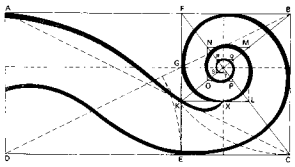

From the Maker's Bench

Part Alchemy, Part Art

The third in a three-part series on Varnish

by Laurence Anderson

No aspect of a violin making is so shrouded in mystery and so steeped in myth as the varnish. Varnish is, according to the many popular articles on the subject, part alchemy, part chemistry, and part art. As the value of the old Italian instruments, and especially the old Cremonese instruments, has increased over the centuries, the claims for the varnish on these instruments have become more and more extravagant. Some have proclaimed the varnish to be the secret to the sound of the old Italian instruments, a secret that the masters took with them to their graves. This proclamation has been repeated so often that it has become universally accepted. Violin making is of course a process. From the selection of the wood in the forest to the final positioning of the bridge, everything contributes to the sound. Varnish is a part of the process; but in truth, a great varnish cannot salvage a mediocre violin and a mediocre varnish cannot destroy a magnificent one.

This is the third installment in a three-part essay exploring varnish. I hope to expose in these essays some to the myths and extravagant claims and to share some of the results of modern research on the varnish of previous centuries. This article deals with antique finishes.

Solomon Guggenheim, the businessman turned art collector late in his life, is reported to have once asked the curator of his collection: "Who is this artist, Vermeer, and should I own one of his paintings?" In the art world, the reverence for the past is sometimes taken to extremes; old paintings are coveted beyond reason and ancient artists metamorphose into demi-gods. When it comes to art, people often say, "I know what I like," but what they really mean is, "I like what I know." The past is comfortable, predictable, unchanging. Collectors can purchase a great painting of a past master and be assured it will always be a great painting of a past master. Violinmaking, a supreme craft, like art, is haunted by the past. No maker, not even Stradivari, has been able to escape it. The Brothers Amati worked under the shadow of their father, Andrea; Stradivari worked under the shadow of Jacob Stainer. In the final decades of his career, G.B. Guadagnini was forced, by his patron, to abandon his original designs and to compromise his genius to make copies of the violins of Stradivari. Even Andrea Amati, the founder of the Cremonese school, found that late in his career he was competing against instruments he had made years before.

Musicians have always preferred older instruments; "they like what they know." Dealers and makers, for centuries, have forged labels to meet this demand. It was standard practice for dealers, from 1775 to 1875, to remove the original labels of lesser-known makers and replace them with counterfeit labels of the more famous older makers, and for contemporary makers to place the counterfeit labels of dead masters in their own instruments. This was done more out of economic necessity than outright deception.

Natural wear on a 240-year old violin by Janarius Vinaccia

It was the 19th century iconoclastic French maker, Vuillaume, who perfected the craft of antiquing instruments, that is of artificially stressing violins to make them appear much older that they actually are. He elevated this skill to such a degree and was so universally recognized for this skill, that the 1716 "Messiah" Stradivarius, the prized piece in the Ashmolean Museum, has had, from the moment it reappeared in Paris in 1855, a coterie of doubters who believe it to be a copy by Vuillaume himself. The pressure on makers to antique their instruments has continued unabated since the death of Vuillaume in 1875.

Antiquing involves deception: artificially stressing the wood, chemically altering its color, affecting wear patterns in the varnish, and adding nicks and scratches. One afternoon when I was a student, touching up a graft on an old violin, completely absorbed in my task to make the graft look as old as the rest of the instrument, my teacher leaned over my shoulder and whispered in my ear: "Never forget, that in time, all touch-up will fade." This is the problem with antiquing: no matter how skillfully it is done, the older the violin gets, the more artificial the antiquing appears. In 50 to 75 years, the antiquing will stand out against natural wear and natural aging; and the older the antiqued instrument becomes, the greater the contrast. Although the contrast is not always obvious to the untrained eye, violinmakers often refer to old antiqued instruments derogatorily as painted ladies. ("Painted ladies" is actually a euphemism; we call them something far worse.)

Antiquing begins by artificially aging the wood. Wood will naturally darken in time as it is exposed to sunlight and the atmosphere. To create this look, a new instrument is darkened by bathing it in fumes of ammonia hydroxide, nitric acid or ozone. But the difference between natural aging and this chemical bath is analogous to

Originally published in MNSOTA's *String Notes* — Spring 2002 (Vol. 4, No. 3)

sun on the beach and a tanning booth. The tan from a booth never looks quite natural.

The varnishing is then carried out in two different ways. One way is for the maker to treat the violin essentially as a canvas. Varnish is applied like paint from a pallet; the illusion of wear is created by the way the varnish is bushed on. I have to admit that sometimes I find artistic exhilaration when applying the varnish to create the illusion of age. An alternative way to antique is to apply the varnish, and then once it has dried, to create wear by rubbing it off.

Finally the wood is stressed with dents, chips, scratches and cracks. Dirt is mimicked by mixing earth pigments and powered rosins with oil. I have even heard apocryphal stories of celebrated makers cracking the tops and backs then taking them to incompetent repairmen to have them restored to mimic the mediocre repairs that one often encounters on old instruments.

The photograph on page 6 details the natural wear on a beautifully preserved 240-year-old instrument by the Neapolitan maker, Janarius Vinaccia. Sometime in the 19th century it's edge was carelessly burned by a cigarette. (I am not making that up.) I recently cut away the charred wood and grafted on a new piece then touched up the graft to match the rest of the violin. The repair is now invisible. But it is only a matter of time, perhaps less than half a century, before the touch up will begin to fade and the repair will be exposed.

Antiquing is difficult to carry off effectively. It requires incredible skill, and when it is done well, it is truly remarkable. But antiquing always comes with a price. No matter how skillfully done, the antiquing will be exposed as the instrument ages. We admire the great instruments of the past because they have aged naturally; their history is detailed in their nicks and scratches. Each violin tells a story of foreign travel, of new music, and of the musicians who have struggled to master it. An antiqued instrument will always have a clouded biography.

Laurence Anderson is a violin maker and restorer in Northfield Minnesota. ❡

Originally published in MNSOTA's *String Notes* — Spring 2002 (Vol. 4, No. 3)