Polymathic pursuits

Andrew Robinson feels the tension between specialisation and breadth

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hat inimitable songwriter and satirist Tom Lehrer, who began his career as a mathematician at Harvard University and a military researcher at Los Alamos National Laboratory, has some mischievous lines about specialisation that have stuck in my mind ever since I heard them as a child in the 1960s. They are recited – in a cod German accent – in 'Wernher von Braun', a ballad about the Nazi-turned-Nasa rocket scientist: "Once the rockets are up, who cares where they come down? / That's not my department," says Wernher von Braun.'

For better or worse, as an author, I have never had a department. My closest encounter with specialisation was as literary editor of what was then known as the Times Higher Education Supplement. It entailed commissioning (mainly) professors - including Nobel laureates, figureheads for specialisation - to write (mostly) reviews of academic books. But I confess that my biggest satisfaction came from commissioning well-known non-academics to write about trade books authored by academics. For example, a vivid review by the writer, broadcaster and amateur astronomer Patrick Moore of At Day's Close, an excellent history of night-time in Britain before the industrial revolution by an American academic historian. Moore gleefully observed that a certain 18th-century clergyman in rural Kent 'received regular supplies of gin at night, left on his doorstep by the village blacksmith, whose nickname was Moonshine.'

In the end, after 12 years in this tenured post on the fringe of the academic world, I knew I had to make a choice between specialist journalism and non-specialist authorship.

My last book before I became a full-time author in 2006 was, ironically, a fairly brief biography of a polymath. Active in the early 19th century, Thomas Young was a respected doctor by training and profession, with an appointment at a major London hospital. But Young is best known for a physics experiment, still taught in schools, which established the wave theory of light against Isaac Newton's reigning particle theory; and he is almost as well known for deciphering part of the ancient Egyptian Rosetta Stone in rivalry with Jean-François Champollion. He is also remarkable for his work in engineering (Young's modulus of elasticity), linguistics (Young named the 'Indo-European' language family) and physiology (how the eye perceives colour), not to mention the calculation

of life insurance, the measurement of longitude and even the tuning of harpsichords. Surely no one has ever written for the *Encyclopaedia Britannica* on a wider variety of subjects than Young.

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At the clever suggestion of my American editor, the biography was entitled *The Last Man Who Knew Everything*. I did not expect it to be a bestseller. Young is far from being a household name like Newton. And my expectation was fulfilled: the biography sold modestly.

That said, I was amazed at the breadth of the interest in it shown by both British and American reviewers in national newspapers as well as more specialised journals. Almost all of them asked why Young had been largely forgotten by the general public. Their answers varied almost as widely as Young's achievements. Perhaps the most perceptive was that of the nearly 90-year-old Arthur C. Clarke, author of 2001: A Space Odyssey. Clarke, himself once a scientist before he turned to writing fiction, noted that 'By documenting the extraordinary life and career of Thomas Young, this book reminds us how most of us tap only a small proportion of our full potential. It is also a cautionary tale on how society reacts to individuals who cannot be pigeonholed.'

Aristotle, Galileo and of course Leonardo da Vinci may be generally celebrated for their polymathy, but there are not too many other examples in the span of world history. As an Oxford University historian, Alexander Murray, remarked not long ago about another largely forgotten British polymath, the polyglot linguist and judge Sir William Jones, '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 recognise, 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*.'

I can vouch for the truth of this from experience. The subjects of my six biographies demonstrated in their lives a spectrum of curiosity from full-scale polymathy



Andrew Robinson is the author of more than 25 books in the arts and sciences. His latest is *Earth-Shattering Events: Earthquakes, Nations and Civilization*, published by Thames & Hudson.

Photo © Jonathan Bowen. to narrowly focused specialisation. Young lies at the polymathic extreme. Rabindranath Tagore, winner of a Nobel prize as a poet and writer, was also a celebrated composer of songs (including India's national anthem), a self-taught modernist painter and a freedom fighter alongside Mahatma Gandhi. The Oscar-winning film director Satyajit Ray not only composed the music and songs for his films but was also a professional illustrator, a gifted caricaturist and a bestselling detective-story writer. Michael Ventris succeeded in reading the pre-Homeric script of the ancient Mycenaeans and Minoans ('Linear B') but trained as an architect. Jean-François Champollion, the French linguist who deciphered the Egyptian hieroglyphs, thereafter specialised in the history and culture of ancient Egypt.

Albert Einstein was the least polymathic of my six subjects, despite his periodic forays into international politics and much-quoted wit. And there are some 1,700 individual books about Einstein listed in library catalogues, while less than a dozen have been written about Young since his death in 1829. A similar limitation is true of my other biographical subjects. New books on Gandhi are common, but there are relatively few on Tagore. It looks as if specialisation is generally more productive of attention, fame and posthumous reputation than polymathy.

Specialisation is certainly more practical than polymathy for professional authors. We depend for our income on publishers' advances and royalties. (As we all know, these have fallen steadily since the 1990s, especially since the financial crash of 2008; I am shocked to recall an advance for a fairly specialised book I received back in 1991 of £15,000 - a figure almost inconceivable today.) Polymathy requires a variety of knowledge that takes considerable time to acquire, even at a relatively basic level. A professional author may receive grants towards this, but will require sympathetic specialists to support such grant applications in order to overcome the natural scepticism of grant-giving bodies. A publisher also has to be persuaded that polymathy has a market among book-buyers. Although several have periodically taken a chance on this with my books, the more typical reaction is that of a noted university press publisher who once greeted me with the ironic, if affable, remark: 'Here comes the last man who knew everything.'

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Probably I would have done better to concentrate on writing books about, say, Einstein and other aspects of 20th-century physics for the general reader, rather than venturing into wholly unrelated areas like archaeology, languages and Indian history/culture. After all, a track record in a particular subject area – such as the history

of the second world war, Renaissance art, genetics or astrophysics – is what generally attracts publishers, literary editors and other media attention, as well as awards and honours.

Specialisation is what my father, a physicist at Oxford University to whose memory I dedicated my book on Einstein, chose for himself; his last book was a textbook on Einstein's theory of relativity. But somehow specialisation has never appealed to me. I cannot help but agree with Young. He concluded in an 'Autobiographical Sketch' written not long before his death: '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.' Yet even Young had severe, lifelong doubts about his versatile career.

Genuine polymaths like Young will always be thin on the ground. Ditto authors who feel the urge to tackle polymathic subjects. In the words of my longtime publisher at Thames & Hudson, Jamie Camplin - recently retired and now writing his own, somewhat polymathic, book: 'We should revere the true specialist, but so also the non-specialists who are as painstaking as the specialists, yet whose motivation is the true authorial one: the desire to stand back, survey the specialist evidence with a rigorous humanism, and then communicate what they find. They are certainly beleaguered, a dying breed perhaps, because the media in general prefers the spurious authority, shrilly expressed, of the "expert".' Let us hope they can continue to survive as a salutary counterweight to the inevitable tug of departmentalised culture. •