Nihonto Newsletter, Issue 1.

This Newsletter series serves as a continuation of Nihonto Collector Guide:

https://www.historyswords.com/cert.pdf

The plan is to cover in each issue three topics which so far have not been addressed in detail by any "standard" publication. One article will focus on historical aspects, including appraisal papers, one on techniques and metallurgy and one on specific nihonto schools.

In the first issue we discuss the meaning of NTHK scores, the difference between Saiha process and "artistic requenching" and main characteristics of Kyushu school.

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Kyushu mono.

In the XXth century the formal introduction of Gokaden (five schools) as the basis of Japanese sword classification has been without a doubt an important achievement. However it resulted in one rather negative development. A few important sword manufacturing centers (Uda, Kyushu) have been downgraded to the "provincial" status and the research focus shifted to the "mainline" gokaden traditions to such an extent that a chain of heritance between different lineages of the nihonto tradition at times appears artificially disturbed or misrepresented. Very similar blades produced by the "mainline" and "provincial" schools are seldom discussed in the same Chapter or article.

Yamato tradition has been especially severely affected as some of its most important early "relatives" – Kyushu, Hoki and Mogusa schools are now considered "provincial", while Yamatospecific analysis tends to focus only on blades supposedly produced in the Yamato province, in the neighborhood of Nara city and its temples. This downplays an extensive similarity existing between Yamato Senjuin, Mogusa, Hoki, Kyushu and even certain ko Bizen lineages.

Such approach is obviously not universal, and an excellent discussion of these schools is presented, for example, in Dr. Honma Junji's "Nihon-koto-shi". However since it has been published decades ago, it lacks in photography and recently more blades have been discovered,

while many attributions related to Amakuni and other supposed early smiths have been contested.

The case of *Kyushu mono* is important since they represent a significant portion of pre-mid Kamakura Japanese swords. They also have a very distinctive appearance, which has been maintained between Heian and Edo periods. Conversely there are later lineages (Enju, Hizen Munetsugu, Bungo school after the Kamakura period, Ujifusa's followers in Satsuma and many others) which while physically located in Kyushu did not follow the native Kyushu style but instead chose to adopt an outside tradition and thus will not be considered here.

It is difficult to state with certainty which date should be associated with the beginning of Kyushu nihonto. There is an example dated 1159 signed Yukimasa belonging to Naminohira school. It demonstrates a number of antiquated traits – shinogi is less prominent in the nakago area, there is a pronounced curvature in the area close to nakago with the nakago itself also retaining some curvature, there is a hint of kujimomo-gata. While this blade is also accepted by many to be the earliest signed and dated nihonto in existence, it has a distinctively later appearance compared to some of the Sanjo school's examples. Majority of the earliest Naminohira blades demonstrate the shape consistent with late Heian – early Kamakura period. Another early Kyushu lineage, associated with Bungo province has a blade by its famous smiths Yukihira dated to 1205. There are no Kyushu blades for which one could make an argument that they significantly predate Naminohira Yukimasa's. It is therefore not unreasonable to consider that Kyushu tradition was established sometime between 1125 and 1150 by the founder of Naminohira lineage.

This makes it one of the earliest production centers in Japan, but the circumstances surrounding its foundation remain unclear. In early published genealogies the founder is identified as Yamato smith Masakuni, whose descendants used the name Yukiyasu. However, there is only one existing signed Yukiyasu blade which has an early, possibly late Heian or early Kamakura period's sugata, there are two which are probably somewhat later - early Kamakura period or about, and there are mid Kamakura period and later examples. This name has been used throughout Naminohira's history until the end of samurai epoch, i.e. Meiji era.

This suggests there probably was a number of earlier smiths, including the above mentioned Yukimasa, and while there could have been a Heian period's Yukiyasu, the vast majority of the earliest Yukiyasu lineage's works are from Kamakura period.

Another factor to consider is that the works of Naminohira bear exceptional similarity to those of Houju school, which brings forward the question whether it was a Naminohira smith who established the Houju tradition, or vice versa. Unfortunately, there is very little certainty in regards to Houju's origins and even its physical location. It has been repeatedly stated in the literature that it operated out of northernmost Mutsu province, possibly Hiraizumi city, where it was founded by descendants of a legendary smith Mogusa.

Since Mogusa lineage will be considered in detail in a separate publication, it suffices to state here that even the factual existence of his work has been contested. We believe an argument can be made that he was a Master smith who worked in the mid to second half 11th century, whose lineage was responsible for the foundation of many if not most Yamato-related traditions. However, the blades which can be attributed to Mogusa himself and his school are exceptionally rare. Moreover, their worksmanship is superior to either Naminohira or Houju, and bears greater similarity to that of ko Hoki Yasutsuna and ko Bizen Tomonari. Another issue with the history of Houju school as it being related by various literature sources is that the vast majority of Houju blades existing today were produced within a relatively short timeframe between mid-late Nambokucho and early Muromachi periods. This makes it doubtful the group operated in Hiraizumi, since at the time the area was ruined and abandoned. Its northern placement might still be realistic: there is certain stylistic connection with later northern schools such as Gassan, and Houju jigane has a dark northern hue, which is however quite similar to that of Kyushu. By comparison Naminohira is credited with a relatively large number of surviving blades which judging by their appearance were produced roughly between 1150 and 1225, relatively many of which are signed or ubu. Naminohira is known for its daito, while Houju produced a large number of naginata, moreover the vast majority of existing Houju blades are mumei. What is more important is that the Houju attribution is usually obtained on the basis of exclusion rather than affirmation, meaning that attribution to Naminohira requires presence of a few very specific traits, while a typical argument supporting Houju attribution goes as "it is similar to Naminohira and other Kyushu work, except for a few features which are highly atypical for Naminohira and thus we accept Houju attribution, since it is the school which practiced many unusual variations". This makes it possible that the real number of Houju blades is even smaller, and many blades attributed to Houju are simply unusual naginata blades produced by one of the Kyushu schools.

However it is not entirely unexpected to find connections between sword schools located in very distant provinces (like Mutsu and Satsuma), as establishing sword production on a new site always involved bringing in swordsmiths from elsewhere, and in the 12th century there were very few places where the production already existed. Northern provinces and Kyushu also share a connection that both included areas considered "warrior country": a standing military force in Bungo province which became a stronghold of Taira clan and Minamoto clan's lands in the north.

However, this observation fails to explain anything regarding the early history of Naminohira – on the one hand there is little in mid 12th century history which would suggest a significant development of warrior tradition in Satsuma province specifically, on the other hand the sheer scale of Naminohira production dwarfed all other Kyushu provinces until Nambokucho period.

Another venue worth investigating are local temples. Many early Japanese craftsmen, and Yamato lineage swordsmiths in particular, worked under temple patronage, an arrangement which to an extent has been maintained in Kyoto and Nara regions even during the Edo period. However there is no information suggesting a strong connection between Naminohira swordsmiths and any particular temple, nor was any Satsuma province temple known for its swordsmiths, or even craftsmen in particular, especially compared to the leading temples in other Kyushu provinces.

The last but not least element in the foundation puzzle is the nature of Naminohira aesthetic. It lacks refinement seen in prestigious Yamashiro or Bizen lineages or even in the mainline Yamato schools, though majority of those, like Yamato Tegai, were established much later, towards the end of Kamakura period. Its relatively simplistic hamon in suguha and ko nie with hazy and wide nioguchi certainly invokes the image of chokuto and Shosoin examples, and so does its rustic and often rough jigane. There are differences: pre-nihonto blades with identical undulating nagare packed close to hamon are unknown and it remains a uniquely Naminohira characteristic. It can be argued that Yamato Senjuin school was established even earlier, as it has many blades which have a more antiquated shape, and its hada is considerably more diverse, often including such elements as fine itame or mokume, which is also not uncommon for Shosoin and chokuto examples. However, it tends to be more refined than either Naminohira or chokuto, and its hamon is known for more accented nie activities, which suggests that Naminohira demonstrates a distinctively more conservative technique.

What kind of conclusions can be reached from all of that? Naminohira school was established by someone who inherited his craft from a lineage going back to the pre-nihonto era, the lineage which for some reason kept true to by then (12th century) already unusually conservative interpretations of the Yamato style. The founder probably came from either Yamato or Mutsu province. For reasons unknown at the time Satsuma province has been chosen as a hub for swordmaking in Kyushu, and in terms of sheer number of blades produced it retained its leading positions until Nambokucho/Muromachi periods.

The Houju lineage (i.e. people who signed their blades "Houju") came into being towards the end of Kamakura period. There are two possibilities: either it was established by someone from Naminohira, or Mogusa lineage founded both Naminohira and Houju. The latter option is more consistent with the published early genealogies, however there is an issue: the lack of blades demonstrating Naminohira style worksmanship in northern provinces pre-dating late Kamakura period. The blades which are supposed to represent the Mogusa lineage have stronger nie based expression. In any case, Houju school's popularity never approached the same level as Naminohira, as it remained a relatively obscure tradition located somewhere in the northern provinces.



Naminohira Yukiyasu. Despite appearing in old texts as mid to late Heian lineage, this example is likely from mid Kamakura period. The level of execution is superior to average Naminohira with nijuba and hotsure in ko nie, prominent shirakke utsuri. Wide, hazy nioiguchi, undulating and packed nagare above the hamon are distinctive Naminohira features.

Let us now consider a typical appearance of a Naminohira blade. It remains exceptionally consistent from the very beginning until the school's gradual demise during the Edo period. Hamon is suguha, seldom there is some notare, in which case the hamon tends to be wider and more nie heavy. Otherwise a typical Naminohira hamon is weak and tends towards ko nie and nioi. There could be "belt-like" activities in nie or ko nie similar to those appearing in Hoki, ko Uda and other provincial Yamato-related schools, but in Naminohira's case the appearance tends to be more inconsistent, i.e. the activities are visible only in some portions of the blade. The nioiguchi is wide and hazy. Hamon's width tends to increase substantially from early to late Kamakura blades.

Another distinguishing feature of the school is its hada, which has black hue and long and broad nagare above the hamon, which can have "oscillating" and at times almost "sinusoid-like" appearance as in the photograph above.

These elements can occupy a relatively wide area, to the point that the blade might look like it is forged in a pure masame, especially in old or poor polish. However, compared to any mainline Yamato blade the hada is darker, more coarse and undulating, and the hamon has less pronounced nie activities, so any misattributions to Yamato Hoshu or Senjuin are uncommon. Shirakke utsuri is often present with antai roughly covering the area with nagare. Shinogi is high.

Naminohira's direct influence on non Kyushu schools has been limited, as it remained associated strictly with Satsuma (beginning with Kamakura period - Shimazu family) domain, noted for its conservative and closeted traditions, except during late Muromachi period a smith of this lineage went to Kaifu (Awa province) and contributed to the popularity of Naminohira inspired style there. Judging by the number of surviving blades Naminohira must have enjoyed a high standing at the end of Heian and early Kamakura periods, though it never counted among the premier

lineages recognized by either Tenno or Shogun's courts. Its relative standing further declined towards the mid Nambokucho period and more or less collapsed towards the end of Muromachi when the arrival of Ujifusa and other smiths to Satsuma province significantly altered the local taste.

Daito are common, many are signed, often including family name "Naminohira" (lit. "waves are quiet") in addition to a personal name. There are also tanto, usually from Muromachi period, and a few naginata.

Because the school retained very conservative style it is hard to date its work, especially when suriage. Unfortunately this conservatism not only extends to jigane and hamon, but there are also slender tachi shaped blades with small kissaki made during Muromachi period, which further confuses the attribution. This puts considerable limits on the distinction between the time period covered by "ko Naminohira", i.e. "earliest Naminohira" attribution, and simply "Naminohira" attribution which identifies the later works. "ko" certainly excludes Muromachi period and includes most if not all Kamakura period's work, but when exactly the boundary between the two is drawn is both unclear and uncertain. Generally, more Muromachi-like work will be called "Naminohira" and older looking examples are "ko Naminohira".



Sairen. Direct comparison with the previous photograph reveals both the similarities and the differences. Sairen's and Jitsua's work exhumes greater force but lesser refinement, jigane has wider and more accented masame, typically also includes mokume, which is however not present in this photograph. Hamon is wider with strong nie activities like nijuba, reminiscent of ko Hoki or Yamato Tegai schools.

Among other Kyushu schools there is but one which in all likeness directly descended from Naminohira. This group worked in Chikuzen province, supposedly brought there by Ryosai around mid to late Kamakura period. Surviving blades are in almost all cases attributed to the following

two smiths: Sairen (active around 1290-1320, there is a dated oshigata to 1317) and Jitsua, most likely Sairen's son, who has a number of signed blades suggesting he was active around 1320-1340. Compared to Naminohira, their work has more pronounced nie activity in the hamon, with multiple belt-like formations in nie, more difficult to discern nioiguchi, jigane which is a mixture of masame and mokume. It is also very seldom that jigane retains the same imagery throughout the blade, i.e. in one place it can appear as pure masame (as in the image above), in another there will be however a strong presence of mokume. In one place masame lines are almost parallel, in another they diverge and converge as they go; even if it does have the appearance of Naminohira-like undulating nagare packed above the hamon, it remains such only within a small portion of the blade.



Kongobyoe. A combination of weak "Kyushu" hamon, rough jigane, and distinctive mokume elements is often sufficient to attribute this work.

Around 1340 Jitsua's lineage most likely split into two groups. The one lead by Sa soon abandoned Kyushu style and instead excelled in Yamashiro and Soshu traditions. The other one was probably the one called Kongobyoe (金剛兵衛), literally "followers of strength", a Buddhist slogan appearing in its signatures. There is a signature indicating they resided in Dazaifu city and were probably associated with Chikuzen Kokubun-ji temple. Temple patronage or an outright ownership of bonded craftsmen is a very typical situation in Japanese history in the early periods. Privatization of land estates and road polling stations during the Heian period has been accomplished predominantly under the auspices of important temples in Kinai area, whose leadership has been controlled by a few noble families, most importantly the Fujiwara clan. It is possible that Sairen and Jitsua also worked under a temple patronage; Kongobyoe status of a temple school might relate to unusual nakago shape it used: sotoba-gata, where the sharp point is located roughly in the middle with equal sloping on both sides. The names of the smiths often include "Mori" character.

As with other Kyushu works, hamon tends to be weak, in ko nie with patchy nie activity and hazy nioiguchi. There is blackish hue and standing out jigane, which often includes large mokume elements and while masame is common, it does not imitate packed, undulating form of Naminohira. It can be said that its jigane varies between something quite similar to Sairen and Jitsua, though with a later sugata and weaker nie activities in the hamon, to a type of jigane which is less coarse and prominently features mokume elements.

While the earliest known examples probably date from 1340s, most known Kongobyoe blades are from Muromachi period. During the Edo period its smiths moved to more mundane tasks and produced very few blades.



Tachi, signed Bungo no Kuni Yukihira © Tokyo National Museum.



Bungo Yukihira, details.

The most famous Kyushu smith of all times is Bungo Yukihira. There are signed swords, including the one dated to 1205, and his activity period is confirmed by records of him being part of Goban Kaji within roughly the same timeframe. As a part of a small group of smiths (there is a possibility it was only him and Sadahide (Joshu), but it is also possible there were other swordsmiths as well) with similar workstyle he resided in Bungo province in the beginning of Kamakura period. Signed Sadahide's blades are uncommon, while those of Yukihira vary in both work and signature, which might suggest that two or three generations existed, possibly working till mid Kamakura period. At this point the school must have nearly ceased its production until the local swordsmithing was rejuvenated by Bungo Tomoyuki in mid Nambokucho period. This however came with a significant

departure from Kyushu style, though in honor of Yukihira Bungo the local smiths often retained the "yuki" portion in their names.

Compared to other period Kyushu smiths Bungo Yukihira's school is the most refined and "not Kyushu" looking, which no doubt contributed to its popularity with the court's connoisseurs. The only hint of its Kyushu connections is a simple suguha based hamon, with patchy nie activity like kinsuji and sunagashi, which otherwise is ko nie based. Jigane however is dominated by tight itame with plenty of ji nie, yubashiri are common, chikei can appear as long, wide, dark lines. Coarse elements in masame or mokume can appear in places. The group very often begins its hamon as yakiotoshi, an antiquated trait which is not nearly as popular with other Kyushu schools including the earliest Naminohira examples. Shirake utsuri is common. Compared to Naminohira and Sairen lineages kasane is thick and the jigane hue is lighter. Bungo Yukihira is famous for his diverse and unusual horimono including Fudo Myyoo, Kurikara and others, possibly making him the first horimono Master of the nihonto tradition, though obviously horimono are well represented on pre-nihonto blades.

Jigane's beautiful and refined appearance suggests a relationship to Yamashiro or possibly Bizen traditions, the latter is supported by the genealogy published in Kanchiin Book 観智院本, supposedly compiled in 1423 on the basis of a document dating to 1316. Among Kyushu smiths, it mentions Miike Denta (Chikugo province) as Yukihira's relative, which is also consistent with stylistic commonality between the two.

It is often stated that Miike school was active during the Heian period (11th century), and Heian dating is traditionally assigned to the school's most famous blade – National Treasure by Denta (the name being used by many generations of Miike smiths) Miike, but none of its blades demonstrate sugata similar to the earliest nihonto examples. It appears that some of the earliest Miike works have appearance consistent with a mid Kamakura attribution. While it produced very few blades, it managed to survive over a long time period, from its foundation possibly sometime between 1210 and 1250 and all the way till mid Muromachi.

Its Kamakura period blades are generally similar to Bungo Yukihira's with dense itame jigane and suguha based hamon in ko nie with limited activity and hazy nioiguchi. Yakiotoshi is common. Distinguishing feature of Miike school is a wide and shallow hi. Otherwise, yubashiri are atypical, utsuri can tend towards jifu, and while for Yukihira we often except yakitsume boshi, for Miike o maru is more characteristic.

Finally let us consider a few blades which share much in common with Kyushu work yet have been attributed to *Houju*.



Naginata naoshi, Nambokucho period. Coarse masame-mokume jigane is not unlike what is seen in Sairen's lineage and Kongobyoe. However, the hamon has very strong nie presence and is notare rather than pure suguha – both are not typical for Kyushu. Since Houju is accepted as a school which can include a variety of elements not found in Kyushu, this blade has been attributed as Houju. There is no clear alternative. It lacks elegance or strong masame of Yamato Shizu. Shikkakke Norigata would presume a more periodic gunome appearance of the hamon. NTHK NPO however attributed the blade as "Unju", and while there are some Unju blades which have unusually strong Yamato connotations, this particular attribution is difficult to understand.



Naginata blade, end of Nanbokucho period to Oei, attributed to Houju. In places (right photograph) it can be mistaken for Kyushu work due to weak ko nie hamon, hazy nioiguchi and wide undulating masame. However, in Naminohira we would not expect the masame to take over the entire blade nor would it exhibit mokume and other variations as on the left. It is too late to consider an attribution to Jitsua. Kongobyoue attribution remains a possibility, however one would prefer to see specifically Kongobyoue features. Default judgement for such blades is Houju.

NTHK scores.

If we discount families as not being organizations in a true sense, we should accept NTHK as the longest continuously active organization (since 1910) dedicated to preservation and study of Japanese swords.

However, the earliest example of its judgement paper (origami) known to the author is dated 1968. Most likely the first formal shinsa with open submissions has been held sometime in 1960s, until which point NTHK functioned as a club. In a pre-war period written opinions were requested from specific appraisers, as paper or sayagaki, rather than being issued by organizations.

It was NBTHK which first introduced a formal, open to public submissions and privately managed appraisal system. The endeavor was helped by the fact that initially some of the people involved were tasked with providing assessments of swords as artistic (traditional or gendaito) or not (showato) in order to adhere to post-WWII laws and occupation authority requirements. Later, it was a natural step to use a similar functionality to create an institutional, large scale appraisal service considering sword attributions and authenticity. It was not however until 1960s when Japanese economy boom created an outstanding demand for sword collectibles and appraisals, that "alternative" papers, NTHK included, also came into being.

This was helped by the fact that during 1970s the spread in appraisal quality between various provincial offices of NBTHK remained significant, while a number of very prominent book authors and sword specialists were not part of the permanent NBTHK shinsa staff. Also NBTHK performed judgements as an institution, i.e. names of judges who appraised a blade in most cases remained completely anonymous. Alternative groups typically centered around a few people with a significant name recognition among sword collectors. In particular NTHK papers were affirmed by personal seals, allowing one to assess the judges' identities, specialties and past contributions to the field.

At the same time a multi-tier assessment protocol adopted by NTHK was certainly inspired by already existing NBTHK practices, with a few notable differences. One of them was that NTHK not only offered different levels of papers, but also provided a score in the judgement sheet, with the following relationship vis-a-vis the paper level:

Shinteisho papers: 60-69 points Kanteisho papers: 70-84 points Yushu Saku papers: 85-94 points Sai Yushu Saku: 95-100 points We can speculate that the intent was to establish some correlation with kicho (after 1982 - hozon), tokubetsu kicho (after 1982 - tokubetsu hozon), Juyo and Tokubetsu Juyo origami levels of NBTHK. NTHK NPO does not follow the same system as it issues only kanteisho and yushu saku papers, which as we will consider shortly is also reflected in a different score system.

In recent NTHK papers however, the scores always tend to group at the paper transition levels, i.e. 60 or 70, all other score differences (for example, 73 versus 74) are both rare and basically irrelevant. Historically, some shinsa sessions did not assign such scores at all. Unlike NBTHK where submitting for Tokubetsu Hozon requires a separate fee, the submission process for shinteisho and kanteisho is the same, and therefore shinteisho level swords (below 70 points) are specifically assessed as inferior. Poor condition, lesser attributions, these blades not only would not receive Tokubetsu Hozon papers if submitted to NBTHK, but represent the worse portion of all Hozon level swords. The vast majority of papers issued by NTHK are plain kanteisho with the score of 70 points or about.

NTHK NPO uses a different system: during a typical shinsa only one level of certificates is issued, but a score, written on a judgement sheet returned to a submitter on the day of examination, is supposed to reflect the blade's quality and value.

Everything receiving less than 75 points is considered a commodity. Average to above average Muromachi period's pieces, run of the mill shinto work. It is not completely analogous to Hozon level, since advancing from Hozon to Tokubetsu Hozon is as much about fulfilling specific minimal requirements (for example, mumei blade usually needs to predate Muromachi) as much a confirmation of quality level. Some low scoring (73-74 points) blades were able to receive Tokubetsu Hozon certificates, and some higher scoring ones (75-76) - were not.

75-76 points is considered a basic good blade. Collectible with no major condition issues. 77 points score is relatively rare and can be understood as a transitional place between 75-76 points and 78 points categories.

78 points: aside of certain exceptions this is the best what a good blade with no major detriments can receive in the US shinsa. It can be a mumei koto blade that checks all the boxes: good condition, attribution to a well known smith, impressive work. It can be an impressive, signed Edo period's blade by a better smith. This score is given to about 5% of the total submissions. Note - tosogu ratings and judgements are an altogether separate topic.

However, there is no significant correlation between the highest scores such as 78 and 80 points (the latter being a direct prompt for Yushu Saku submission and 79 points being a very uncommon score) and NBTHK's Juyo grade. Very significant portion of NTHK NPO's 78 points scorers are Edo period works by top level smiths (Shinkai, Sukehiro, Suishinshi Masahide, Naotane), in fresh polish and without major detriments. However, aside from a few smiths like Hizen Tadayoshi, NBTHK is

seldom inclined to accept Edo work as Juyo. At the same time the scores given by NTHK NPO to high end mumei koto blades can be considerably more modest. For example, 76 and even 75 points is often associated with a major Soshu school example.

One of the reasons is that NTHK NPO scores strongly reflects the current state of polish. Even a very high end koto blade in an old, worn out polish is expected to receive 76 points, despite being much more valuable compared to 78 points shinshinto blade in a perfect polish.

Saiha and Yakinaoshi.

The term saiha refers to a requenched blade. In most cases it has been in a fire, lost at least a portion of its hamon, and then the hamon was restored by another round of water quenching. The result is an utilitarian fighting weapon rather than a proper collectible; most are lacking the basic nihonto aesthetic.

On the other hand there are famous koto blades which have been requenched during the Edo period by master smiths such as Yasutsugu. Question: should those also be considered *saiha* or they constitute a different category (which perhaps should be called *yakinaoshi*, lit. "rebaked"). That this a separate category perhaps has not been explicitly identified in the literature because such blades are seldom found outside of old, often government affiliated collections. The argument supporting it might deserve a separate name is that if such an item would appear on a market and would have been brought to shinsa, there is a very high change it would not have been recognized as saiha.

Consider the basic question - why should the fact that the blade has been already quenched once prevent any consequent applications of the same process? Aside from physical structure, i.e. conversion to martensite phase, quenching produces very few changes. It has very little impact on steel's chemical composition and limited impact on grain size. Accordingly by using the process of slow annealing – heating up the blade and then slowly cooling it down over a course of at least a few hours, possibly even few days to two weeks, one can dissolve the martensite and return the blade to a state relatively similar to what it was before the quenching. It can be then heated up again and quenched in a manner relatively similar to any other blade.

This is the process described by Col. Dean Hartley on his visit to Fujimura swordsmith.



Early Soshu blade requenched during the beginning of Edo period. Excellent hamon in nie occupies almost the entire surface below shinogi. It is impossible to identify this work as "saiha" without knowing its actual history.

Because it was commonly used when requenching an important blade many yakinaoshi by Yasutsugu and other Masters do not offer significant clues that the blade has been requenched aside from the fact that it does differ in many ways compared to a typical appearance of the original work.

The *saiha* process on the other hand was Sengaku period attempt to address a purely utilitarian issue. After the blade is quenched once, requenching it as is without annealing would almost certainly crack it due to additional stress. A quick and cheap solution is to heat the blade and then allow it to cool down in the air before quenching in water. The purpose here is not to remove the existing stress and convert the martensite, but to undergo a lower temperature quenching. As a result, no large martensite crystal can form, either within the hada (ji nie) or within the hamon, maybe aside from couple of spotty areas close to the edge where for some reason the temperature gradient reached higher amplitude. The nioiguchi is hazy to practically non-distinctive. The original stress has not been fully alleviated, so the new quenching usually adds to the curvature, but not as much and not with similar catastrophic consequences as if requenching would have been performed at a standard temperature. The blade can cut but has an unusual balance and very bland appearance.

For such process even the required clay application is thin and rudimentary, relying in part on difference in heat exchange between thicker and thinner (the edge) portions of the blade. Suguha and suguha notare hamon profiles dominate, mizukage is common, which appears as trace of the angle at which the blade has been submerged in water, if the clay layer used is thin.

The reason we can reconstruct both saiha and yakinaoshi processes is not because there are detailed Japanese sources, but because a similar procedure has been practiced more or less everywhere worldwide when blades needed to be placed back in action with little regards to long term consequences.



Tanto saiha are not nearly as common as katana, but here is an interesting example. Its nakago demonstrates fire scale – coarse and non-uniform pitted patina common with blades that survived fire. There is mizukage. Both hamon and jigane are indistinctive, though unusual care has been taken to produce an elaborate hamon shape. Nie is observable in only one small portion of the blade. Of note that the blade is been tired and overpolished, with altered sugata and damaged horimono. Originally it was probably an interesting Soshu style example.