

By Francis Lestingi

Lovely as a Tree

Sculpting a high-relief appliqué with epoxy

Poems are made by fools like me, But only God can make a tree. — Joyce Kilmore

With deepest apologies to Joyce Kilmore and God, it is possible to sculpt a high-relief, dimensional, appliqué. Replicating trees with this method is the highest form of flattery; read on to learn this technique, which can beautify any sign panel.

Making a template

First, I needed a good tree rendering; a dramatic silhouette is preferable to a conventional, symmetric shape. A Google, com search yielded more than 250,000 images. Fortunately, I found an attractive oak-tree drawing within the first 500 listings. I printed, scanned and outlined the image using Adobe Illustrator® on my Mac® G4 computer.

Then, I printed the outlined tree onto high-quality tracing paper using my HP LaserJet 2200d printer. Because laser printers deposit carbon particles onto a substrate to reproduce images on paper, it's possible to transfer the artwork to a piece of mahogany or HDU by applying heat from a heat-transfer pen or household iron.

Next, I cut out the silhouette using



Defying Kilmore's concluding couplet, Signs of Gold's (Williamsville, NY) Francis Lestingi details his steps for crafting a tree — that is, using mahogany, two-part epoxy and other materials to craft an appliqué suitable for myriad signage types.

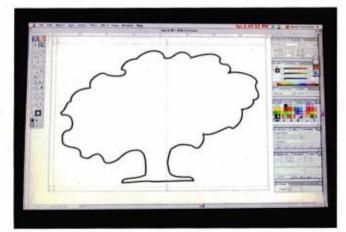
a scroll saw with a spiral blade. A saber saw can accomplish the task, but a spiral blade moves the panel in any direction while cutting. This is especially helpful when navigating many small arcs and curves.

Carving time

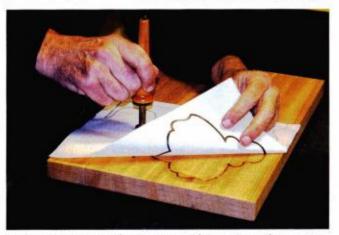
After I cut out the silhouette, I was ready to carve around the edges and trunk. I secured the cutout to the workbench by first covering the tabletop with newspaper, using a few zigzag beads of yellow carpenter's glue. Next, I applied glue to the cutout's back, and I pressed the silhouette onto the newspaper.

This technique provides excellent adhesion with minimal glue. Alternately, the cutout could be attached to a piece of wood as a base and secured to the bench's top with a clamp. The latter approach would facilitate orienting the cutout in any direction desired. Removing the cutout is quick and easy with a flexible, metal, paint scraper.

The only required chisel carving is



Having plugged through approximately 500 tree renderings in an online Google.com search, Lestingi selected this oak-tree rendering as a template.



Having printed the outlined tree onto high-grade tracing papers using his HP LaserJet 2200d printer, Lestingi imprinted the graphic onto a mahogany block using a heat-transfer pen.



Using a scroll saw with a spiral blade, Lestingi cut out the tree. A saber saw would work, but a spiral blade can move a substrate in any direction while cutting — a time-saving step.



Lestingi applied a zig-zag pattern of yellow carpenter's glue, which provides strong adhesion with only a moderate application.



Lestingi gouged the tree's edges for greater detail.



Lestingi chiseled the trunk and edges. To help him create detail, he laid a sketch of a tree trunk atop the appliqué.

on the trunk and edges. To detail the tree trunk, I made a pencil sketch of an actual tree and placed it upon the silhouette to serve as a guide. Next, I tapered the tree's entire edge and sloped it approximately 60°.

To give the tree the illusion of full-bodied girth, without carving away any material, I added material by "sculpting" with a two-part epoxy; this comprises an epoxy resin and a hardener. Having mixed both parts, I liberally applied a generous amount of colloidal silica powder until I'd created a paste that's roughly the consistency of peanut butter. Without silica, the epoxy's texture would be syrupy; thus, it becomes much more workable.

With a tongue depressor, I began sculpting. As the epoxy built up on the silhouette, I twisted my applicator to provide the desired effect of leaf detail. A careful study beforehand of actual trees helped produce a realistic effect, such as the crests and valleys in an actual tree's surface structure.

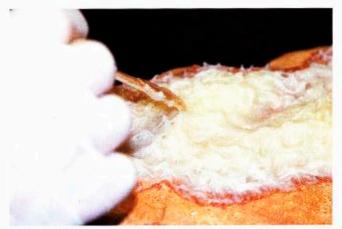
Once I'd reached my desired high-relief texture on the silhouette, I cured the epoxy paste overnight. After the epoxy hardened, I removed the sharp points and edges I'd created during the sculpting phase. Then, I sanded it by hand; aggressive, 60- or 80-grit sandpaper does the job well. I followed with 120-grit to smooth its texture.

Beautification

The newly sculpted tree is now ready for size and gilding. At this point, I could've molded and cast the sculptured tree and produced multiple copies to be used in future applications (see ST, May 2003, page 40). If you do so, begin the moldmaking process after the following coating procedure.

Polyurethane-resin castings (created using the procedure in my May column) don't require primer when you use Krylon® Fusion spraypaint; the paint fuses with the plastic casting.

However, for wood originals, I apply three coats of Krylon® automotive primer before applying sev-



Lestingi used a two-part epoxy to add substance to the sculpture without additional carving. Having mixed the epoxy, he added colloidal silica powder to thicken it and improve workability. He applied it using a tongue depressor.

eral coats of black paint. I chose black because the vertical edge on the finished tree will provide an attractive, emphatic border. Not gilding the sides also simplified sizing and gilding procedures, and permitted easy handling during installation onto the panel. To



After the epoxy hardened, he used 60-grit sandpaper to initially sand the surface, and finished with 120-grit sandpaper.

avoid goldleaf inadvertently sticking to the black sides, I dusted the periphery with gilder's rouge talcum powder also works.

I sized the sculpture using LeFranc's slow size with a bit of 1Shot® chrome-yellow lettering enamel, which I added as a color indicator. The longer the size cures, the greater the gild's brilliance; the size may cure in 12 to 48 hours.

Because genuine, 23k gold is only 0.0001 in. thick, it can't be handled using your finger. The traditional goldleaf applicator is the gilder's tip brush. First, I "charged"



Before sizing and gilding, Lestingi applied Krylon® Fusion spraypaint.

into the balm across my hand; the tip easily lifted the leaves away from their sheets. Goldleaf attached to the sculpture, because the size's tack is greater than the oil on the brush.

After I covered the tree with gold, I looked for any missing



Prior to gilding, he applied three coats of Krylon automotive primer prior to several coats of black paint, which provides an emphatic border to the tree's edge.

the brush with oil (not static electricity, as some mistakenly believe), which allowed gold to attach to the oil on the brush (I used ChapStick™ lip balm). Simply rubbing it on my hand made it easy to use.

I lightly swiped the gilder's tip

spots, or holidays. I filled these with small pieces of leaf, which I transferred from the leaf booklet to the tree by using a ½-in., white-sable brush. Placing a piece of cardboard under the leaf helps make it rigid and easier to lift from



Using a gilder's tip, Lestingi applied 23k looseleaf, double gold.

Voilá! Having used a white-sable brush to create the impression of leaves, Lestingi finished his creation. Against a backdrop of God's creation, judge for yourself the authenticity of Lestingi's work.

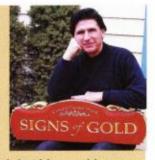
the page; I easily dislodged my desired amount of gold and placed it on the sculpture. Finally, I used the white-sable brush to detail myriad pieces that represent the tree's multitude of leaves.

I attached it to the sign by twisting three studs into the appliqué's back and inserting them inside silicone-filled holes that drilled into the signface.

This practically foolproof tree appliqué is now ready to adorn a sign, and confers an aura of dignity and elegance.

More on Francis

Signs of Gold Inc. (Williamsville, NY) owner Francis Lestingi, a Queens, NY native, taught himself pen calligraphy and brush lettering during his



youth. By high school, he'd learned how to gild and handletter storefront paper signs.

After high school, Lestingi entered the Christian Brothers religious teaching order, where he earned physics degrees from Catholic University and Rensselaer Polytechnic Institute. Later, he taught physics, chemistry and theology at high schools in Rhode Island and throughout New York City. During his tenure, Harvard University hired him to design transparencies for a high-school physics course for the National Science Foundation.

After leaving the Order, he earned a doctorate at the University of Wisconsin, and taught physics and scientific history at SUNY-Buffalo, earning the President's and Chancellor's Awards for Excellence in Teaching.

Ten years ago, while still teaching, Lestingi decided to return to the "lettering arts" and founded Signs of Gold. He soon took early retirement and began carving fulltime. He's garnered two first-place awards in USSC Sign Design Competitions.

Equipment and Materials

Brushes: Soft, flat, %- and ½-in. lettering brushes, from Andrew Mack & Son Brush Co. (Jonesville, MI), (517) 849-9272; gilder's tip, from Leo Uhlfelder & Co. (Mt. Vernon, NY), (914) 664-8701; ½-in., white sable brush, available from art-supply stores.

Electronics: Apple® Mac G4 computer, from Apple Computer (Cupertino, CA) (408) 996-1010 or www.apple.com; Epson Perfection 1640SU scanner, from Epson (Long Beach, CA), (800) 873-7766 or www.epson.com; HP® LaserJet 2200d printer, from Hewlett-Packard (Palo Alto, CA), (800) 752-0900 or www.hp.com.

Epoxy: Two-part, West Systems Epoxy 405, from Gougeon Brothers Inc. (Bay City, MI), (989) 684-7286, available from such woodworking stores as Rocklers; and colloidal silica powder, available from art-supply and woodworking stores.

Gilding: LeFranc Charbonnel slow size, from LeFranc & Bourgeois Inc. (René, France), available at such distributors as Colart Americas Inc. (Piscataway, NJ), (732) 562-0770; gilder's rouge and 23k ducat, looseleaf, double gold, from Leo Uhlfelder & Co.

Paint: Krylon automotive primer and high-gloss, black spraypaint, available at hardware tores; 1Shot chrome-yellow lettering enamel, from One Shot LLC (Gary, IN), (219) 949-1684.

Paper: Vellum, 16-lb. tracing paper, from Clearprint Drafting and Design (Emeryville, CA), (800) 766-7337.

Substrate: Mahogany sign panel, from KenCo Wood Products (Buffalo, NY), (800) 757-9142.

Tools: Various chisels and gouges, a heat-transfer pen and Delta scroll saw, available from WoodCraft (Parkersburg, WV), (800) 225-1153; carpenters' yellow glue and 60-, 80- and 120-grit sandpaper, available from hardware tores.

Miscellaneous: Tongue depressors, lip balm and talcum powder, available at drugstores.