



UNIVERSITY
of York

Department of
Philosophy

THE BLAZING WORLD OF



Margaret Daughte
to Tho: Lucas Es: of
Essex & wife to Wm.
Lucas of Newcastle

MARGARET CAVENDISH

Margaret Cavendish was a celebrity aristocrat, poet, novelist, dramatist, philosopher and scientist. She wrote one of the first novels in English, one of the first ever works of science fiction, and she was the first woman to attend a meeting of the Royal Society, the British home of modern science.

MARGARET AND WILLIAM

Margaret Cavendish (née Lucas) was born in 1623 into a wealthy aristocratic family in Essex. In 1642, she became a lady-in-waiting to Queen Henrietta Maria. When Henrietta Maria fled the country in 1644 because of the English Civil War, Margaret went with her to Paris.

Margaret met William Cavendish in Paris in 1645, at the English court in exile. William Cavendish, Marquess of Newcastle, had led the Royalist armies to defeat at the battle of Marston Moor on 2 July 1644. Margaret was 22 and William was 52. They fell in love quickly, marrying the same year and moving to Rotterdam and later Antwerp.

They returned to England when the monarchy was restored in 1660. William's main house was Welbeck Abbey in Nottinghamshire, but he also owned Bolsover Castle, which was used primarily for pleasure and entertaining. William's first wife had died in 1643 and they had had five children. Margaret never had any children herself – except her books – and died in 1673, three years before William.



Margaret and William Cavendish, by Gonzales Coques 1662.
© Gemäldegalerie, Berlin, Germany. Photo by Jörg P. Anders.

FAME AND AUTHORSHIP

Margaret was obsessed by fame and celebrity. She was notorious at the time for her extravagant dress sense, which often involved elements of cross-dressing. But she wanted to be known for her achievements, and not simply for her status and the luxuries it brought with it:

"I should weep myself into water,
if I could have no other fame than
rich coaches, lackeys, and what state
and ceremony could produce, for my
ambition flies higher, as to worth or
merit, not state or vanity."

(Sociable Letters)

Margaret worked hard to achieve this recognition. She was one of the most prolific women writers of the seventeenth century. Her work is written in a wide range of genres, including poetry, drama, fiction, oration, essay, letter, commentary, autobiography and treatise, and addresses issues in science, philosophy and politics. Not only were Margaret's interests considered unusual for a woman at the time, but unlike many other women authors of the period she published her work under her own name.

Right: Portrait of Margaret Cavendish, Lady Newcastle. Frontispiece to *Poems and Fancies* (1653). Credit: Wikimedia Commons.



MARGARET'S VISIT TO THE ROYAL SOCIETY

One of Margaret's claims to fame is that she was the first woman to attend a meeting of the Royal Society.

The Royal Society is the British home of modern science, and was associated with one of the most important scientific and philosophical movements of the early modern period: 'experimental philosophy'.

Experimental philosophers sought to promote experiment and careful observation over speculative, philosophical theorising. Prominent early members of the society include Christopher Wren (the architect of St Paul's), Robert Boyle (famous for the law named after him, that the pressure of a gas is inversely proportional to its volume) and Isaac Newton (famous for his work on light and gravity).

Margaret visited the Royal Society on 30 May 1667. She had solicited an invitation to one of the Society's meetings. The diarist Samuel Pepys records that she was eventually invited by the all-male membership "after much debate, pro and con., it seems many being against it".

She made a theatrical entrance, arriving late and flamboyantly dressed. During her visit she was 'entertained' by Robert Boyle and his assistant Robert Hooke, who showed her a number of experiments highlighting some of the then-recently discovered wonders of the world. These included an experiment using an air pump to discover the weight of air, and experiments in which colourless liquids were mixed to produce liquids with vibrant colours.

Right: Title page to *Observations upon Experimental Philosophy*.

Credit: Source Library: The Donald F. and Mildred Topp Othmer Library of Chemical History, Chemical Heritage Foundation, Philadelphia, USA.

OBSERVATIONS UPON EXPERIMENTAL PHILOSOPHY. To which is added, THE DESCRIPTION OF A New Blazing World.

WRITTEN
By the Thrice Noble, Illiustrious, and Excellent
PRINCESSE,
THE
Duchefs of Newcastle.

L O N D O N,
Printed by *A. Maxwell*, in the Year, 1666.

VISIT TO THE ROYAL SOCIETY

Margaret's visit to the Royal Society was a land mark in the history of science: from its beginnings in 1660, the Royal Society did not admit its first woman fellow until 1945. Nevertheless, it's fair to say that her visit was not a resounding success. A verse attributed to the diarist John Evelyn makes fun of Cavendish and her eccentric appearance:

But Jo! Her head-gear was so pretty
I ne'er saw anything so witty;
Though I was half afeared,
God bless us! When I first did see her:
She looked so like a Cavalier,
But That she had no beard.

Samuel Pepys, meanwhile, was underwhelmed by her visit, criticising not only her clothes but also her manners and lack of engagement:

"The Duchesse hath been a good, comely woman; but her dress so antick, and her deportment so ordinary, that I do not like her at all, nor did I hear her say any thing that was worth hearing, but that she was full of admiration, all admiration."

OBSERVATIONS UPON EXPERIMENTAL PHILOSOPHY

However, Cavendish's lack of critical engagement during her visit to the Royal Society stands in stark contrast to her published work, which is deeply critical of Boyle, Hooke, and the experimental philosophy of the Royal Society.

By the mid-1660s, Margaret had already published a number of works of 'natural philosophy', encompassing what we would today describe as both science and philosophy.

In 1666, a year before her visit to the Royal Society, Margaret published a work called *Observations upon Experimental Philosophy*, an extended critique of experimental

philosophy. In this work, Cavendish defended her own distinctive form of speculative philosophy, arguing that the best way of finding out about the world was through the use of our natural senses combined with the use of reason. She was deeply critically of the experimental philosophers' reliance on artificial instruments, like telescopes and microscopes, which she thought "delude" our senses.

THE BLAZING WORLD

Cavendish's criticisms of experimental philosophy are presented in a very different form in her most famous work, the *Description of a New Blazing World*.

The *Blazing World* was originally published as an appendix to the *Observations*. While the *Observations* was written in the form of a conventional work of natural philosophy, *Blazing World* is an inventive, genre-defying work, that is, amongst other things, one of the first examples of a novel in English, a work of utopian fiction, an early example of science fiction, a feminist manifesto, and a piece of popular science and philosophy.

Cavendish describes *Blazing World* as part romance, part philosophy, part fantasy. It tells the story of a young Lady who is abducted by sailors, and then shipwrecked in a strange new parallel world populated by talking animals. Mirroring Margaret's own marriage to William Cavendish, the Lady marries the Emperor of the Blazing World. She becomes Empress and is given the absolute power to govern the world, creating a peaceful and well-ordered society. The Empress eventually returns to her own native country to save it from invasion, and makes it sovereign over all the nations in our world.

Right: From William Cavendish, *L'Art de dresser les chevaux* (1737).
Credit: Wikimedia Commons.

In one of the more surreal moments, she is helped along the way by none other than Margaret Cavendish. Cavendish and the Empress become platonic lovers when their souls are united, and during the course of

their developing friendship Margaret takes the Empress to Bolsover Castle, where they see William Cavendish practicing the arts of manège and fencing.



THE VISIT TO THE ROYAL SOCIETY – REIMAGINED

The *Blazing World* contains a fictional projection of Cavendish's later visit to the Royal Society – although in this parallel world, the visit plays out very differently.

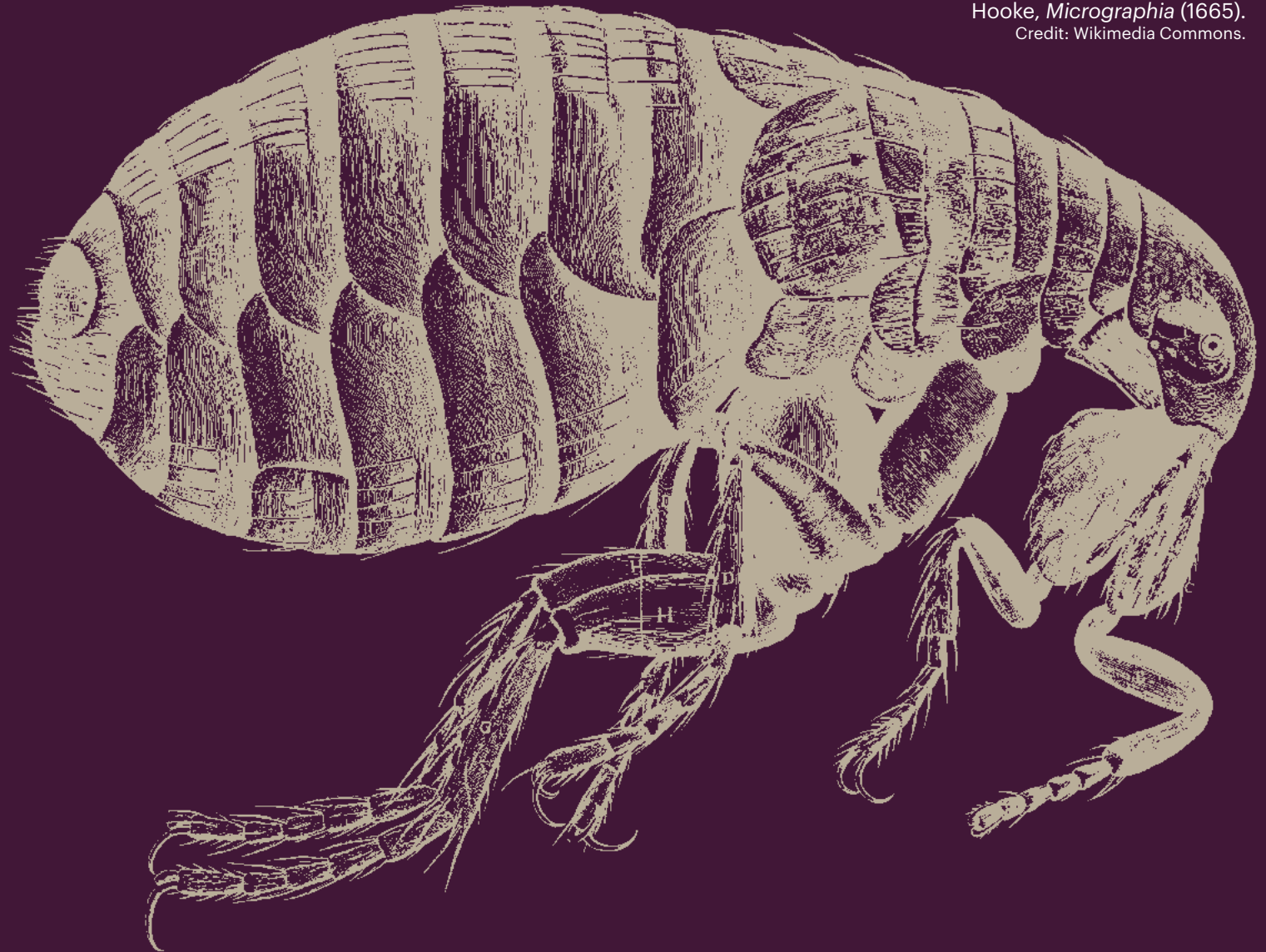
The Royal Society was granted a royal charter by Charles II in 1662. In a similar fashion, the Empress erects schools and founds societies for practitioners of different academic disciplines. In the *Blazing World*, however, each academic discipline is represented by a different type of talking animal: lice-men are geometers, ape-men are chemists, and experimental philosophers are bear-men.

In the real world, Cavendish needed to petition for an invitation to attend a meeting of the Royal Society, and this invitation was only grudgingly offered. But in the *Blazing World* the power relations are reversed. The Empress *summons* representatives from the different disciplines to her, and when they tell her about what they know about the *Blazing World*, she is anything but full of admiration. Instead, Cavendish uses this as an opportunity to repeat some of the criticisms of experimental philosophy that she makes in the *Observations*.

The bear-men, for instance, displease the Empress by arguing amongst themselves over what their telescopes reveal, which the Empress takes as evidence that their telescopes are

deluding their senses. She is no more impressed by their microscopes. The sight of an enlarged flea and louse – a reference to Hooke's famous image in *Micrographia* – “almost put her into

a swoon”, and the images turn out to be of no practical benefit because they provide no way of helping poor beggars who are afflicted by these creatures.



A magnified flea from Robert Hooke, *Micrographia* (1665).
Credit: Wikimedia Commons.

MARGARET AND BOLSOVER CASTLE

Margaret, who had not yet visited the castle at this point, describes Bolsover in an early poem, 'A Dialogue Between a Bountiful Knight and a Castle Ruined in War' (1653):

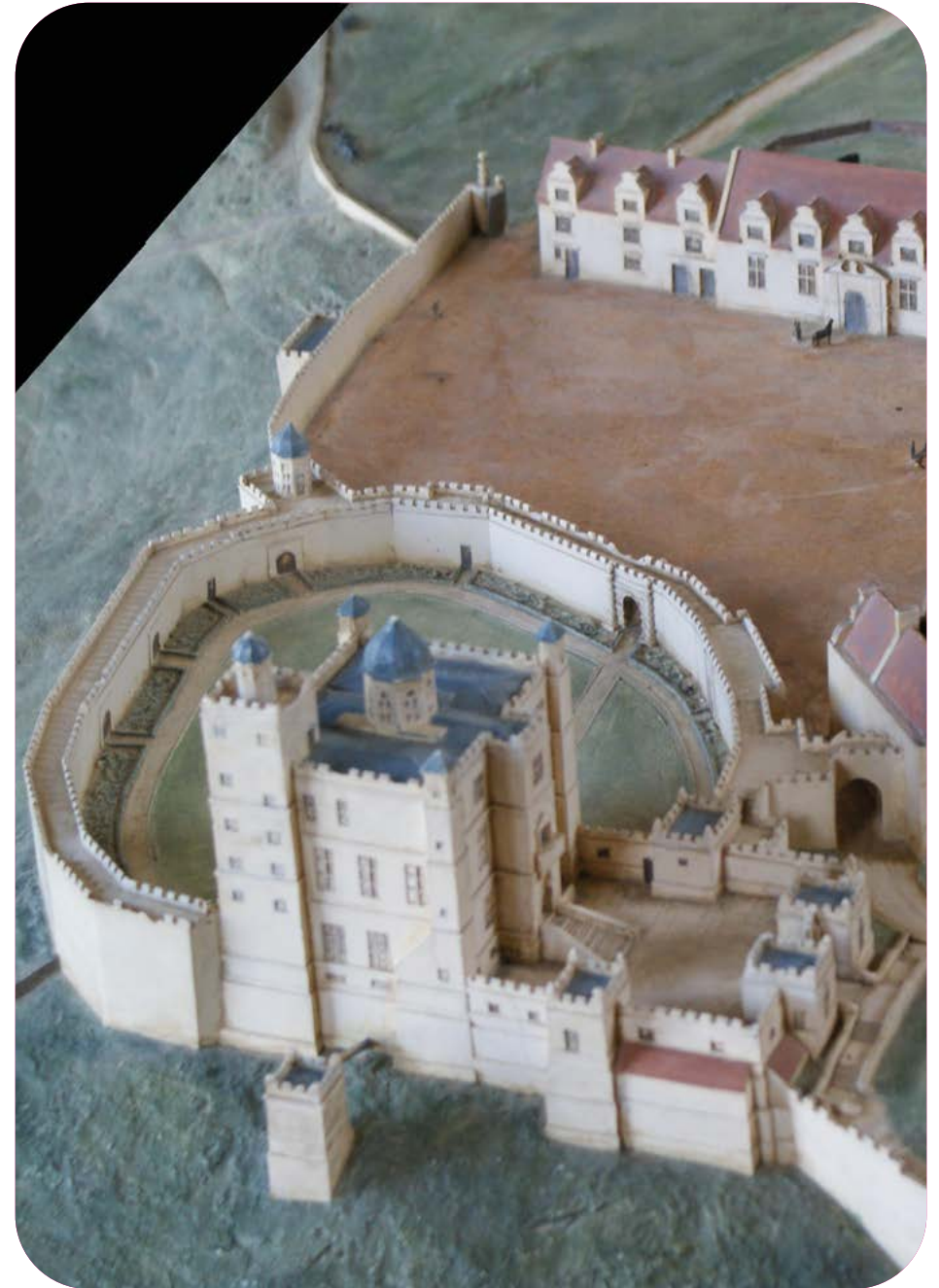
Knight.

Alas, poore Castle, how thou now art chang'd
From thy *first Form!* to me thou dost seem strange.
I left thee *Comely*, and in perfect health;
Now thou art wither'd, and decayed in *Wealth*.

Castle.

O Noble Sir, *I* from your Stock was rais'd,
Flourished in plenty, and by all Men prais'd:
For your *Most Valiant Father* did me build,
Your *Brother* furnish'd me, my Neck did gild:
And Towers on my Head like Crownes were plac'd,
Like to a *Girdle*, Walls went round my Waste.
And on this *pleasant Hill* he set me high,
Viewing the *Vales* below, as they did lye...

When they returned to England in 1660, William and Margaret set about restoring their estates, which had fallen into ruin during the English Civil War. But when Margaret takes the Empress to see Bolsover in *The Blazing World* it is still "but a naked house, and unclothed of all furniture".



17th century Model of Bolsover Castle, as it may have looked in the late 1600s.
Credit: Wikimedia Commons.

BOLSOVER CASTLE – REIMAGINED

The buildings that Margaret saw when she returned to England stand in stark contrast to the fantastical architecture that greets the Empress in the Blazing World. When she arrives, for instance, the Lady is taken to the Emperor's palace, which covers an area of four miles, is made of entirely gold, and his apartment is "rich with diamonds, pearls, rubies and the like precious stones".

But although the fantastical architecture of the Blazing World is a product of Margaret's fertile imagination, there are possible traces of her own experience. For instance, to maintain the peoples' faith in her new religion, the Empress builds two chapels. One is lined with 'star-stones', and from this she "preached sermons of comfort to those who repented their sins".

The other, lined with 'fire-stones', could be made to "appear all in a flame" (by means of artificial pipes), and from this she "preached sermons of terror to the wicked". These descriptions are reminiscent

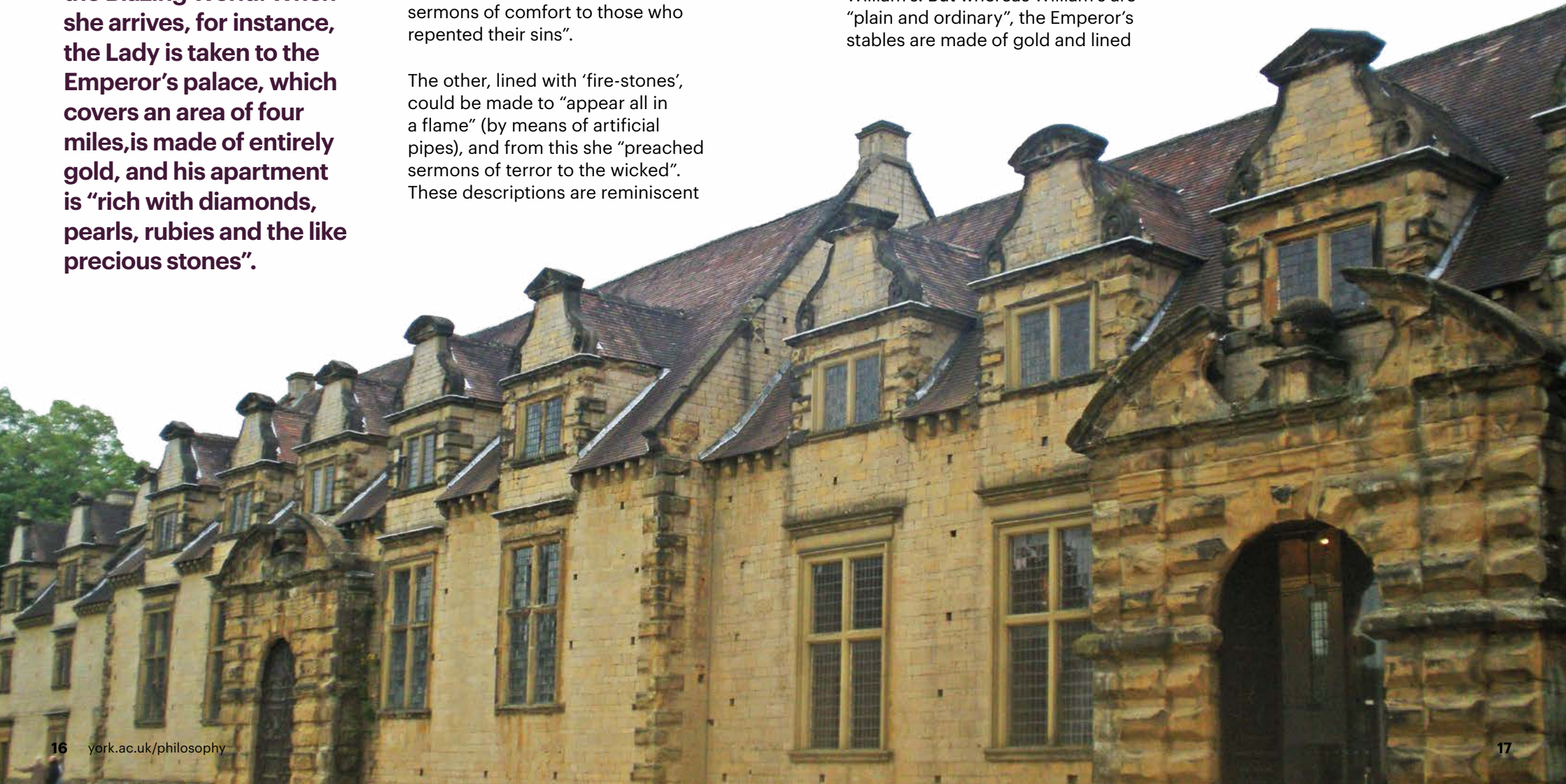
of the image of a temple with a flame burning on its roof in the ante room to the left of the main entrance to the Little Castle.

The Emperor is certainly inspired by Bolsover.

While the Empress is away saving her homeland from invasion, the Emperor builds stables and riding-houses like William's. But whereas William's are "plain and ordinary", the Emperor's stables are made of gold and lined

with precious materials. The riding-house, meanwhile, is lined with "sapphires, topazes, and the like" and the sand on the floor so soft that it was "not in the least hurtful to the horses' feet".

Below: The Riding House, Bolsover Castle
Credit: Wikimedia Commons.



RECEPTION

Margaret never received the fame and admiration that she craved – just notoriety, and later neglect.

Her unconventional manners and dress earned her the nickname 'Mad Madge'. No one from the Royal Society ever wrote a response to her published works, and nor was there a response to her philosophical work more generally. Writing in a letter to another seventeenth century woman philosopher, Anne Conway, the philosopher and theologian Henry More correctly predicted that "she may be secure from any one giving her the trouble of a reply."

In the centuries to follow her work was largely ignored, with occasional, somewhat mixed, references. Virginia Woolf, for instance, described Cavendish's work as "swarming with a diffused, uneasy, contorted vitality. Order, continuity, the logical development of her argument are all unknown to her." But recent years have started to see a reassessment of Cavendish's work, and an appreciation of her place as an important figure in the history of literature, philosophy, and science.



Portrait of Margaret Lucas Cavendish,
Duchess of Newcastle-upon-Tyne (1673).

Source: Luminarium.org.



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Duchess of Newcastle by Peter Lely.

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