

Art of Olive Green

Towards Art, an Ethics & a Laugh

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Egyptian Onions as Contemporary Revolutionary Metaphor

Posted by *getraer* on *June 15, 2012*

Posted in: [Activism](#), [Gardening](#). Tagged: [Arab Spring](#), [Egypt](#), [revolution](#). [Leave a comment](#)



(<https://artofolivegreen.files.wordpress.com>

[/2012/06/imag1638.jpg](#))

It was a beautiful day in outer NYC today, so I was working in my victory garden. I had to plant a dozen lemon cucumbers bursting from their pots and ideally a rosebush that's been pining on the porch, but since I practice "paranatural gardening" (not weeding until the land will be used), I never finish as much as I hope.

While clearing out a space for the cucumbers near the Malabar Spinach, I noticed that the tomatillos reseeded three plants. I also saw that the Egyptian Onion has transplanted its young within a 2' radius, as it is wont to do. This onion produces cocktail onion-size bulbs in clusters at the ends of its 2-3' hollow stalks, which become so heavy with bulbs that they collapse just as the bulbs are starting to sprout.

I was thinking about Egypt's revolution (notwithstanding the Supreme Court decision that's condemned voters to choosing between the devil and the deep Red Sea) and the regional agitations for change in the Arab Spring. The Guardian has a [sleek, effective graphical timeline](http://www.guardian.co.uk/world/interactive/2011/mar/22/middle-east-protest-interactive-timeline) (<http://www.guardian.co.uk/world/interactive/2011/mar/22/middle-east-protest-interactive-timeline>) presenting key events in the regional uprising through December 2011; recall that Egypt's role came pretty early in the movement.



(<https://artofolivegreen.files.wordpress.com>

[/2012/06/imag1644.jpg](#))

They bend to earth and wait to break.

Sometime the bulb sprouts before it even falls: Yemen, where President Ben Ali fled before he could be sentenced. It may be knocked off and then sprout: Libya, where Qaddafi was killed in the country and his son was captured. Perhaps a bulb on the cluster falls off and seems to dry up: Syria, where 12,000 are dead and there seems to be no end in sight. Recalling the speeches, the protests, the camps in Tahrir Square, the *images*...maybe the zeitgeist had started with the Egyptian.

Or maybe I'd had too much sun.

Lost-Foam Casting: A Primer

Posted by *getraer* on *June 1, 2012*

Posted in: Art, Recycling, Self-Sufficiencies, Studio, Upcycling. Tagged: aluminum, art, casting, furnace. 2 Comments



This is my second larger work in lost-foam casting, which involves cutting a pattern in EPS (“expanded polystyrene,” inaccurately conflated with Styrofoam (<http://univfoam.com/styrofoam-vs-polystyrene>)), covering it in a shell and burying it in sand before filling it with molten aluminum. The metal instantly vaporizes the foam and the shell prevents the sand from collapsing the pattern before the metal fills it. Yet the sand is needed to weigh the whole thing down; too little sand and the hot metal will burst through the top of the pattern before it fills. Balancing these jostling forces is part of casting’s trick, unfortunately a knack that comes only with practice. When I started I couldn’t imagine this process, so I thought to knock together this perfunctory outline.

This narrative is reconstructed from my CustomMade Creation Story (<http://www.custommade.com/by/alex-fethiere/creation-stories/custom-metal-candle-holder/13233>), where the video and photos were originally posted. (CustomMade is a service that invites

people to commission artisans and artists to create anything from paintings to balustrades.)

Cutting 4" foam slab for lost foam casting



After tracing, I cut the pattern with a hot-wire cutter that I built. I have broken three commercial ones; they are astonishingly crap slave-made *laogai* fire hazards that burn out in the first half-hour of use. I reverse engineered their principles and used quality materials.

After cutting, I sprue the mold (channeled for hot metal pouring—the funnel-like protruberance), vent it (to allow gases of vaporizing foam to escape—drink straws work fine and can be capped during sand pouring), and coat it to improve texture. Then I brush it down with a shell of drywall paste that resists the pattern collapsing when it is buried in sand and filled with molten aluminum.

Burial is one of the more noisome steps, because for a piece this size it requires over 100 lbs (~45 kg.) of sand that has already absorbed burnt foam. A respirator and a large fan at your back, as with

Venting is very important with lost-foam casting. See the video: every one of these straws becomes a foam volcano. much of this process, are required. I bury something this big (16"x11"x2.5", or 41cm x 28cm x 6.35cm) in a stainless steel sink.

The blast furnace (<https://artofolivegreen.wordpress.com/2011/11/14/prometheus-unbounded-waste-oil-furnace/>) is fired up next with some scrap wood and raised to temperature with waste cooking or motor oil; aluminum melts somewhere around 1400 Fahrenheit (760 Celsius, 1033 Kelvin) but the cement lining is rated to withstand more than twice that temperature. I place the crucible (container for melting and pouring metal) in the furnace once the interior is at temperature and wait for the metal to melt. My silvery soup is mostly machine-shop rejects, alloys like 6061, spiced with pie plates, soda cans and foil. Once this melts, the most uneasy moment of the whole odyssey follows: the lift and pour.

Lost foam casting in aluminum



After the pour, I have to wait at least 20 minutes to see if I made a hash of it all somehow. The casting can be shoveled out of the sand but will be dangerously hot for some time. It's fun, but not necessarily recommended, to hose it off: metal can react badly to sudden temperature changes. In a non-structural application I'll force-cool it if I'm going to grind/finish/polish it heavily.

Spraying down fresh aluminum casting



This is still not the end. The sprue is cut off and the whole is ground/polished/milled. I'm pretty happy with how it turned out, and so is the client. What I learned is probably the most valuable outcome...or so I tell myself as I send it off.



(<https://artofolivegreen.files.wordpress.com>

[/2012/06/img_3700-1.jpg](#))