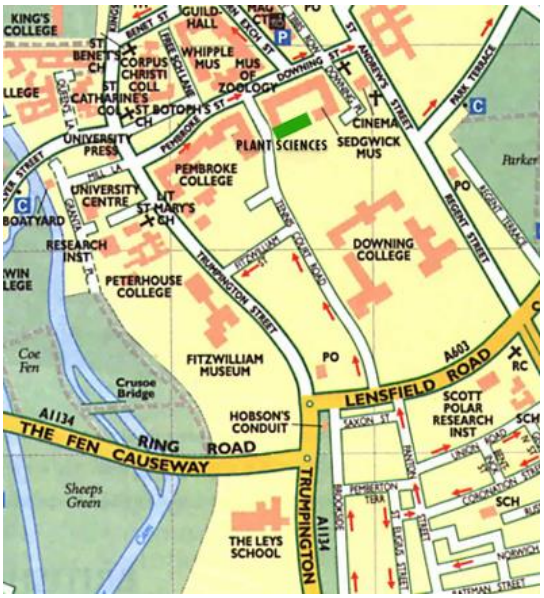
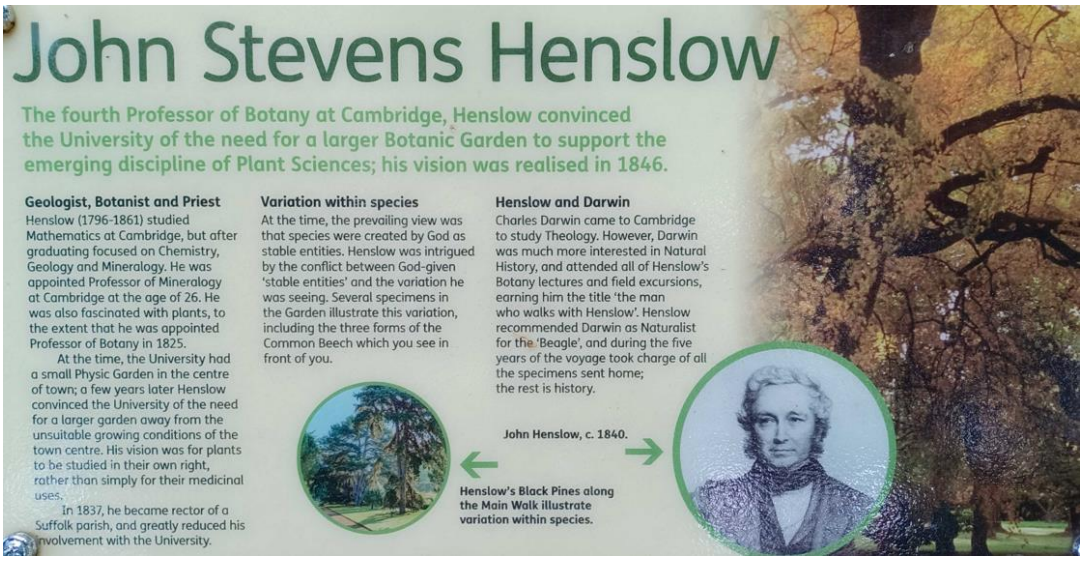
Scientific Cambridge — Photo album Part 4

During my last two-week programme at Cambridge[1], devoted to literary and artistic studies centred on Shakespeare, I also took the opportunity to explore some of the scientific treasures of this temple of scholarship, including four specialized museums. As they are smaller than London's Natural History Museum and Science Museum, for example, each museum offers an enjoyable experience, a voyage in time and knowledge without feeling overwhelmed by the size of the exhibitions or the crowds of tourists. I invite you to follow me in a one-day circuit in Scientific Cambridge!



Crossing the Fens, if you turn on your right on Trumpington Road, you can go to the Botanic Gardens: originally founded in 1762 in the centre of the City—now known as the New Museums Site—it grew plants used for teaching medical students at the University. John Stevens Henslow, Professor of Botany at Cambridge from 1825–1861, was responsible for moving the Garden to its current site.[2]

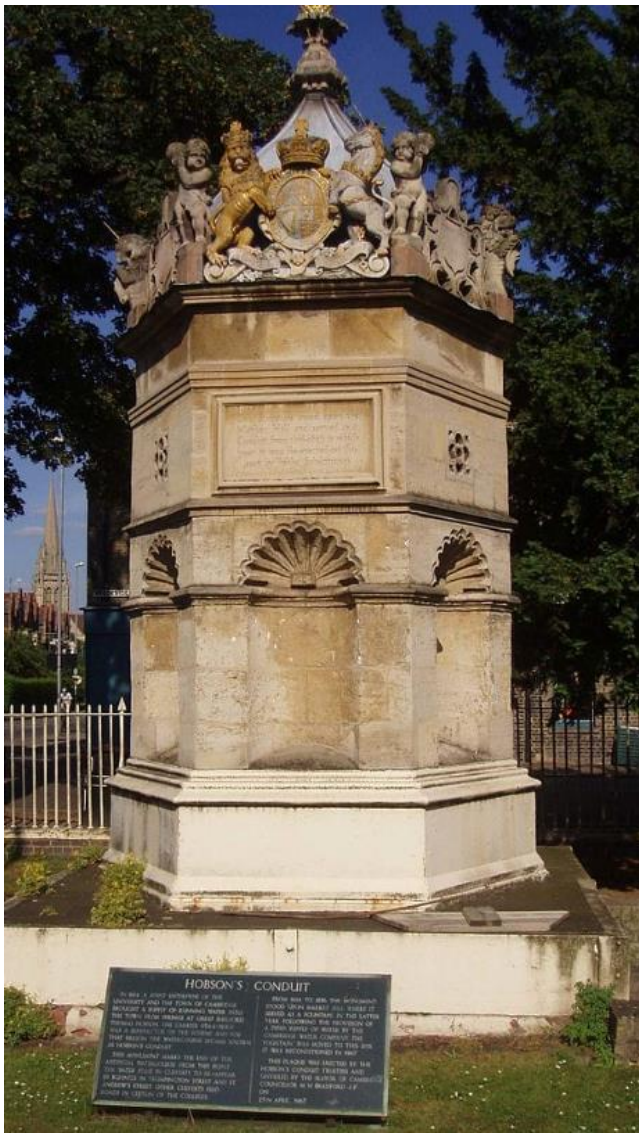


[1] See the album photos of my two-week stay in July 2024 at Cambridge on: A two-week holiday in Cambridge – The eternal student – anglophile version

[2] Source: History of the Garden - Cambridge University Botanic Garden

I already narrated my visit to the Botanic Gardens in Part 3 of my Photo Album (see footnote 1), but they are an integral part of "scientific Cambridge". You'll also find more information about the history of botany in my *RP Science and Art in Britain's "Modern" History* (§ 2.4 pp. 44-47 and § 3.5 p. 79).[3]

At the corner of Trumpington and Lensfield Roads stands the Conduit Head (at the end section of the watercourse) or 'Thomas Hobson's Monument': in 1631, Thomas Hobson, whose income came from transporting goods to and from London, bequeathed land to fund and maintain Cambridge's first public water supply: https://hobsonsconduittrust.org/.



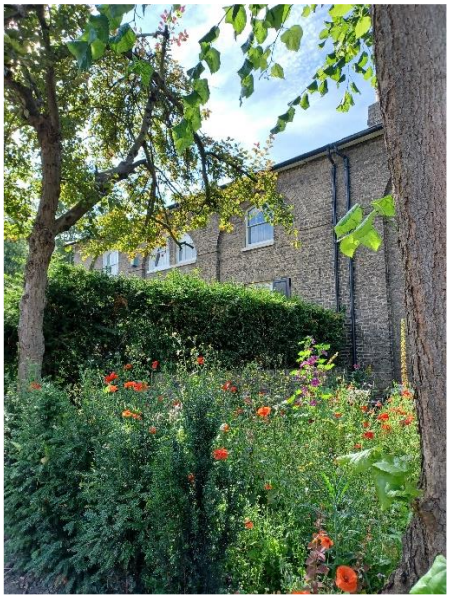
Front of the monument[4]


Back of the monument (my photo)

And at the corner of Trumpington Street and Lensfield Road, we find the Department of Engineering of the University of Cambridge, including the James Dyson Building, which houses since 2016 postgraduate researchers and supports world leading research in areas including advanced materials, smart infrastructure, electric vehicles and efficient internal combustion systems: Overview of the Department | Department of Engineering

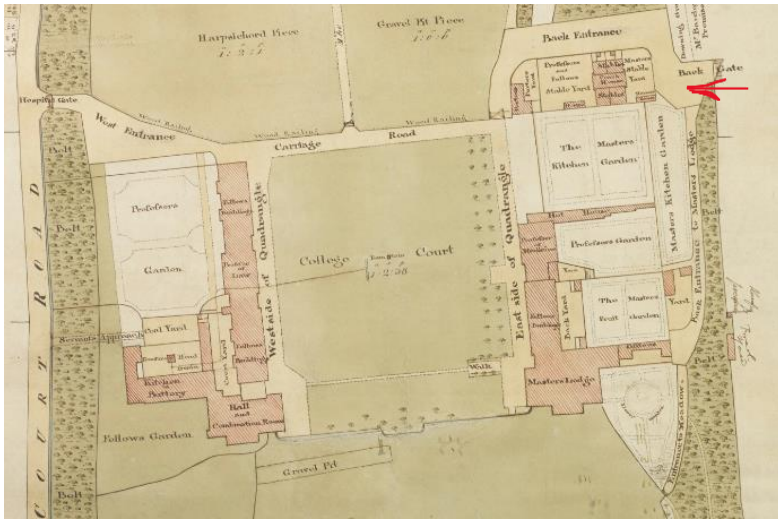
[3] Science & Art in Britain's "Modern" History – The eternal student – anglophile version
[4] Photo from https://hobsonsconduittrust.org/

Continuing in Lensfield Road, I saw little Georgian-style brick buildings and charming private houses neighbouring scientific organizations such as the Scott Polar Research Institute: Scott Polar Research Institute, Cambridge



At the corner of Lensfield Road and Regent Street/Hills Road stands the Catholic church of 'Our Lady of the Assumption and the English Martyrs', a large Gothic Revival church built between 1885 and 1890. The symbol of a Catholic church standing amidst this area of Cambridge, rather dedicated to science and technology, reminded me of Galileo and Descartes. Though both Catholics, they believed that religion is about morality and faith, while science deals with the observable, physical world: to them, the Bible taught "how to go to heaven, not how the heavens go."

Then, walking in Regent Street to the city centre, I wouldn't know that on my left-hand side, behind the brick facades lies Downing College, until I saw its main entrance. As it was open to the public, I seized this opportunity to have a look inside. And I didn't regret it! As it was built only in the beginning of the 19th century, its Georgian architecture is completely different from the early colleges. The first buildings were erected in 1807-1812, designed by William Wilkins (1775-1839) who was greatly influenced by Greek architecture. Until recently, Downing was the only Cambridge College to be designed as a whole, instead of being added to over time.[5]



Detail of the 1822 'Plan of Downing College and Pleasure Grounds' by Wilkins[6], Regent Street is on the right

Detail of the poster at the entrance of Downing College, on Regent Street.

[5] See Downing College | Downing College Cambridge and

[6] Wilkins' map on: Downing College timeline | Downing College Cambridge

View from the first court: the new library on the right, built in a style with the older buildings in the background

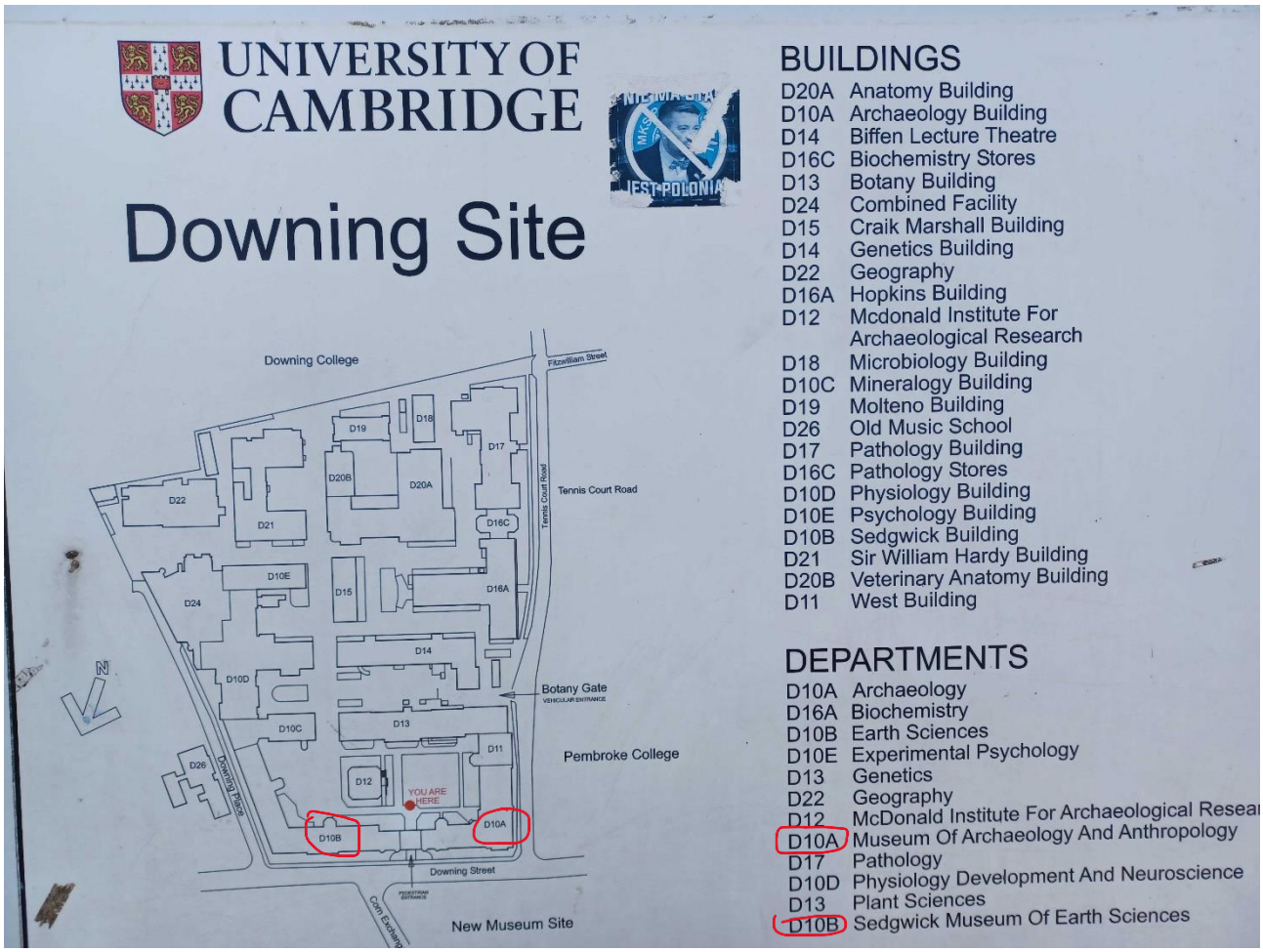
Downing College was formed "for the encouragement of the study of Law and Medicine and of the cognate subjects of Moral and Natural Science" and has developed a reputation amongst Cambridge colleges for Law and Medicine[7].

The Esat Lodge Gardens where Summer cultural events like the Shakespeare Festival take place

[7] Source: Downing College, Cambridge - Wikipedia

View on the West Range from the Quadrangle.

Going back to Regent Street and walking towards the city centre, I then turned on the left in Downing Street, where stands Downing Site, with its various faculties, as well as two museums: the Museum of Archaeology and Anthropology (D10A): https://maa.cam.ac.uk/ and the Sedgwick Museum of Earth Sciences (D10B): https://sedgwickmuseum.cam.ac.uk/



I started my visit with the Sedgwick Museum of Earth Sciences:


The entrance of the museum, and a statue of Adam Sidgwick in the museum


Sculptures at the bottom of the building's staircase

The collections are of outstanding scientific and historical importance. They date from the 17th century and are still growing as research continues today. Important historic collections include those of John Woodward (1688-1728), Sir Abraham Hume (1749-1838), Charles Darwin (1809-1882) and Alfred Harker (1859-1939), while [their] archive collection includes field notebooks, papers, maps and photographs charting the history of geology in Cambridge, including the records of the *Sedgwick Club*, the student society founded in 1880.[8]

For more information about the history of geology and palaeontology, you can also read my RP *Science and Art in Britain's "Modern" History*, pp. 73-78.[9]

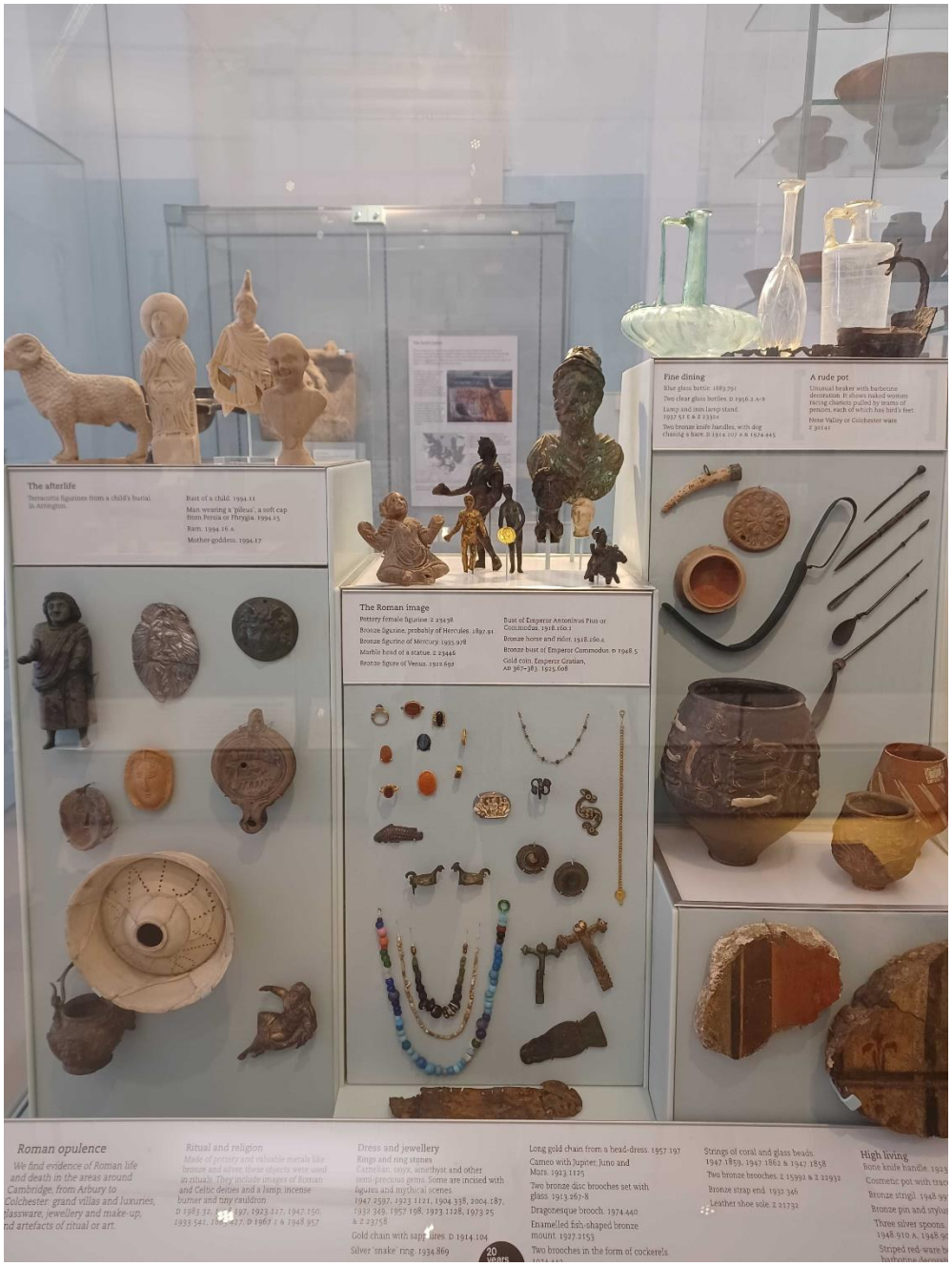
[8] Source: Collections | Sedgwick Museum of Earth Sciences
[9] See my RP on: Science & Art in Britain's "Modern" History – The eternal student – anglophile version

Hippopotamus amphibius

Iguanodon

Whitby and Dorset fossils

Then I went to Museum of Archaeology and Anthropology, where I enjoyed watching some of their fascinating collections of items, from Roman artefacts to exotic art coming from all over the world:



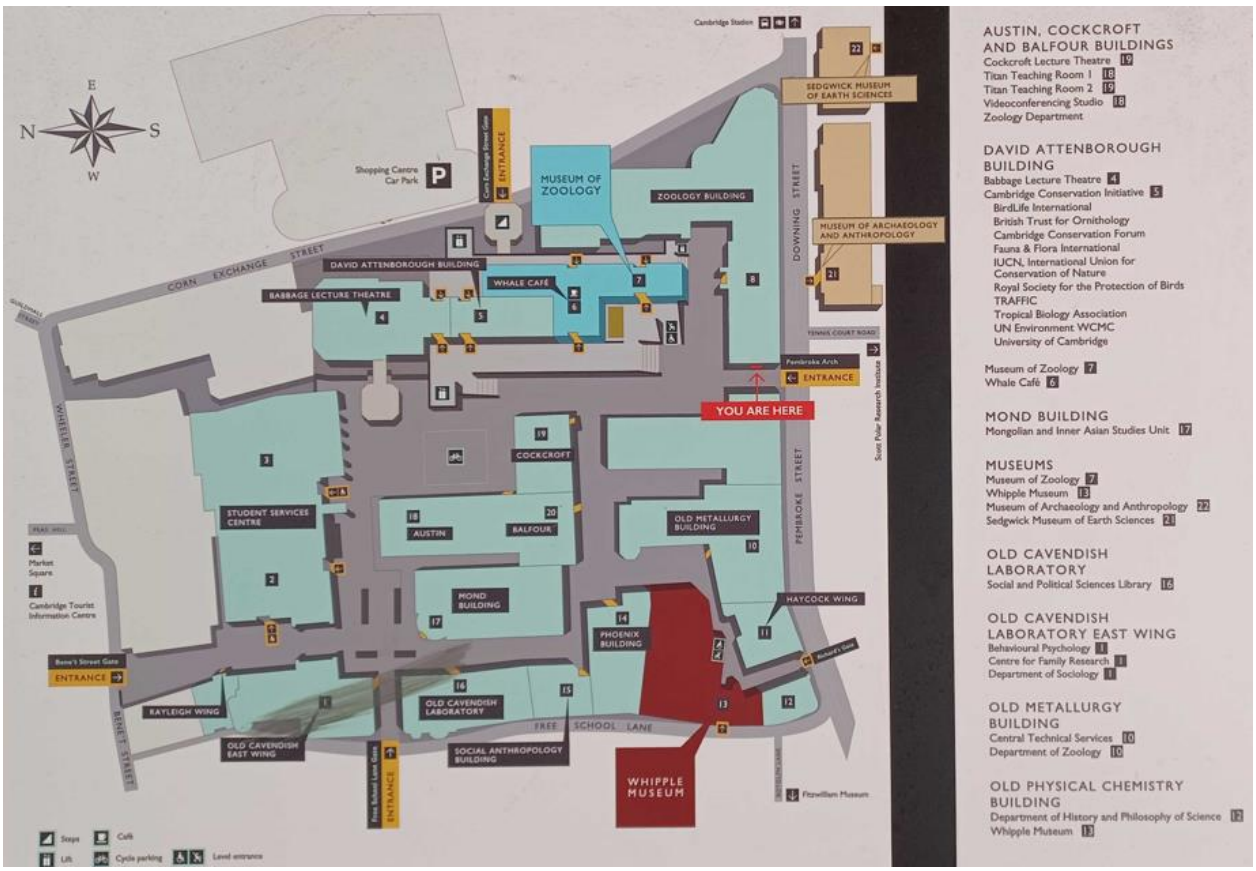
A display of Roman artefacts in Clarke Hall

The main permanent gallery on the ground floor (Clarke Hall) is dedicated to the archaeology of Cambridge and the surrounding area.

On the first floor, Maudslay Hall gallery houses the Museum's principal Anthropology collection, displaying culturally significant art and artefacts from around the world. On the mezzanine other treasures, such as the Egyptian shabtis (workers in the afterlife) are displayed.

The Maudslay Gallery displays World Cultures collections, including totem poles from Queen Charlotte Islands, British Columbia, Canada

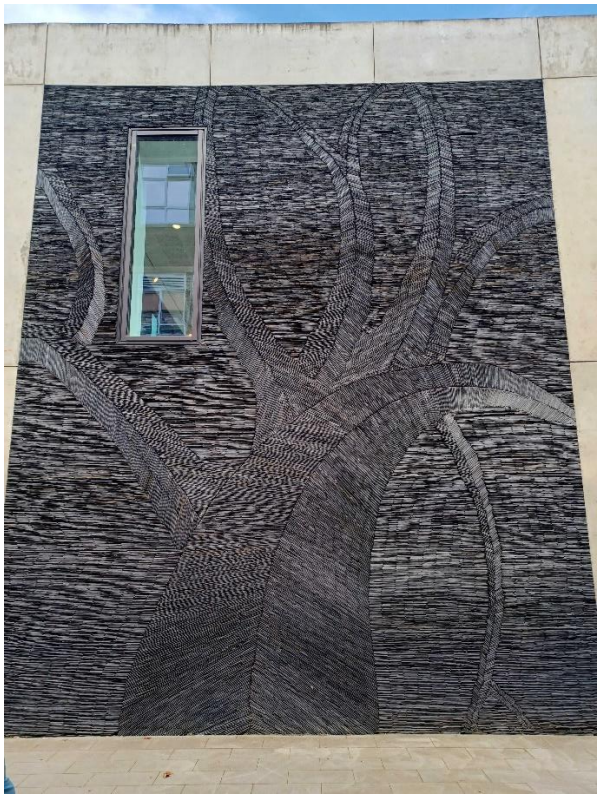
Almost opposite the MAA in Pembroke Street, you find the Pembroke Arch entrance, which gives access to another huge site housing the Museum of Zoology and the Whipple Museum. In the same area also stands the old Cavendish Laboratory.[10]



[10] See my RP *Science and Art in Britain "Modern History"*, pp. 69-70 and 90-91

The Museum of Zoology and the nice Whale Café are housed in The David Attenborough building, as well as: https://www.museum.zoo.cam.ac.uk/

And on the right side of the building, note the *Slate Works South*, by Ackroyd and Harvey, 2016:



The dramatic display of the collections of animals is very attractive to visitors, especially to children. For more information about the history of zoology and Darwin's *The Origins of Species*, you may read *Science and Art in Britain's "Modern" History*, pp. 75-80.[11]

[11] Science & Art in Britain's "Modern" History – The eternal student – anglophile version

And to close this little tour of “scientific Cambridge”, I visited the delightful Whipple Museum of the History of Science: https://www.whipplemuseum.cam.ac.uk/.

The entrance of the Whipple Museum…

The main gallery of the museum (see note next page)

The treasures of the Whipple Museum

The collection of globes on the second floor

Various armillary spheres from the 18th century

Notes:

1) In the museum's main gallery (photo on previous page), the original Jacobean ceiling dates from 1618. In the foreground stand a 1908 'Royal Century' telescope (see next page) and a 1750 Adams' Grand Orrery.

2) The photos of the armillary sphere and orreries in my RP *Science and Art in Britain's "Modern" History* (pp. 24 and 39)[12] were also taken at the Whipple Museum in Cambridge.

[12] See: Science & Art in Britain's "Modern" History – The eternal student – anglophile version

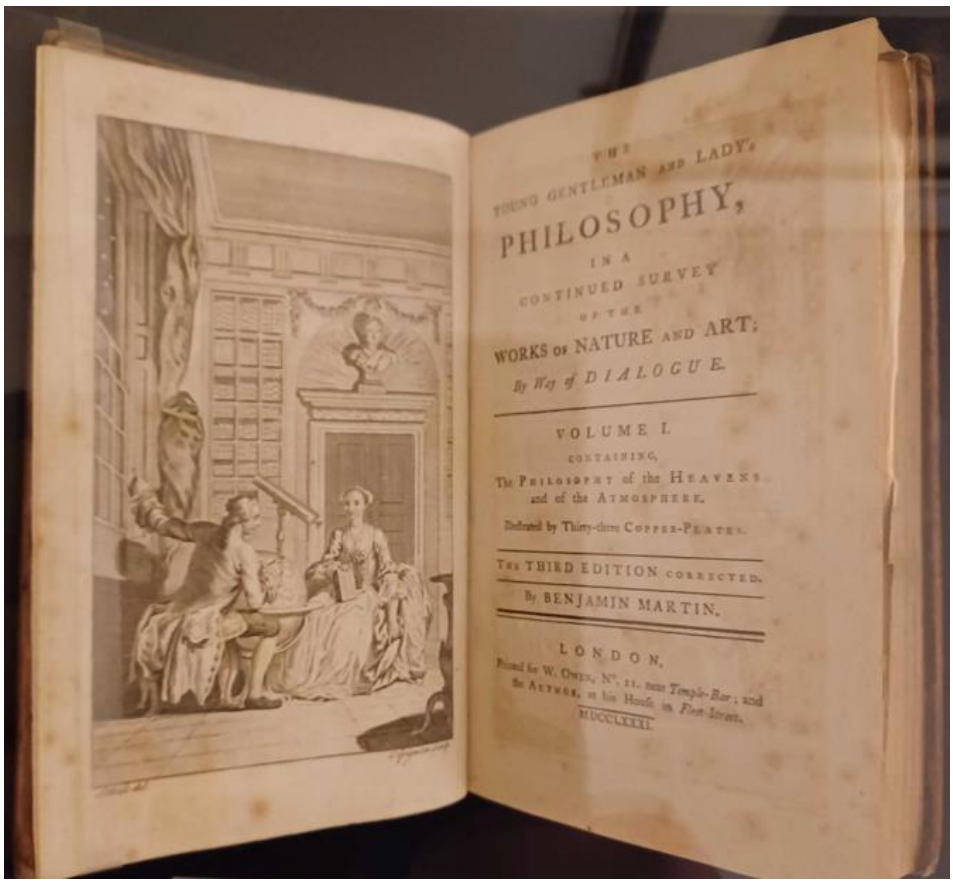
Reflecting telescope, Newtonian “Herschel Telescope”, by William Herschel, English, c. 1790

This huge reflecting telescope was made by Sir William Herschel in around 1790. It uses a concave mirror of 9-inch diameter to gather and focus light. Herschel was a German emigre musician who settled in Bath, England, where he spent his spare time building telescopes and observing the night sky. He achieved public acclaim and royal favour through his discovery of the planet Uranus in 1781, the first new planet to have ever been discovered (Mercury, Venus, Mars, Jupiter and Saturn are all visible to the naked human eye).[13]

5-inch refracting telescope on an equatorial stand, with clockwork drive, ‘Royal Century’ model, by W. Watson & Son, English, c. 1908

The nineteenth century saw a boom in public interest in astronomy, both as a subject of study and as a leisure activity. The London firm of W. Watson & Sons (founded 1837) became a leading provider of home telescopes, as stargazing, planet watching, and comet hunting became hobbies enjoyed by many.[14]

[13] Photo and description: courtesy to the Whipple Museum, collections.whipplemuseum.cam.ac.uk/objects/9006/
[14] Photo and description: courtesy to the Whipple Museum, collections.whipplemuseum.cam.ac.uk/objects/14344/



THE
YOUNG GENTLEMAN AND LADY'S
PHILOSOPHY,
IN A
CONTINUED SURVEY
OF THE
WORKS OF NATURE AND ART;
By Way of DIALOGUE.

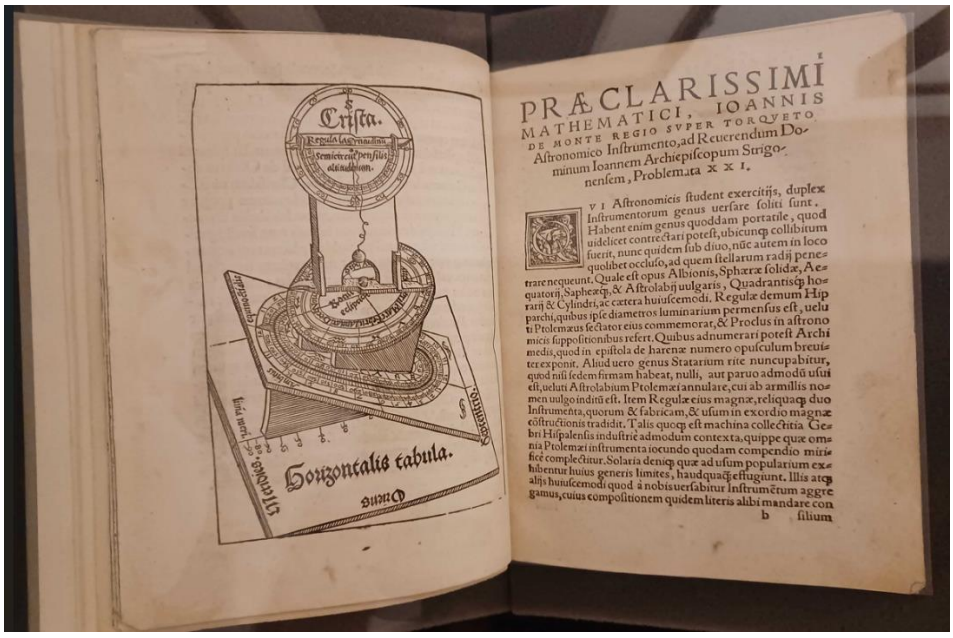
VOLUME I.
CONTAINING,
The PHILOSOPHY of the HEAVENS and of the ATMOSPHERE.
Illustrated by Thirty-three COPPER-PLATES.

THE THIRD EDITION CORRECTED.
By BENJAMIN MARTIN.

LONDON,
Printed for W. OWEN, N°. 11. near Temple-Bar; and the AUTHOR, at his House in Fleet-Street.
MDCCLXXXI.

Benjamin Martin, *The Young Gentleman and Lady's Philosophy*, 1781-2 (three volumes)

Benjamin Martin's treatise was a popular introduction to the work of Isaac Newton, framed as a series of discussions between master and pupil.



Cristæ.

Horizontalis tabula.

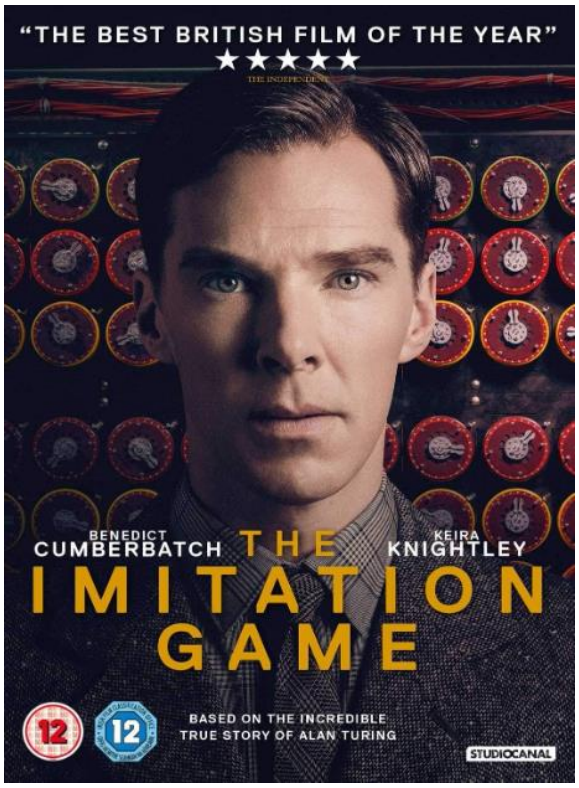
PRÆCLARISSIMI
MATHEMATICI, IOANNIS
DE MONTE REGIO SVPER TORQVETO
Astronomico Instrumento, ad Reuerendum Dominum Ioannem Archiepiscopum Strigoniensem, Problemata XXI.

Joannes Regiomontanus, *Scripta clarissimi mathematici*, 1544

The book above is a collective publication, made by three generations of astronomers and instrument makers working in the German city of Nuremburg, illustrating the close relationship of science and technology to further human knowledge.

This was only a short introduction to the scientific treasures of Cambridge. I conveniently presented these four museums as part of a tour, but as they offer a free entrance, it is very easy to go there and spend some time just browsing and admiring the displays in a few glass cabinets… or have an enjoyable break at The Whale Café!

As most new discoveries in science today are the results of the collective work of big—and often international—teams of scientists working with complex and expensive equipment, the relevance of the Nobel Prize, which used to be awarded to individuals, has recently been questioned. However, the number of Nobel Prizes awarded to affiliates to Cambridge University bears witness to the vitality of sciences at the University of Cambridge, not only from the 17th to the 19th centuries, but also from the 20th century onwards: from Lord Rayleigh (Physics, 1904), JJ Thomson (Physics, 1906) and Ernest Rutherford (Chemistry, 1908), all three from Trinity College, to Sir Roger Penrose (Physics, 2020), the list of laureates who were professors or students at Cambridge is impressive.[15]
In 2014, two British films paid homage to two outstanding scientists, both former students at Cambridge: Alan Turing (1912-1954), who was highly influential in the development of theoretical computer science, and Stephen Hawking (1942-2018), a theoretical physicist, cosmologist, and author. Respectively, *The Imitation Game* (2014), starring Benedict Cumberbatch as Alan Turing, and *The Theory of Everything* (2014), with Eddie Redmayne as Stephen Hawking, popularized the lives and works of these great scientists, though highlighting also their differences: Turing's work was kept secret for more than 50 years, and being ostracized because he was homosexual, he killed himself at only 41 years old, while Hawking became a worldwide star quite young, and despite his severe illness and handicap, gave lectures all over the world. His scientific books became best-sellers.



Eva Anglessy, le 25.10.2024

[15] Source: Nobel Laureates of Cambridge