

Styles of Decipherment:  
Thomas Young, Jean-François Champollion  
and the Egyptian hieroglyphs

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The competition between Thomas Young and Jean-François Champollion to decipher the Egyptian hieroglyphs using the Rosetta Stone took place two centuries ago. Yet, it continues to fascinate Egyptologists, scholars of decipherment and the general public.

The polymath Thomas Young (1773-1829)—pioneering physicist, eminent physiologist, professional physician, and exceptional polyglot, among several other things—became hooked on the scripts and languages of ancient Egypt in 1814, the year he began to decipher the Rosetta Stone. He continued to study the hieroglyphic and demotic scripts with variable intensity for the rest of his life, literally until his dying day. The challenge of being the first modern to read the writing of what appeared then to be the oldest civilization in the world—far older than the classical civilization of Young’s beloved Greeks—was irresistible to a man who was as equally gifted in languages, ancient and contemporary, as he was in science. He himself described his Egyptian obsession as being driven by “an attempt to unveil the mystery, in which Egyptian literature has been involved for

nearly twenty centuries”. His epitaph in London’s Westminster Abbey states, accurately enough, that Young was the man who “first penetrated the obscurity which had veiled for ages the hieroglyphics of Egypt”—even if it was the linguist Jean-François Champollion (1790-1832) who in the end would enjoy the glory of being the first actually to read the hieroglyphs in 1822-23.

One might have expected Young to have involved himself earlier with the Rosetta Stone, when it first went on display at the British Museum in London in 1802. However, at that time, Young was totally occupied with his scientific lectures at the Royal Institution, and after the mammoth task of publishing these in 1807, he devoted himself mainly to medicine. What finally triggered his active interest in the hieroglyphs, was a scholarly review he wrote in 1813 of a massive work in German on the history of languages, *Mithridates, oder Allgemeine Sprachkunde* by Johann Christoph Adelung, which contained a note by the editor, said Young, which “asserted that the unknown language of the stone of Rosetta, and of the bandages often found with the mummies, was capable of being analyzed into an alphabet consisting of little more than thirty letters”. When an English friend shortly afterwards returned from the East and showed Young some fragments of papyrus he had collected in Egypt, “my Egyptian researches began”.

First, Young examined the papyri and reported on them to the Royal Society of Antiquaries in May 1814. Then, he took a copy of the Rosetta Stone inscription away with him from London to a small town and spent the summer and autumn studying Egyptian, when he was not attending to his medical patients.

Apart from his exceptional scientific mind and his broad knowledge of languages, Young brought to the problem one other extremely valuable and relatively uncommon ability. He had trained himself to sift, compare, contrast, retain and reject large amounts of visual linguistic data in his

mind. This ability has been a *sine qua non* for serious decipherers ever since Young and Champollion (as I have described in my two books on decipherment: *Lost Languages: The Enigma of the World's Undeciphered Scripts* and *The Man Who Deciphered Linear B: The Story of Michael Ventris*).

In his teens and twenties, Young had been celebrated for his penmanship in classical Greek, leading to the publication of *Calligraphia Graeca* with John Hodgkin in 1794. From this he developed a minutely detailed grasp of the Greek letter forms. Then, in his mid-thirties, he was called upon to restore some Greek and Latin texts written on heavily damaged papyri dug up in the ruins of Herculaneum, the Roman town smothered along with Pompeii by the eruption of Mount Vesuvius in AD 79. The fused mass of papyri had first to be unrolled without utterly destroying them, and then interpreted by classical scholars capable of guessing the meaning of illegible words and missing fragments. The unrolling required Young's chemical skills; the interpretation demanded his forensic knowledge of classical languages. In neither activity was Young at all satisfied with his results, but his experience with the Herculaneum papyri made him keenly aware of the relevance of his copying skills to the arcane arts of restoring ancient manuscripts. As he noted, "those who have not been in the habit of correcting mutilated passages of manuscripts, can form no estimate of the immense advantage that is obtained by the complete sifting of every letter which the mind involuntarily performs, while the hand is occupied in tracing it".

The mass of unpublished Egyptian research manuscripts by Young, now kept at the British Library, bear out this claim. Much of his success in this field would be due to his indefatigable copying—often exquisitely and occasionally in colour—of hieroglyphic and demotic inscriptions taken from different ancient manuscripts and carved inscriptions and also from different parts of the same inscription, followed by the word-by-word comparisons that such copying made possible. By placing groups of

Egyptian signs adjacent to each other, both on paper and in his memory, Young was in a position to see resemblances and patterns that would have gone unnoticed by other scholars. As his biographer George Peacock wrote, after immersing himself in Young's manuscripts, "It is impossible to form a just estimate either of the vast extent to which Dr Young had carried his hieroglyphical investigations, or of the real progress which he had made in them, without an inspection of these manuscripts."

It was his powerful visual analysis of the hieroglyphic and demotic inscriptions on the Rosetta Stone that gave Young the inkling of a crucial discovery. He noted a "striking resemblance", not spotted by any previous scholar, between some demotic signs and what he called "the corresponding hieroglyphics"—the first intimation that demotic might relate directly to hieroglyphic, and not be a completely different script, somewhat as a modern cursive handwritten script partly resembles its printed equivalent. One can see this relationship from the drawing he published showing the last line of the Rosetta inscription in hieroglyphic (which includes a cartouche), demotic and Greek. If one examines the hieroglyphic and the demotic signs, one can see that some resemble each other. Equally clear, however, is that other "corresponding" signs do not.

The clinching evidence for the truth of this partial resemblance came with the publication of several manuscripts on papyrus in the monumental French survey, *Description de l'Égypte* (arising from Napoleon Bonaparte's expedition, which discovered the Rosetta Stone in 1799), the most recent volume of which Young was able to borrow in 1815. He later wrote: "I discovered, at length, that several of the manuscripts on papyrus, which had been carefully published in that work, exhibited very frequently the same text in different forms, deviating more or less from the perfect resemblance of the objects intended to be delineated, till they became, in many cases, mere lines and curves, and dashes and flourishes; but still answering, character for character, to the hieroglyphical or hieratic writing

of the same chapters, found in other manuscripts, and of which the identity was sufficiently indicated, besides this coincidence, by the similarity of the larger tablets or pictural representations, at the head of each chapter or column, which are almost universally found on manuscripts of a mythological nature.” In other words, Young was able to trace how the recognizably pictographic hieroglyphs, showing human figures, animals, plants and objects of many kinds, had developed into their cursive equivalents in the hieratic and demotic scripts.

But if the hieroglyphic and demotic scripts resembled each other visually in many respects, did this also mean that they operated on the same *linguistic* principles? If so, it posed a major problem, because the hieroglyphic script was generally supposed to be purely conceptual or symbolic (except for the foreign names in the cartouches, as suggested by Sylvestre de Sacy in 1811), whereas the demotic script was supposed (by Johan Åkerblad) to be purely phonetic, indeed alphabetical. The two views could not be satisfactorily reconciled, if some of the signs in the demotic scripts were in fact hieroglyphic in origin.

So Young took the next logical step and made another important discovery. He told de Sacy in a letter in 1815: “I am not surprised that, when you consider the general appearance of the [demotic] inscription, you are inclined to despair of the possibility of discovering an alphabet capable of enabling us to decipher it; and if you wish to know my ‘secret’, it is simply this, that no such alphabet ever existed”. Young’s conclusion was that the demotic script consisted of “imitations of the hieroglyphics ... mixed with letters of the alphabet.” It was neither a purely conceptual or symbolic script, nor an alphabet, but a mixture of the two. As Young wrote a little later, employing an analogy for the demotic script that perhaps only a polymath such as he could have come up with, “it seemed natural to suppose, that alphabetical characters might be interspersed with hieroglyphics, in the same way that the astronomers and chemists of

modern times have often employed arbitrary marks, as compendious expressions of the objects which were most frequently to be mentioned in their respective sciences.” A modern, non-scientific example of the same idea would be such ‘compendious’ signs as \$, £, %, =, +, which represent concepts non-phonetically, and often appear adjacent to alphabetic letters.

Young was correct in these two discoveries about the relationship between the hieroglyphic and demotic scripts. But we must also note that the discoveries did not now lead him to make a third discovery. He did not question the almost-sacred notion that the *hieroglyphic* script was purely symbolic. He continued to adhere to the view that the only phonetic elements in the hieroglyphic script were to be found in the foreign names in the cartouches, as first suggested by de Sacy. The idea that the hieroglyphic script as a whole might be a mixed script like the demotic script was to be the revolutionary breakthrough of Champollion. “Hieroglyphic writing is a complex system, a script all at once figurative, symbolic, and phonetic, in one and the same text, in one and the same sentence, and, I might even venture, in one and the same word”, Champollion famously perceived in his *Précis du système hiéroglyphique des anciens Égyptiens* in 1824.

From 1814 until the publication of his important *Encyclopaedia Britannica* article, “Egypt”, in 1819, Young had had the field of hieroglyphic decipherment largely to himself. Champollion, though interested in the Rosetta Stone from 1808, did not tackle its decipherment in earnest until 1821. He quickly overtook Young and become the founder of Egyptology as a science.

During the 1820s, the two men sometimes cooperated with each other, but mostly they competed as rivals. Their relationship could never have been a harmonious one. Young claimed that Champollion had built his system of reading hieroglyphics on Young’s own discoveries and his tentative hieroglyphic ‘alphabet’, published in 1819. While paying generous

and frequent tribute to Champollion's unrivalled progress since then, Young wanted his early steps recognized. This Champollion was adamantly unwilling to concede, claiming that he had worked independently; and in his vehemence he determined to give all of Young's work the minimum possible public recognition. Just weeks before Young's death in 1829, Champollion, writing in the midst of his expedition to ancient Egypt—he was then at Thebes in the Valley of the Kings—exulted privately to his brother in Paris: “So poor Dr Young is incorrigible? Why flog a mummified horse? Thank M. Arago for the arrows he shot so valiantly in honour of the Franco-Pharaonic alphabet. The Brit can do whatever he wants—it will remain ours: and all of old England will learn from young France how to spell hieroglyphs using an entirely different method ... May the doctor continue to agitate about the alphabet while I, having been for six months among the monuments of Egypt, I am startled by what I am reading fluently rather than what my imagination is able to come up with.”

The defiantly nationalistic overtones—at times evident in Young's writings, too—have to some extent bedevilled honest discussion of Young and Champollion ever since those Napoleonic days of intense Franco-British political rivalry. Even Young's loyal friend and admirer, the physicist Dominique Arago, turned against his work on hieroglyphics, at least partly because Champollion was an honoured fellow Frenchman. Thus, a recent (1999) French book for the general reader by a writer of Egyptian origin, Robert Solé, and the Egyptologist Dominique Valbelle, translated into English as *The Rosetta Stone: The Story of the Decoding of Hieroglyphics*, deliberately omits the trenchant criticism of Champollion's character by his former teacher de Sacy written to Young in 1815; it also omits two other controversial episodes, in which Champollion is generally held to have suppressed an erroneous publication of his own in 1821 and to have failed to acknowledge a crucial inscriptional clue provided by another in 1822.

Alongside this, Egyptologists, who are the people best placed to understand the intellectual ‘nitty-gritty’ of the dispute, are naturally drawn to Champollion more than Young, because he founded their subject. No scholar of ancient Egypt would wish to think ill of such a pioneer. Even John Ray, the Egyptologist who has done most in recent years to give Young his proper due, admits: “the suspicion may easily arise, and often has done, that any eulogy of Thomas Young must be intended as a denigration of Champollion. This would be shameful coming from an Egyptologist.”

Then there is the cult of genius to consider: the fact that many of us prefer to believe in the primacy of unaccountable moments of inspiration over the less glamorous virtues of step-by-step, rational teamwork. Champollion maintained that his breakthroughs came almost exclusively out of his own mind, arising from his indubitably passionate devotion to ancient Egypt and his unrivalled knowledge of the Coptic language descended from ancient Egyptian. He pictured himself for the public as a ‘lone genius’ who solved the riddle of ancient Egypt’s writing single-handedly in 1822-23. The fact that Young was known primarily for his work in fields other than Egyptian studies, and that he published his studies on Egypt anonymously up to 1823, made Champollion’s solitary self-image easily believable for most people. It is a disturbing thought, especially for a specialist, that a non-specialist might enter an academic field, transform it, and then move onwards to work in an utterly different field.

Lastly, in trying to assess the differing styles of Young and Champollion, there is no avoiding the fact that they were highly contrasting personalities and that this contrast sometimes influenced their research on the hieroglyphs. Champollion had tunnel vision (“fortunately for our subject”, says Ray); was prone to fits of euphoria and despair; and had personally led an uprising against the French king in Grenoble in 1821, for which he

was put on trial. Young, apart from his polymathy and a total lack of engagement with party politics, was a man who “could not bear, in the most common conversation, the slightest degree of exaggeration, or even of colouring” (wrote his closest friend after Young’s death). Young and Champollion were poles apart intellectually, emotionally and politically.

Consider their respective attitudes to ancient Egypt. Young never went to Egypt, and never wanted to go. In founding an Egyptian Society in London in 1817, to publish as many ancient inscriptions and manuscripts as possible, so as to aid the decipherment, Young remarked that funds were needed “for employing some poor Italian or Maltese to scramble over Egypt in search of more.” Champollion, by contrast, had long dreamt of visiting Egypt and doing exactly what Young had depreciated, ever since he saw the hieroglyphs as a boy; and when he finally got there, he was able to pass for a native, given his swarthy complexion and his excellent command of Arabic. “I am Egypt’s captive—she is my be-all”, he thrilled from beside the Nile in 1828. Later he described entering the temple of Ramses the Great at Abu Simbel, which was blocked by millennia of sand: “I almost entirely undressed, wearing only my Arab shirt and long underwear, and pressed myself on my stomach through the small aperture of a doorway which, unearthed, would have been at least 25 feet high. It felt as if I was climbing through the heart of a furnace and, gliding completely into the temple, I entered an atmosphere rising to 52 degrees: holding a candle in our hand, Rosellini, Ricci, I and one of our Arabs went through this astonishing cave.”

Such a perilous adventure would probably not have appealed to Young, even in his careless youth as an accomplished horseman roughing it in the Highlands of Scotland. Unlike Champollion, Young’s motive for ‘cracking’ the Egyptian scripts was fundamentally philological and scientific, not aesthetic and cultural—in contrast with his attitude to the classical literature of Greece and Rome. Many Egyptologists, and

humanities scholars in general, tend not to sympathize with this motive. They also know little about Young's work in science and his renown as someone who initiated many new areas of enquiry (such as a theory of colour vision) and left others to develop them. As a result, some of them seriously misjudge Young. Not knowing of his fairness in recognizing other scientists' contributions and his fanatical truthfulness in his own scientific work, they jump to the obvious conclusion that Young's attitude to Champollion was chiefly envy. But not only would such an emotion have been out of character for Young, it would also not have made much sense, given his major scientific achievements and the fact that these were increasingly recognized from 1816 onwards—starting with French scientists, who awarded Young their highest honours.

For Champollion, the success of his decipherment was a matter of make or break as a scholar and as a man. For Young, his Egyptian research was essentially yet one more fascinating avenue of knowledge to explore for his own amusement. Both men were geniuses, though of exceptionally different kinds, and both deserve to be remembered in the story of the decipherment of the Egyptian hieroglyphs: Young for taking some difficult but crucial initial steps; Champollion for discovering a coherent system and demonstrating its validity with a vast array of virgin inscriptions.

(Andrew Robinson is the author of a biography of Young, *The Last Man Who Knew Everything*, and is currently writing a biography of Champollion, to be published by Thames & Hudson.)

## Discussion: Styles of decipherment

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1) What is the critical mistakes among many which make T. Young lose the race with J-F. Champollion for the decipherment of Egyptian hieroglyph?

2) Under the collapse of public education system under Napoleon in France, who taught Champollion or how did he train himself enough to embark on decipherment?

3) Did T. Young have knowledge of Coptic, which was critical for Champolleon to decipherment of hieroglyphs?

4) What is the most important factor in order to be a decipherer?

