Number 19 New King Street, Bath, is neither an imposing building, nor a great observatory, but it holds an important place in scientific history. It was from the garden of this house that, in 1781, William Herschel discovered the planet Uranus, using a home-made 7 ft telescope, thereby doubling the size of the known solar system.

The house was home to William and his sister Caroline, also an astronomer, for much of their productive life. Now called the Herschel House Museum, it has recently undergone a major facelift. The project is significant in that it has attempted to restore the house to a fairly accurate representation of a middle-grade Georgian town house of the 1770s, using contemporary designs. The refurbishment is the first phase of a larger scheme that will include the installation of a mini-planetarium in the restored vaults of the house.

The refurbishment project followed months of fund-raising – £70,000 for phase one and even more for the next phase – and the re-listing of the house by English Heritage to a Grade II* listed building. The house badly needed structural work and improvements to the exterior. The inside looked tired and had many things in it that were either of the wrong period or simply looked incongruous. Somehow, a balance had to be struck between recreating the atmosphere of the last quarter of the 18th century when Caroline and William lived there, and upgrading security and environmental systems to enable us to accommodate a collection of important and valuable objects. This has meant satisfying loaning institutions that our new showcases meet the highest standards.

Collaboration

Work began last December, the first major changes since the Museum opened nearly 20 years ago. The interior project is a collaboration between the curator, specialists including astronomers, and Lisa White, who has recently masterminded a permanent exhibition on Georgian interiors for the Building of Bath Museum. Attention to detail has been a priority. For example, fragments of 18th century wallpaper found in smaller Bath houses have been reproduced using traditional methods. As far as we can tell, papers would have been on the walls of this house in the late 18th century, by which time wallpaper was not only very popular, but cheaply produced in a great variety of designs. In addition, furniture, floor-coverings, lighting, paints and door furniture have been carefully researched and reproduced as authentically as possible. The carpets for some of the rooms are currently being produced at the Axminster factory under the guidance of David Luckham. Designs in keeping with town houses of the period have been reproduced in a Brussels weave.

As always with building projects, things didn’t always go to plan. For instance, lions appeared in the ceiling mouldings! The cornices were just lumps of painted plaster before the restoration started, and having them cleaned was a late decision. It proved to be the right decision because the cleaning has revealed some very fine detail. The lion masks are thought to date from the 1760s or 1770s, before the Herschels came to live in the house. These seem to be a rare phenomenon, even in Bath Georgian houses. The heads are strung together with garlands – an interesting classical motif worthy of Robert Adam.

The plasterwork was professionally cleaned using a process that softens old layers of paint before the most delicate parts are individually picked out by hand. Finally, the mouldings were limewashed as they probably would have been in the Herschel’s time. “Probably” is a word used a lot in refurbishment. A lack of substantial documentation and original material directly connected to the Herschels has meant that the interior renovation has been largely a conjectural exercise. In the case of the recently recreated house of Handel the musician, a comprehensive inventory gave a very...
Herschel House

Museum in Bath, once the home of William and Caroline Herschel.

William Herschel

William Herschel was born in Hanover in 1738, but came to England as a young man. He arrived in Bath in 1768 to take up the post of organist at the Octagon Chapel. He later became director of music for the city, responsible for organizing concerts in the Pump Rooms and other high-profile venues. Although William was a talented musician and an accomplished composer, he became fascinated by astronomy and telescope making became a vital part of daily life.

William was ably assisted by his sister Caroline, who acted as housekeeper and companion and became a competent astronomical observer in her own right, discovering many comets and nebulae and revising Flamsteed's famous star catalogue.

Caroline's domestic observations give an interesting insight into life in the Herschel household. She was often irritated at the mess created by William's telescopic endeavours, not least because he used quantities of horse dung to make moulds for his mirrors and his workshop led directly to the kitchen. Caroline comments in her memoirs that she often had to feed food directly into William's mouth because he forgot to eat, such was his concentration. Cracked flagstones in the basement bear witness to the explosion of molten speculum metal on to the floor of the workshop that reportedly sent William and his assistants running for cover.

Following the discovery of Uranus in 1781, King George III gave William an official pension which enabled him to abandon his musical career and devote the rest of his life to astronomy. Royal patronage enabled William and Caroline to leave Bath to live at Slough – nowadays this would not necessarily be considered a move up the social ladder, but William and Caroline were content to be part of the Court circle.

Workaholic

During their stay at New King Street, there is no doubt that William and Caroline both had a rigorous timetable, organizing and playing in concerts and giving music lessons in between casting and polishing mirrors and spending the nights observing and recording. Indeed, from Caroline's diaries it is easy to deduce that William was something of a workaholic. But his lasting achievements are many. Patrick Moore says: "William Herschel was the first man to give a reasonably accurate picture of the shape of our star system and galaxy. He was the best telescope maker of his time, and possibly the greatest observer who ever lived."

This year is a significant one for the museum, not only because it marks the improvements and additions to the house, but also because it is the 250th anniversary of Caroline's birth. The museum is currently featuring an exhibition to celebrate the event. Reflected Glory aims to show Caroline as instrumental in William's success, and as an intelligent and diligent astronomical observer. Her paradox is that she was enabled to accomplish her astronomical achievements only by being William's sister, but as William's sister, she would never be fully recognized as an astronomer in her own right.

Debbie James, Curator, Herschel House Museum.