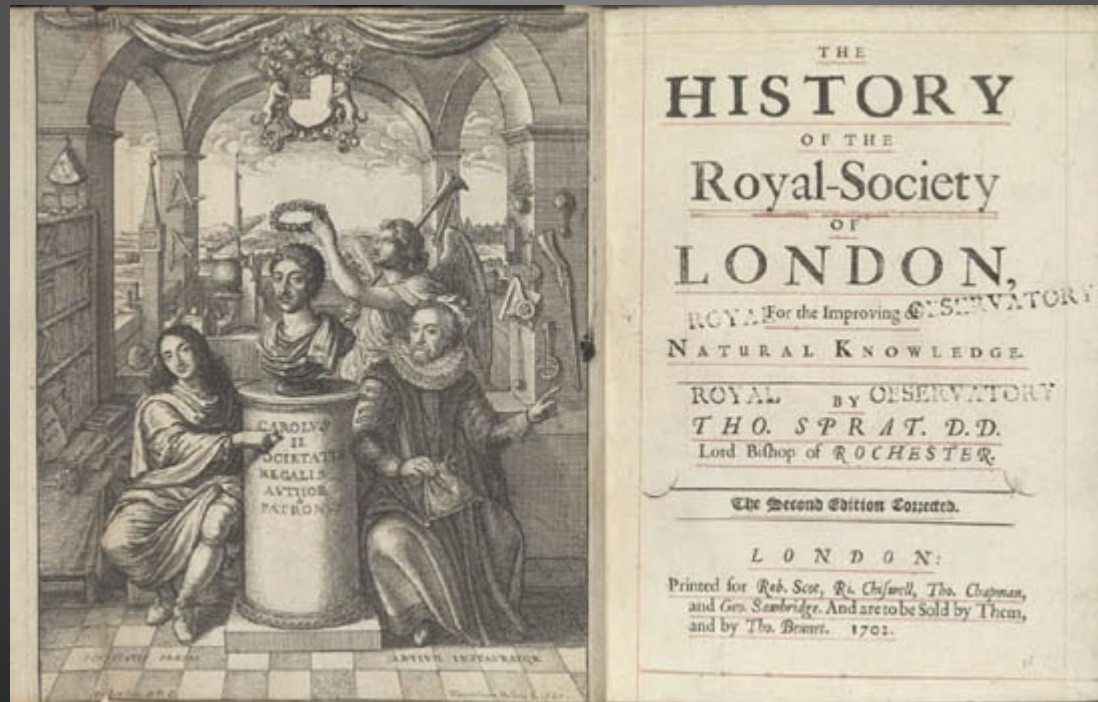


1667 AND THE ROYAL SOCIETY

A MANIFESTO FOR THE FUTURE

Dr Patricia Fara
Clare College, Cambridge



1667

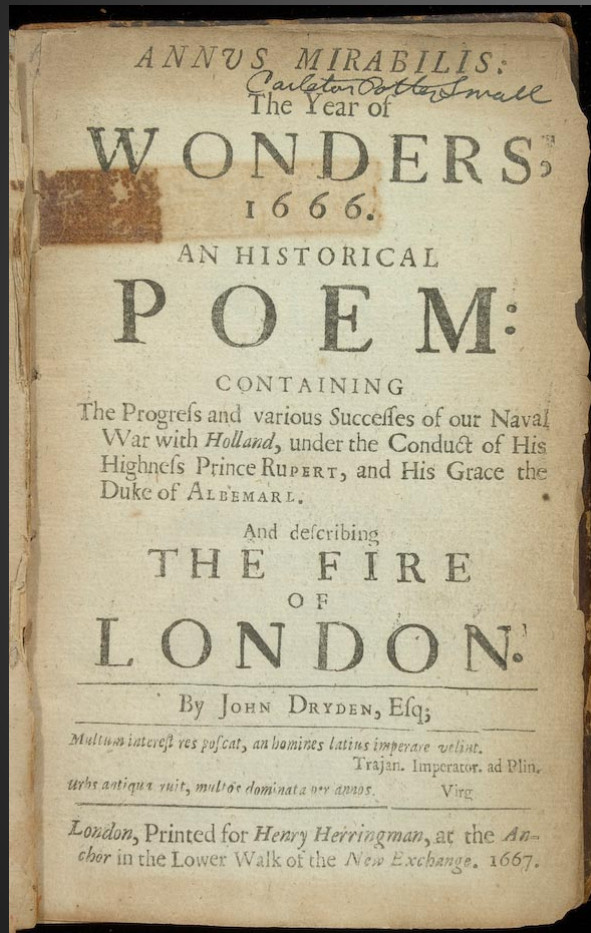


1666

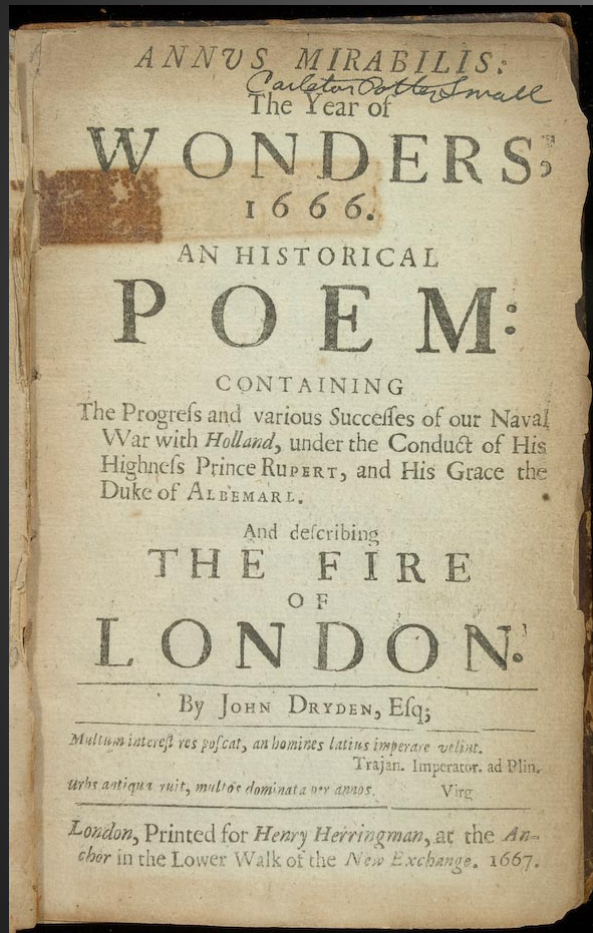


18 Here is wisdom. Let him that hath understanding, count the number of the beast : for it is the number of a man, and his number is, six hundred threescore and six.

John Dryden, 1667



John Dryden, 1667



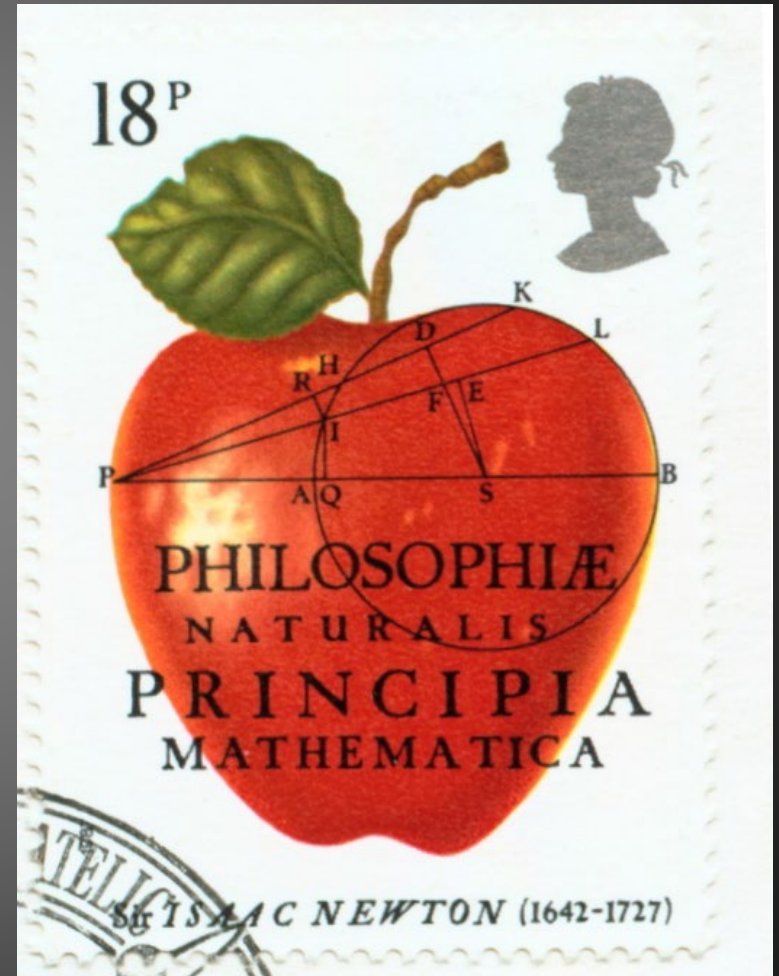
Me-thinks already, from this
Chymick flame,

I see a city of more precious
mold:

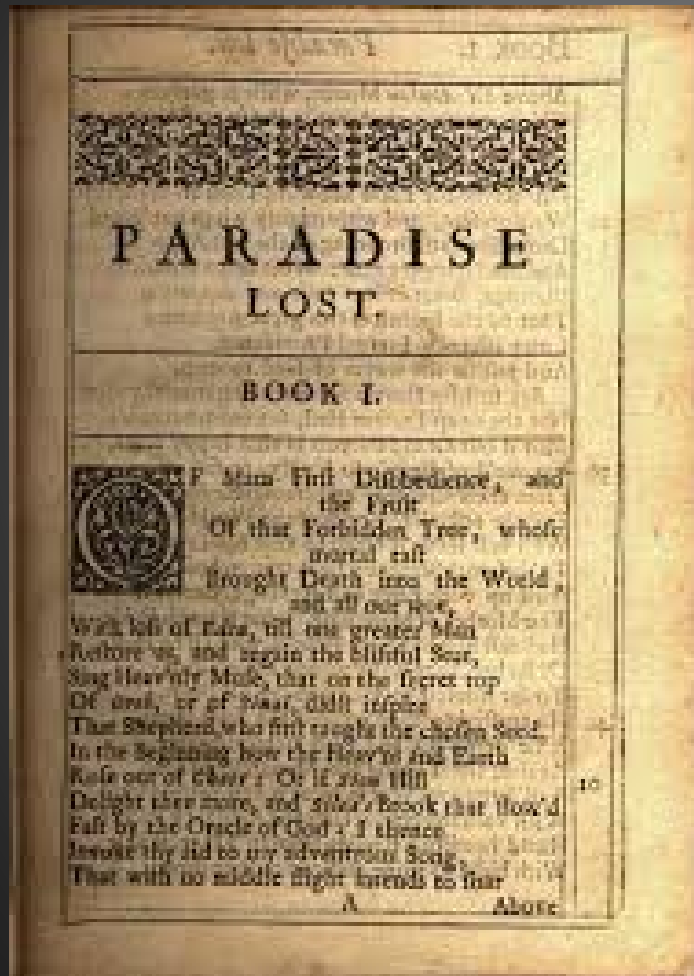
Rich as the town which gives
the Indies name,

With Silver pav'd, and all
divine with Gold.

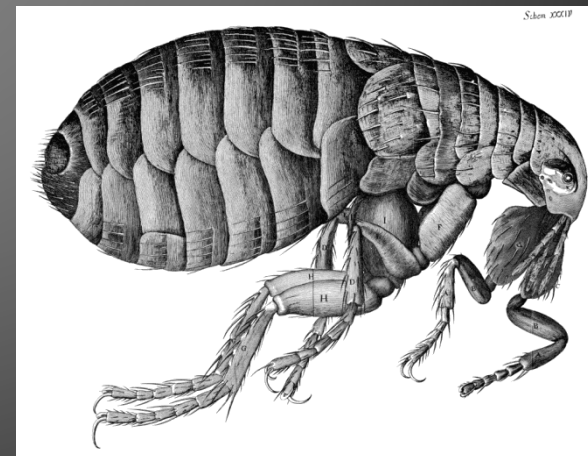
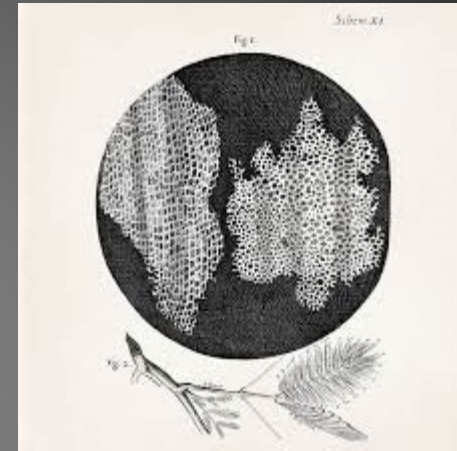
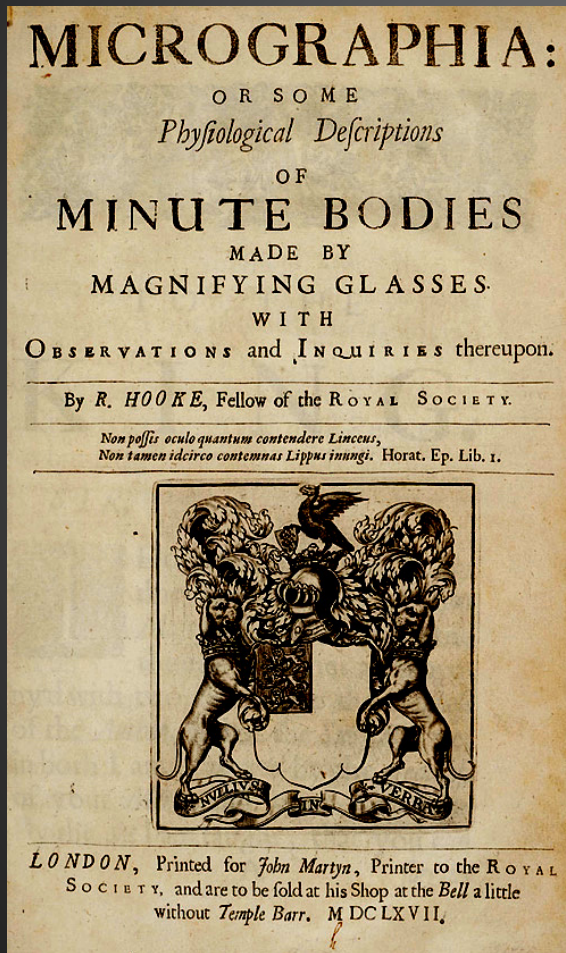
Isaac Newton, 1666-7



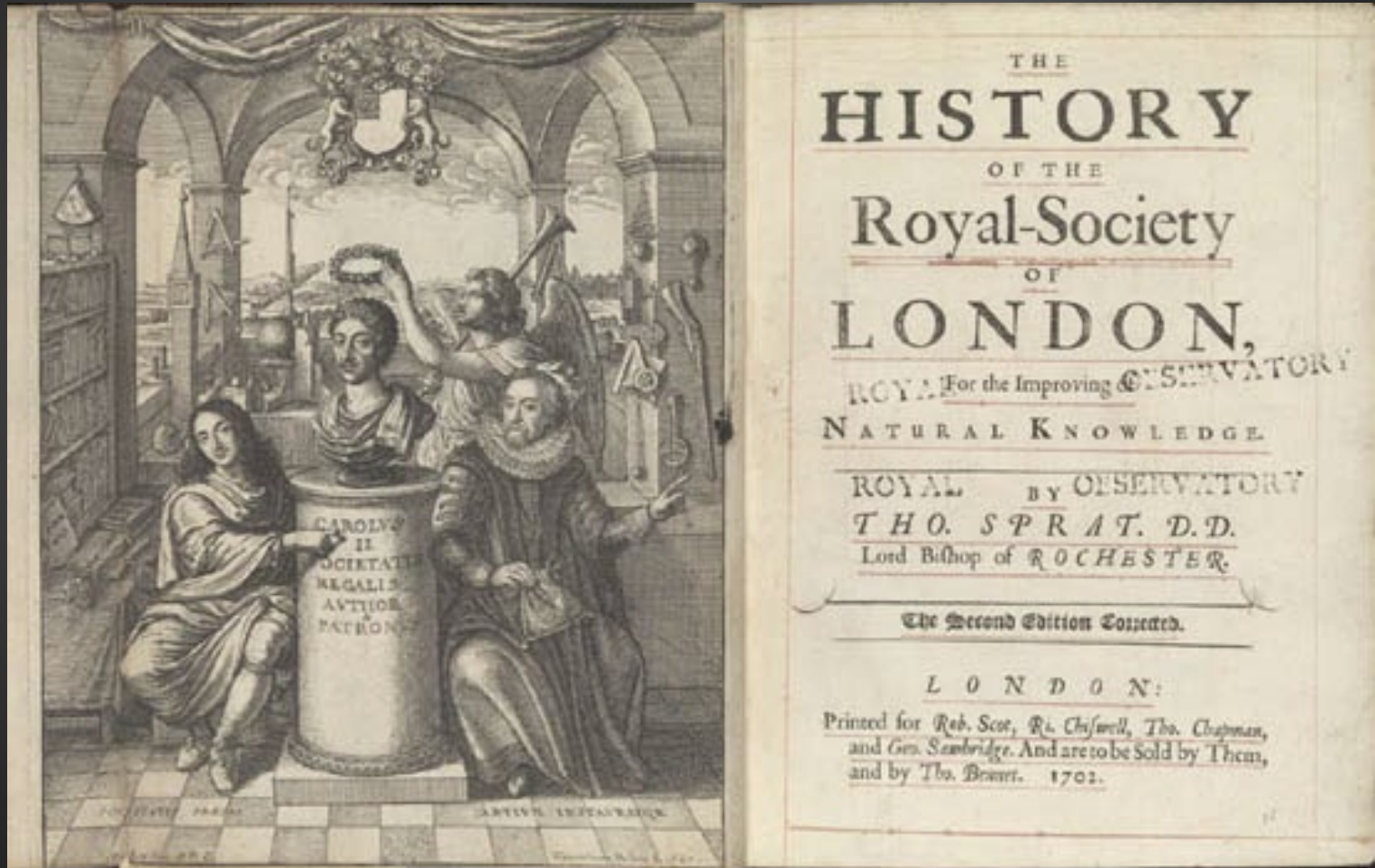
John Milton, 1667



Robert Hooke, 1667



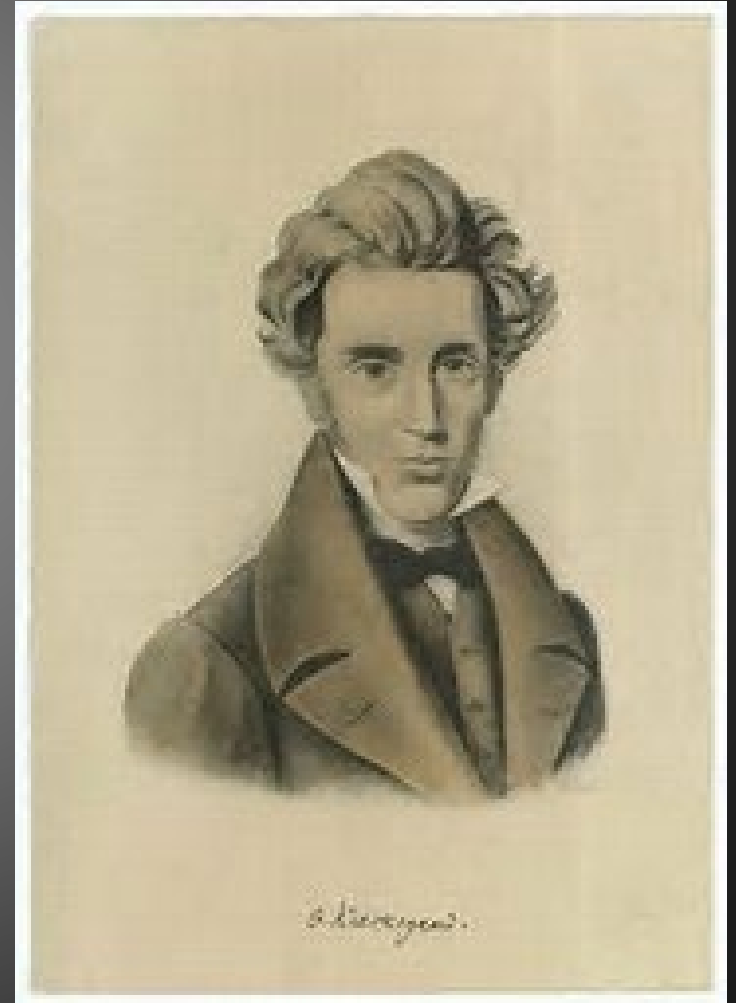
Thomas Sprat, 1667



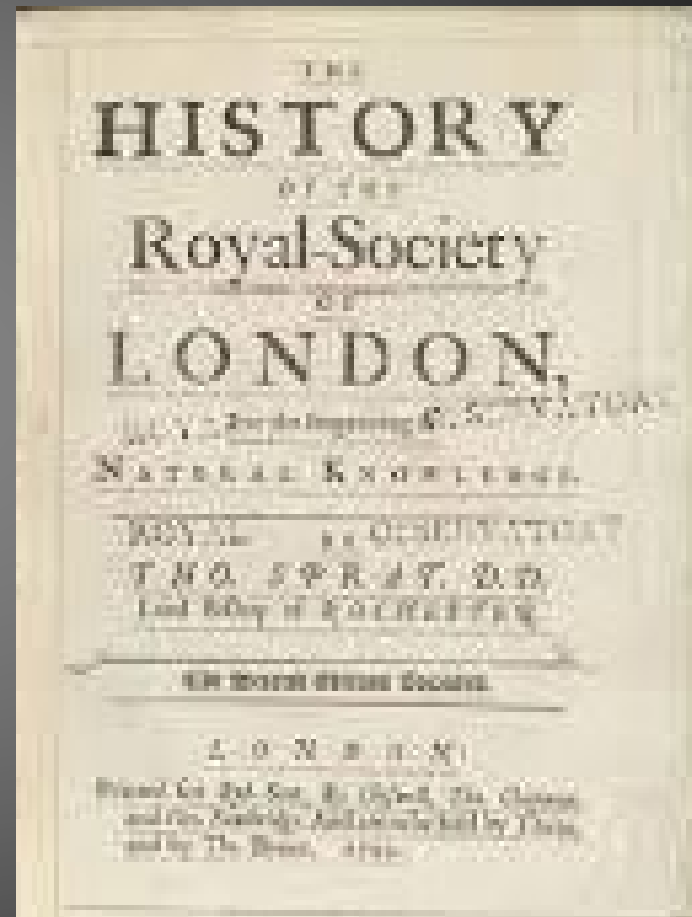
Søren Kierkegaard

‘Life can only be understood backwards; but it must be lived forwards.’

Journals and Papers, 1843



Thomas Sprat (1635-1713)



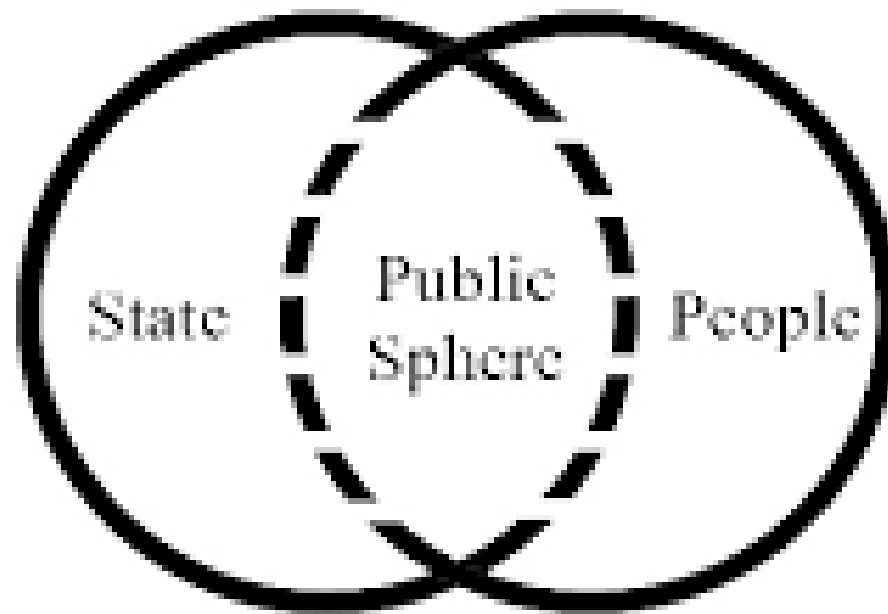
Battle of Naseby, 1645



1660 Restoration



Jürgen Habermas (1929-)



German: 1962

English: 1989

Parliament



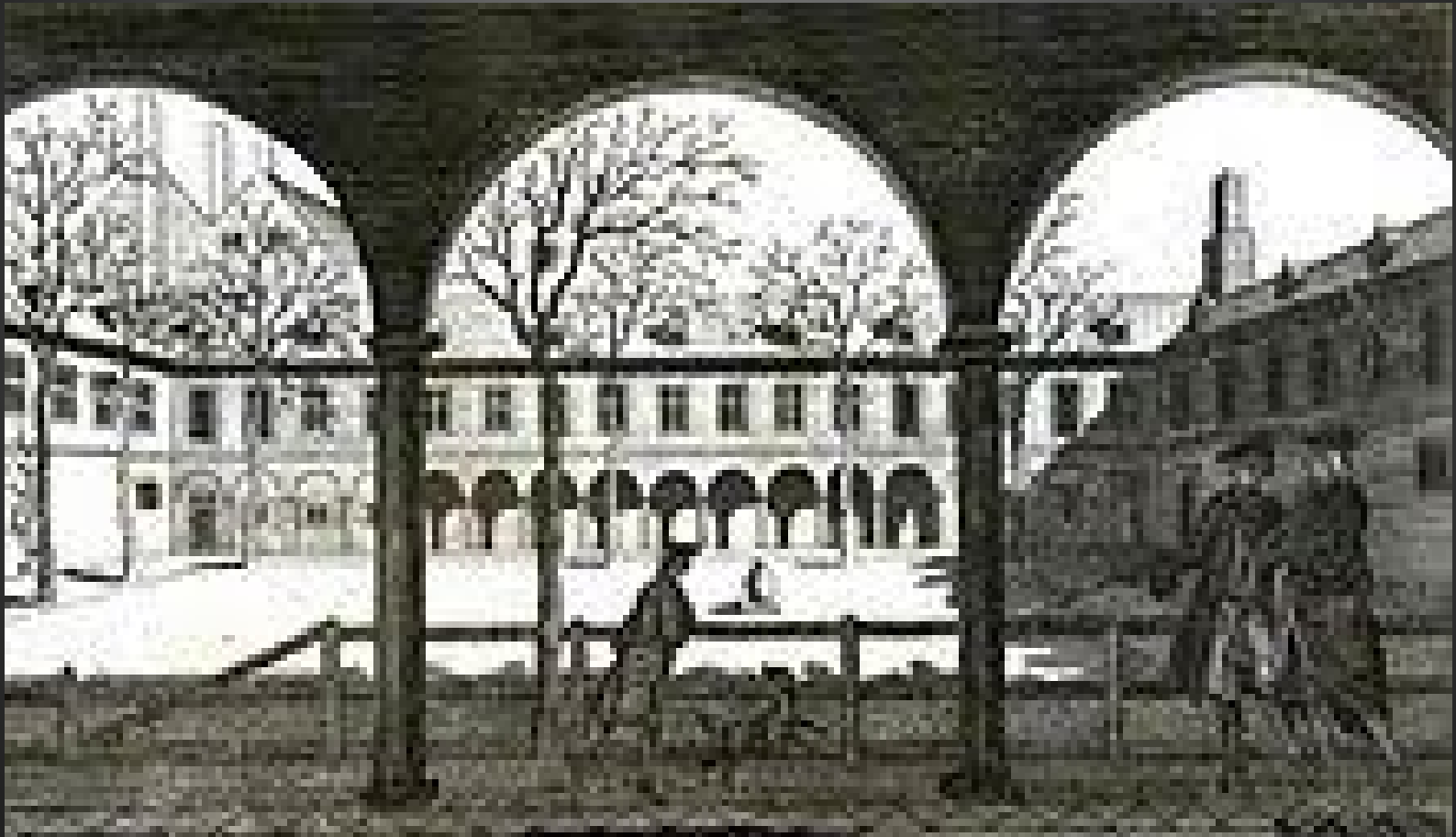
Theatres



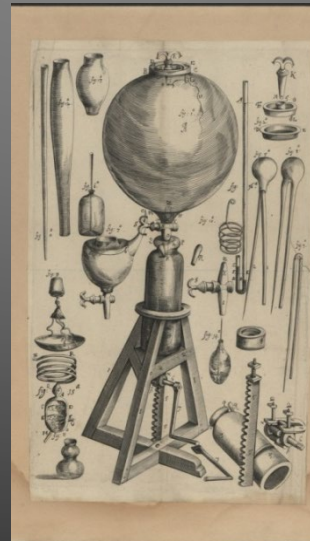
Coffee houses



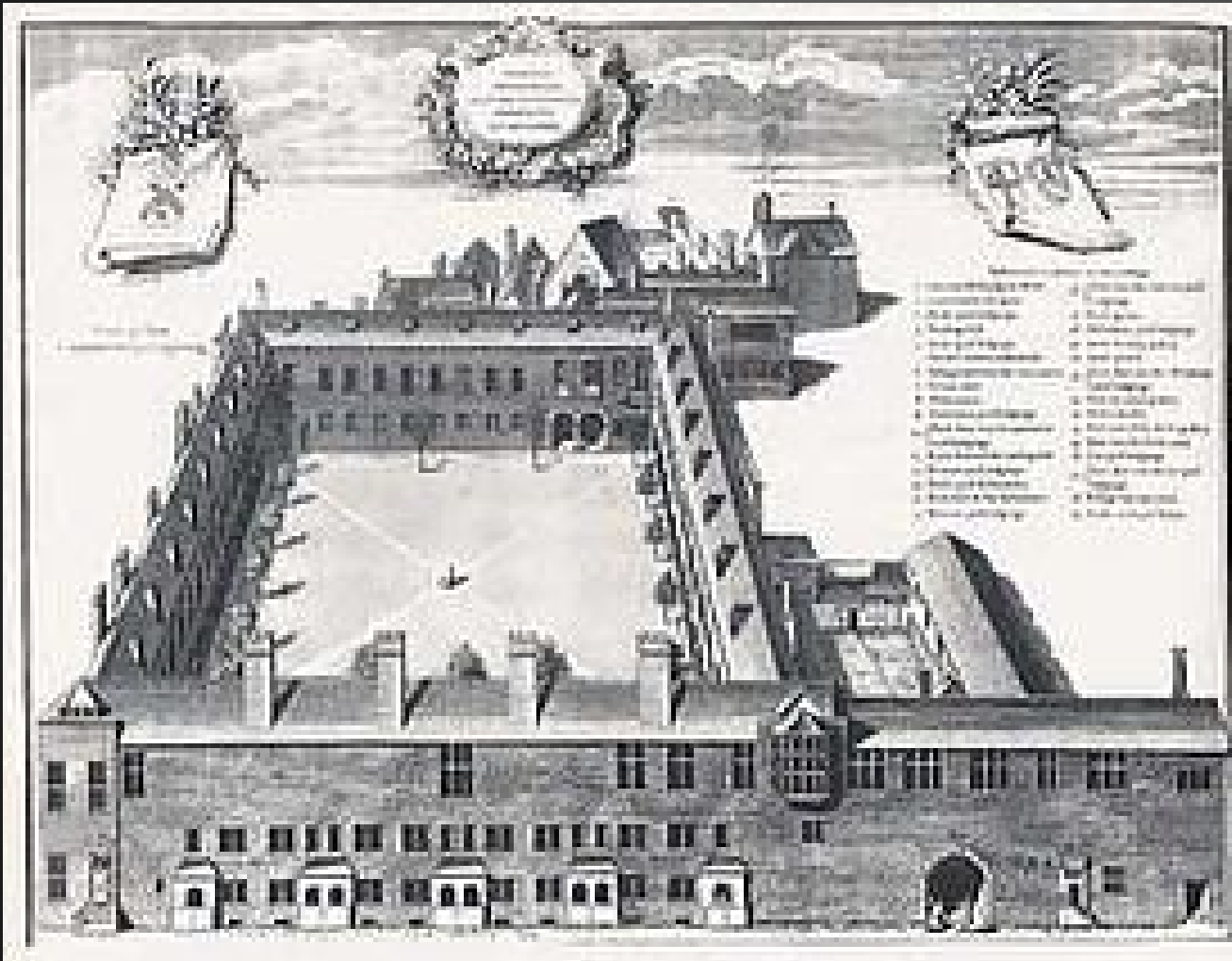
Scholarly societies



1660 Oxford to London



Gresham Professor of Astronomy



Royal Charter 1662

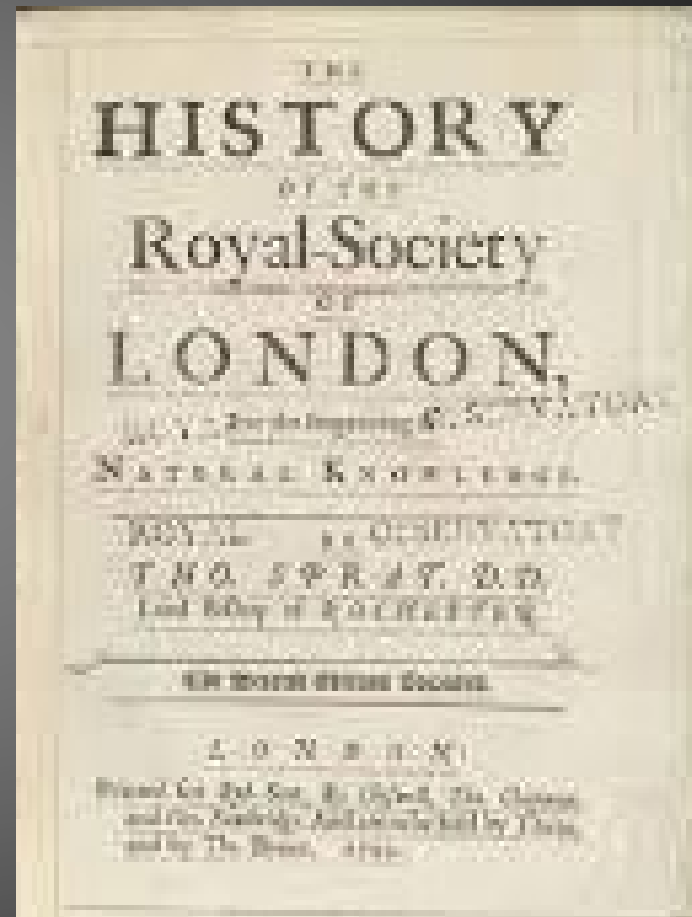


Samuel Pepys, 1664



Charles II spent...
'an hour or two
laughing at Sir W.
Petty...about his boat;
and at Gresham
College in general...for
spending time only in
weighing of ayre, and
doing nothing else
since they sat.'

Thomas Sprat (1635-1713)





1. SCIENCE AND SOCIETY



Sprat's Frontispiece



CAROLUS
II
SOCIETATIS REGALIS
AUTHOR
&
PATRONUS



William Brouncker



$$\frac{4}{\pi} = 1 + \frac{1^2}{2 + \frac{3^2}{2 + \frac{5^2}{2 + \frac{7^2}{2 + \frac{9^2}{2 + \ddots}}}}}$$

THE ROYAL SOCIETY



*From these and all long
Errors of the way,*

*In which our wandring
Prædecessors went...*

*Bacon, like Moses, led us forth
at last.*

FRANCIS BACON, 1561-1626



FRANCIS BACON, 1561-1626

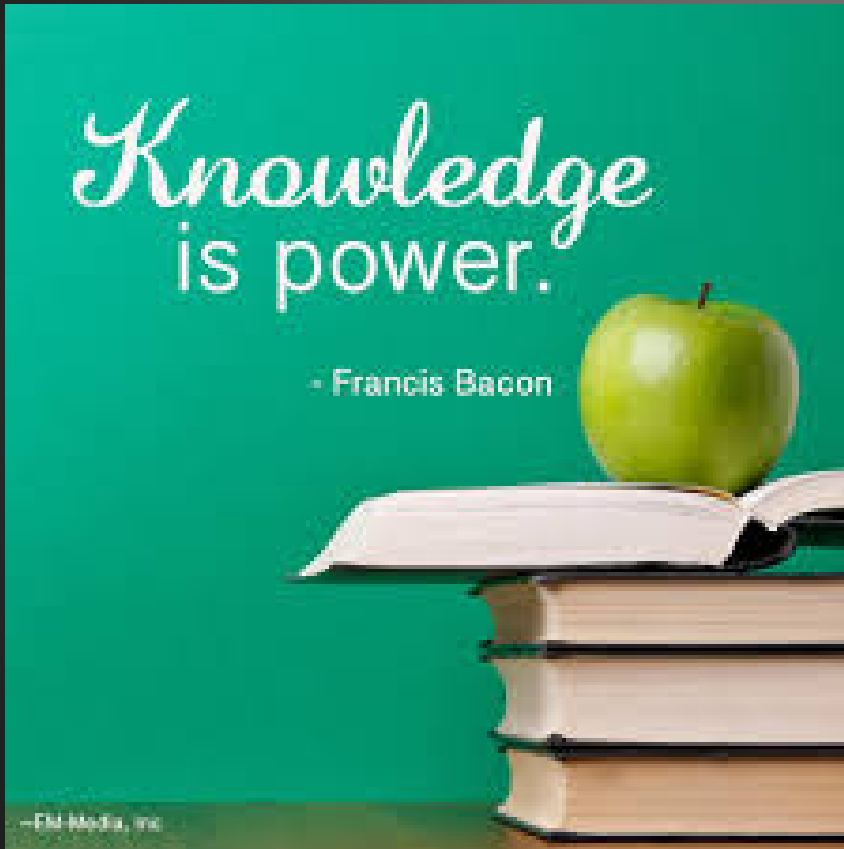
1581 Elected MP
1603 Knighted
1618 Lord Chancellor
1621 Disgraced

1620

The Great Instauration

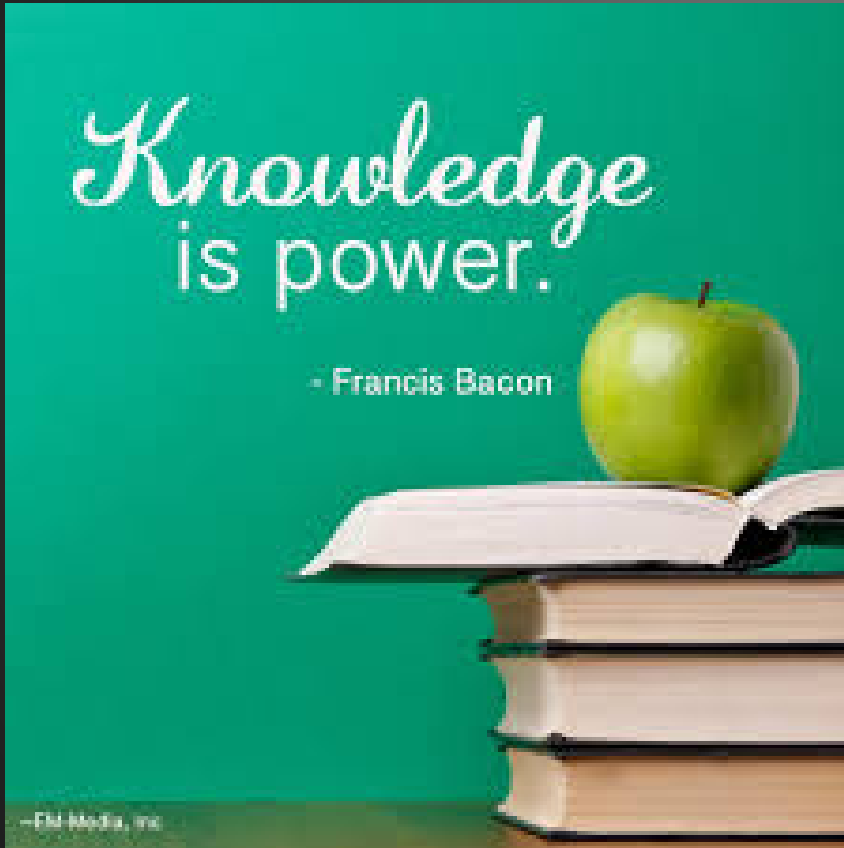


The Great Instauration (1620)



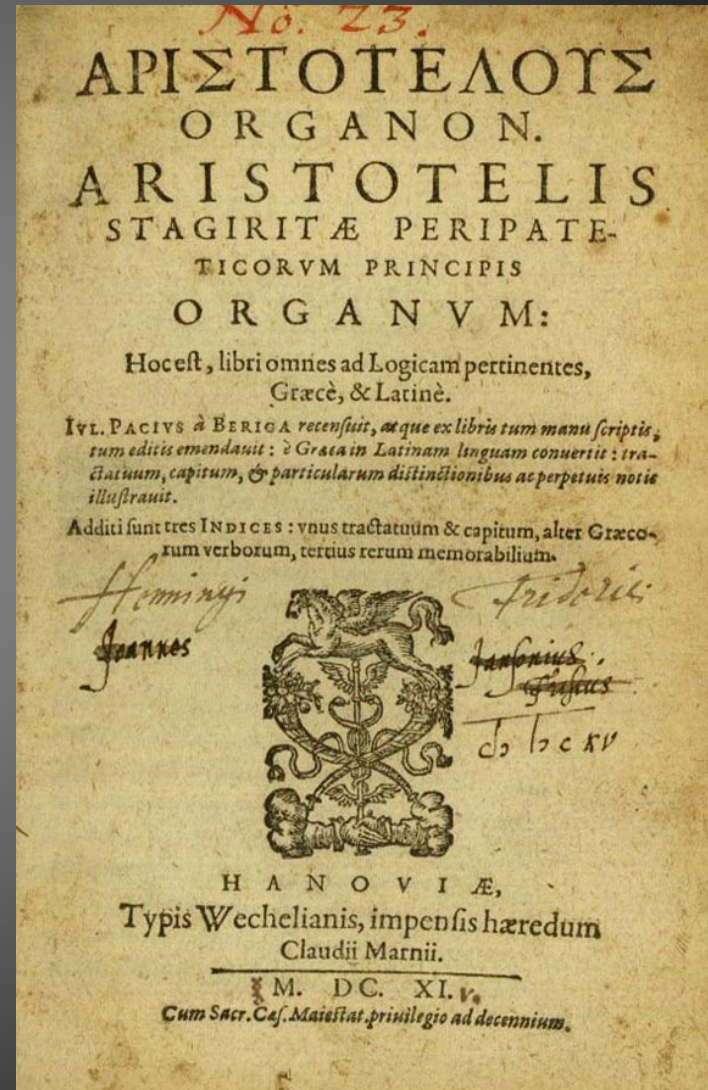
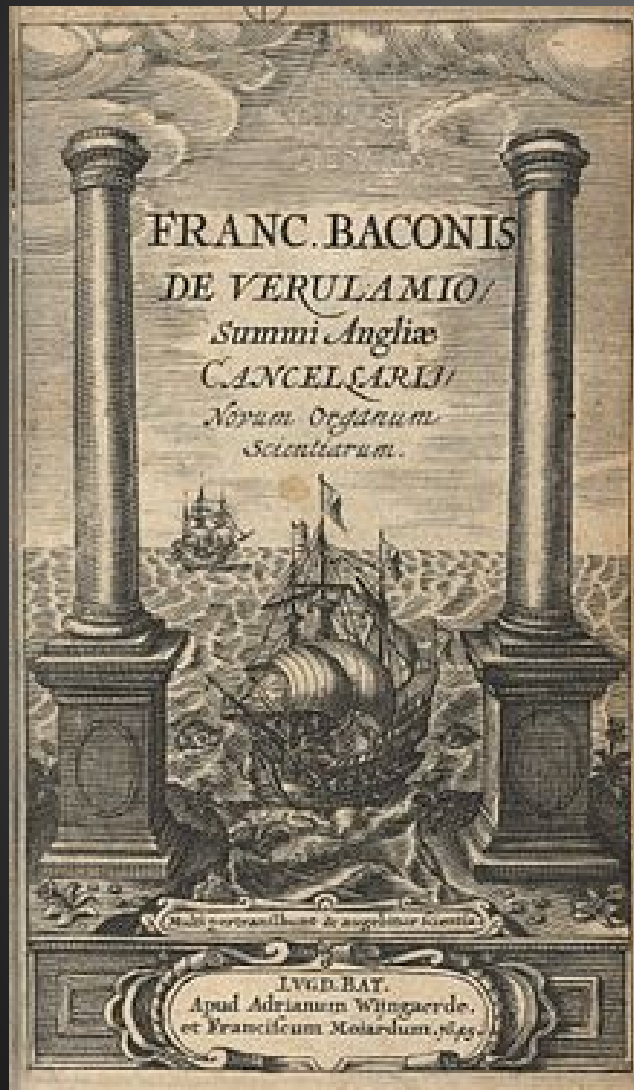
'...a way must be opened
for the human
understanding entirely
different from any
hitherto known...'

The Great Instauration (1620)

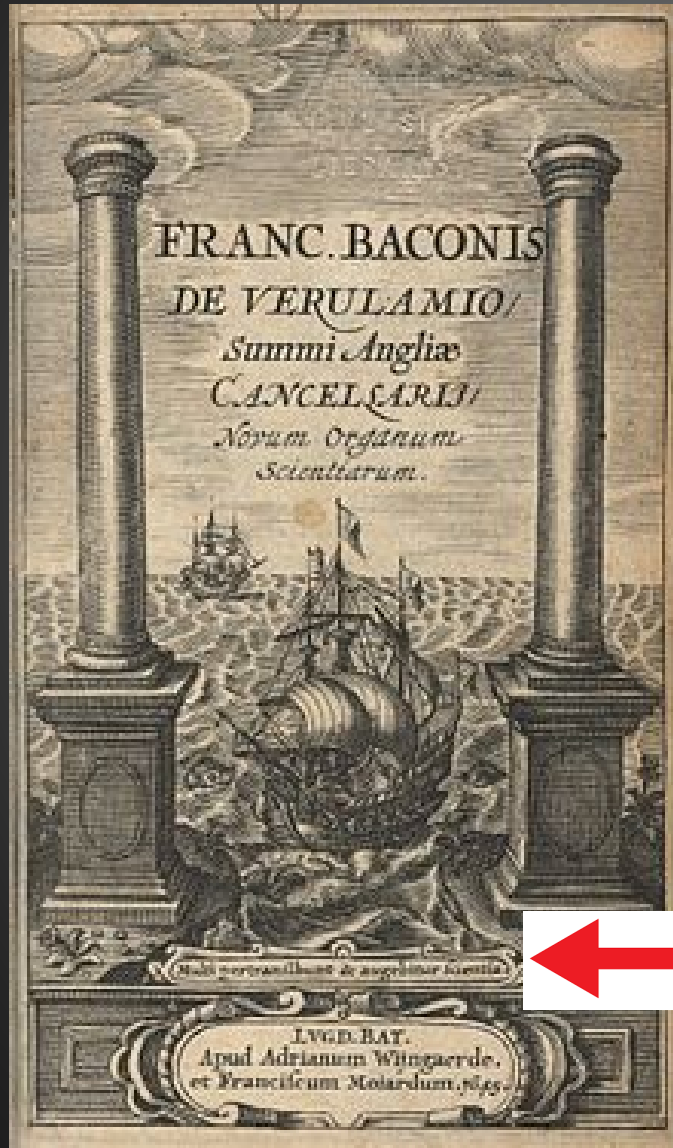


'...a way must be opened for the human understanding entirely different from any hitherto known...in order that the mind may exercise over the nature of things the authority which properly belongs to it.'

Novum Organum (1620)



Observation and Experiment



‘Many will travel and knowledge will be increased’

Observation and Experiment



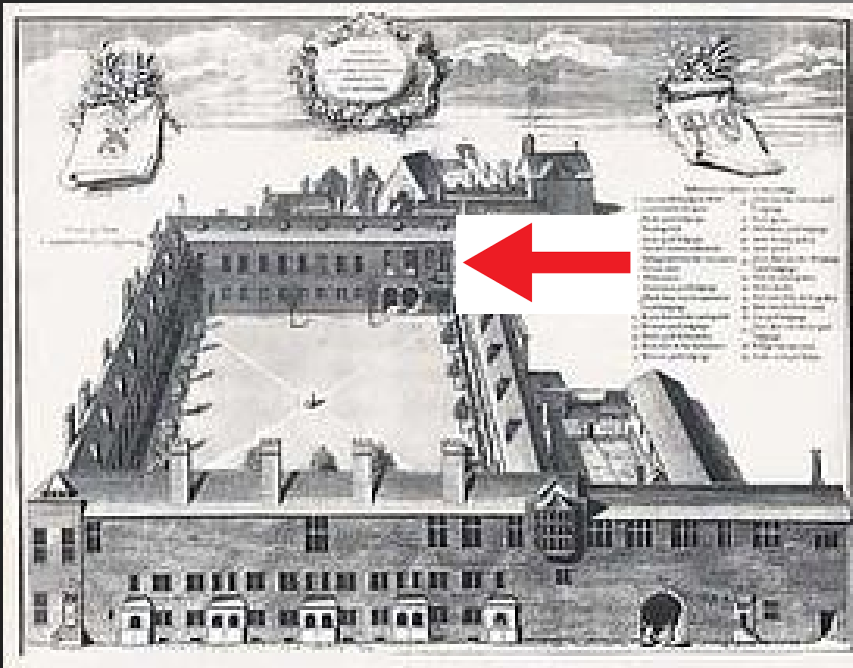
'...even the forces of our own minds conspire to betray us... remedies can only proceed from the real, the mechanical, the experimental Philosophy...'

Robert Hooke

Robert Hooke

Gresham Professor of Geometry

RS Curator of Experiments



Three types of instrument



Mathematical instruments

‘A new kind of *Pendulum Clock*, wherein the *Pendulum* moves circularly, going with the most simple, and natural motion, moving very equally, and making no kind of noise.’

(Sprat)



Mathematical instruments



Optical instruments



Robert Hooke

Micrographia (1665/7)

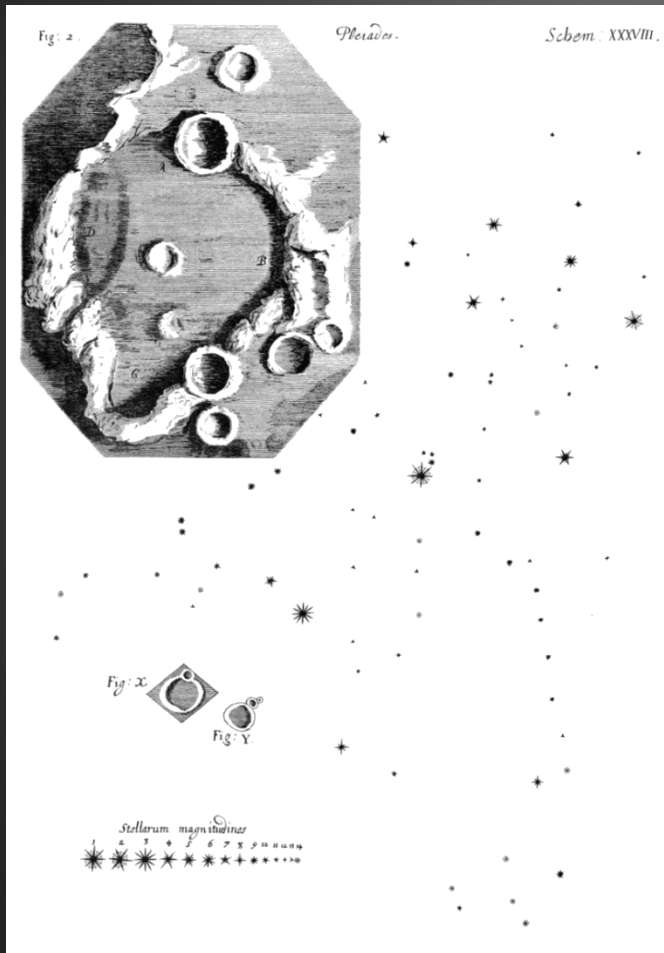
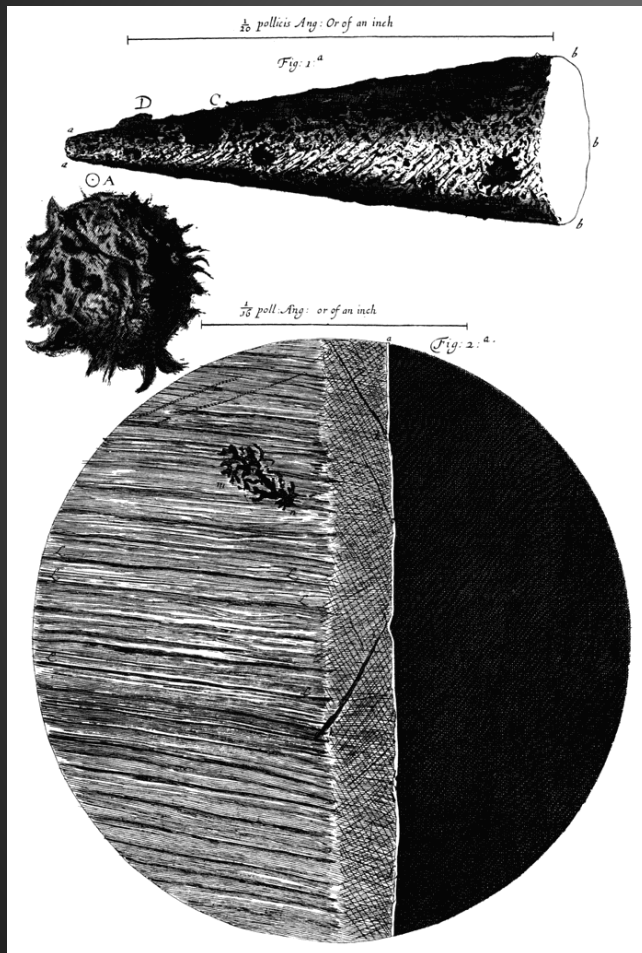


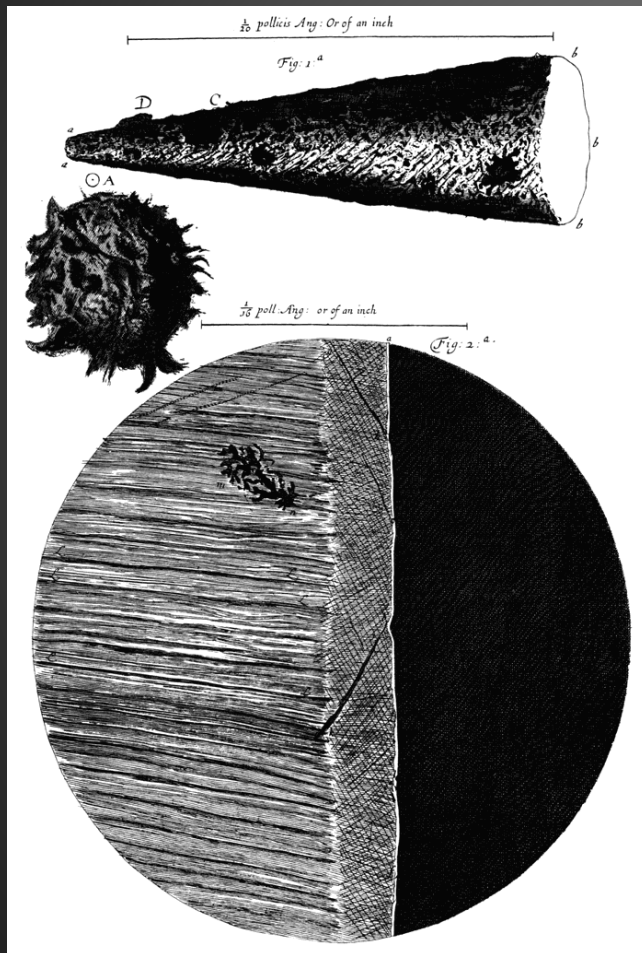
Fig. X
Johannes Hevelius

Fig. Y
Giovanni Riccioli

Hooke's first plate



Hooke's first plate



Needle

Full stop

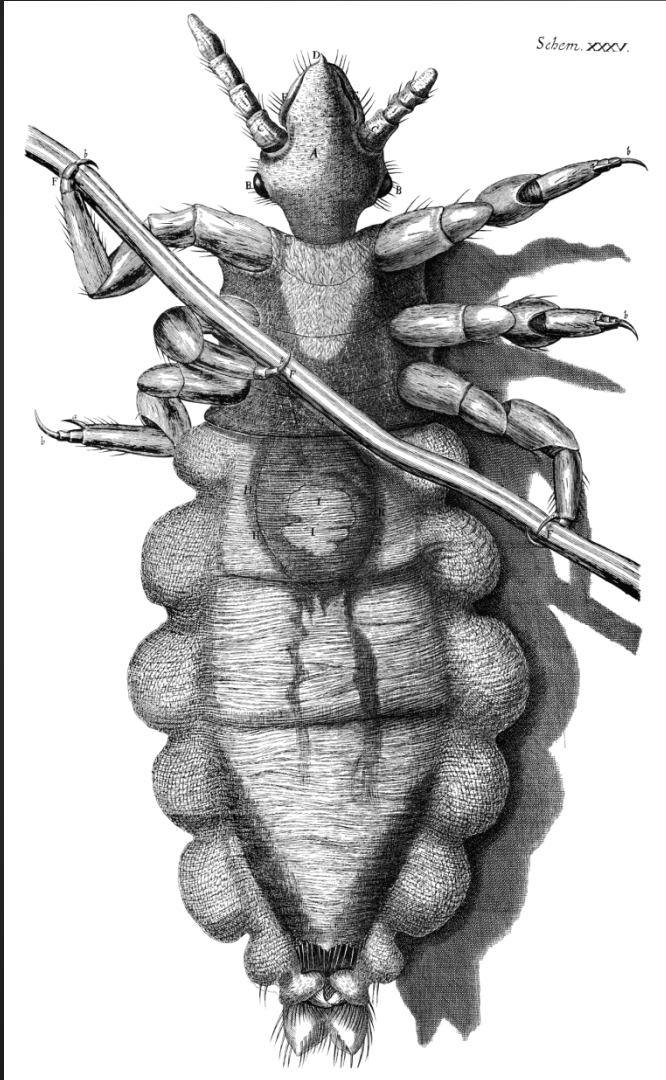
Razor

Ant



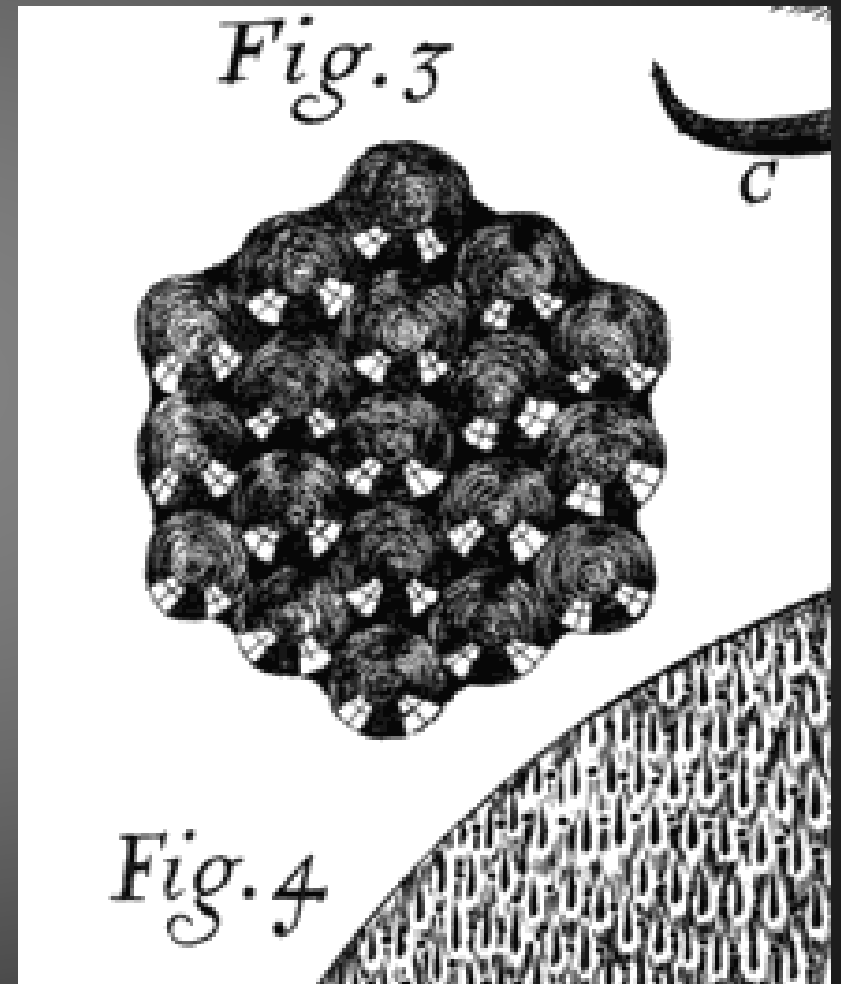
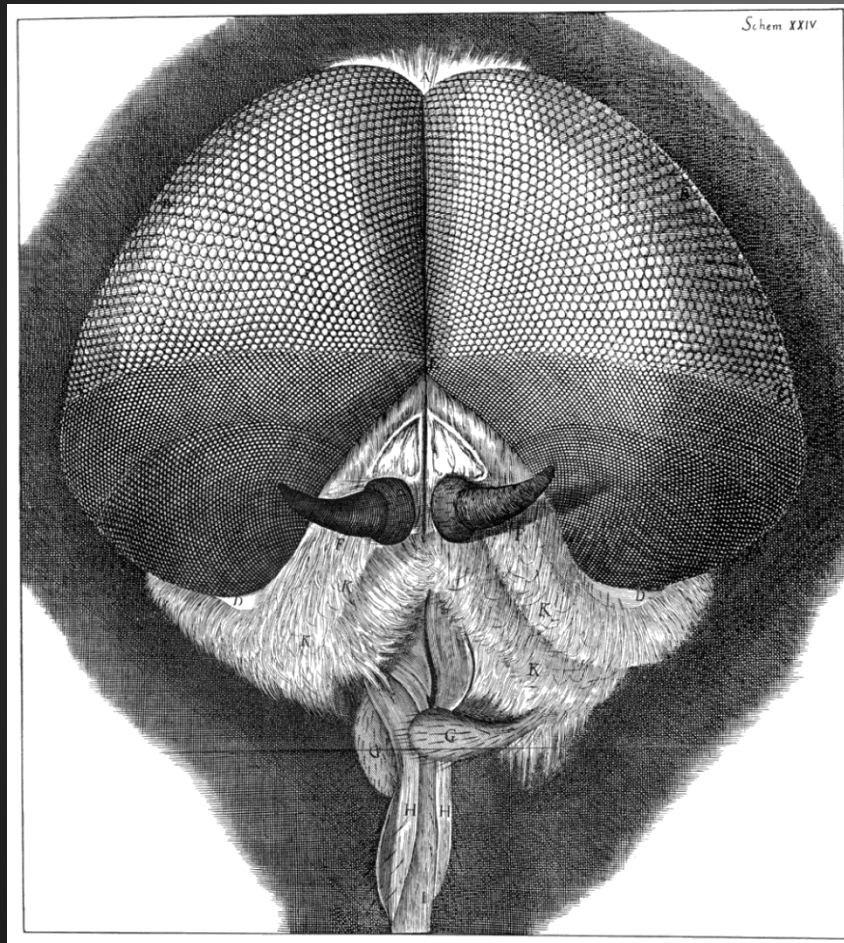
‘This was a creature, more troublesome to be drawn, than any of the rest.’

Louse



‘...it is troubled at nothing so much as at a man that scratches his head, as knowing that man is plotting and contriving some mischief against it...’

Eyes of a fly

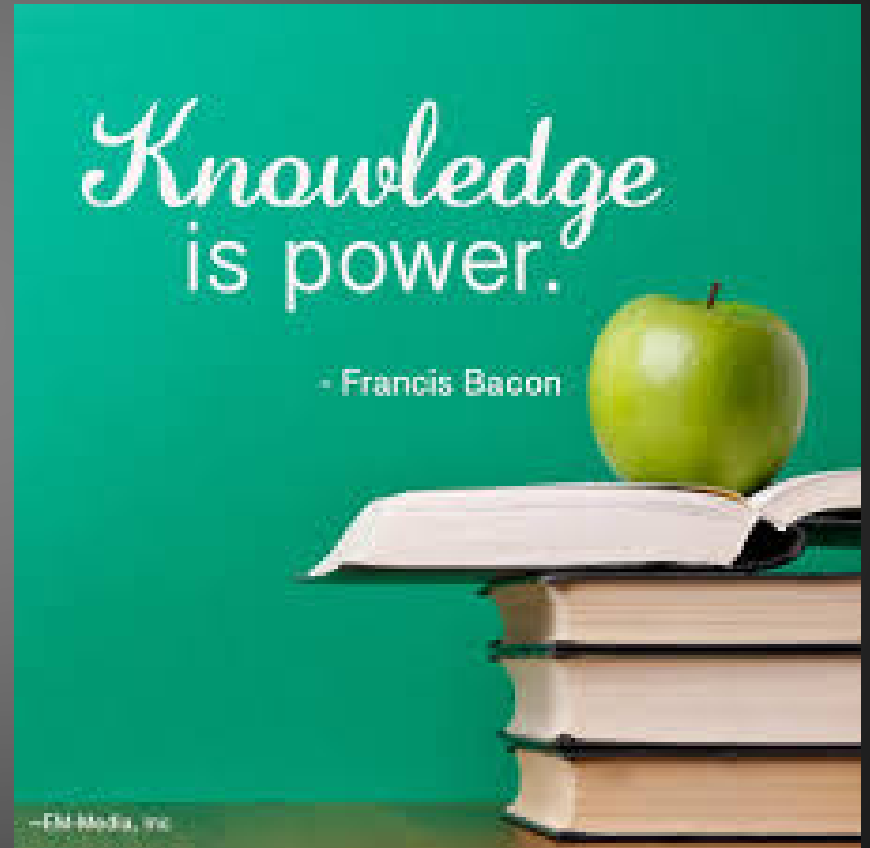


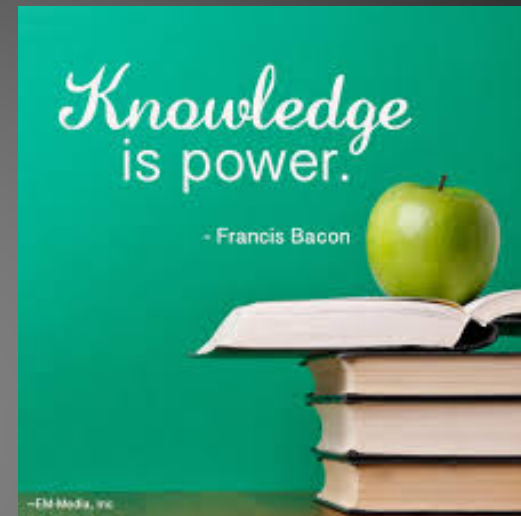
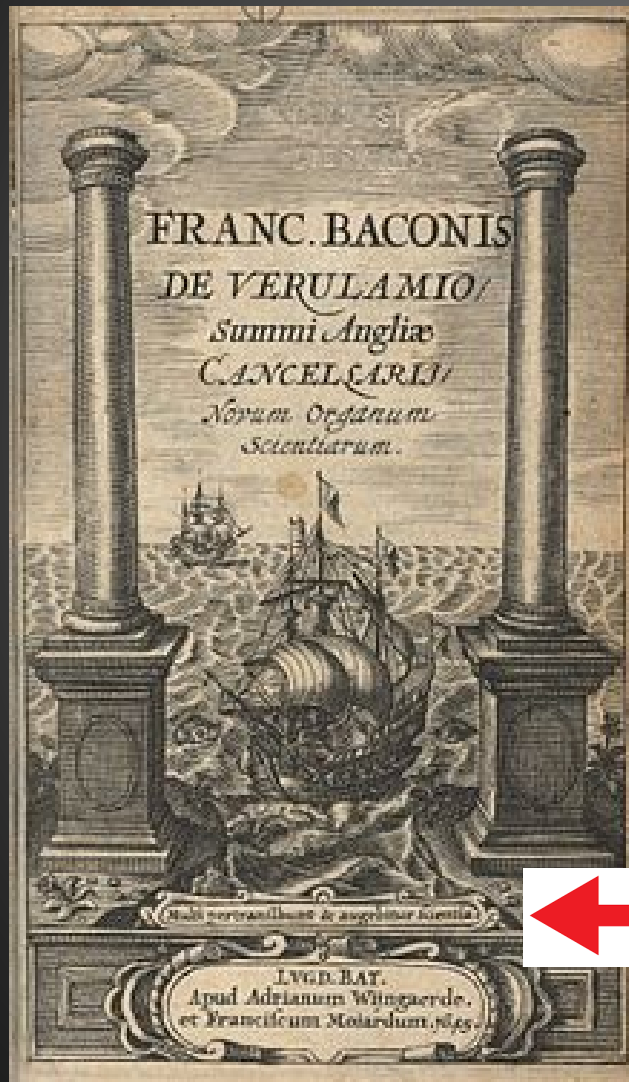
Philosophical instruments





2. A GLOBAL EMPIRE





‘Many will travel and knowledge will be increased’

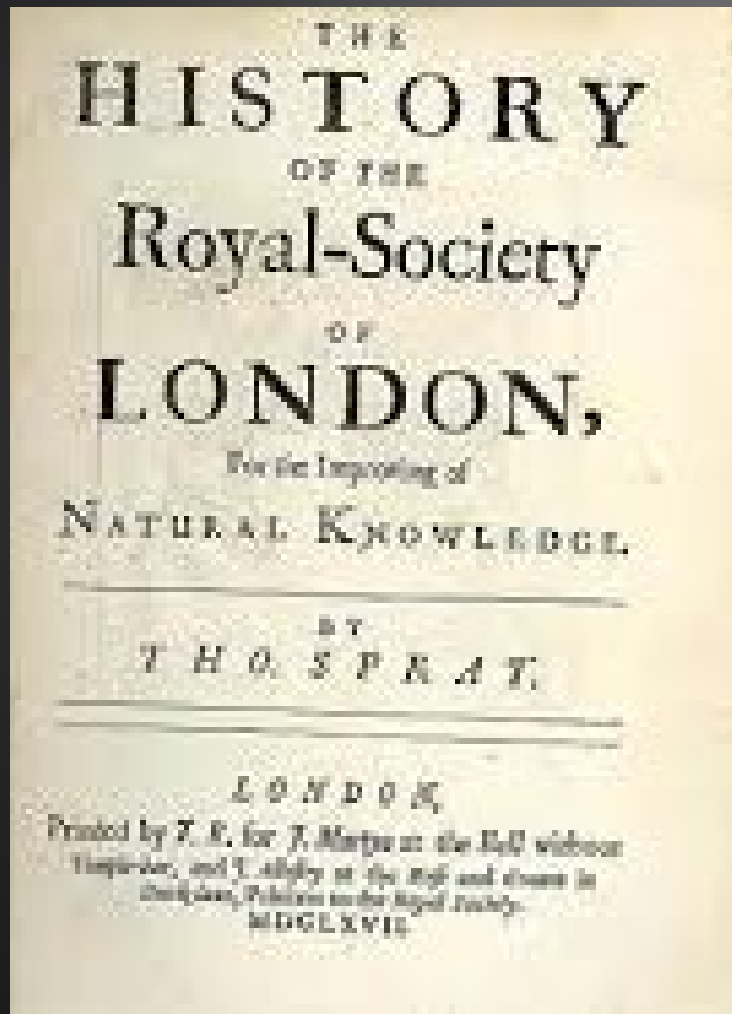
Gun



Longitude Clock



Twin Sisters



...the Foundation of the *Royal Company*: to which as the Twin-Sister of the *Royal Society*, we have reason as we go along, to wish all *Prosperity*. In both these *Institutions* begun together...

Twin Sisters

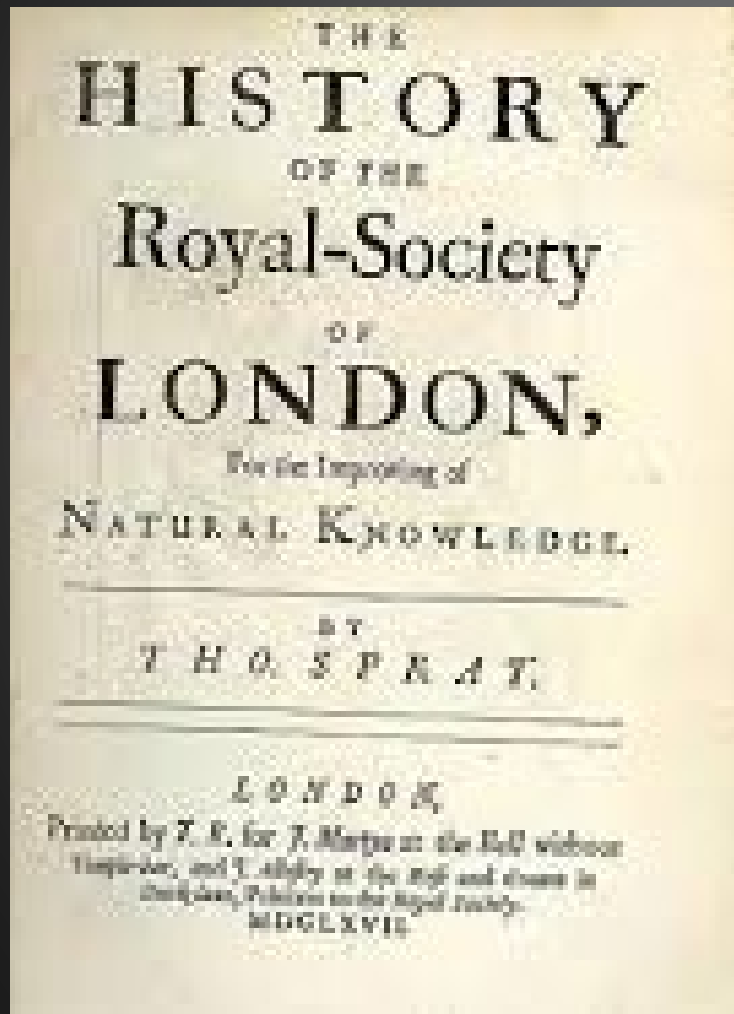
Royal Society



Royal Adventurers Trading into Africa



The Company of Royal Adventurers Trading into Africa



...In both these *Institutions* begun together, our *King* has imitated the two most famous *Works* of the wisest of antient *Kings* [Solomon]: who at the same time sent to *Ophir* for *Gold*, and compos'd a *Natural History*, from the Cedar to the Shrub.'

1663 charter

‘...shall for ever hereafter have use and enjoy all mines of gold and silver which are or shall be found in all or any the places above mentioned, and the whole entire and only trade [to those parts] for the buying and selling bartering and exchanging of for or with any negroes slaves good wares and merchandises whatsoever to be vented or found at or within any of the Cities.’





Cape Coast Castle



Elephant & Castle



Company returns in 1665

- Gold £200,000
- People £100,000
- Ivory, wood, spices etc £100,000

Philosophical Transactions, 1667

(472)

usually live, contrary to what is believed to happen in other Countries?

15. To take an Account of the *Wooden Locks* there, which are said to be made with as great Art, as those of *Iron*, with us.

16. To observe the Course of the Waters, both of the *Mediterranean*, and the *Red-Sea*?

Inquiries

For Guiny, by Abraham Hill Esq;

1. **V**Hether the River *Niger* overflows the Countrey yearly, like *Nilus*?
2. Whether the Rain, when it falls, be often very hot, rotting the Cloaths, if not presently dried, and breeding Worms in them?
3. Whether the Gold there, be of very different fineness, and that which is uppermost in the Mine be the finest?
4. Whether the *Palm* affords them Wine, Oyl, Vinegar, Soap, Bread; and out of the Leaves they pick Threds, making thereof very curious Works?
5. Whether they have, besides their *Palm-Wine*, a Drink made of *Grain*, like our Ale? What Grain that is, and how prepar'd?
6. Whether their Arrows, they make, be poysonous? By what Tree, and how prepar'd?
7. Whether some People on the River *Gambra*, be only Tawny, as others very Black?
8. Whether the *Negroes* have such sharp sights, that they discover a Ship at Sea much farther off, than the *Europeans* can?
9. **V**What Reason there is to conclude, That the Common People being accustomed to drink *Water*, is the cause, that they are troubled with Worms in their Bodies, very painful to them, and difficult to get out?

F I N I S.

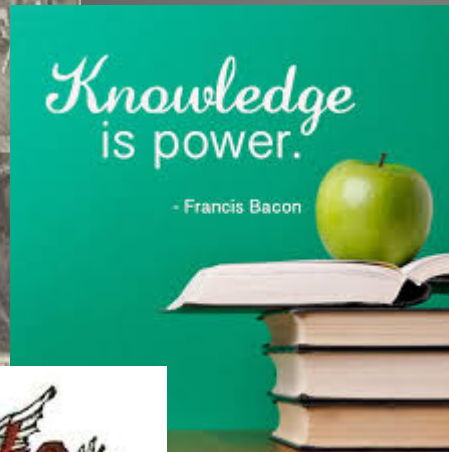
In the *SAVOY*,

Printed by T. N. for John Martyn at the Bell, a little without Temple-Bar, Printer to the Royal Society, 1667.

1667: Merchant Petition

‘That formerly there hath always been a freedom of Trade for all His Majesties Subjects for *Negroes* on the whole coast of *Guiney*, by reason whereof the said Plantations have been plentifully supplied with *Negroes* of the best sort, and at an indifferent rate, to the great encrease of the said Plantations, and the advantage and profit of this Crown and Nation.’

1667: Thomas Sprat



Gentlemen...

'are to know, that *Trafic*, and *Commerce* have given mankind a higher degree than any title of *Nobility*, even that of *Civility*, and *Humanity* itself...in those Coasts, whither the greatest Trade shall constantly flow, the greatest *Riches*, and *Power* will be establish'd.'