

Restoring armor and swords – contrasting view points Part B Swords

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Part A of this series (Bottomley et al (2015)) considered the restoration/conservation of armour. It was pointed out that there are different attitudes towards restoring swords and antiques in general among occidental (Europeans and Americans) museum curators and Japanese specialists in swords and armor. **Part B** considers the restoration/conservation of swords.

In fact, until quite recently, there was a complete lack of understanding among antique specialists in the occident on how an antique Japanese sword should look. Anne Gilbert, wrote that we should look in a Japanese sword for "marks of hand forging". She advises:

"Do you carefully examine the sword blade itself for marks of hand forging? Any early piece should be hand-forged." (Gilbert (1978) page 84)

Concerning *koshirae* (mounts) she advises that one should, for example, examine if the handle which "might have been ivory, but now is wood with an "antiqued" finish". Harold L. Peterson, wrote that:

"oxidation or patination is one of the first and most important clue that a trained curator or collector should check". (Peterson (1975), page 56)

These approaches may apply to occidental swords and guns but surely they don't apply to an old polished sword Japanese sword. We shall see later why the state of oxidation is so important in the case of European swords.

With Japanese swords, the attitude in the UK to refurbishment has an important precedent. A few years ago the British Museum obtained sponsorship to have a hundred of its collection of Japanese swords, sent to Japan for polishing (Harris (2004)). On their return, not only had they been polished but those with damaged hilt bindings had been re-bound, but in addition some had their scabbards repaired.

Due to the nature of European armour and swords, restoration of those pieces required much heavier intervention than in the case of Japanese pieces. Consider two cases of restoration of European swords that resulted in one case in what is called today a composite sword.

The piece (Figure 1) is a **cut & thrust sword** in the style of circa 1550, composed of old parts. Here is a description of the old parts as given to us by an expert who prefers not to be named:

"Judging by the etchings on the blade I'd say that it was made in the 18th century for some sort of cavalry broadsword. But the shape of the ricasso implies that the blade was intended for a sword with hilt with several parrying rings and a more complicated guard than you will find normally on cavalry broadswords. It is possible that the blade was made for a Spanish sword. The other parts come from different eras – the crosspiece might be 19th century, the grip too and the pommel is 17th century."



Figure 1 Hermann Historica auctioneers, Munich

In addition we think that the pommel (although maybe 16th) is weak and feeble and the rear and front arms are too square in section. On a real hilt the bars would be forged and taper elegantly.

This kind of restoration results in a composite sword and should be avoided.

Consider this example of restoration on a transitional rapier (German c 1690) which in our opinion is acceptable. The sword, as can be seen from Figure 1a, had the left shell of its guard damaged or lost. Now it is replaced by a new shell of apparently the same metal. One can see clearly that the restored shell is in perfect condition and that the original shell is rather dented. The owner has considered restoring the original shell as well. Fortunately he can't do this since the sword was expertly restored in England and the restorer is unknown to us.



Figure 1a - Transitional rapier. The right shell of the guard was expertly restored.

On the other hand it appears that there are differences in attitude towards restoration between European and American museums as well as between American and European collectors. We will explore this in a later part of this series of articles.

The fact that there are differences between museum restorers is a bit surprising. For example, in a book by Stuart W. Pyrrr et al. (Phyrr (2002)). On page 23 of this publication, a very beautiful transitional rapier belonging to the Metropolitan Museum of Arts is described. At the end of the description the author states that "When acquired, this sword lacked its grip. The present one, formed of fourteen alternating strands of braids, twisted, and plain copper wire or ribbon over a wooden core, was masterfully fabricated by the Museum's armourer, the late Robert M. Carroll, who copied the genuine grip on a contemporary Dutch rapier in the Metropolitan collection." This sentence is a distinct contradiction with other approaches explained above.

(See URL - <http://www.metmuseum.org/collection/the-collection-online/search/26552>)

Finally, let's explain why Harold L. Peterson (Peterson (1975) page 58) considers the examination of patination so important. For him one axiom is that:

"...you should always bear in mind about oxidation is that an object made of two or more pieces of the same metal will normally patinate at the same rate..."

He then describes the case of a Luristan bronze dagger that had a difference in colour between the hilt and the blade. He says that he should "have rejected it just as instantly". But he didn't and a few months later he had to remove the dagger from his bronze collection to his fake collection. The patination on Japanese swords is only important in the *nakago* (tang) of the blade and should be examined, but very often differences of patination colour are not reflective of age but due to *machi okuri* (lengthening the tang by shortening the cutting edge) or *o suriage* (greatly shortening the tang).

Figure 2 below taken from Ineda (nd) page 31, bottom figure it is possible to see clearly different patination on the *nakago* The sword is a *Mei Sho* (famous commander) and a *Mei To* (named sword).



Figure 2 *Mei Sho* and *Mei To* (Ineda (nd) page 31). The *Mei Sho* is Gamō Ujisato (1556-1595). The *Mei To* is Aizu Masamune.

Four cases where restoration of Japanese swords was done are considered below. In discussing these cases arguments for both the restoration and not doing the restoration are considered.

Case 1 – Over-polishing a sword

Some swords are found with forging flaws or deep rust pitting or both. Forging flaws appear when a sword is polished and should be left as is or specially repaired as described in an article by Leon Kapp (1993). Forging flaws will be considered in the next section of this article.

However, when the sword is pitted with rust, the problem becomes more serious. According to Francis Boyd (2007), a sword was sent to Japan for restoration. It had, however deep pitting (and /or forging flaws with a very thin outer skin). To remove the pitting the sword was polished in such way that large portions of the outside steel was lost. In Boyd's words:

"I was recently shown such a blade in exactly this state. It had a brand new, **high quality polish** [our emphasis] from Japan, and it was signed by a well- thought of maker with whom I was familiar. I could see a clear delineation between the core and skin running all the way down the *shinogi-ji* area on both sides. No matter how good the *Mei*, the sword was dead. I do not know whether or not to fault the polisher on the issue of conservation as I did not see the sword before it was polished. Obviously the polisher did not think highly of the man who submitted the blade for polish as he would know by the first or second stone that the skin was gone and should have communicated this before he went any further on the work. Who knows, perhaps he did and was told to continue?"

The polisher can disguise this kind of effect but close examination will reveal that the sword is lost as a weapon, but one has to know what to look for to see this defect. Should the sword only be lightly cleaned and the rust stabilized, or should the polisher produce something that is worth looking at, perhaps only from a distance?

Consider these factors:

First, Francis Boyd's opinion, based on the rest of his article, stated: "The sword was dead" because he was considering its use as a weapon. The defect he saw affected the structure of the sword. But maybe the sword as an object of art should be restored as was done.

Second, this kind of restoration is dangerous. Perhaps it was done to increase the value of the sword for a person who doesn't know much about them, but wants a sword by that smith. Many collectors do not want to buy swords with this kind of defect. The question is, should swords with this kind of defect get papers from the Japanese *shinsa* teams?

Third, opinions vary on how to restore swords. The Europeans point of view is that this restoration should be avoided. It is a fact that there are many Japanese swords, but in the future swords like this could be used in museums to illustrate the technique of Japanese sword manufacture, However, as Boyd (2007) explained, there are many swords of this well-thought-of maker so his artistic work can

be appreciated in other swords. There was no need to restore the blade the way it was restored. Not because this kills the sword, but because a lot of history was lost. On the other hand a pitted sword should not be presented as a fine example of a Japanese sword.

Modern polishers are nowadays refusing to polish blades in poor condition. Mr. Tsuruta Kazushige of Aoi Arts wrote on his web-site:

"I was very surprised about the condition of the blade which was rust all over the blade and deep rust many places..... Most polishers will refuse instantly for polishing. So these swords will be ruin..... Please pray for us that there are no *hagire* or rough parts."

The mentioned blade was carefully polished and the results were very successful. To us the problem was to discover if *shintetsu* (core steel) - rough parts would appear. Perhaps some research should be done utilizing other methods of cleaning the blade where we can discover if there are places where the rust is too deep and then partially polish the blade leaving these places alone.

Case 2- Should flaws be repaired?

A list of flaws that a Japanese sword can have may be found in the pamphlet by Hawley (1973). Photographs of some of the flaws (forge flaws) can be found in an article by Lloyd Fleming (2012). In partial agreement, with what was written by Hawley, Fleming describes the flaws as **fatal** and **non-fatal**. In his words:

"A flaw in a sword blade can refer to two things: a flaw generated as a consequence of manufacture, or a flaw caused by degradation from use and subsequent repair."

(Note that Fleming does not consider a flaw due to bad conservation that resulted in pitting by rust, perhaps because swords in this condition are becoming rare to find.) He continues:

"Many blades have flaws of some kind, some designated as "Fatal Flaw" in cases where the blade where use of the blade in battle will likely result in a failed blade. A non-fatal flaw only compromises the appearance of the blade without rendering it unfit for service."

The flaws that result from forging, as commented above, can be restored by special techniques. They usually do not compromise the structure of the sword (and are therefore called non-fatal) and can be restored (see Leon Kapp (1993)) without modifying the *sugata* (shape) of the blade. It is our opinion that this kind of restoration is acceptable, but question whether this would be acceptable to European curators and restorers. The Japanese restorer, when good, can produce a virtually invisible work. European restorers would like the restored parts clearly visible. To a Japanese sword collector a visible repair would be unacceptable: the sword would be unbelievable ugly: one of us went as far as to say that in this case it is better to leave the flaw visible.

Consider fatal flaws: the more important of these flaws are *hagire* (crack perpendicular to the temper-line), *karasuguchi* (broken tip), or missing sections along the *hamon* (temper-line). *Hagire* can

sometimes be fixed by reducing the *mihaba* (sword width) by removing steel from the *ha* (cutting edge). According to Fleming (2012):

"this was valid at one time when the sword was put to use in conflict, as once the *hagire* is removed, if the *hamon* has not been breached the blade is viable as a weapon again."

Unfortunately, this kind of repair will inevitably change the *sugata* (shape) of the blade. As is well known the *hamon* is under compression and removing part of it may even cause the blade to deform and become for instance *uchi-zori* (reverse curvature). This is discussed at length in the book by Nakahara (2010). *Karasuguchi* and broken tips can perhaps be mended by a polisher without distorting much the *sugata* of the blade. It is our opinion that breaks in the *hamon* cannot be fixed without distorting the blade. The only way we can see to correct serious breaks is to re-temper the sword. This sword would then be a *saiha* (retempered) blade.

Some of us think that collectors can be a little too pre-occupied and dismissive of swords with flaws. For example, we know of a *tanto* mounted in an ebony hilt elaborately carved all over with chrysanthemums and a brocade covered scabbard that contains a very early blade signed *Yoshimitsu*. The blade had been polished so many times that there is no *hamon* remaining, yet whoever owned it thought it sufficiently precious to mount it in an expensive *koshirae*. We also know of a *wakizashi* that is a genuine *naginata naoshi* from what must have been an enormous original, possibly from the *Kamakura* period, since both the blade and tang seem to have been cut from that part of the original blade above the grooves. Because the original blade swelled in width at the original *monouchi*, they had to reduce the width during conversion with the resultant loss of about 2"- 3" of *hamon* in what is now the centre of the blade. Despite this, someone had it mounted and carried it. After all it still has a hardened point and *monouchi*, as well as a *hamon* towards the base of the blade, and hence was considered fit to use.

In Figure 3a, one can see a *Meibutsu* (Treasured Sword), the Ikeda Masamune, with fatal flaws due to use. You can see that the mune machi is gone and that there are chips on the edge and some grain openings.



Figure 3a Meibutsu, Ikeda Masamune (Ineda (nd), page 31 top figure):

Figure 3b is an example taken from *Meibutsu -Treasured Japanese Swords* - 2011 page 64-65. This tanto is attributed to Masamune and has significant gaps in its hamon, is tired and over-polished. There is was no known famous owner of this tanto, yet it is designated as a Kyoho Meibutsu.

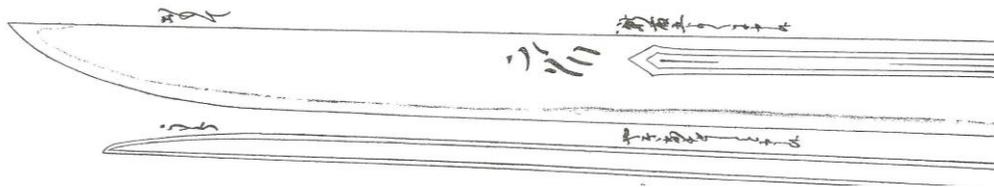
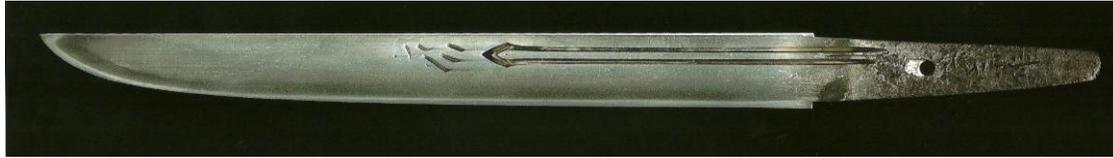


Figure 3b Meibutsu -Treasured Japanese Swords page 64-65

Another more provocative question is should old European swords be polished? The problem here is that in many cases one does not know if the blade was originally polished. One case described in the literature seems to point out that at least some swords (medieval ones) were polished. This is the case of the sword of Sancho IV (1223-1248, King of Castile and Leon) as described by Claude Blair (Blair (1959)) who says:

"The broad blade has suffered somewhat from corrosion but in places retains its original mirror-bright polish."

If it is known that the sword was originally polished then to restore it means to polish it as much as possible but not more. This seems to be reasonable but as mentioned in the introduction there are strong arguments against restoration intended to bring the object to a condition close to what it was when originally made.

An interesting experiment was carried out by Stefan Maeder and is described in an article in the *Token Bijutsu* (Maeder (2008)) in Japanese. He took a few old European swords to Japan and had them polished in the Japanese fashion. The swords so polished showed *hada* (grain) as can be seen in the Figure 4 below.

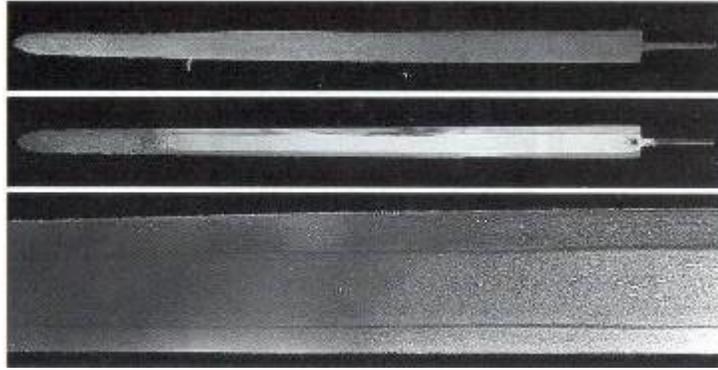


Figure 4 - This figure shows *ji hada* in a Merovingian period blade (5th to late 8th C)

European swords from after 1200 C.E. do not have *hada* (Coutinho (2011), Appendix A and B). So if polished it would be *muji hada* (without pattern). The decision whether to polish such a blade depends on knowing if it was polished or not in its original state.

Case 3 – Swords with the signature removed and *mumei* (unsigned) swords

***Koto* Swords**

Swords with non-original or false signatures are very commonly found. Since a sword with a false signature loses a lot of its value and is generally rejected when submitted for *shinsa*, it is common to remove these signatures. Without signatures the swords may get a paper and an attribution that will add monetary (not artistic) value to it. This procedure may be regarded as a partial restoration since the false signature is considered a blemish to the sword.

According to Nakahara (2013) this is an old habit and that perfectly good signatures of less well-known masters were removed or altered in the hope that a particularly good sword made by a not so consistent swordsmith could pass as a sword made by a better (more consistent) swordsmith. In most cases this is done in such a way that the sword appears as *suriage* and therefore one is induced to think that the absence of signature is justified. Nakahara (Nakahara 2010) considers this forgery and points out that there is many ways of shortening the blade (if necessary for use) without removing the signature. (See any book on Japanese swords for types of signature). The act of shortening a blade cannot be considered a restoration. But if the signature is maintained (*orikaeshi mei* (part with signature is retained and folded over) or *gaku mei* (signature is removed and inset into the tang) for example this is acceptable. With this opinion Nakahara came very close to what the Europeans should consider right. Nakahara's opinions are highly controversial in Japan.

Removal of signatures that are correct cannot be considered a restoration, since blade was not *gimei* and therefore the procedure was not done to remove a blemish. Accordingly, this cannot be considered restoration.

In contrast to this, there was a good sword which was signed *Soshu Ju Masamune*, but in a fashion clearly not resembling a true *Masamune* signature. The signature was obviously considered false by a famous polisher and also by an expert in identifying swords. They both recommended the removal of the signature and submission of the blade to *shinsa*, since the blade and signature were recognized as coming from another well-known *Soshu* smith. However the owner decided not to remove the signature and after a long research about this false signature and a lot of good luck he discovered the blade was probably made by *Soshu ju Hiromasa*. Why *Hiromasa* had signed it as *Soshu ju Masamune*, in his characteristic fashion will never be known, but presents an interesting set of questions. Was this blade made on request and *Hiromasa was forced* to sign *Masamune*) or did he (*Hiromasa*) think the sword was so good that he decided to sign it *Masamune*. He should have in this case added *utushi* (in the style of) but he didn't.

The question remains: should the signature be removed with the loss of a piece of history?

A very similar situation, with a different outcome is described in a recent post on nihontomessageboard:

<http://www.militaria.co.za/nmb/viewtopic.php?f=1&t=20971>.

In this post, a long discussion about removal of signatures and *mumei* swords, Ron Hartmann (Ron STL) described the following event:

"examples in my collection. The first is a (now *mumei*) attributed to Hatakeda Morie. It carried the *mei* "*Morie*" when discovered by the previous owner. At the recommendation of Tanobe San and Fujishiro San to the previous owner, the *mei* was removed.I find sad that the "*gimei*" was removed. "

Another example similar to this is a *tanto* which was originally signed *Yoshimitsu*. The owner in Japan, had the "*mitsu*" character obscured and submitted the blade for *shinsa* where it was returned as a *Heianjo Yoshinori* blade. Subsequently, the full signature was removed (The blade clearly had the wrong *jihada* for a *Yamashiro* blade.) and resubmitted again. This time it was attributed to *Moromitsu (Oei)*, which was much closer to the *original Yoshimitsu* signature designation. This begs the question of why do people remove signatures at all, rather than leave them as historical records. It might be best to attribute the blades to whom we think the smith is, to the best of our current knowledge. There are at least four reasons false or inaccurate signatures are added to the blades.

First reason is for the purpose of deception and financial gain. These are the most egregious and should be removed, if we are certain of their intent.

The second reason (as discussed in the NMB thread) is to create gift-swords for presentation at various ceremonial occasions. Potentially this was the case with the *Masamune tanto* mentioned above. In this case, it clearly isn't a *Masamune* signature, but a well cut one, so why remove it?

Third reason is that the master smith of the blade had someone else sign it for him. There could be many reasons for this, but if the blade is attributed as his work or even a combined work with his students, then the signature bears some level of accuracy.

Fourth reason has to do with the practice of producing copies of famous blades, or blades in the likeness of a famous smith. As long as it isn't being done to deceive people, then it should remain as an example of "in the style" or "a copy of" (*utushi*) the original smiths work.

Shinto and Shinshinto Swords.

There is an enormous number of *Shinto* swords that are *mumei*. This great number of *mumei Shinto* swords is a great conundrum for the authors of this article. This was noticed by one of the authors and a friend in gun shows or Japanese swords exhibitions in the USA. Most of these swords were slightly *suriage* and with two *mekugi* and out of polish. The surprising fact is another of the authors noticed that in Japan there is a large number of *mumei koto* swords of the *muromachi* period. We shall make some conjectures about this difference in another article after examining a large number of *oshigata* taken in the USA in the seventies and eighties.

But let's return now to the question why so many *mumei shinto* swords? These same question was raised more recently by Clive Sinclair in the site

<http://www.militaria.co.za/nmb/topic/9068-why-mumei/>

In the site are some competing explanations (one of the authors would say conjectures).

Another explanation (or conjecture) is that it is possible to think that blades made by apprentices that were not considered good enough by their master were left without signatures. It is more plausible, that apprentices produced swords that their master would not consider good enough, but to destroy such a sword would be economically disastrous. Historically there were many blades destroyed during the *Muromachi* era. For example, *Toyotomi Hideyoshi* conducted a sword hunt in 1588 and this reduced the number of swords from the previous *Sengoku* period since the swords were destroyed allegedly to construct an enormous statue of Buddha. Also many swords of this period (not confiscated in the sword hunt because they belonged to soldiers) were destroyed in various large battles. There were two Korean Invasions. (The first invasion took place in 1592 and involved about 154,000 Japanese warriors. There was a brief truce. Then there was a second invasion in 1597 involving about 115,000 Japanese warriors (Turnbull (2002) - pages 240-241)). The Japanese gave up the invasion in 1598.) There was also one big campaign (*Sekigahara* in 1600) that involved about 160,000 warriors (Bryant (1991) page 51)) and a very long siege (*Osaka* from 1614 to 1615) that involved about 300,000 samurai in the winter campaign (Turnbull (2006) page 29) and about 200,000 samurai in the summer campaigning. (Turnbull (2006) pages 64-65). That resulted in the formation of the *Tokugawa Shogunate*. Finally we have the *Shimabara no Run* rebellion that in its last phase involved about 105,000 samurai against 37,000 Christians (Caldwell (1991)). Many books in economics point out there were very bad economic crises during the *Tokugawa* regime period. One

may conclude that since so many *Koto* swords were likely destroyed in previous battles, that there would be a market for *Shinto mumei* swords. These types of *mumei* swords cannot be considered a restoration since nothing was altered. But in some cases, as mentioned above, the signature was removed to increase the value of the sword. As mentioned above this is not restoration. It is simple fraud. Note that sometimes it is difficult to find out if the signature was removed.

Interestingly, there are many well-made swords (mostly *Shinshinto* swords) that have improbable signatures from old masters. Perhaps, removing these signatures may be considered a restoration, or it might be best to leave the signature and give the sword a paper declaring that the signature was false and making an attribution to the real maker. Unfortunately this is not an option offered by any organization that has *shinsa*. We hope that this may be change in the future. One of the authors has a sword that upon showing the oshigata to a renowned expert was informed that one character of the signature had been altered to increase its commercial value (The *kanji Tsugu* was altered to *Tsuna*). It was also possible to restore the old *kanji*. The adulteration, however, was presumably done in *Edo* times and to restore the *kanji* to its original condition was to lose history. (see letter below) It is our opinion that to have this document pointing out that there was an alteration is much better than to restore the piece, or worse yet, to remove the signature and submit as *mumei* for *shinsa*.

Dear [REDACTED]

I have carefully examined the Tsunahiro signature in the oshigata making reference to our oshigata collection. The following is the conclusion I have reached after much deliberation.

Considering there is just one Tsunahiro in the Genroku era, the characteristics of the signature in your sword seem to indicate that the mei was originally signed Echizen-no-kuni Omi-no-kami TSUGUhiro. Since Tsunahiro had a greater name value, some one at a later date added chisel cuts to change the character reading TSUGU to look like TSUNA which are somewhat alike. The alteration can be done by adding a few strokes to the right part of the character. Tsuguhiro is a swordsmith belonging to the so-called Shimosaka school. Such a possibility is 99%.

If that is the case and if such sword is submitted to the Shinsa, we would give it the [REDACTED] designation indicating the signature is not the original but an altered one. Sometimes attempts are made to put it back to the original mei by expert hand, but the risk of damaging the the tang is quite large.

Sincerely yours,

[REDACTED]

Another example is part of a letter by another well-known expert. This is about a sword signed Oku Yamato no Kami Taira Ason Motohira and dated Kansei 9th year (1797).

July 8, 2008



Dear



Thank you very much for the delightful dinner. I also very much enjoyed seeing your sword collection.

I have researched your MOTOHIRA and have found that it unfortunately is a forgery. However, the blade is very well made by him or his school. Please see enclosed OSHIGATA.



My best wishes,



Department of Arms and Armor

As we can see from the letter the signature is *gimei*, but attributed by the above mentioned expert to Motohira or one of his students. Do you think the signature should be removed? None of us think so.

It is hoped that in the future more experts and *shinsa* boards will consider such a practice for swords with altered or false signatures, rather than having the signatures removed and swords submitted as *mumei*.

Cases 4 – Swords polished wrongly

In this case, a sword having an old *Honami Ko-Fuda* attributing it to *Shitahara* School was sent for polish. Unfortunately the *Ko-Fuda* was somehow misplaced. The polisher, a good one, polished the sword well but without paying attention to the fact that the sword should be polished in order to preserve the characteristics of the School's *jihada*. Instead, it was polished to reflect the polisher's personal opinion of beauty. The result was a well-polished sword that obscured the original School's type of *hada*. One has to look very carefully to see any appearance of the original *hada*. As a result of the change in the appearance of the *hada*, when the sword was submitted to *shinsa* it was attributed

to another School. Unfortunately another polish is probably out of question - maybe a touch up polish should be considered to return it to its original state.

This is a case where the polisher decided to use his own sense of beauty to decide what kind of polish the sword should have. In our opinion this should not be the case. We know of several examples that when the polisher applies *keisho* polish sometimes he disguises the original *hamon* profile that he considers ugly or aggressive. A well-known Japanese polisher told one of us that, some *shinsa* prefers the *hamon* so white that acid has to be used. To get the kind of required whiteness without acid would destroy the sword's *yakiba*. In polishing a sword you should consider your options carefully.

One option would be to always ask for a *sashikomi* polish.

A second option would be to ask the polisher what type of polish the blade should have. Some polishers know what is considered beautiful by the *shinsa* teams and will do whatever they can to please them. Put yourself in their position. Assume that after the polish the sword fails to get a better paper because of the polish, you would be upset with the polisher and may not recommend him.

A third option to consider is doing nothing. A Japanese sword is beautiful if restored as much as possible (but not more) to its original condition.

It is hoped that this series of articles cause you to think more deeply about the restoration/conservation that you are considering. If you do then our efforts will be rewarded. We are after all only caretakers of these wonderful works – so take care.

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