

[Restoration versus Conservation](#) by [Mario Saviano](#)

As collectors we are often faced with the choice of restoring of our swords to like new condition, or conserving the piece in it's present state, commonly referred to as "arrested decay". Unfortunately, the term "restoration" is often thrown around and misused by the general public and novice collectors in every field. I started collecting swords over forty years ago and in the early stages when I was very young, my object in collecting was to 'restore" many of my swords to bright, shiny, like-new condition. Fortunately, I did not do serious damage to any of them! It wasn't until I took a trip to England and Wales that I became aware of the difference between the two terms and our approach as a culture to the terms "restoration" and "Conservation". I was attending an antique and classic car show in Wales when I noticed that the autos on display were all in original condition but cleaned up a little. No shiny paint, over-chroming of parts (or chrome prior to 1929), lavish wood finishes; just old cars that were clean but clearly used. In short, the goal was to present the cars in their present condition...preserved. When most people think of restoration, they think that a piece must be restored to like-new condition, and frequently they overdo the project. The PBS series, Antiques Roadshow, has done much to make the average person aware that many thousands of dollars of value can be lost when the original finish is destroyed and the piece is "restored" by stripping or refinishing. We will hopefully never see the return of the overzealous refinishing and stripping of the 70's and early 80's. . The end of the twentieth century will most likely be the last time that swords are used as weapons by the great civilizations of the

world. It is my philosophy as a collector that I am entrusted to preserve the pieces in my collection for future collectors and historians. Restoration should only be reserved for damaged or missing parts and even then, care must be taken before the project is started. In evaluating the piece, we may find that the process and cost involved are more than the actual value to be gained, therefore, it is best to leave it alone and prevent further damage. I don't think there are very many skilled people worldwide who can restore swords and those that do probably charge a lot of money for the work. Therefore, if you don't think you can handle it, don't do it.

[Methods of conservation](#)

For many years, collectors of swords looked to gun collectors for information and techniques of conservation. After all, we share a similar problem, rust, although the gun collectors compound theirs with the additions of wear and corrosion. When I first began collecting, there was very little information about how to prevent rust and damage from corrosion. We followed the lead of gun collectors and used small amounts of light gun oil wiped on the surfaces of the sword and renewed, usually once a year. This technique is still used and is effective if you remember to renew the oil on a regular basis and whenever anyone touches the blade or other parts with their fingers. People love to touch swords. They especially like to touch the blade with their fingers and test the sharpness of the edge (a very dangerous practice with Japanese sword blades!). I got out of this habit a long time ago but I can't

expect others to do the same, including fellow collectors! Even if you explain the reasons why they should not touch the blade, they still do it either consciously or unconsciously. Touching any polished, or unpolished, metal part with your fingers leaves an acid residue that will eventually turn to rust or corrosion. So, how do we solve this problem? Recently, I discovered a specialty wax called "Renaissance" available from The Gemmary or from Museum Replicas Limited. Developed for the British Museum, it is a remarkable product that protects against fingerprints, rust, corrosion, etc. It is applied sparingly over the entire surface after cleaning and buffed slightly. You can use it on metal, wood, bone, and leather. There is another product by the same company called "MicroFine" polish that is used before the application of wax and it works very well also. The advantage of using wax over oil is obvious. No greasy residue, no staining of surrounding cloth or leather, no accumulation of dust or dirt. I would re-apply the wax at least once a year or more in humid or adverse conditions. I would not use auto wax because it contains coarse abrasives that may scratch delicate etchings or washes, plus most contain solvents that could discolor leather or cloth. Perhaps a good quality floor paste wax like "Johnson's" would work but I've never tried it. To carry the prevention phase one step further, I require anyone handling my swords to wear cotton gloves that I supply. My source for them is a company called MicroMark, which sells supplies for the scale model hobbyist. They are available by the dozen and very inexpensive and reusable. If I attend a knife or antique show that has swords for sale, I carry some with me; the gesture to the dealer is appreciated. Another trick I use when examining a sword blade is to rest the back of the blade on the

thumbnail of my other hand to relieve the weight on the grip side, thereby keeping fingerprints off the blade. Lets assume you've just purchased a sword and upon examination you find light rust and some corrosion on brass work. Borrowing a solvent from gun collectors, I like to use Hoppe's No. 9, carefully wiping away any excess with a very soft absorbent cotton or felt cloth. A small soft toothbrush works in tight areas but be careful around any etching or gold washes on bluing. Also, be careful not to use a lot of this solvent around joints or in any areas where it can accumulate, a dampened cloth followed by a dry one to wipe excess is all that is necessary for cleaning. Very light rust on the surface of scabbards can be removed with bronze wool and a little WD 40. Bronze wool is available from most hardware stores and building supply houses. The difference between steel wool and bronze wool is the material they are made from; bronze is a softer metal that will not scratch the surface as deeply as steel wool does. Use caution around gold washes, bluing, and delicate plating. If rust were occurring around these areas, I would not use bronze wool, instead I would use the MicroFine polish. Heavy rusting and pitting are more of a challenge. My goal is to stabilize these areas rather than removal. The Gemmarly sells a product called "Renaissance metal de-corroder" that is a very mild acid that will neutralize the rust. Follow this by an application of wax or oil whichever you prefer. A last resort for heavily rusted areas might be sand or bead blasting, but consider carefully whether this method is best for the piece. A better abrasive media than sand is walnut shells, or some of the newer plastic media. Contact a supplier of abrasive media for sandblasting to get information about what is best. Personally,

I have never done this for conservation of swords, it's probably too extreme.

Leather handles and scabbards present another problem. The enemy of leather is lack of moisture, an inevitable result of the aging process. Leather is a natural material containing oils that will evaporate with time unless they are replenished. Most leather preservatives contain petroleum distillates, which will, over time, evaporate and to some degree worsen the problem. Again, the Gemmary carries a product that I've used with success called "Tana leather cleaner". It is designed for delicate leathers and is used by conservators for this purpose. I only use it for sound leather in fairly good condition, for example scabbards or fittings. Flaking or peeling leather should not be fooled around with. In the museum world sealing damaged leather with a clear polymer resin, or varnish in the old days, preserves the affected area. Personally, I would not attempt this, but would leave the leather alone and prevent further handling of the damaged area. There are people who restore leather products for museums and collectors and I would leave it to the experts.

A word about buffing. A lot of people try to "restore" metal by buffing in an effort to return the metal to like new condition. Buffing is an art that has to be practiced a lot before you are any good at it, and bad buffing can really damage a surface. If you really feel that you have to buff something, by all means read up on the techniques and practice a lot. Then choose a piece that is not very valuable or rare. DO NOT attempt to buff or polish a Japanese sword blade. That is a job for experts and rarely needed. Brass can be cleaned without buffing; it just takes a little more time and

work. There are many fine brass polishes available for cleaning, check the abrasives content on some of the more popular ones. Cleaning with a quality brass polish will not damage the patina that old brass develops plus you will not destroy fine detail work in the metal, easily removed by buffing.

[In Conclusion.](#)

I hope that this article will stimulate discussion among fellow collectors and perhaps lead to better methods and techniques that we can all use. I am not an expert on the conservation and restoration of metal ware or weapons. The techniques and methods I use are the result of my experience and a little trial and error. I welcome your suggestions and look forward to hearing other viewpoints.

[Sources for supplies](#)

- **The Gemmary** (www.gemmary.com)

Renaissance Wax, Microfine Polish, Tana Leather Cleaner, etc.

- **Museum Replicas Ltd.** (www.museumreplicas.com)

Renaissance Wax

- **MicroMark** (www.micromark.com)

Cotton gloves, small tools and supplies