

# Anonymous polymath



Thomas Young is remembered for his part in deciphering the Rosetta Stone. **Andrew Robinson** finds a man of much broader knowledge

Recently a six-part BBC television series on ancient Egypt devoted a whole programme to the decipherment of hieroglyphs. The story was portrayed as a race between the English polymath Thomas Young – bent over the Rosetta Stone – and the obsessive French Egyptologist Jean-François Champollion, who won the race in 1822 and went on to reveal the language of the pharaohs. Although Young's initial steps were crucial, Champollion would not publicly admit this, and a controversy arose between them that still rumbles to this day.

Champollion has enjoyed almost all the glory for the decipherment, while Young has tended to be forgotten – which is a pity, because he was one of the most remarkable figures of the Enlightenment. His memorial plaque in Westminster Abbey notes that Young brought 'an equal mastery to the most abstruse investigations of letters and science'. Albert Einstein compared Young's most important scientific discovery to the work of Newton. And on the bicentenary of Young's birth in 1773, a Science Museum exhibition stated that 'Young probably had

a wider range of creative learning than any other Englishman in history. He made discoveries in nearly every field he studied.'

This may sound like an exaggeration until one considers Young's achievements. In addition to his work in Egyptology, where he is generally regarded as the decipherer of the demotic script (the second script on the Rosetta Stone below the hieroglyphic), Young was an amazing polyglot who spoke many languages as a youth and coined the term Indo-European after thoroughly comparing the grammar and vocabulary of some 400 languages. He was a major scholar of ancient Greek, whose calligraphy was published and admired by the leading classical scholars of the day. In science, he was the physicist who discovered that light is a wave with an experiment today regarded as the key experiment in quantum theory; he was the engineer who discovered the relationship between stress and strain in materials ('Young's modulus' of elasticity); and he was the physiologist who explained the focusing of the eye, the concept of astigmatism and the perception of colour by the retina. Young was also a leading physician at St George's Hospital in London, foreign secretary of the Royal Society for 25 years, Secretary of the Board of Longitude and superintendent of the government's vital *Nautical Almanac*, as well as an adviser to the Admiralty on shipbuilding. Finally, he was the author of 'Young's temperament', a way of tuning keyboard instruments such as harpsichords, and of Young's principles of life insurance, which he applied as a salaried actuary for a life insurance company in the 1820s. No wonder Young has been dubbed 'the last man who knew everything'.

The range of his expertise is perhaps best shown in his writings for the *Encyclopaedia Britannica*. In 1816, when approached by its editor Napier

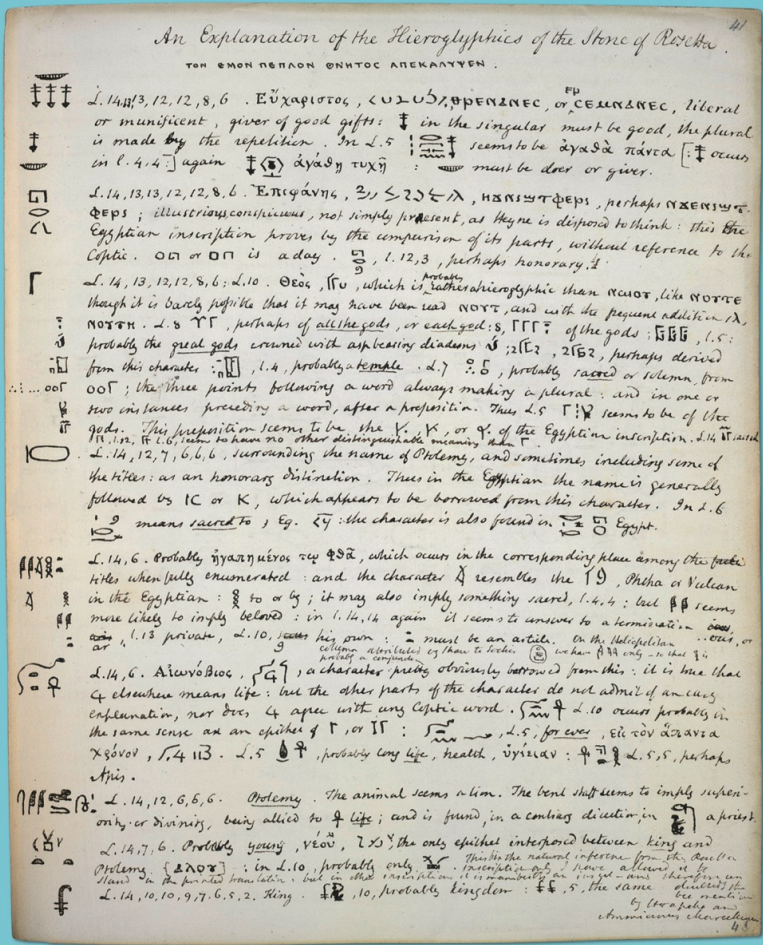
Macvey, Young offered articles, among others, on the following subjects: alphabet, annuities, attraction, capillary action, cohesion, colour, dew, Egypt, eye, focus, friction, halo, hieroglyphic, hydraulics, motion, resistance, ship, sound, strength, tides, waves and 'anything of a medical nature'. Overall, Young covered 380 quarto pages of the *Encyclopaedia Britannica*. The editor in his preface acknowledged Young as a man 'to whose profound and accurate knowledge, rare erudition, and other various attainments, this work is largely indebted in almost every department which it embraces'.

So why has Young's reputation suffered since his death in 1829? Partly because he was modest and did not promote himself, partly because he published much of his work (including that on Egypt) anonymously, but chiefly because polymathy is always hard for others to embrace. The historian Alexander Murray writes: 'History is unkind to polymaths. No biographer will readily tackle a subject whose range of skills far exceeds his own, while the rest of us, with or without biographies to read, have no mental "slot" in which to keep a polymath's memory fresh. So the polymath gets forgotten or, at best, squashed into a category we can recognize, in the way Goethe is remembered as a poet, despite his claim to have been a scientist, or Hume as a philosopher, for all the six dumpy volumes of his *History of England*.' Murray was writing about Sir William Jones, a polymath of the generation before Young, but his comment applies well to Young.

The fact is that Thomas Young divides academics. Those who appreciate Young admire his range, his intuition and his far-sightedness. Those who do not, deprecate these very same aspects of his life and work as dilettantism, sloppiness and opportunism. For the latter group, Young, far from being a polymath, stands convicted of some cardinal academic sins: lack of focus, lack of rigour and lack of originality.







Opposite top: Thomas Young, detail of painting after original by Sir Thomas Lawrence, early 1820s; opposite bottom: Detail of the Rosetta Stone, showing the three different inscriptions; Young is considered to be the decipherer of the demotic script; left: Page from Young's Egyptian research papers, entitled 'An Explanation of the Hieroglyphics of the Stone of Rosetta' (© British Library. All Rights Reserved)

In a word, lack of discipline. Or should that be lack of a discipline? Two centuries after Young, in an age of narrow specialisation in the academia and the professions unthinkable in his time, polymathy probably disturbs us still more than it did the Victorians. We are made uneasy – despite our cult of ‘genius’ – by those who effortlessly bridge several disciplines. It is only too natural to treat them as dilettantes or even to dismiss them as charlatans.

Young seems to have been keenly aware of this. It clearly brought him great mental satisfaction to range widely – but he knew that polymathy would damage his professional standing. Hence his extraordinary decision to publish anonymously during his middle years while he was trying to establish himself as a physician. Young thought that to become famous as an Egyptologist or even as a physicist would do his medical practice no favours. Potential patients would naturally assume that the polymathic Dr Young would not give their ailments his full attention.

At the request of his favourite sister-in-law, Young wrote an autobiographical sketch for

a posthumous edition of the *Encyclopaedia Britannica*, where he discussed his polymathy quite directly. The sketch was not published, and disappeared into the files of Sir Francis Galton for a century, not surfacing until the 1970s. Young noted of himself: ‘He would probably not have recommended the plan of his own studies as a model for the imitation of others: and he certainly thought that many hours, and even years of his life, had been occupied in pursuits that were comparatively unprofitable. But it is probably best for mankind that the researches of some investigators should be conceived within a narrow compass, while others pass more rapidly through a more extensive sphere of research.’

This is quietly perceptive about breadth. But it should be read alongside a comment about depth

Young made to his oldest friend in a private letter: ‘I like a deep and difficult investigation when I happen to have made it easy to myself if not to all others – and there is a spirit of gambling in this, whether as by the cast of a die, a calculation à perte de vue [i.e. a far-fetched calculation] shall bring out a beautiful and simple result, or shall be wholly thrown away. Scientific investigations are a sort of warfare, carried on in the closet or on the couch against all one’s contemporaries and predecessors; I have often gained a signal victory when I have been half asleep, but more frequently found, on being thoroughly awake, that the enemy had still the advantage of me when I thought I had him fast in a corner – and all this, you see, keeps one alive.’

Throughout his relatively short life Young was restlessly curious. When he lay dying, he was forced to work in bed with a pencil, unable to manage a pen, on the proofs of his pioneering demotic dictionary, which was published after his death. His old friend remonstrated with him that proofreading would fatigue him. But Young refused to listen, saying that his Egyptian work was a ‘great amusement’ to him. In the British Library, which keeps five extraordinary volumes of unpublished Egyptian manuscripts by Young, I came across these proofs. They were marked up, with Young’s precise, handwritten corrections, to page 96, not far from the end of the book. He was just short of 56 years old.

Andrew Robinson’s biography of Thomas Young, entitled *The Last Man Who Knew Everything* was published last year (£17.99; ISBN 1–85168–494–8), and is now available in paperback (£9.99; ISBN 978–1–85168–552–3). His new book *The Story of Measurement* is published by Thames & Hudson (£19.95; ISBN 978–0–500–51367–5).