



The Moon Tree

Ilex crenata



Garden of Illusion

at the Connaught Hotel

The *Garden of Illusion* is an evocation of landscape, with serpentine water, a tree silhouetted against night stars as they glitter on the pool. A disc of light is reflected from the dark water onto the far wall so that the merest breath of wind is transported as a shimmer in the reflected image of the moon. The connection between this idealised landscape with some notion of the world beyond the walls of the hotel is made by creating a little Haiku of naturalism, with the water and plants reduced to a minimal essence. When it became clear that the tree did not have enough light and was in danger of dying, I discussed with Adam Lowe if it might be possible for Factum Arte to make a brass copy of it. The result deepens the unexpected metaphorical quality of the garden: everything within it becomes a copy, a mirror or a representation of something else.

Tom Stuart-Smith

When we commissioned *The Moon Tree* from Factum Arte we felt it perfectly embodied the Connaught spirit of aligning tradition and modernity, whilst capturing the unexpected and one of a kind magical quality that has become so closely associated with the hotel. Working with some of the world's leading artists and craftsmen has become part of our signature philosophy at Maybourne where we believe unique, bold creations, charm and delight our guests, as well as creating a significant artistic legacy for our hotels.

Stephen Alden – CEO Maybourne Hotel Group



Imitation of nature

Reality and Illusion

Zeuxis has the reputation of being one of the most innovative artists of the classical world, even though none of his works exist. In his *Natural History*¹ Pliny the Elder recounts the story of a contest between *Zeuxis* and *Parrhasius* to determine which artist could achieve the greatest reality in their paintings. *Mimesis* was a quality highly prized in ancient Greece and the ability to transform paint into something that convinces the eye and brain was the greatest proof of artistic skill. *Zeuxis* was a pioneer in still-life painting, perhaps its first exponent, and when he unveiled his painting of grapes it was so real that passing birds swooped down and pecked the painting in an attempt to eat the fruit. It seemed he was certain to win the challenge until *Zeuxis* asked *Parrhasius* to remove the curtain that was covering his painting. With a smile *Parrhasius* revealed that the curtain was actually the painting. *Zeuxis* conceded defeat, agreeing that it was easier to deceive a bird than to deceive a painter who understood the relationship between illusion and reality.

The imitation of nature was equally strong in classical sculpture. Euripides suggests that Helen of Troy was not a real woman but an eidolon of Helen, a statue of ideal feminine beauty made from a cloud, both material and nebulous, a spirit so real that neither Menelaus nor Paris were able to differentiate between Helen and her ghostly double. The artist, like a magician, is able to dematerialise the real, physical external world. They mediate this ideal in different ways and transform it as it is returned to the physical world. In both these stories of artistic skill the success lies in the level of deception and involves a healthy dose of trickery. But the pursuit of both natural and idealised realism can also be celebrated for its truth and accuracy. The act of transformation can reveal rather than deceive; it can help us see more than

¹ While Pliny studies *Natural History* with great attention to detail he took less care with his own life, dying in the pyroclastic flow that resulted from the eruption of Mt Vesuvius - now called a *Pinean eruption*.



we do from day to day; it can give us a condensed reality in which the original and the authentic merge in a dynamic process that can remain entwined, or grow apart over time.

Wenzel Jamnitzer was a highly influential goldsmith, workshop director, proto-banker, diplomat and the creator of *Perspectiva Corporum Regularium* (1568), an extraordinary work on art and artifice, with a fascination with ideal forms and Platonic solids. But during his life Jamnitzer was also famous for a process he developed to cast plants, insects, snakes and reptiles from life. Nuremberg in the mid sixteenth century was coming to terms with the impact of various new, quintessentially Renaissance media and technologies such as the printing press with its ability to transform and mediate information. It was a material world in which a goldsmith had his hands on the most precious matters available, from rare metals to dyes and glazes. Almost exactly contemporary with Jamnitzer, Bernard Palissy was casting from life in Paris and transforming his life casts into glazed ceramics. But Jamnitzer, the true alchemist, was transforming his base materials into gold! He understood how to catch insects and snakes, how to make a snake vomit, how to prevent it biting and how to stupefy his prey with alcohol so it could be teased into a natural position before its ultimate transformation into gold.

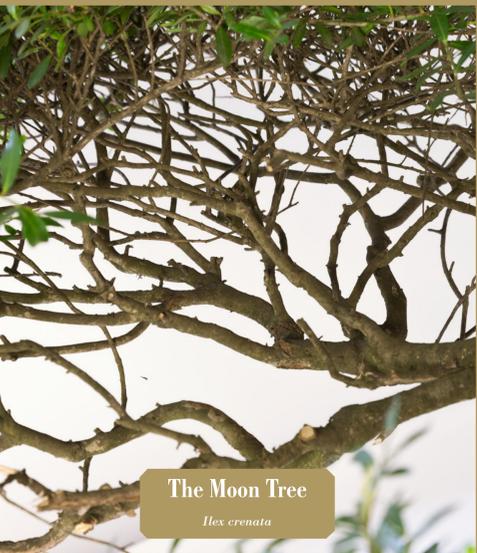
There are few portraits of Jamnitzer but one shows him with the tools of his trade standing in front of a collection of plants and leaves that he has transformed into plaster. It is difficult to catch and transform a snake or reptile into gold, but to turn a leaf into an exact replica of itself in plaster or any other media is even more complicated. Jamnitzer's process seems to have been a closely guarded secret, but while the details were hidden, the basic principles are not. His process would have involved encasing the



Naturabguss von Eidechse, Wenzel Jamnitzer, 1540/1550.

plants in a moulding material, burning the organic material or dissolving it in acid, forcing the casting material into the empty spaces under pressure, and finally removing the mould with great care. The physical world is governed by some basic rules and turning a thing into a reproduction of itself requires a series of operations. The starting point is an object with a variety of different qualities, but the end result is an object in a different material that retains some – but not all – of those qualities. Jamnitzer was a master who understood these transformations both theoretically (hence his lifelong fascination with geometry and platonic solids) and physically (as an artisan). As a goldsmith he was also faced with the knowledge that the material he worked with was more valuable than his ideas and that his creations were transient. The moment the value of the raw material exceeded the value of his artistic creation it would be melted down and used as currency. Like many great Renaissance innovators, most of Jamnitzer's greatest creations no longer exist. His room-sized creation for Archduke Ferdinand of Austria representing creation itself, with Adam and Eve surrounded by animals, plants birds and mineral specimens (all painstakingly cast from life) no longer exists, nor does his cosmic fountain made for Emperor Maximilian II that was over ten feet high and five feet across.

In the intervening years the laws that govern material physics have not changed significantly, and the processes adopted by Jamnitzer are essentially the same. But digital technology has changed the way we understand information and its mediation. At a time when *The Economist* is describing the new developments in 3D output as the next industrial revolution, Factum Arte is writing software and undertaking material research that is building bridges between new technologies and traditional artisanal skills.



The Moon Tree

Ilex crenata



The *Ilex crenata* was removed from the Connaught by Crocus Ltd and shipped to Madrid by Cimex. It was then studied in depth and photographed in detail. Special attention was paid to the way the tree had been pruned, the way the leaves grew and the way the growth died back.



Enrique Fernández at Esfinge Foundry preparing the clusters of leaves for casting. The leaves had to be assembled in clusters with wax feeders that allowed the brass to get into the constricted spaces left behind in the mould after the lead had been burnt out.



The centrifugal casting system at Esfinge. The system was designed and built by Enrique Fernández based on a small centrifugal system for jewellery making.



The crucible and the mould are clamped together in a vertical orientation and then spun at speed. The gyroscope effect tilts the crucible into a horizontal position and the liquid brass is forced into the cavities in the mould.



Once removed from the mould and cleaned the feeders are cut away from the fine branches and leaves. These are then sorted into different groups based on size, density of leaf, perfection of casting and general shape.



The larger parts of the trunk were cut into sections, numbered, photographed and cast at Fademosa - a foundry run by Alvaro Menor that has worked closely with Factum Arte for many years. The cast and the tree are then checked side by side.



The sections of tree were welded together to create an accurate form of the complete tree.



Sebastián Beyro worked carefully with Ángel Miñambres to position and solder (with silver) the leaves twigs and branches into position. Naturalism was always the guiding principle.



The assembled brass tree is then blasted with fine glass microspheres to remove traces of plaster and produce the magical golden light that gives the tree its character. Ángel Miñambres wearing protective gear while working with the blasting system.

As a consequence of the realisation that the *Ilex crenata* (bonsai) in the Connaught did not have the right conditions to thrive, the idea of transforming it into a brass facsimile of a tree resulted in an intense period of research. Like all projects its success is dependent on an uncompromising quest for an object with its own intrinsic qualities. The right technological dexterity has been supplied by a host of artisans with different skills led by Sebastián Beyro. Tom Stuart-Smith has been active with his profound understanding of plants and Stephen Alden has been both supportive and constantly encouraging from beginning to end.

The first approach was to take a tree and use electrolysis to copper plate it. This was done at Arte Granda, a workshop founded in 1991 by Félix Granda. The copper plating of the branches worked perfectly, but the leaves, unless dry, presented problems. A thick copper plating was achieved on several samples. The copper was also nickel and gold plated. The assumption was that as the tree died the electro-plated metal would be strong enough to hold the form. Unfortunately the organic material proved far stronger than its delicate metal skin, and with humidity it swelled, bursting the more rigid copper deposit. The next stage was to petrify the tree. Contact was made with an Argentine professor who claimed to have found a process to petrify wood. This proved to be a dead-end, but it opened a line of research that

went from mineralogy to the impregnation of building materials. Water-jet cutting and folding the leaves by hand was considered, as was stamping from templates, and laser-cutting. All were rejected. These approaches required a level of abstraction and standardisation that failed to produce a convincingly unique specimen of a tree. We were in pursuit of a condensed essence of tree that defied standardisation. Every leaf, twig and branch had to have its own character and superficial quality. It was this specificity that we were pursuing. Finally it was decided to use the tree as a model for itself. It was shipped to Madrid, carefully photographed by Alicia Guirao del Fresno, cut up and taken to different foundries. At Fademosa, Alvaro Menor and his team cast the main trunk and branches. At Esfinge, a foundry run by Enrique Fernández a specially designed large-scale centrifugal system was used to spin the moulds at high speeds forcing the liquid brass into the smallest cavities left in the mould. The first tests were extraordinary and we were able to cast the finest twigs and hold the veins on each leaf. But the process was slow and as the leaves dried they became too thin to cast: the brass simply could not get into the mould and many of the leaves were only partially formed. After many conversations with Tom, the nurseries in England and Germany and tree specialists in Madrid, we finally purchased small Box bushes and found we could successfully merge its leaves with

those of the *Ilex crenata* bonsai. With all the elements successfully mutated into brass Ángel Miñambres and Sebastián Beyro began the painstaking process of re-assembling all the tree. The final result was sand-blasted to produce a magical gold tone. The transformation complete, it was shipped to London. In London it assumed its position in Tom Stuart-Smith's *Garden of Illusion* at the heart of the Connaught.

Texts by Adam Lowe

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