

PEBBLE BEACH CONCOURS D'ELEGANCE®

INSIDER™

CELEBRATING THE LIFE AND LEGACY OF THE AUTOMOBILE

THE 1960s
DREAMERS
AMERICA'S ONE-OFF DESIGNERS

TEXAS PLOWBOY
BOB SMITH
REVIVING PRIZED
FERRARIS

ONE ON ONE
WITH FERRARI'S
FLAVIO MANZONI

**CORRADO
LOPRESTO**
PRESERVING ITALY'S
AUTOMOTIVE HERITAGE

EXPLORING MONTANA:
THE GOING TO THE SUN
RALLY





The Search for the Perfect Trophy:

How we found and then re-created an award befitting our Best of Show

By Jules "J." Heumann

It all began about ten years ago when, by coincidence, Peter Hageman, Glenn Mounger and I were at Retromobile in Paris.

Because Peter is an antique dealer and knows all the ins-and-outs of the markets there, he suggested we go out to the Marché aux Puces—literally, the “flea market”—on Friday, which is dealer day, so there are fewer crowds and fewer pickpockets. We thought that was a good idea and off we went.

Once there, the three of us were walking down the sidewalk, peering in this shop and that, and talking. At certain point, Peter and I were so engaged in conversation that we somehow lost Glenn! So we retraced our steps, looking into each and every shop as we passed it, and finally, we came to one that was very narrow and very deep—and standing at the far end of that shop and looking upwards was Glenn. Well, we had to see what he was looking at, so of course we went in. And there, on top of an armoire, was this absolutely gorgeous and very large cup.

“The shop was one I wouldn’t normally go in,” Glenn said later. “It had a lot of heavy furniture up front, no automobilia, no small treasures. But the glint of that cup somehow caught my eye. It was majestic, it had a stately elegance, and it was unlike anything I had seen.”

I suspect the same thought struck each of us when we first saw it: What a wonderful perpetual trophy that would be for Pebble Beach!

We soon got the dealer to bring the cup down. And it was utterly magnificent. It was about two feet tall, and heavy—very heavy. As we learned later on, it is solid silver. It also has two bands of repoussé metalwork, where the metal has been stretched and beaten and then chased into the shape of traditional oak leaves, around the top and the lower portions of the cup. This work is quite deep; at times the pattern is up to 3/8ths of an inch deep. And mounted opposite to each other up top are two



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faux handles, done in a very graceful Art Déco pattern. Oddly, it had never been engraved.

It was perfect! So we bought it.

As it happened, I had bought a chest at another dealer that day, so we had the trophy shipped to me inside of the chest—well wrapped up, of course. Upon its receipt, I took it to silversmith here in San Francisco who has a national reputation, and they cleaned it up and marveled at it—at the fact that it was old, it was silver, and it had never been engraved. Then we brought it down to Pebble Beach and convinced Sandra Button that it should be our perpetual Best of Show trophy, and she readily agreed.

Now fast-forward a decade.

Over the ensuing years, it has bothered me that we didn't have something equally unique to offer to the actual automobiles that are named Best of Show at what I believe to be the finest concours in the world. These automobiles come to us from all around the world and they compete here on a very high level; I don't know of another concours that judges cars with the level of detail and specificity that we do here.

It was my thought that we must give the winner—the car and the owner—something commensurate with the fame, the adulation, and the respect that a car earns by winning here. Lalique has often graciously provided the winner with its crystal Trophée—and that is absolutely lovely, but it isn't unique to us.

It seemed to me that a creating a half-sized version of the cup that is now our perpetual trophy would be absolutely ideal—and I wanted to undertake that project for the love of the concours.



I began to work with a silversmith on this, but the estimated costs were too high—particularly over the long term. The first cup would cost tens of thousands of dollars. Additional cups would be cheaper, of course, but not by much. So I had to find another way to do it. Next I thought of 3D scanning and printing, and I tried to find somebody who could scan the trophy, reduce the size, and print it directly as one polished silver piece—but that was not to be for many reasons, including the size of the trophy.

It was the combination of old and new technologies that provided a solution.

With the help of friends, I located Scansite 3D, a company in San Rafael that does scanning and printing—but the printing is in wax.

It then works with the Artworks Foundry in Berkeley to turn a wax print into a mold for a metal sculpture, which can then be sent to Biro & Sons in San Francisco for final engraving and silverplating.

The process of scanning is electronic, so it is relatively quick and relatively inexpensive. The casting process then reverts back to age-old traditional methods, using the lost wax process. Simply speaking, what they do is they pour molten bronze into a mold made from the wax 3D prints. But there are about 8 to 10 steps in between. Although the principle is simple, the process is complicated, and it involves a lot of handwork.

It also takes a bit of time. We began this process in December and we've just received the first several polished bronze trophies—and I'm absolutely thrilled with the result. Now they are off to the silversmith for engraving and silverplating.

I can't wait to see which car wins Best of Show this year and gets to take home the first of these trophies!

The Process of Recreating Our Best of Show Trophy

1



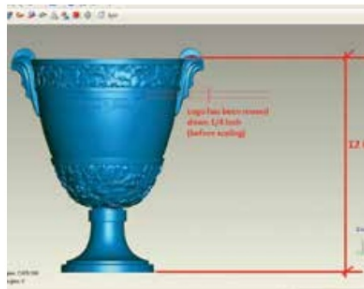
PREPARE IT FOR SCANNING
The original silver trophy is coated with children's clay and water-based tempera paints, giving it a matte rather than reflective finish so the scanners can correctly pick up details like the logo and the repoussé pattern of the metalwork.

2



THE SCANNING PROCESS
The trophy is scanned repeatedly with elite aerospace-grade structured light scanners. Rather than a laser, these use a halogen light, which is measured as it hits the object and bounces back, much like radar. Scans are made with different measuring volumes and in multiple patterns, much as you would photograph an image from multiple views. Ultimately, about 150 scans of our trophy were made, each of which took about a minute and a half.

3



THE SCANS ARE MERGED AND EDITED.
Ultimately, the final merged scanned image is accurate to 7 microns. But often when the final image is to differ from the original in size, changes need to be made. For the half-sized trophies, the rim near the handles had to be thickened, the liner was removed and the logo was slightly lowered.



4

THE PRINTING BEGINS
The object is printed by the top-of-the-line Objet machine, the highest resolution 3D printer available today. Accompanying software slices the previous merged and edited scan into slices about 16 microns in depth. The printer then lays down each slice in resin and an accompanying laser solidifies each slice, building the object layer by layer. The Objet machine built the resin image of our trophy in three parts over the course of about 40 hours. These three parts were then glued together to form the initial macquette, the model, to be used for the traditional two-mold lost-wax bronze casting process.

5



THE MOLDS ARE CREATED

To begin the two-mold lost wax process, craftsmen at Artworks Foundry in Berkeley, California, paint latex rubber over the initial macquette and allowed to harden into a mold. The latex is then removed in two halves to create an inverse rubber mold of the model.



6

THE WAX IS POURED

Wax is poured into the latex mold to form a wax model, which is then carved, sanded and smoothed. It is also made hollow and a gating system is established to provide channels for the bronze to be poured.

7



CREATING THE SHELL

A very thin ceramic shell is created over the whole of this wax image by dipping it repeatedly in a slurry, then quickly in silica, allowing it to dry between each dipping. This is repeated about ten times until the shell is solid, coating both the inside and outside of the hollow wax model. The shell is then placed in an oven where the wax melts away, leaving a cavity for the bronze.



8

POURING THE BRONZE

Molten bronze is poured into the cavity and allowed to solidify. Any excess metal is then removed and the bronze is polished. A high polish was required on our trophies because they will be silverplated.



ENGRAVING

The trophy is engraved at Biron & Sons in San Francisco. As a finishing touch, the trophy is silverplated.

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