

OBITUARY

Professor Edward Hall, CBE, FBA

Professor Edward Hall, whose Research Laboratory for Archaeology and the History of Art laboratory in Keble Road, Oxford was one of the three used for the Shroud radiocarbon dating in 1988, died on August 11, aged 77. He was accorded lengthy obituaries in the UK's *Times*, *Guardian* and *Telegraph* newspapers, his personal part in the radiocarbon dating being prominently featured in each instance. From my two decade acquaintance with him he would probably have preferred to be remembered for his rather more positive achievements, such as his personal founding of the Oxford laboratory, his co-founding of the highly respected archaeological science journal *Archaeometry*, and a number of inventions, including, during the 1950s, an electronic adaptation of the Jacquard loom for the production of Cash's nametapes.

Nonetheless there was a showman side to Hall that took a certain delight in applying his technological know-how and gadgetry to the detection of archaeological and historical fakes with a high public profile. Back in the 1950s he cut his teeth in this field by very convincingly helping prove the fraudulence of the famous 'Pitdown Man' skull, and he was undoubtedly proud of this achievement. When I first struck up acquaintance with him in the early 1980s he surprised me by showing rather more of an interest in the Shroud than I had expected for one who was not only an avowed atheist but in general contemptuous of anything 'fringish'. At that time, however, Hall was developing at Keble Road the apparatus needed for bringing to the UK the then highly innovative accelerator mass spectrometry method of radiocarbon dating, the great virtue of which was that it needed much smaller samples than required by the original proportional counter method of dating as invented by America's Willard Libby. Hall had his sights very firmly set on ousting Harwell - which was still using the old Libby method - as the UK's premier radiocarbon dating laboratory.

So given that the Roman Catholic Church's concern was to sacrifice as little of the Shroud as possible for dating purposes, what more public way of showing off what his laboratory could do than by getting involved with the Shroud? Hall's very keen interest in the project became clear in 1986 when he directly asked for my 'diplomatic' help because a meeting to which he and others had been called to discuss the practicalities of Shroud carbon dating became very abruptly postponed because of heated dissension between Professor Chagas in Rome and Professor Gonella in Turin. In April 1988 he personally travelled to Turin, with his assistant Dr. Robert Hedges, to collect the Shroud fragment and control samples that were allotted to his laboratory, and a few weeks later he very kindly showed then BSTS General Secretary Susan Black and myself around the laboratory while the work for the dating proper was in preparation. Asked his personal view on how the Shroud's image had been created - having just seen the cloth for himself in Turin - he said that he still thought it to be a fake, and that the image had probably been made by heating a metal statue, then applying it to the linen branding-iron-style.

When it came to the famous '1260-1390!' press announcement of the radiocarbon dating result, he was substantially more upbeat, hence his now often-quoted and brutally simplistic remark: 'There was a multi-million-pound business in making forgeries during the fourteenth century. Someone just got a bit of linen, faked it up and flogged it.' He was quite unabashed in using his status as a trustee of the British Museum to give a public lecture, hosted by the British Museum

Society', for further ramming home this message, in the course of this showing a somewhat careless attitude to historical data not in dispute. Nor did he shy from exploiting his laboratory's 'success' in its work on the Shroud in order to raise £1 million pounds to found the Edward Hall Chair in Archaeological Science, a post shortly after taken up by the British Museum's Dr. Michael Tite. This directly secured the laboratory's future.

Not that Hall needed to feel shy over this, since from his founding of the laboratory in 1953, through to 1988, when at 64 he was looking to retirement, he had funded the venture largely through his own personal private wealth, made possible by a substantial inheritance. Back in the 1880s his paternal grandfather Thomas had been working as a bank manager in Rockhampton, Queensland, Australia, when two prospectors came to him with news of striking gold. The specimens were somewhat doubtful because they were mixed with ironstone rather than the more usual quartz, but Thomas Hall backed the prospectors with his own money, his brother Walter also joined the venture, and within a few years the company was producing so much gold that it was able to pay out dividends of £100,000 per month, with further finds of copper adding to the site's riches.

In 1900 the now millionaire Thomas Hall moved to England, purchased a large estate in Norfolk, and sent his sons to Eton. Grandson Edward likewise accordingly received an Etonian education during the late 1930s/early 1940 before serving in the Royal Naval Volunteer Reserve during the last three years of World War II. Following the war he read chemistry at New College Oxford, then stayed on to do a Ph.D in physics, in the course of which he developed an X-ray fluorescence spectrometer. After his working on the Piltdown hoax he conceived and founded the Oxford Research Laboratory for testing archaeological and other artefacts, following which the rest is history.

'Teddy' Hall, as he liked to be known, had innumerable interests, almost all reflections of his intense practicality and inventiveness. Keen on boating, during a trip to Turkey he applied proton magnetometers that he had developed to the detection of underwater wrecks, finding three World War battleships. Reflecting his family's gold-mining history, he made his wife Jeffie's wedding ring, explaining 'I just turned it up out of a length of gold tube'. When a friend became so paralysed by polio that he was unable to breathe without assistance, he devised and manufactured a special wheelchair with a built-in ventilator.

As pointed out by BSTS member Lady Penny Money-Coutts, who once met Hall socially, and who kindly drew my attention to the *Times* obituary, this interestingly quoted him as saying that archaeologists: 'should never find themselves in a position where a key argument or interpretation is based on a single measuring technique which cannot be cross-checked'. The last time that I met 'Teddy' in person was eyeball-to-eyeball on a late-night TV discussion programme, *After Dark*, when I made a rather similar point with direct reference to the Shroud dating, and will swear that he winced. While he and I naturally disagreed on the subject of the Shroud, I feel grateful that we never quarreled, and that whenever we occasionally corresponded or talked on the phone, this was always with amity and equanimity. Hall may have been utterly convinced that the Shroud is a fake, but his judgment, whether he was right or wrong in this, was based very shrewdly and totally understandably on what his instruments told him. The Shroud scene has lost, not an enemy, but a truly great and admirable character. The world of science has lost a great deal more.