Room 6
Ercole Lelli's Anatomical Waxworks
- Sala dei paesaggi -
Although the establishment of the “Camera della Notomia” (Anatomy Room) at the Istituto delle Scienze was based on provisions made by Pope Benedict XIV on 28 November 1747, from the very beginning the Palazzo Poggi’s scientific fortunes were closely tied to its medical and anatomical sections. Marsili deemed the “anatomia artificiosa sottile” (fine artificial anatomy) taught by the “divine Malpighi” the best at providing general methodological direction. The physician and anatomist Giovan Battista Morgagni (1682-1771), founder of pathological anatomy, a student at Bologna and a professor at Padua starting in 1711, played an important role when the institute was founded. Many of the leading figures during the first 40 years of activity were physicians: from Beccarri to Caldani, Galeazzi and Molinelli. Marsili had not envisaged a specific medical-anatomical Laboratory at the institute because he considered city hospitals to be the appropriate venue for practising medicine and conducting anatomical observation. Furthermore, in the view of Pope Benedict XIV, the medical and anatomical facilities at the Palazzo Poggi were not to serve as an alternative to the medical-anatomical activities conducted at existing centres (the university and hospitals). Rather, these laboratories were simply meant to channel the skills of scientists, physicians and artists to produce useful materials for the advancement of the discipline and the training of doctors. The Camera della Notomia was established to produce teaching material and its purpose — according to the institute’s motto proprio — was to show the bones and muscles of the human body “separately” with respect to “… the conventional anatomy courses at the public university, [where it] is treated on a rather general level”. In keeping with this intention, an artist rather than an anatomist was chosen to head it: Ercole Lelli, “figure director” at the Accademia Clementina di Belle Arti, also situated in the Palazzo Poggi.

After specializing in mythology and osteology and spending time at the autopsies rooms of various hospitals in the city, Ercole Lelli (1702-1766) undertook the first systematic anatomical waxworks. In 1734 he created two sculptures made of linden wood portraying two “flayed” men supporting the lecture’s chair in the Anatomical Theatre of the Archiginnasio. Following a request by Pope Benedict XIV, in October 1742 he presented his programme for the institute’s anatomical room, in which he provided a detailed illustration of the wax models needed to illustrate “separate bones”, as well as “eight life-sized statues including two nudes, one male and one female, and six flayed figures showing the different muscle layers down to the skeleton”.

In the execution of the figures and models, Lelli was assisted by Giovanni Manzolini and, after a dispute between the two men, by Luigi Cardini. In the 18th century, the collaboration between artists and anatomists, which since the Renaissance had yielded illustrated anatomy texts in which finely rendered representations of the human body were combined with accurate portrayals of anatomical details, also began to be expressed in the modelling of anatomical waxworks. The advent of wax modelling during the Enlightenment was simply a continuation of the splendid treatises on the human body that had marked the modernization of anatomy starting in the 16th century. In essence, it was the three-dimensional rendering of anatomy treatises. However, there was a difference: even the finest atlases of anatomy and colour prints were static with respect to the extraordinary visual power of coloured anatomical waxworks, which eclipsed the dullness of the page and the monochrome of traditional sculptures. The three-dimensional models also offered an enormous advantage. Understanding the structure of the human body required not only an exact representation of what one saw during a dissection, but also entailed acquiring a

++ “Adam” and “Eve”, life-sized nudes, made of wax.
three-dimensional sense of the shape of the organs and their positions within the body. We must also consider the fact that, at the time, there were no effective methods for preserving anatomical specimens. Consequently, plastic anatomy—the art of reproducing whole human figures or anatomical parts using wax and other media for teaching purposes—also spread to the leading European university centres.

Several stages were involved in the creation of wax models. The first step was procuring the body parts to be reproduced. At this point, a drawing or initial figure was prepared for each model “using ordinary material”, on which layers of coloured wax were applied to imitate the real part. The wax—generally the Levante or Sottana types—was diluted with turpentine and then blended with mastic and tallow. For the models, the base was generally made of bones taken from human skeletons and, in the case of full figures, they were supported by an iron framework that made it possible to set them in the desired poses. At the beginning of his career, however, Lelli used a different technique to create the “flayed” figures at the Anatomical Theatre. According to Michele Medici (1856), “Lelli used two human skeletons and, after setting them in the ideal position, he took hemp cloth soaked in wax mixed with bran and turpentine and began to fashion the different muscles, affixing them in their places, imitating what is real and natural with the most scrupulous precision”.

Ercole Lelli was also the author of the still unpublished Compendio Anatomico per uso de’ Pittori e Sculitori (“Anatomical Compendium for Painters and Sculptors”). The book had five plates illustrating the external anatomy of the human body.

- The plaster statue of the “flayed man”, made by Ercole Lelli, is a scale model of the right-hand statue in the Anatomical Theatre of the Archiginnasio.
- View of the “Camera della Notomia” (Anatomy Room) with eight statues by Ercole Lelli (MPP photo).
“Flayed man”, a model made using a real skeleton and wax.

A human skeleton with surface muscles. An iron framework was used in addition to wax and a skeleton in order to give the full-length figures the desired posture.

Human skeleton with the intermediate muscles. Model made using a real skeleton and wax.

Human skeleton with the deep muscles. Model made using a real skeleton and wax. Because body parts beneath the surface muscles needed to be removed, several cadavers often had to be dissected in order to obtain an intact “piece”.

The lector’s chair in the Anatomical Theatre of the Archiginnasio, with the two statues of “flayed men” made by Ercole Lelli in 1734. Public dissections as well as several university anatomy courses were held here (DL photo).

Close-up of one of Ercole Lelli’s wax statues (MPP photo).

Design for the Anotomy Room at the institute. Bologna, Archivio di Stato.
† Ercole Lelli, "Normal kidneys" and "Horseshoe kidney", c. 1734. Lelli, who dissected numerous cadavers, observed a congenital malformation that he decided to reproduce alongside normal organs (MPP photo).

† Wooden model used to illustrate the movements of the thoracic bones during breathing.

† The plaster figure of the "flayed man", detail from Ercole Lelli’s _Self-Portrait_.

† Male skeleton, made from a real skeleton and metal.

† Female skeleton, made from a real skeleton and wax.