervision himself. He frequented taverns to take depositions, came to know the prisons and interrogated several hundred people. Under his regime, twenty seven criminals were executed in 1697/98. Pleas of mercy did not seem to move him. (Some biographers (such as Frank Manuel) have even argued that the work allowed Newton 'to rage at prisoners and their wives and mistresses with impunity' and it was of therapeutic value as it allowed the release of the rage inside him.)

In 1700 he was appointed the Master of the Mint, a position he held until his death.

Biman Nath
Raman Research Institute, Bangalore 560 080, India.
Email: biman@rri.res.in

