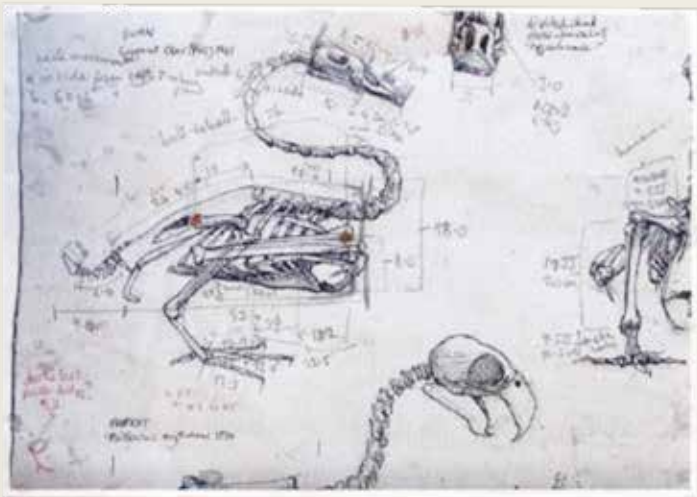
ANNE SHINGLETON

MY SWAN

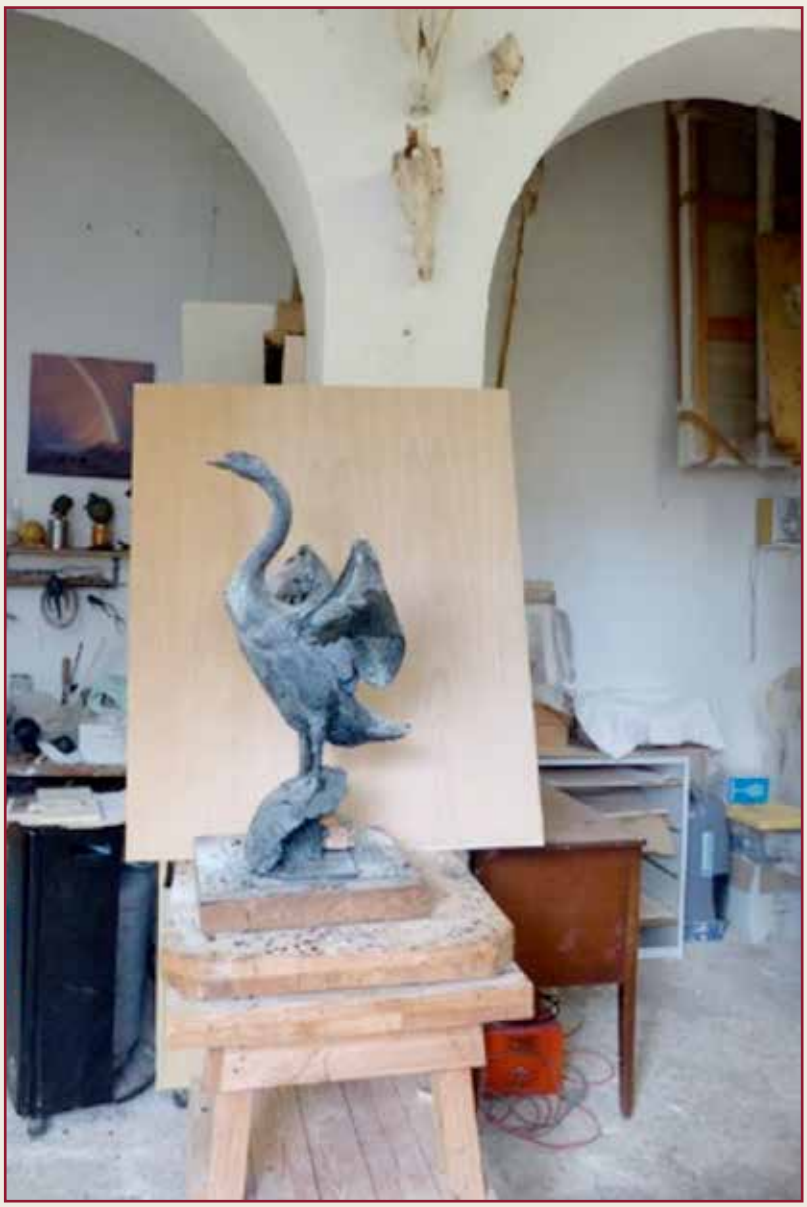
An illustrated description of the creative process, from start to finish, of a large sculpture in bronze.

The idea for this large sculpture had been in my head for 3 years. The first work on it was to gather information on the anatomy of the swan.

I made studies from swans; dead, stuffed, bones and skeletons. Also from videos of birds in the standing and flapping wings pose that particularly interested me.



The next stage was to make small rough models (maquettes) to ascertain the main movements; they are about 25 cm high. I wanted to show the moment when a swan has finished preening his feathers and stretches up to give his enormous wings a few powerful flaps. Having decided on the pose I made a bigger more detailed maquette, about half life-size, again in wax.



A mould was made of the maquette and a copy of the swan in hard white resin created. This served for taking measurements for the enlargement with a pantograph.

The pantograph enables the large measurements to be defined and so the armature can be constructed to remain within the body of the swan.
Once the armature is soldered in place the modelling with the clay can start.

There is always a moment when changes can be made. I chose to modify the angle of the primaries in the clay.

I was fortunate to be able to work in this large purpose built studio for sculpture, in Pietrasanta. Not having done this before, the modelling took me about 40 days. A totally enjoyable experience!

A FEW PHOTOS OF THE FINISHED CLAY MODEL.

The next stage in the creative process required the skills of a mould maker. Liquid silicone was poured over the surface and left to solidify into a pliable but solid rubber.
This first layer is the most important and takes all the subtleties of the surface texture.
More layers of slightly stronger silicone were added, and finally a firm gesso/plaster of Paris layer securing the whole form completed the process. Large sculptures may need many separate mould segments.

My swan had two moulds for each wing, and several for the body.

In the bronze foundry hot molten wax was poured into the silicon moulds, allowed to cool a little, then poured out leaving a hollow wax replica of that section of the sculpture.

The wax model always needs work, (called retouching) to clean it up.
I do this work myself since it gives me the opportunity at this stage in the process to make any corrections of details.

When the wax was sufficiently cooled the mould was carefully opened, and the casting wax was removed and prepared for retouching.

The bigger pieces of casting wax were put on a scaffold structure to stop them warping under their own weight.

The tubes, called runners and risers, and the funnel that carry the molten bronze to all parts of the sculpture were attached, and the whole structure was then ready for the encasement inside and out of a fine refractory material.

This was done by dipping the whole structure into vats of liquid ceramic made of various particle sizes which dried onto the surface of the wax creating a porous shell. Next it was placed into a large oven and heated so that the ceramic became solid and the wax melted and poured out of the whole structure. This is why this type of bronze casting is called the "lost wax technique". While the structures were still hot from the oven, they were placed in sand, or into containers under vacuum. A team of men with protective clothing lifted the heavy crucible which had been heating in the furnace and tipped the white hot bronze which is over 1000 deg Centigrade into the funnel of each sculpture. Bronze is a mixture of mainly copper, with zinc and tin.

Observing the very controlled movements of the operators in their masks and protective clothing is like attending a theatrical performance. There is something magical about it and I am always moved by the experience.

After a few hours the metal had cooled and solidified, and the laborious work of removing the ceramic shell and the now bronze runners and risers, from the sculpture began.

Each part of the sculpture was then cleaned of any imperfections with mechanical tools, and holes were repaired by welding.
As the various parts were welded together a steel armature was also welded firmly inside to give extra strength to the whole structure, especially the wings which are quite heavy.

This took quite some expert figuring out to make an armature inside that would support any likely extra weight, since the sculpture is planned for display in a public space.

However, when all its bits were assembled the sculpture came to life again for me - an emotional moment! Finally, the bronze was sandblasted to clean it up and make the surface homogenous.

The sculpture was transported to where it will be patinated.

Patination is the process whereby the surface of the bronze is treated with heat and various chemicals to best display the relief of the sculpture and to give it some colour.
This is a highly skilled job and many different effects and layers of colours can be obtained.

Lastly the whole surface was brushed with a transparent wax and then polished. This brings out the effect of the layers of patination, and preserves the sculpture from the effects of the atmosphere.

Here I have waxed and polished the right foot to show how the wax makes the sculpture surface finally come alive.
This sculpture is not just a swan. There are 4 other animals included on the base; a snail, a lizard, a leaping frog and a toad in a hole. (Toad in the Hole is a traditional English dish consisting of sausages in Yorkshire pudding batter!). These animals can be discovered around the feet of the swan, and are at the height that a child can see and stroke them.

Waiting for the temporary base in iron to be completed and attached, before being transported to its destination in the open air.

After the labours of two men, a crane, and a small lorry, the swan "flew" from the foundry and was installed in the garden in Florence, about 114 km away.
View from the front showing the underside of the feathers.

View from behind.

My swan can be easily visited in the famous **Gheradesca Gardens**, part of the Four Seasons Hotel, Florence, Italy.

This Mute Swan bronze, and is entitled "**FACING THE FUTURE**". I am pleased to say that it is one of the finalists in the in the 13th International Art Renewal Center Salon of 2017/2018.

The measurements of the bronze are: h170 (70") x w177 (72") x d130 (51") cms
The temporary pedestal is h30 (12") x w65 (25") x d60(23") cms.

For any further enquiries please contact me at:
anne@anneshingleton.com
or telephone me on
+39 380 7927237
or via my website:

http://www.anneshingleton.com/english/contact-anne-shingleton.html