

# Restoring Armour and Swords – Contrasting Points of View

## Part A: Armour

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### **Introduction**

As is so often the case when individuals who share a common interest meet, the conversation frequently veers into the exchange of observations, anecdotes and opinions. Such a discussion began between two of the authors around the question of restoration vs conservation of Japanese artifacts, notably weaponry and its accessories, both decorative and utilitarian. Gradually, the number of participants in the discussion grew to the four authors listed here, each of whom brought his own contribution.

While each of the authors brings his own experience, preferences and ideas to the meeting of minds, all are united in the appreciation for and delight in ongoing study of Japanese weaponry and its accoutrements. Although they are situated in a variety of countries, the authors are unhampered by distance and different time zones thanks to the freedom of communication capability afforded by the Internet.

As the discussion continued over time, the authors reached a mutual agreement to publish the data they had collected, including the supporting examples they had researched. Predictably, perhaps, the original germ of the idea that had inspired the discussion, namely, the wisdom of restoration vs. conservation in treating antique weaponry et al, had expanded significantly. Exploration of the methods employed in treating damaged antique artifacts and the attitudes and practices that inspired the individual courses of action moved from the general to the specific. As the areas of study became more delineated, focusing on arms and armour, swords, *shirasaya* and *koshirae*/fittings, it became clear that attempting to incorporate all the collected evidence in one article would be difficult, if not impossible, and definitely overwhelming to the reader.

It was determined by mutual agreement, therefore, to publish four separate, yet related, articles, thus affording each of the areas of study the attention it deserves. The resulting four articles that follow are:

## Restoring Armour and Swords –Contrasting Points of View

Part A:        Armour        Part B:        Swords

Part C:        *Shirasaya*    Part D:        *Koshirae* / Fittings

In each of the articles, attention has been paid to the courses of action chosen by the principles— museums, dealers or individual collectors-- in repairing the artifacts, the results produced by these choices and the reflection of the attitudes of the time and place these decisions were made.

As always, there are other factors which may influence the rationale behind choosing restoration over conservation or vice versa. These may include, but are not limited to:

- availability of resources
- availability of qualified and well-trained craftsmen
- scholarly interest in and knowledge of historical characteristics
- consensus of opinion as to the desired course of action (This element may impede, if not totally halt, the progress of remedial care when more than one person or agency is involved in the decision-making)
- the intended use of the restored or conserved item(s)

For the purposes of the discussions in the following articles, the elements listed above are, for the most part, not included, as the resulting data would indeed be unwieldy.

Alternately, the choices as to treatment of artifacts and the ultimate results are reported and supported, when possible, by the inclusion of illustrations.

It is not the intent of the authors to determine which of the methods of repair—restoration or conservation—is the superior or preferred choice. In each of the examples presented, the focus has been on the method of repair chosen, the ultimate results and recognition of the attitudes and context in which the choices were made.

This statement of intent underlying the direction of the articles is likely to be repeated throughout the following articles as a reminder that the discussions are presented in the hope that the information shared here will educate rather than invite a verdict. The ultimate goal is the enhancement of understanding and continued enjoyment of these beautiful and historic artifacts.

## **Part A: Armour**

When antique artifacts are acquired, the purchaser or recipient is often faced with the option of changing the condition of the artifact, whether this is for the purpose of public display, resale or personal enjoyment.

In general, the options available include:

- Restoration: returning the condition of the artifact, as closely as possible, to its original condition at the time of its production
- Conservation: preserving the condition of the artifact as it exists at the time of its acquisition, thus arresting any further deterioration.
- Reproduction: creating new facsimiles in the style of the original artifacts to replace missing or damaged components. The resulting items are usually incorporated in the restoration process.

The following discussion focuses specifically on swords and armour and the attitudes of two groups— a) European and American museum curators/collectors and b) Japanese specialists—as regards the treatment of these artifacts.

The concept and practice of restoration is a relatively recent one, as demonstrated in the examples offered below. In the 19<sup>th</sup> century, most European swords and armour were in the hands of private collectors. One such collector was Bashford Dean, an American (Dean 1915); another was Sir Richard Wallace, whose collection of artifacts is now known as the famous Wallace Collection (Capwell 2011). Some pieces in these collections were heavily restored.

Emma Schumuecker proposes a modern point of view (Schumuecker 2007) in her description of the treatment applied to armour and her opinion of the result:

"Research into the Japanese and Western ethics for the conservation of Japanese armour was undertaken to enable a better understanding of past treatments and modern ideals. It has sometimes been thought by Western conservators that Japanese conservators and craftsman heavily restore armours. There is evidence that this to be true as, for example, in 1972 a Japanese company sponsored the restoration of a Royal Armouries early 17<sup>th</sup> Century armour. It was an important object presented by Tokugawa Hidetada to King James I in 1613, through Captain Saris of the East Indies Company, and had been on display in the Tower of London since at least 1662. On arrival back from Japan after restoration it was found that many areas had been re-lacquered or filled with lacquer and that the whole armour had been relaced (Kitoku1989). This treatment has made the whole armour very robust for display and loans but unfortunately much historical evidence has been lost (figures 9 and 10)."

[Figures 9 and 10 referenced above appear as Figures 1 and 2 in this article]

The suits of armour displayed in Figures 1 and 2 appear at first glance to be two different sets of armour when, in fact, they are both the same set of armour pre- and post- restoration. When examined side by side, definite differences are evident:

1. The *kabuto* (helmet) does not seem original
2. The *kote* (sleeves) are missing
3. The *haidate* (apron) is missing

Figure 1 →

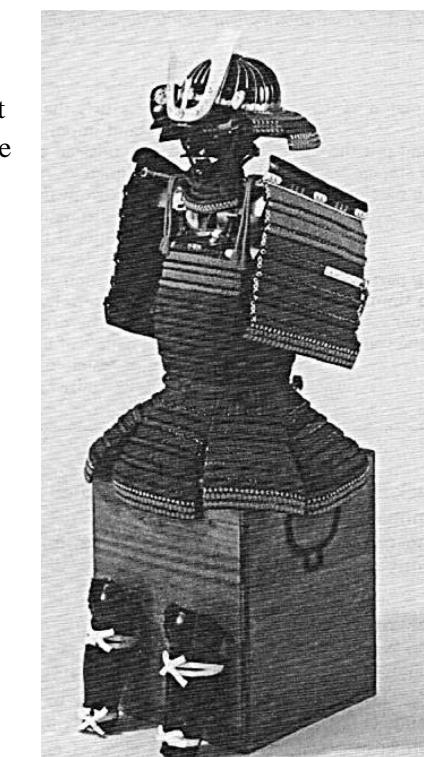


Figure 10 XXVIA.1 after its restoration.



Emma Schumuecker has many suggestions about how she thinks a proper restoration should have been done, and says that "the restoration of the Royal Armouries 17<sup>th</sup> century armour [the armour is catalogue number XXVIA.1] is not representative of the Japanese approach to the restoration and display of armours."

←-Figure 2

Figure 9 XXVIA.1 before its restoration in 1972.

Emma Schumuecker further describes the restoration of a crest of a Japanese helmet, as illustrated in Figures 3 and 4 below.

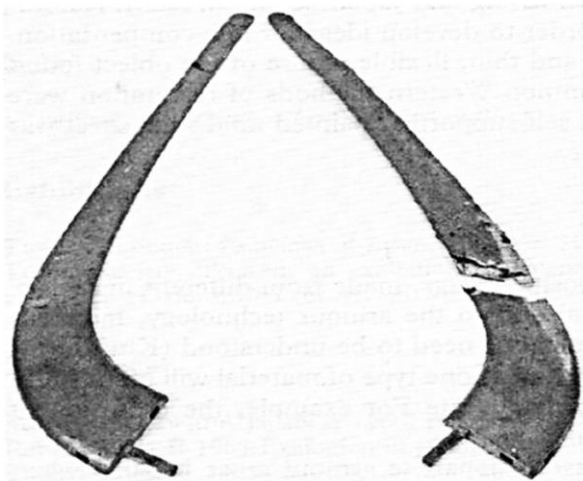


Figure 2 Crest before treatment (XXVIA.176A).

Figure 3

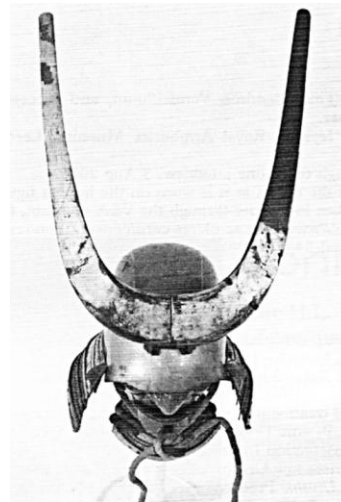


Figure 11 Helmet after treatment.

Figure 4

Ms Schumuecker’s approval of the resulting restoration of the crest is evident in her comments cited below. When praising the restoration skills of Japanese professionals, she echoes the attitude of many European conservators:

"For example, many Japanese Shrines’ catalogues, dating as far back as 1968 illustrate armours with areas of loss filled with the same materials but in obviously different colours. Original lacing and leathering is often retained and areas of loss are filled with complimentary materials that are obvious to the observer as not original. Loose material is also often retained separately. “

The table below (Figure 5), taken from her paper, illustrates what she considers are the options to restore the crest mentioned above and the shortcomings of each possible choice.

Figure 5  
→

Option	Comment
1. Do nothing and display it as it is	This would not satisfy the display requirements of this decorative and important object
2. Make a new crest and put the original fragment in storage	This option may mislead people into thinking that the object is complete
3. Recreate the missing part using original materials	This option may also mislead, as the restored area may not be easily distinguished from the original. Experience of traditional lacquering techniques is not available to the department.
Recreate the missing part using alternative effects to simulate the effect of gilded lacquer	The artificial simulation may conflict with the original finish. Conversely, it may not be easily distinguished from the original
4. Make a tonal match and complete the outline	It completes the outline of the object and doesn’t hide or disguise the true nature of the crest. The addition should be easily recognized and not detract from the object

The armour presented to King James I (and VI of Scotland) still has its original helmet. When sent to Japan for restoration it had lost the elaborate *mitsu kuwagata dai* from the peak and several of the copper-gilt ornaments off the bowl itself. The Japanese armour restorer made a new *mitsu kuwagata dai* and new fittings to replace those lost but left the originals in their worn state. The new additions are visually obvious as they are brightly gilded, hence satisfying Emma Schumuecker’s requirement that replacements should be immediately obvious. These additions could be easily removed if needed; thus they are compatible with the need for reversibility. What the Japanese restorer did that was incompatible with modern conservation ideals was to consolidate flaking lacquer and replace missing sections of lacquer using *urushi* (lacquer) and to replace all the lacing and cords with new silk. Neither of these actions complies with the Western notion of the need for reversibility and the avoidance of restoration. In defense of the staff at the Tower of London, what was considered as acceptable practice at the time is now regarded with disapproval; for example, the standard technique used to deal with pieces of European armour that had lost plates was to replace them with newly-made ones stamped with the Tower of London mark to indicate that they were replacements. Helmets and the like that had been damaged by rust were repaired by riveting a new patch inside the piece, embossing that patch outwards until its surface was flush with the original surface and then polishing the whole. Today the accepted practice would be simply to stabilize any active rust and leave any holes as they are found.



Figure 1 Mogami haramaki, a style of armour in which the rows of plates in the body are individually hinged. About 1580. Royal Armouries XXVIA.2

Figure 6

One mystery which persists is the failure of the Japanese restorer to return the *kote*, *haidote* and storage box to the restored suit of armour. One possible and likely logical conclusion is that these items were not part of the original armour. During the time that the armour was on display in the Tower of London, H. Russell Robinson was curator of Oriental Arms and Armour. Robinson collected Japanese armour himself and published widely on the subject. It is possible that Russell Robinson provided the now-missing items as they were readily available in the sale rooms at the time of his tenure. The *kote*, *haidote* and storage box may have been included in the display to demonstrate a “complete” set of armour, but they may have been removed when the armour was shipped to Japan for restoration as they were not original to the suit of armour.

A second set of gift armour presented to King James I had been housed in various palaces since the day it had been received and suffered far less from neglect than the first set. During the interregnum following the execution of King James’ son, Charles I, it was sold, along with many other Royal Treasures to a Major Bass for the sum of £10. On the accession of King Charles II it was recovered, ultimately being deposited on loan to the Royal Armouries Museum. The conservation in this case concentrated on repairs to the fabrics and sewing down broken cross-knots with silk thread. As a consequence, it remains one of the few armours from the early Edo period that retains its original lacing and fabrics.

Within the same era as the King James I armour described above, the Spanish crown also received gifts of Japanese armour on the arrival of the first and second Japanese missions to Europe in 1585 and 1615, respectively. On each of these occasions, three sets of armour were presented as gifts. For the purpose of this discussion, particular attention will be paid to one of the first three suits of armour given to King Phillip II of Spain in 1585. It was ultimately included in the Royal Armouries’ Collection (Bottomley 2006) and, like the King James I armour referenced earlier, required remedial care as time passed. The contrast between the treatments afforded the latter Spanish armour and the former British acquisitions reflect the differences in attitude towards conservation and restoration of these artifacts.

A manuscript dating back to 1603 described the armour presented to King Phillip II and ordered it to be transferred from the palace to the Royal Armoury following the sovereign's death. Later it was acquired from the Spanish Royal Collection, together with two other Japanese armours, by Rodrigo Diaz de Vivar Gomes de Sandoval y Mendoza, 7<sup>th</sup> Duke of the Infantado. It was included as part of the inventory of his palace in Guadalajara in 1643.

There it remained until the 19<sup>th</sup> Century when it was acquired by Euseblo Zuloaga. In 1840, Zuloaga sold it by auction in London, where it was purchased by the Tower of London. At that time, the catalogue description identified it as an armour of a "Moor of Granada". It is shown in Figure 6.

The movement order of 1603 included a description of the armour at the time. The detailed account stated that it was originally black-laced, had a "gilded leather panach" or *koshiro date* on top of the helmet and a *maedate* on the front with a Shimazu family *kamon* (crest) between two black fur-covered "tails" or horns.

At the time of its purchase, the armour was in a very dilapidated condition. When it was acquired by the Tower of London, the crests, the top plate of the neck guard, the throat guard of the mask and the leg armour were missing. It was re-laced, incorrectly, by the staff of the Tower using green-worsted braid, in spite of the specific reference in the description to its earlier black braiding.

In 2005, a decision was made by both the curatorial and conservation staff of the Royal Armouries to restore this armour to something approaching its original appearance. As a first step, the armour was re-laced using black silk. The 19<sup>th</sup> century velvet pieces onto which the metalwork of the sleeves had been sewn were to be replaced by sleeves of hemp and the missing plates were to be restored, ostensibly to achieve a more complete look. Unfortunately, the program was halted; by this time, the only work which had been completed was the consolidation of lacquer on the plates of one shoulder guard

The current staff responsible for conservation has subsequently opted to revoke the original decision and retain the original 19<sup>th</sup> century reconstruction. The rationale used to support this position is that "it is part of the armour's history". In contrast, the same conservation staff considers it perfectly acceptable to re-strap European armour when the old internal leathers holding the plates together disintegrate. Perhaps the difference in attitude where restoration of Japanese armour is concerned may be attributed to the absence of a precedent or accepted directive on how to perform such a task without causing criticism.

Problems have arisen already when standard Western conservation techniques are attempted with Oriental material as in the case of conserving flaking lacquer. A Western conservator's training demands the use of an approved solvent-based adhesive injected under the flake and clamped until set. In practice such an adhesive dries quickly around the exposed edges of the flake, but because the lacquer is impervious to the solvent and can only evaporate by slow diffusion through the already dried adhesive, it remains fluid under the flake. There is no adhesion except around the edges unless the flake is left clamped for months. In Japan *urushi* is used as the adhesive. This hardens irreversibly throughout its mass, re-gluing the whole flake to the substrate in a matter of hours. The Japanese justification to the argument about reversibility is that 'the flake [is not intended] to come off again anyway'. The article by Emma Shmuecker (Schmuecker (2007)) describes her attempts to deal with this problem. The



method she tried, however failed. Therefore the problem of how to restore lacquer, from the European point of view is an open problem.

A further on-line discussion can be found at:

<http://nihon-no-katchu.proboards.com/thread/1081/additional-pics-historical-armours-ukiyasu#ixzz3OwQxboeW>

In the West, the controversy continues as to the best approach to rescuing damaged artifacts: conservation or restoration. The solution may involve a complex analysis of the existing problem while considering the historic treatment applied when similar damage occurred as a result of the normal intended use of the object. As an example, it is easy to imagine an antique suit of armour in danger of falling apart because its silk lacing has rotted. One course of action to correct this problem is to use new silk to re-lace rather than using thread or monofilament in an attempt to tie all back together. During its original working life, the armour would have needed re-lacing and refurbishing from time to time as a result of everyday wear and tear. To accomplish this efficiently, the armour would have been stripped down to bare plates and given a new coat of lacquer to cover scratches and chipping before being rebuilt. Further, there is some evidence that during these periodic refurbishments, the owners would take the opportunity to have the armour re-lacquered in a different colour. An example of this practice is visible on one the suits of armour included in the Royal Armouries collection. While it is currently gold-lacquered, it was originally black-lacquered; the original colour is visible around the gold-lacquered *kamon* on various parts of the set. Likely re-lacquering was somewhat superficial as a cost-cutting measure. In this case, the decision to restore rather than conserve the armour is an interesting one and closely resembles the steps followed by ancient artisans whose mission was to ensure the utility of the armour rather than preserving the artistry of the original.

As mentioned earlier, the modern tendency to choose restoration is a relatively recent practice. By the 19<sup>th</sup> Century, most European swords and armour were in private hands. Two such notable collectors were the American Bashford Dean (Dean 1915) and the British Sir Richard Wallace, who amassed the now-famous Wallace Collection (Capwell 2011).

In his description, Tobias Capwell refers to “the most iconic work in the Armouries of the Wallace Collection: the famous Gothic equestrian armour” (Capwell 2011, page 54). The text is quoted below, followed by a glossary of terminology which may be unfamiliar.

“The rider’s armour includes a number of original elements, some very fine, others altered in modern times. The sallet skull, bevor and cuisses are all authentic pieces, but ‘improved’ in the 19<sup>th</sup> century through the addition of decorative bands...The breastplate is constructed of old metal, possibly two munitions breastplates c. 1500, remade by the 19<sup>th</sup> century restorer.”



<u>Term</u>	<u>Description</u>	<u>Term</u>	<u>Description</u>
sallet	helmet	tassets	plates hanging from the skirt over the thighs
bevor	chin defence	pauldrons	shoulder defences
besagews	circular plates at the armpits	greaves	shin defences
cuisse	thigh defences	crinet	horse's neck defence
sabatons	foot defences	arson plate	saddle plate

**Terminology: Parts of Armour**

**Figure 7**

Some of the terminology used to discuss European arms and armour may not be familiar to collectors of Japanese swords. In order to illustrate and clarify the references used, labelled photographs of Horse Armour and Man Armour have been included in the Appendix of this article.

Tobias Capwell's account in the "European Arms and Armour Supplement" (1986) of the Wallace Collection provides more details about the altered components of the arms and armour and leaves no doubt that it is far from genuine. According to Capwell, the skull of the sallet is real but originally had a bevor that used the same pivots as the visor. The fluting on the lower part of the breastplate is 19<sup>th</sup> century, as are the skirt, tassets, pauldrons and besagews. The greaves have been modified as have the sabatons. The backplate is genuine but from another armour. The third, fourth and fifth plates from the top of the crinet covering the neck of the horse are 10<sup>th</sup> century, as is the left arson plate and the struts of the saddle. In other words, very little of this armour actually dates from the 15<sup>th</sup> century, yet it appears time and again in publications as if completely authentic.

When Sir Richard Wallace acquired the equestrian armour discussed above, he had no real knowledge of arms and armour. At that time, in the early part of the 19<sup>th</sup> century it was quite fashionable to acquire arms and armour and some dealers of the era were not above over-restoring to satisfy demand. Sir Richard Wallace bought two large collections to decorate his house and had the wealth and freedom as proprietor to choose how he wished them to be prepared for display. Whether the piece is over-restored or not, it remains extraordinarily beautiful and the sword is genuine.

At the outset of this article, the issue of restoration vs. conservation was introduced with a brief description of how these methods of "rescuing" damaged artifacts are different in both method and philosophy. It is not the intention of this discussion to make a judgment favouring either restoration or conservation as the superior choice in all cases, but rather to highlight examples and examine how they reflect the different attitudes.

Just as "Beauty is in the eye of the beholder", to borrow an old cliché, the choices made as to how armour is to be returned to its former glory rests in the hands of those who have acquired those pieces.

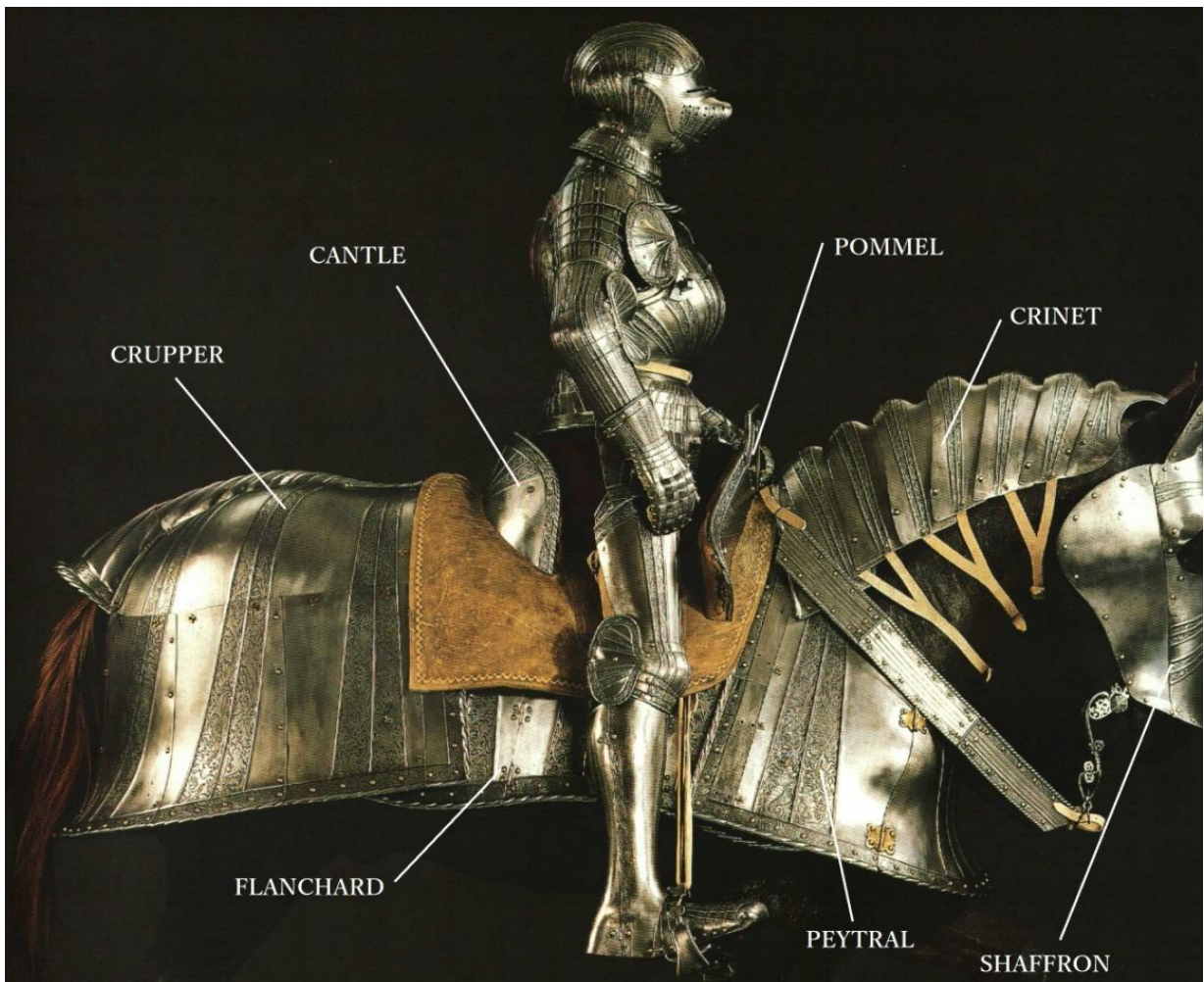
Whether the choices made are the result of personal esthetic preference or the desire to preserve as much of the original as possible, the results will continue to provide insights into an earlier era.

In conclusion, when considering armour, it is important to emphasize again the differences between the attitude of Japanese collectors as compared to that of European/American collectors – the latter appears totally fixated on reversibility, avoiding any treatment that cannot be undone – conservation first, but if absolutely necessary restoration; whereas Japanese collectors are quite comfortable restoring objects to their functional condition.

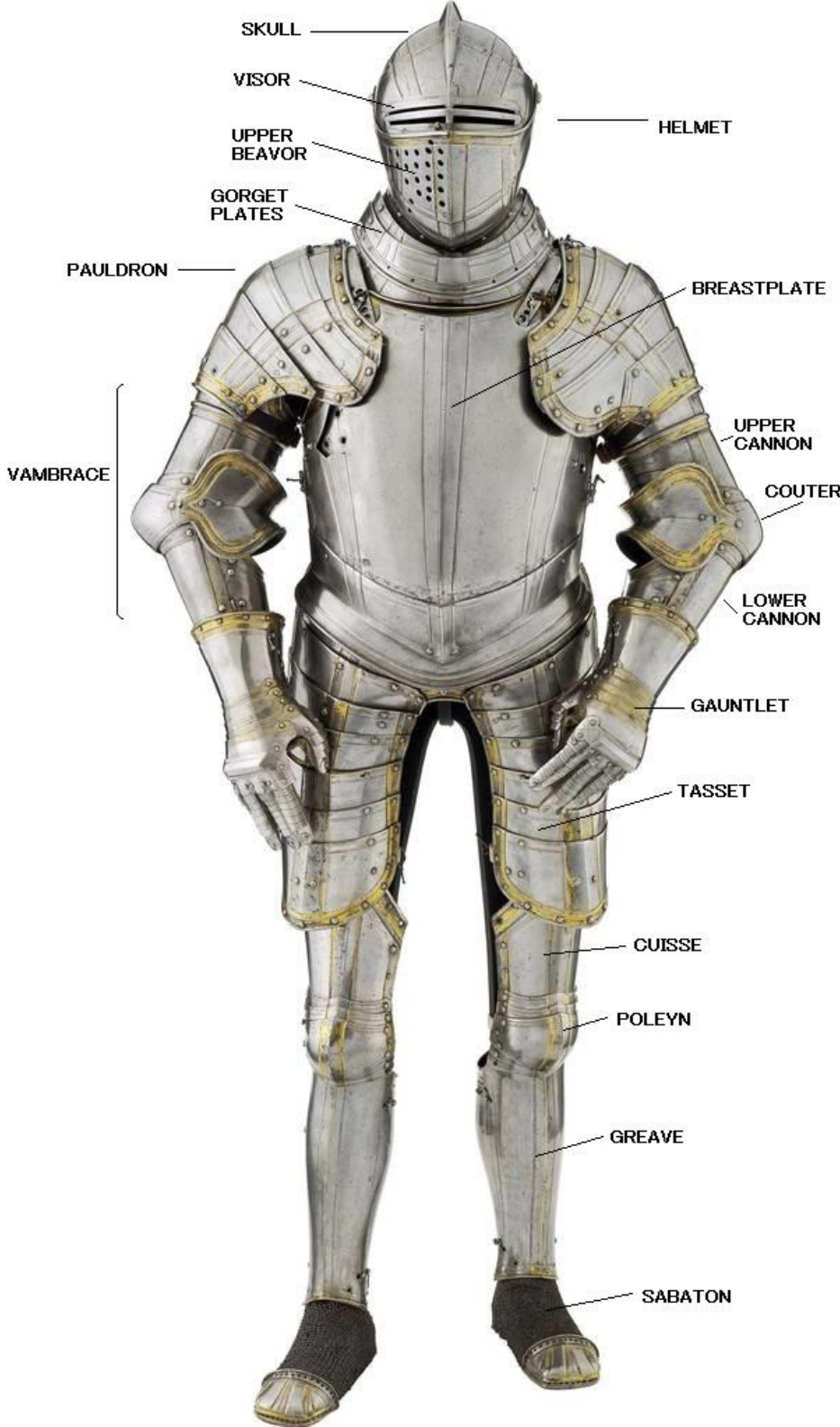
Many thanks are offered to Sylvia Hennick for her editing prowess. The discussion will continue with Part B: Swords.

## APPENDIX- THE PARTS OF EUROPEAN ARMOURS

A. HORSE Armour – St. John's Castle - a replica of a castle in the European-Tudor style built in the 20th C, by Ricardo Brennand in Recife, Pernambuco, Brazil (Finner (2008)).



B. MAN (Armour with the current names for the parts - (Armour No. II.82) and 'By permission of the Trustees of the Royal Armouries')



## **Bibliography**

Bottomley I. (2006) - Ian Bottomley, *The acquisition of XXVIA.2 and its possible origin*. *Arms & Armour* **3 (2)** 149-157.

Capwell (2011) - Capwell (2011) - Tobias Capwell, *Master Pieces of European Arms and Armour in the Wallace Collection*, Paul Robertson Publishing, London.

Dean B. (1915) - Bashford Dean *Catalogue of a Loan Exhibition of Arms and Armour* The Metropolitan Museum of Arts, New York.

Finner (2008) - P. Finner, R. Brennand and M .A. Maciel - *Coleção de armas no Castelo São João* Raithby Lawrence & Company London 2008. - The catalogue in English and Portuguese describe a selection of pieces that are housed in the castle. The castle is open to the public visitation and contributes to educate the people of Pernambuco about its own past.

Kitoku (1989) - M Kitoku (ed.) - *Yamazumi Shrine Catalogue*, Omishima (Japanese text)

Oakeshott (1998) - Ewart oakeshott, *A Knight and His Horse*, Second Edition Dufour Editions Inc. Chester Springs, Pennsylvania

Schumuecker (2007) - Emma Schumacker, *The conservation and Display of a Japanese helmet*, *Arms & Armour* **4 (2)** 145-158