BY ADAM CHERUBINI

A Period Finish

'Authentic' look is, at best, a guess.

As period woodworkers, we strive to produce the most accurate furniture possible. We delight in the use of period tools, for they impart authenticity impossible to achieve by other (modern) means. But when it comes to finishing our projects … well … er … most of us don't use authentic period finishes. And I think I understand why. In this article, I'm going to discuss what I know and don't know about period finishes. After reading this article, you may decide to try an authentic period finish on your project … or not.

No fooling. *I'm not trying to fool anyone with this finish. Obviously this is not an antique chair. But the original finish used 250 years ago probably wouldn't look right to you.*

Period Finishes

Period craftsmen had a wide variety of finishes at their disposal. Oil-based paints were used and probably more frequently than surviving pieces would suggest. The Charles Plumley inventory of 1708 included two quarts of "varnish" and two "varnish" brushes. The two quarts were valued at nearly a week's wage for a journeyman. It may have been some sort of concentrate.

Varnish is an imprecise term now and was likely even less precise 200 years ago. It's impossible to say whether Plumley had two quarts of oil-based, wood rosin "varnish," or two quarts of shellac flakes dissolved in alcohol (possibly called a "spirit varnish" then) or some combination of a half-dozen different ingredients including, but not limited to, lacquer, plant-derived resins, or shellac in various forms. These could have been dissolved in "spirits" – some sort of volatile that could include wood-based turpentine, alcohol or even linseed oil.

Linseed oil is found in account books for cabinetmaker's shops (such as John Head, who purchased gallons at a time). Linseed oil may have been used as either a simple shop finish by itself or as an ingredient in other finishes. Ditto, beeswax can be found in period documents. Again, it could have been used as a finish by itself, was an ingredient in other finishes, or simply to lubricate plane soles.

Period craftsmen had various colorants they could add to make stains or tinting varnishes (there's that word again). I've not come across these in association with cabinetmakers' shops and I'd be surprised to. Legend has it that brick dust was used universally as both a colorant and an abrasive powder. I've tried this (both ways) and it works, though commercially available dry earth pigments are easier to obtain. Eighteenth-century bricks were different from modern bricks. I used 18th-century bricks from Philadelphia. I can imagine how a single brick may not appear as either a purchased item or an item of sufficient value to warrant its inclusion in any period document. Marking gauges likewise don't typically appear in probate inventories, but I think it's safe to assume they were present.

To those of you who find this fascinating, I apologize. In the world of period furniture making there are apparently several very slippery slopes. Here is another one: Check out Appendix V of Jeff Greene's must-have book "American

PHOTOS BY THE AUTHOR

Furniture of the 18th Century" (Taunton) for a list and description of period finishes. The Internet is replete with web sites detailing the process for brewing your own versions of all of these. Most that I found were associated with luthier work, so you might want to start there.

So we know period furniture makers had access to a wide range of finishes. What did they actually use? And how do we know? Well, the quick answer is: We don't know.

Extant period furniture has all manner of "stuff" on it, some of it intentionally applied, some of it, let's call it "patina," was unintentionally applied. Theoretically, we should be able to analytically determine what the "original" finish was. But of course that's a difficult proposition. The bottom layer might be linseed oil, for example. Then a varnish may have been applied over that. Was the varnish the original finish? Or was it applied after delivery? Famed New York antique dealer Israel Sack popularized "patina" and the value for "original" finishes. Before his time, "patina" was "dirt" and furniture restorers removed it. He wrote in the forward of his son Albert's book, "Fine Points of Furniture: Early American," about his time in the trade:

"The finest pieces had to be taken apart, scraped and finished inside and out before they could be sold (to most customers). Innumerable choice pieces were absolutely ruined by poor restoration. There is nothing which hurts (the value of) an early oak piece so much as planing, scraping, and finishing."

Here, Israel Sack discussed his value for original finishes and his disdain for refinished furniture. Keep in mind that he was a furniture restorer before becoming an antiques dealer, so he knew more than a bit about the subject. But Sack, who established the value for original finishes, also included this gem:

"Mahogany and walnut, when properly restored, are not necessarily spoiled."

I suspect that just about everything we see has been refinished. And just because the finish looks old now, it doesn't mean it was original then.

Original Finish

So what was the original finish? Using state-of-the-art equipment, and leveraging a variety of historical resources including paintings of period interiors, the museum

> *"There's no such thing as an original finish."*
>
> ■ David DeMuzio
> Head Conservator of Wood
> Philadelphia Museum of Art

conservators I know suggest original finishes were spartan. Linseed oil and a bit of beeswax probably comprised the original finish on carved chairs like mine, for example. A film finishes couldn't practically be rubbed out when laid over intricately carved surfaces. It would also fill up the nooks and crannies, dulling the detail.

The baroque sensibility (some believe rococo is a form of baroque both aesthetically and linguistically) of light and dark, near and far, would also be harmed by a film finish. Philadelphia furniture makers seemed to intentionally use surface texture to enhance the contrast between carved areas and "bright" smooth areas made reflective with wax. Oil and wax offered period craftsmen the artistic control that a film finish over a carving would not.

I hasten to add that not all fine pieces were finished as simply. They had varnishes and we can assume they used them. There were

"Original" finish. *Note the color and texture on this chair from the 1760s. Despite its age and wear, the beauty of this work still shines through.*

people in the 18th century who could do this sort of work. Musical instrument makers applied film finishes to their products to affect tonal quality. And I believe there were specialty finishers in London and Colonial Philadelphia at the least.

What I'd like to leave you with on the subject of original finishes is doubt. I'm skeptical, and I think you should be too. I mean, there's still significant debate about the restoration of the Sistine Chapel's ceiling. Did the Vatican do the right thing? They removed varnish that Michelangelo may or may not have applied.

What about Patina?

Perhaps the biggest problem I have with original finishes is that they very well may not have been the finishes that people of the period recognized. They certainly aren't the finishes that people who love antiques fell in love with. And this issue goes to the very heart of what reproduction furniture making is all about. Is the goal to represent how furniture looked when new? I don't know the answer.

Whatever the condition when new, period furniture almost certainly changed rapidly once it was delivered. Homes were heated with smoky fireplaces then. Folks cooked meals in their living rooms, and they lit their homes with candles made of animal fat or lamps filled with whale oil. There were no screens on their windows to filter any of the dust from a bustling street or a farmer's plow.

In very short order, furniture would have been coated with dirt and grime. The cleaning process pushed filth into recesses (and pores) where it would collect (often further punctuating the design). And dirt in Philadelphia is made of the same sort of stuff that's on your sandpaper. So just the process of weekly wipe-downs would have changed surfaces fairly quickly.

A Sympathetic Finish

My goal is to create a finish that is sympathetic to the originals. The end product won't look like it's 200 years old. But it shouldn't look perfect and new either. The goal is to produce an item that fits people's expectations of Chippendale furniture.

Period furniture exhibits identifiable surface characteristics that we can approximate. The key is understanding the goal.

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Liberal oiling. *I began creating my finish with a liberal dose of boiled linseed oil. The resulting dull surfaces probably best approximate a true original finish.*

Wipe on, wipe off. *I mixed burnt umber dry earth pigment with linseed oil and applied it with an acid brush. I wiped off the excess to highlight the high spots. The goal was to darken the knee and foot, where the exposed end grain was most pronounced. What I have here essentially is slow-curing oil-based paint.*

Grunge. *I mixed lamp black with linseed oil and applied that in a similar fashion to create the color of grunge. Most of the dry earth pigments you buy are very finely ground. But Bitumen black is the exception. It makes an excellent gritty texture. It can be applied with wax, oil or shellac.*

Setting aside wear, old furniture takes on a certain color, generally has filled grain and has a texture associated with a build-up of grunge.

Color

Wood changes color with age. Dark woods lighten. Light woods darken. In an August 2009 *Popular Woodworking* article (issue #177), Senior Editor Glen D. Huey finished his walnut chest over drawers with amber shellac and added a touch of red to create the lighter color of aged walnut. New mahogany can be tan or pinkish in color. It becomes darker and redder with age.

Due to the sculptural nature of my chair project, there's an additional concern. Areas of exposed end grain, especially when oiled, get much darker than other areas. So the knees of chairs are often very dark – sometimes almost black.

Filled Grain

Old furniture typically has filled grain. Woods such as mahogany have open pores that fill up with dirt, grime and finish. You can fill the pores of new wood with any number of substances, from drywall joint compound to dry earth pigment to specially designed pore fillers (which seem to be joint compound with dry earth pigments added). Grain fillers change the color of wood, so that's a consideration. Some may be designed to be stainable while others are not, so that, too, is a consideration. Whatever you choose, know that in areas of exposed end grain and areas of high wear, old furniture takes on an almost plastic-like smoothness.

Grunge

On carved furniture especially, built-up dirt and grime can significantly affect the look of a piece. Grunge alone has certain identifiable traits. It's generally black and has a range of textures from fairly smooth to fairly gritty. Grunge collects in nooks and crannies that can't be easily cleaned. It also collects on broad smooth or flat surfaces where end grain provides it a foot hold.

A Period Finish

Creating a finish that looks like an authentic "original" finish requires a lot of faux finishing materials and techniques. I'm not sure I'm willing to invest the time that would take. So I've chosen to add 10-20 years to my chair. And I've done it with materials you have or should have: boiled linseed oil, Butcher's wax, shellac flakes and dry earth pigments (I used Liberon pigments available at toolsforworkingwood.com).

So what is an original finish and how do we apply it to our work? Heck if I know. What I do know is that the finish referred to as the "original" finish is not what furniture left the builders' shops with. Chances are, you wouldn't like that finish, and it may leave your period reproduction furniture looking, er . . . inauthentic. **PW**

Sealed. *The dry pigments can be removed pretty effectively by adding more oil and wiping. So I applied a light coat of buttonlac shellac to seal in the color. Much more needs to be done to this knee and obviously the foot. From here I can add more tinted oils (with less of a chance of disturbing what is under the shellac) or just tint the shellac.*

Visit Adam's blog at artsandmysteries.com for more discussion of traditional woodworking techniques.

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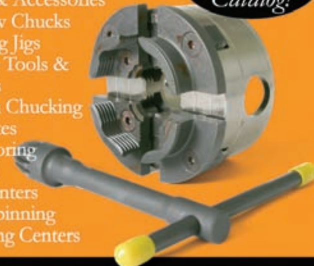

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