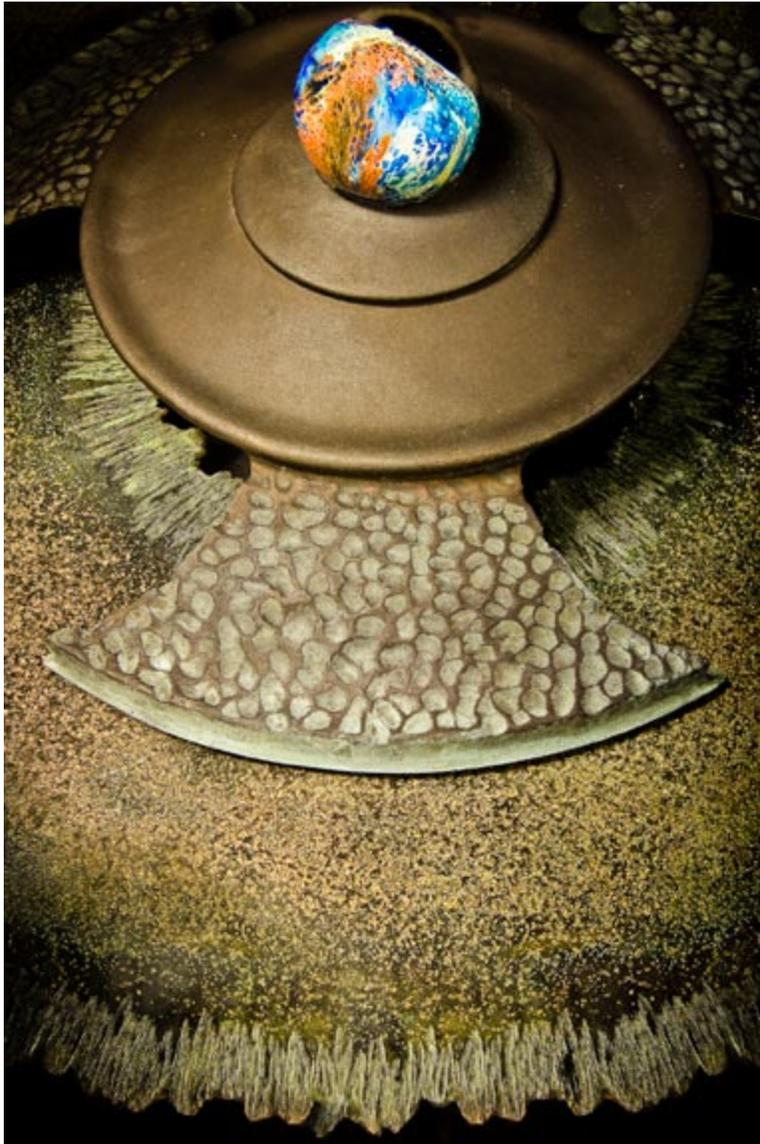


CIRCULAR OBSESSIONS



Atlas

Mixed Media Series
In Glass, Metal & Wood
by Jim Boles



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.....CIRCULAR OBSESSIONS

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Innocast Execuline in Howard Lake MN.

Although Jim has some formalized art training, this series represents a solitary obsession. Working part time as an Information Technology professional has given him the freedom and resources to pursue these forms without undue influence or pressure, making it possible to be responsive solely to an internal aesthetic.

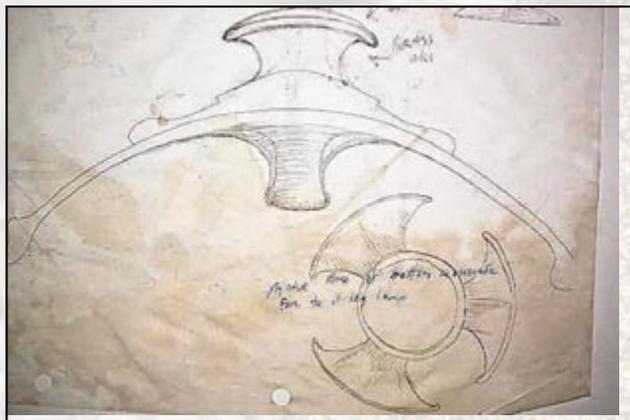
But the driving need to produce just the right color, texture, and reflective property creeps into creative process at every step, making it frustrating and even painful at times.

Circular Obsessions is a sculpture series focusing on media in-the-round. From lathe turned objects to torch-worked glass spheres to cast bronze hemispheres the circle and the sphere are the central motif reviled in continuously changing form, texture, color, and media.

These mixed media gems are the work of Jim Boles working out of his studio in Savage, Minnesota. Considerable time and expense went into building a complete woodworking and glass working studio. The bronze casting was initially done by Jim at the Minnetonka Center for the Arts under the direction of Nick Legeros, and later designs were sent to



After building and provisioning this studio space a seven year period followed of self directed exploration and education in the required glass, wood, and metalworking techniques. Jim began to form a visual vocabulary which repeatedly came back to rounded forms.



In torch-worked glass the sphere (in the form of large marbles) became his preferred form. In glass casting and kiln-worked glass, disk shaped objects become the focus. In woodworking, a lathe was used to prototype the family of shapes he had already sketched on paper.

In some cases ten years might pass before an initial drawing would work its way through the process to a finalized form.

Much of the time was spent on meticulous experimentation in flame-worked and cast glass, resulting in color treatments and glass inclusions which in some cases, have not been seen or used in that manner before



Atlas

Zeus condemned Atlas to stand at the western edge of the Earth and hold up the Sky on his shoulders.

Mixed Media Sculpture

Size & Weight - 18 inch diameter by 13 height., 30 lbs.

Metal Marble - The three spherical objects at the ends and middle of Atlas are Metal Marbles. Metal Marbles are torch-worked glass which has metal oxides added to it and then run through multiple cycles of oxidation and reduction the the torch.

Copper Plate - A 1/8 inch thick copper plate separates the two halves representing the cosmos. This was styled using various cutting and texturizing tools, then several different types of patina chemicals were used to yield subtle color variations.

Bronze Casting - The main body is cast bronze. A woodturning was used as the original from which the mother mold was made. Two castings were made for the top and bottom of the main body from this mold.

Woodturning - In addition to the turning for the mother mold, one end of Atlas has a turned object made from cherry wood. It was stained to look like the patina bronze of the main body.



This work is named Atlas because of the cast bronze center housing supporting the glass spheres. The bronze is thick enough that each half of the casting could support several hundred pounds. This gives the work a sense of presence and strength.

The work is actually bolted together by a 1/4 inch bolt through the center of the work through the middle sphere. The force the bolt compresses the center copper plate, freezing it into place,

Various patina solutions were used on both the copper plate and the bronze casting to create a variegated irregular effect, especially on the copper.

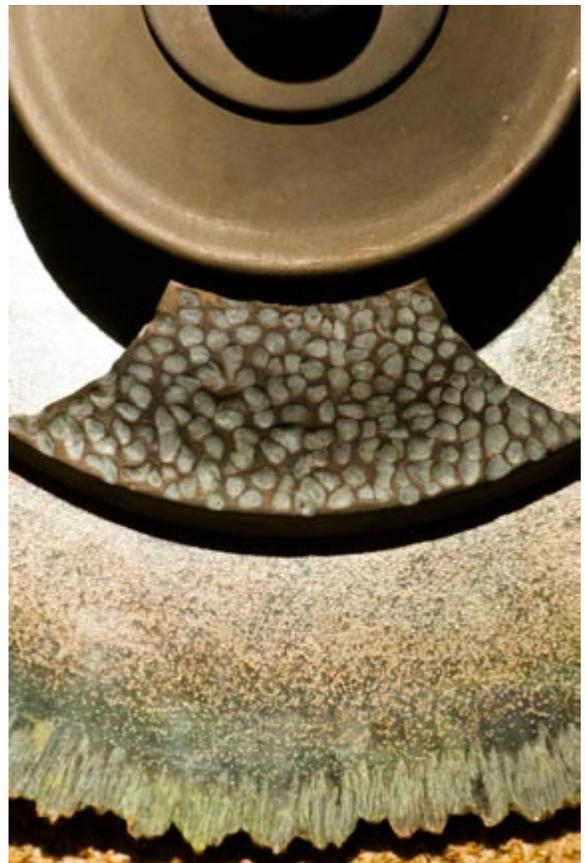
Atlas is an excellent example of the “working in-the-round” approach which Jim favors. The majority of the work had its origins on the lathe, including the Metal Marbles which were

formed with cherry wood marble molds which were also created on the lathe.

This work showcases three Metal Marbles so named because of the metal oxides, gold, silver, and copper which are used to create the detailed and flowing colors of the planet-like spheres.



.....jim boles
designs.....



CIRCULAR OBSESSIONS

Focus On ...

Bronze Casting

This *Focus On* section outlines some of the processes involved in making the bronze casting for Atlas.

After initial sketches, several models were turned on a lathe in wood to obtain a better feel for the actual form. A final design was chosen and a new cherry turning block used on the lathe to create the finalized original.



figure 1

The picture above shows the turning used as the original for Atlas. In this picture copper leaf was applied to the top section in preparation for this turning. It was subsequently used as part of another sculpture in addition to serving as the master for the Atlas castings.

The next stage was to create the mother mold from the turning, eventually used to form wax mold copies. Plans must be made at this point for an even flow molten bronze around the whole of the form during casting. A system of wax runners, gates and sprues are added to the woodturning to insure an even flow of hot

metal to all parts of the mold. To accomplish this thin wax rods are used and attached to the wood at critical flow areas thus insuring an even flow system.

The wood original is then coated with PAM cooking spray, and covered with layers of silicone caulk. PAM is used as a releasing agent so the caulk does not stick to the wood. After the caulk dries forming the mother mold it must be carefully cut off of and freed from the wood original.

Figure two shows the silicone based mother mold with the added connecting wax runners (also covered in silicone) and the large funnel-like gate on the right where the hot wax will be pored into

Bronze casting is a long and somewhat technical multi-stage process, which is somewhat abstract or indirect as compared to other forms of sculpting where the artist works directly on stone or wood to produce a finished work

the now hollow shell of silicone.

Figure 3 shows the mold encased in investment material. The mold is encased because it is jelly-like and cannot support itself. After the top of the encasement is in place, the mold is ready for use by pouring hot wax into the funnel-like gate.



figure 2



figure 3

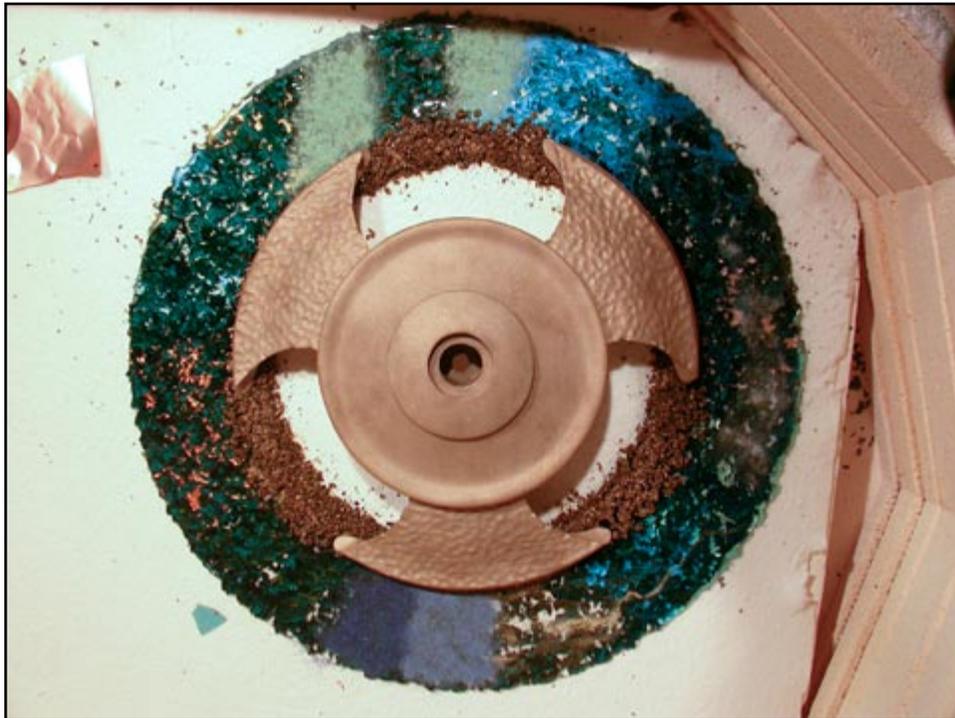


figure 4

When dried, the wax is then removed from the mold, and is subsequently encased in investment casting material. It dries to a near cement-like condition surrounding the wax. The next step is to place into a kiln to burn out the wax, leaving a void the bronze fills during casting. This is sometimes referred to as the "lost wax method" of casting due to the burning off of wax.

Figure four shows a finished bronze sitting on top of a test piece of glass. The original plans for Atlas were for a central glass disk. Later design decisions replaced the glass with a copper disk.

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