

HISTORY

Science fit for a king

Laura Spinney visits a Versailles exhibition of curiosities.

In 1769, King Louis XV of France was given a male rhinoceros for the royal menagerie at Versailles, where it caused a sensation. The animal remained there for 22 years, until it was killed by a sabre thrust during the French Revolution. Its skin was later stretched over an oak frame and displayed at the Natural History Museum in Paris. For the next few months it is back at Versailles, welcoming visitors to the exhibition *Science and Curiosities at the Court of Versailles*.

The rhino embodies the exhibition's two main themes: science as spectacle, and science in the service of the state. King Louis XIV ushered in an era of frenetic scientific activity after his chief minister, Jean-Baptiste Colbert, persuaded him to establish a national academy of science in 1666 — as depicted in a 1680 painting by Henri Testelin (pictured). Louis XIV imposed no rules on his academicians, but he did pay them, so their projects had to be useful to him. Being invited to demonstrate your discovery or invention at court was the best way to get it known.

Scientists came to Versailles from far and wide to help create a splendid royal residence. They included astronomer Giovanni Domenico Cassini, who directed the Paris Observatory from its opening in 1671. Geometricians and astronomers laid

out the gardens (the instruments they used are on display), hydraulics experts pondered diverting the River Eure to fill the lakes — a project that was never completed — and explorers filled greenhouses and the menagerie with exotic species. The forerunner of the lift, the flying chair, was invented at Versailles to transport Louis XV's mistresses upstairs; a full-size mock-up is shown.

It wasn't all self-serving. Under Louis XIV, Cassini charted the Moon's terrain, and Louis XV paid the Cassini family to create the first map of France, parts of which are on show, revealing detail down to the most isolated windmill. Louis XV also had a passion for scientific instruments, such as an astronomical clock showing the Moon's phases and movements of the planets around the Sun according to Nicolaus Copernicus.

Louis XVI encouraged agricultural research with the hope of eradicating famine in France. He was rewarded in 1786 when Antoine-Augustin Parmentier presented him with the flowers of the potato, or 'poor bread', whose cultivation he had been perfecting. Years before Edward Jenner came up with

Science and Curiosities at the Court of Versailles

The Palace of Versailles, France.
Until 27 February 2011.

his vaccine, thousands of people, including Louis XVI himself, benefited from a crude form of inoculation against smallpox — the disease that had killed Louis XV, according to his displayed medical certificate.

Science was also entertainment at Versailles: demonstrations drew large crowds. In 1746, in the Hall of Mirrors, eyewitnesses described how Abbot Nollet literally shocked 140 hand-holding aristocrats with static electricity. Full-sized battleships were floated on the royal lakes, and in 1783, brothers Joseph and Etienne Montgolfier demonstrated their hot-air balloon in a palace courtyard.

Royal women also played a part in the scientific adventure. One of Louis XV's mistresses, Madame de Pompadour, supported the *Encyclopédie* of Denis Diderot and Jean le Rond d'Alembert, a volume of radical Enlightenment thinking that was banned by the French government. Visitors can see Marie-Antoinette's dulcimer player, a primitive robot that hammers out tunes on a stringed instrument. The queen bought it in 1784 and, realizing its scientific value, donated it to the academy a year later.

Marie-Antoinette, the rhino and the academy all met their ends in 1793 at the height of the Revolution. But the academy proved thicker-skinned than the queen and the ungulate. Realizing that they needed scientists after all, the revolutionaries recreated the academy in 1795 in its current form — as one of the five that make up the Institut de France. ■

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A 1680 painting by Henri Testelin celebrates the achievements of the French national academy of sciences during the reign of Louis XIV.

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