

Sculpture in the Cottonian Collection

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Hello, our names are Kristin and Ellie and we are part of the Young Explainers. We're a group made up of different Plymouth University students working in collaboration with the museum. We've been working with the Cottonian Collection and have written new labels and two guides for the collection, to help better engage the public with it. As a part of this work we're also giving talks on various subjects related to the Collection, and today we will be talking about the sculptures. We'll focus on how these bronzes and plaster casts were made and why it was popular in the 18th century to collect them.

The majority of the Collection was brought together by Charles Rogers, who was an 18th century gentleman with a good income. Rogers had many art dealer and artist friends and so was able to collect various pieces of art. He built his Collection up between 1730 and 1780 and it was regarded as one of the finest in England.

In the Cottonian Collection we have quite a number of sculptures, the majority of which are made up of plaster casts and bronze miniatures.

This cabinet here holds the bronzes of the collection. Bronze is made up of a combination of several metals, usually copper and tin, but also occasionally with lead or zinc. People have been using bronze for thousands of years. It has a high tensile strength, is strong and durable and so has been used to make weapons and tools. It can also be moulded into fine detail which is why it is so often used for sculpture. If you look closely at *Eloquence*, you can see the bronze beautifully expresses the detail of her drapery.

The bronze sculptures we have here are casts, which mean that they are copies of sculptures made from one mould. For example, the bronze of *Lorenzo de' Medici* is a copy of a statue that is in his tomb.

The process of bronze casting was first utilized by the Western world by the Greeks around 8th Century BC. The easiest method of casting was to cast in multiple parts, which would then be welded together at a later stage. There are two main ways you can make a bronze cast: sand casting or the lost-wax technique, which is much more complicated.

The lost-wax, or direct casting, enabled by new technology is employed for creating multiple pieces from the same mould. It involves the sculptor making an initial sculpture out of beeswax- or any other kind of substance that has a low melting point. They then cover the sculpture with clay and let it dry. The dried material is then put into the kiln where the wax melts and leaves the clay mould intact. The sculptor then pours liquid bronze into the mould, which cools and hardens. Eventually the

clay mould is then broken to reveal the sculpture inside. It's also called direct casting and every sculpture that is made using this technique is unique because the mould is broken after each casting.

The second technique, called indirect casting, is where the mould is preserved and re-used to make copies of a single design. Firstly the sculptor makes a model in wood, clay or plaster. The finished model is cut into multiple sections and used as a template to form plaster moulds, which then can be reused many times.

Finally, sand casting is when sand is used in mould making. It's most frequently used in the metalwork industry because it's fairly cheap and easy to use, as the sand is mixed with clay and then moistened with water. The mixture is then contained by a system of frames or mould boxes. The sand is either compacted around the mould or the mould is carved directly from the sand itself. Then, like with indirect and direct casting the liquid bronze is poured into the mould and when it is hardened the sand mould is broken to reveal the bronze sculpture.

This cabinet holds the plaster casts of the collection, as well as two terracotta pieces painted to look like plaster. The terracotta pieces are the ones of *St. Bibiana* and *St. Susanna*, we can tell this by their weight: they are far heavier than a plaster cast should be.

Terracotta is a coarse-textured clay-like material which is fired in a kiln at a low temperature. It is a much cheaper material to use than marble, and it was used during the Renaissance age to make test models for full size marble sculptures. Apart from being used in sculpture, terracotta can be used to make pots and jugs for indoor and outdoor use.

The plaster casts in this collection are decorative sculptures. Plaster has been used to make busts, figures, statuettes, sculptors' models, relief panels and architectural mouldings. It is quick and easy to both make and use. The type of plaster used in the decorative arts is usually the Plaster of Paris, which is a form of calcium sulphate; we don't know exactly what the plaster that has been used to make these sculptures here is made out of. Plaster of Paris is made by heating hydrated calcium sulphate to remove the water content of the rock, which is then ground into a powder. You then mix the powder with water and cast it into a mould if you would like to make a sculpture. Plasters are usually cast in multiple pieces. You could also mould it into a shape you want if you just add small quantities of water to make a semi-liquid plaster.

Once the plaster is dry it is soft and brittle, so a plaster object is usually supported by a metal or wood armature in the inside. Hessian or other materials can also be put into the plaster itself or used as a backing to make it stronger because as mentioned beforehand plaster is incredibly brittle and soft, so reinforcements to make it more durable are needed. Plaster casts can also be covered by a sealing agent to reduce damage by abrasives, and fluctuations in humidity and temperature. However even if the outside is sealed, it doesn't mean that any wooden or metal support systems that

are inside the plaster cast won't be damaged by high relative humidity. Wood can expand in the cast and break it from the inside, and the metal will corrode.

Even though bronze is a much more tough material than plaster, it can also be damaged. The surfaces are usually covered with a varnish to enhance the colour and to provide a certain degree of protection. The protective coatings of outside sculptures must be maintained as they can wear away over time, mostly due to changes in weather. That means that the sculpture loses its surface coating and starts to slowly corrode and turn green. Sculptures that are kept indoors, like the ones in the Cottonian Collection, are less vulnerable than bronzes that are kept outside. The bronzes in this collection are in very good condition. They are being looked after and cleaned by the conservation team in the museum.

Plaster is a softer material than bronze and requires special care when handling. If you take a look at the sculpture of Venus by Jean Baptiste Pigalle, you can see that her left hand has broken off. We don't know when or how this exactly happened but it is common for limbs to break off. That shows us how fragile plaster casts can be.

It's also necessary to carefully monitor the temperature and the humidity levels in the room and that is done by the machines in the gallery. You have to make sure that the plaster casts are stored away properly too. The temperature and humidity have to be stable; the cabinets they are in have to be well ventilated. The plaster casts are very porous which means that they can absorb water very easily. Mould and mildew can grow in and outside of the sculptures if they become damp. The sculptures are frequently cleaned to avoid any such damage occurring.

People have been collecting plaster casts from the early Renaissance. Artists such as Michelangelo were the first to carry out restorations of ancient sculptures, to make moulds and collect plaster casts. The first artist to collect casts was probably the Paduan painter Francesco Squarcione at the beginning of the 15th century for the use of training his apprentices.

The collecting of plaster casts reached the height of its popularity in the mid to late 19th century. A very few people in the UK could afford to travel to Italy and France and so couldn't see the authentic ancient sculptures. Instead, many museums commissioned plaster cast copies to complement their collections.

By the 1850s the business of making plaster cast copies had become very popular all over Europe. Casts were sometimes commissioned directly from the *formatore* (an Italian term used to describe the specialist Italian mould- and cast-makers).

The V&A museum's unique cast collection is an excellent example of the Victorian taste. Many other collections were destroyed or broken up during the first half of the 20th century as the demand for plaster casts fell in the early 20th century and the value of casts was questioned as they were seen as inferior substitutes for the original works.

People would buy plaster casts as bronze casts were much more expensive to purchase. However, bronze was in great demand for the small versions of ancient statues. For example, the sculpture of *A Centaur* is a copy of an Ancient Greek statue. Such sculptures were then used in interior decoration. It was particularly popular to place the miniatures on mantelpieces.

As I mentioned earlier, individuals and collectors bought casts for their own personal interest or to decorate their homes. However, plaster casts have different uses apart from ornamental display. For example they were widely used in art schools and academies of art up until the decline in popularity of drawing studies of them in the mid-20th century.

In the late 16th century a painter and writer called Giovanni Battista Armenini recorded that there were cast collections for artists in many northern Italian cities. In 1586 he recommended all students to draw from casts of the finest statues in Rome. In 1666, the famous artist Bernini repeatedly stressed how essential it was for young art students to copy from casts taken from 'all the most beautiful statues, bas-reliefs and busts of antiquity' before learning to draw from nature.

Art schools collected plaster casts to enable young artists to draw from the best examples of classical Greek, Roman and Renaissance sculpture in pursuit of their academic training. This was believed to be an excellent way to refine drawing skills, especially the close observation of light and shade on form. The students would also have studied anatomy in parallel to drawing from sculpture so they would always be able to weigh reality against the ideal physique.

Eventually making drawings after ancient sculptures became less important, and the plaster casts gradually lost their function as academic aid. Like many museums in the 20th century, most art schools destroyed them in the 1950s, 60s and 70s. A past director of the art program in the Vassar College in the New York state, Agnes Clafin had the school's plaster collection destroyed in the 1940s, saying that the plaster casts were no longer useful in teaching and that "this was a time to innovate".

Fortunately there are still several museums and schools that held onto their plaster cast collections. Many will allow artists to draw from them, but the lighting in museums can be a limitation, as they typically use multiple light sources, which makes the study of form and *chiaroscuro* (strong contrast between light and dark) difficult. In this gallery you can see that it is very well lit all around, which means that there aren't a lot of strong shadows on the sculptures.

Art schools weren't the only ones collecting bronze and plaster casts; a lot of people would take a trip in Europe called 'The Grand Tour'. The Grand Tour involves gentlemen from different countries travelling around Europe, where they would take the opportunity to expand their knowledge in foreign languages and politics and to acquire tastes and objects of art. Young aristocrats, well-off middle classes and

students by bursaries, mostly undertook the Tour, where they would pick up trinkets on their way as souvenirs.

The term 'Grand Tour' was itself first used in 1670, in a French translation of Richard Lassell's a '*Voyage or a Compleat Journey Through Italy*' which included various accounts of the Grand Tours of many English gentlemen.

The tour was mostly dedicated to increasing the knowledge of literature, arts, music, theatre, local customs and folklore, and to becoming acquainted with cities and countries quite different from their own and was recommended to any young person who was ambitious to play a leading role in society.

In the 18th century the Grand Tour was described as an 'invisible academy' which offered services to various cultural sectors like the arts or politics and was seen as a very important element in the education of the rich. During that time the tourist community was nicknamed the largest and most independent wandering 'academy' that the western civilisation has ever seen.

The main attraction of the tour was Italy. It was a very popular destination because by the early 17th century there had emerged a belief that Italy was a special destination, especially Rome, where the art academy was an important hub of artistic interest.

The aristocrats and noblemen of France and England were very heavily influenced by Italian art and ideas. They would learn from classical antiquity of Italy through the writings of classical authors on Roman history, visit sites where important events had occurred, collect sculpture and various artefacts like coins and vases. They also travelled to the country on the tour in search of political enlightenment.

The tour was a serious matter which could last several years and involved many people; it was a great luxury and usually involved a considerable amount of money and followers. The English were the most numerous travellers, and they were the first to develop the first 'tour code', setting out the purpose of this 'honours course' in culture, drawing up itineraries and establishing key destinations. Here is a map that shows you which way the tourists would travel. Guided by already published accounts, the travellers would visit the Netherlands and France and travel to Italy by sea from Marseilles, landing at Genoa, Livorno or Civitavecchia. They would stay at Rome and travel south to Naples before turning north. The classic route then involved crossing the Apennines and a journey along the Adriatic coast as far as Venice before entering Switzerland and reaching Calais via Germany.

As an aristocratic institution, the Grand Tour came to an end due to the Napoleonic wars in the early 19th century.

People who were on the Grand Tour would buy objects so they can describe their trip and to validate their experience in the countries they visited. It was very popular to have a self-portrait painted whilst on Tour. The landscape of whatever place the

sitter was at was usually painted in the background, which would embody the closeness of the relationship between the traveller and place. The details of these portraits- books, souvenirs, views, objects d'art, that were usually placed around the person- also play an important factor in our understanding the taste and preferences of the people who commissioned them.

Apart from paintings travellers also bought sculptures. For example *A Centaur*, a bronze sculpture here, is by the Zoffoli workshop. The Zoffoli workshop was a very important workshop in Rome during the 18th century and they specialised in the reproduction of small bronzes after antique sculpture, primarily for Grand Tour market. In Italy, people would take advantage of the tourists that came into their country and they would make money from selling sculptures (and copies of them) they excavated from sites like Pompeii.

The tourists would also purchase plaster casts and bronzes (copies of these newly discovered ancient sculptures) mostly because they were cheaper and lighter than the marble sculptures. Casts were said to be absolutely reliable replicas, cheap, light, and easily transportable. Special papal licences were sometimes required to obtain casts from Rome. Also, bigger casts would've been moved with great care by mules. Large casts, usually life size casts of very large sculptures, would have been moved in separate parts and reassembled upon their arrival.

The rest of Europe was fascinated by Italy, and admired the art that was made there. An anonymous traveller wrote in the late 18th century, that 'Rome is the first world which we have known, and a world which History, Eloquence, Poetry and all the most seductive arts vie with each other to embellish'. So the antique art of Italy had a big influence on the tastes of the tourists that visited the country. They would commission copies of antique sculptures and other objects that they used to decorate their homes with and it became a sign of good taste if you had beautiful art on display around your house, which is probably why Charles Rogers collected things during his time- to show society that he is a gentleman of good taste.

So we have talked about how to make plaster and bronze casts, their history, and their uses. I hope that we have cast new light on the sculpture in the gallery, mainly of plaster casts and bronzes that are in this Collection.

Thank you!