

Matter and Image
Studies and Conservation
at the Museum of Oriental Art
in Venice

Quaderni della Direzione regionale Musei Veneto

Scientific committee

Jacopo Bonetto, Daniele Ferrara, Giovanna Nepi Scirè,
Bonaventura Ruperti, Luigi Sperti, Giovanna Valenzano

Secretariat

Anna Granzotto, Elisabetta Pasqualin

Volume 5

Graphic design

Andrea Filippin

Photographic references

The images of the single papers were supplied by the authors except for:
10.5 (Akama Ryō); 16.1-4 (Marco Beck Peccoz); 4.2-4 (Marta Boscolo Marchi); 1.6 (Beatrice Falconi); 3.1-2, 8.1, 8.3, 8.5, 8.7 (Elisa Giacomello); 19.1, 22.1-7, 24.9-12, 24.14, 24.17 (Anna Passarella); 1.1, 1.10-11, 4.1, 6.1-2, 7.1-2, 10.1-3, 13.1-2 (Maddalena Santi); 10.6, 14.1-6 (Stefania Sartori). Unless otherwise stated in the captions, the images belong to the Photographic archive of Direzione regionale Musei Veneto.

The publisher is at the disposal of rights holders for any unidentified iconographic sources.

No part of this book may be reproduced or transmitted in any form or by any means without prior written authorisation from the Direzione regionale Musei Veneto.

Translations

The papers by Marta Boscolo Marchi were translated by Welocalize.

The paper by Shigeki Iwata was translated by Mary Lewine.

The paper by Valeria Arena was translated by Daniel Forrest Banks.

The paper by Serena Bidorini and Alessandro Ervas was translated by Giacomo Gardin.

The paper by Laura Giuliano was translated by Graham Sells.

James Siddall jr reviewed all the English texts.

On the cover

Senju Kannon, Japan, late 17th – early 18th century.

Venice, Museum of Oriental Art, inv. no. 8848/16286.

Ph. Maddalena Santi.

Produced by

Ministero della Cultura

Italian Ministry of Culture



2021 © Direzione regionale Musei Veneto

San Marco, 63 – 30122 Venezia

ISBN 978-88-85499-15-7

Quaderni della Direzione regionale Musei Veneto 5

Matter and Image Studies and Conservation at the Museum of Oriental Art in Venice

edited by Marta Boscolo Marchi

Table of Contents

| | |
|---|-----|
| The Story of Matter, in Restoration, Art History and the Museum Daniele Ferrara | 7 |
| Introduction Marta Boscolo Marchi | 9 |
| BUDDHIST ART | |
| Buddhist Art in the Museum of Oriental Art in Venice: Two Kannon Sculptures Marta Boscolo Marchi | 15 |
| The CT Scan on Two Statues of Kannon from the Museum of Oriental Art in Venice Michela Disarò, Paolo Sartori | 35 |
| Senju Kannon: the Restoration Beatrice Falconi | 41 |
| A Newly Restored Image of Eleven-Headed Avalokiteśvara in the Collection of the Museum of Oriental Art in Venice Shigeki Iwata 茂樹岩田 | 53 |
| Jūichimen Kannon: the Restoration Beatrice Falconi | 59 |
| Tablets, Steles and Shrines: Chinese Intimations of the <i>Butsudan</i> Nicoletta Celli | 67 |
| Buddhist Altars of the Museum of Oriental Art in Venice: the Restoration Beatrice Falconi | 79 |
| PAINTED HANDSCROLLS | |
| An Unknown Manuscript of the Gosannen War Tale Aldo Tollini | 87 |
| <i>Gosannen Kassen Emakimono</i> : Codicological Aspects and Conservation Treatment Valeria Arena | 97 |
| FURNITURE | |
| <i>Kazaridana</i> of Meiji Period: an Opulent Set of Furniture at the Museum of Oriental Art in Venice Marta Boscolo Marchi | 107 |
| Wood Identification Flavio Ruffinato | 117 |
| Scientific Testing on Micro-Fragments of Organic Materials from the Surface of a Piece of Meiji Period Japanese Furniture Stefano Volpin | 121 |
| <i>Kazaridana</i> of the Meiji Period: the Restoration Process Stefania Sartori | 123 |
| Enamels for Literati: Hidden Images on a Cloisonné Table of the Museum of Oriental Art in Venice Marta Boscolo Marchi | 135 |

The surname always precedes Chinese and Japanese names, except when they are the authors of the quoted texts.

The characters of the corresponding terms in Chinese and Japanese are only shown the first time they appear in the text.

The Hepburn transliteration system is used for the words in Japanese, which means that the vowels are pronounced like Italian and the consonants have an English sound.

The Chinese transliteration work follows the Pinyin standard.

| | |
|---|-----|
| The Restoration of the Cloisonné Chinese Table Stefania Sartori | 147 |
| ARMS AND ARMOURS | |
| <i>Tsuba</i> : Aesthetic and Function Rossella Menegazzo | 155 |
| Cold Plasma for Japanese Handguards Sergio Calò, Alessandro Patelli, Paolo Scopece, Silvia Ulizio | 163 |
| Conservation and Fruition: a New Exhibition Structure for the Japanese Armours of the Museum of Oriental Art in Venice Serena Bidorini, Alessandro Ervas | 167 |
| TEXTILES | |
| Sparkles of Silk and Gold: a Military Ceremonial Garment from the Qing Dynasty Marta Boscolo Marchi | 175 |
| A Chinese Military Uniform: Chemical-Stratigraphic Analysis of the Paper Under a Decorated Plate Gianni Miani | 185 |
| A Chinese Military Uniform: Design, Characteristics, and Restoration of a Special Multi-Material Artefact Anna Passarella | 193 |
| <i>Kalaga</i> : the Art of Embroidered Tapestries in Burma Laura Giuliano | 201 |
| Some Burma Textiles: Treatments on Panels Made with Mixed Techniques and Materials Anna Passarella | 213 |
| Cultural Heritage. Southeast Asia Ceremonial and Household Textiles Elisa Gagliardi Mangilli | 219 |
| Thai Jacket and Ten Fabrics from Southeast Asia: Re-flattening Work on Artworks Containing Metallic Gold Threads Anna Passarella | 231 |

The Story of Matter, in Restoration, Art History and the Museum

We are all immensely grateful to Marta Boscolo Marchi for this fifth “Quaderno” of the Direzione regionale Musei Veneto (Regional Department of Veneto Museums) on *Matter and Image. Studies and Conservation at the Museum of Oriental Art in Venice*. She has collected and described, with intelligence, passion and care, the numerous results of the restoration of works of the collection that she initiated and directed. These pieces will go on display in the museum’s new home in the former church of San Gregorio, which is the other important and related objective she is working on. This activity was conducted and concluded despite the difficulties that Boscolo Marchi, the director of the Museum of Oriental Art, and her staff encountered from the 2019 flood to the current pandemic and the obstacles inevitably caused by the complicated technical and administrative procedures.

My colleague Boscolo Marchi drew inspiration for her plan for the future museum from the documents relating to Prince Henry of Bourbon-Parma’s travels, providing the basis for the restoration of the works presented here. The principles of Brandi’s theory of restoration gave form to the project – as they also were the basis of subsequent development – which seemed to have been applied, but in reality even today were not completely implemented due to the little recognized gap between art history and restoration. It might seem logical to dedicate our attention and resources to pieces that were not only once defined as applied art but also came from faraway cultures. However, in practice it does not work like that. We are still bridging the gap created by a hierarchical view of art, which in Italy derives from Croce’s philosophy in the early twentieth century.

This idea has been indirectly and grotesquely resurrected by a consumerist approach to art, as though art could only be experienced and enjoyed by the general public through ‘masterpieces’. This phenomenon is clearly visible in the choice of exhibition themes which are mainly monographic with catchy names. It is also apparent from the general attitude of the mass media and the inability to steer private benefactors’ support in the direction of more complex artefacts that are potentially less useful for a sponsor’s corporate communication. All of this harms local heritage, including that of the museum networks. In all this, restoration and all the technical and scientific aspects that go with it often seem to become a fashionable frill, needed more for communication. This book shows how, when faced with tougher but more responsible and conscious choices, without, of course, turning down private support, or rather hoping that private individuals will be inspired to take part in more difficult undertakings, the public sector needs to work to bring to light lesser-known pieces of heritage that are, for this very reason, more important because they are part of a whole. It must be said that a high level of specialisation is often a stumbling block. Ar-

Tsuba: Aesthetic and Function

Rossella Menegazzo¹



The four Japanese sword guards (*tsuba* 鐔) of the Museum of Oriental Art in Venice analyzed here (inventory numbers 1770/1885, 1939/2158, 1745/1838, 1875/2045) are all datable for the quality of decorations and materials to the nineteenth century, between the end of the Edo period and the beginning of the Meiji era, so they belong to the modern swordsmith tradition *shinshintō* 新新刀 (literally: *shin*: new; *tō*: sword), generally including the production going from the 1760's to the first decade of Meiji era 明治時代.² They are the expression of the last big production of swords that characterized the end of the Edo period 江戸時代 (*Bakumatsu* 幕末), which saw the disintegration of the samurai class and its privileges under the Westernizing movement that supported the restoration of the Imperial family to govern the Country as the Meiji Restoration actualized in 1868. These years were characterized by fights between the clans supporting the Tokugawa *Bakufu* 徳川幕府 on one hand, and the imperial family on the other. This situation led to an increase of production of edged weapons, among which the Japanese sword (*nippon-tō* 日本刀) can be included.³ However, even if *katana* 刀 acquired a longer dimension and a wider blade to respond to the new attack and defense techniques,⁴ swordsmiths looked back at the main five antique traditions (*gokaden* 五ヶ伝) of the provinces of Yamato 大和, Yamashiro 山城, Bizen 備前, Sōshū 相州 and Mino 美濃. Furthermore, the abolishment of the samurai class meant, on one hand, the sale on the market of the possessions of disgraced samurai families, including armours, katana and any other objects, part of military equipment included their residences and, on the other hand, the development of an imitative production of all those equipment and accessories to respond and satisfy a growing mass market also linked to foreign collecting. The cleaning and restoration carried out on the four pieces in 2019 – thanks to the contribution of Silvana Publisher, the organizer of the exhibition *Giapponismo. Venti d'Oriente nell'arte europea 1860-1915* (Japonism, the Eastern Wind in the European Art 1860-1915), held at Palazzo Roverella in Rovigo,⁵ where they were exhibited in the Japanese section⁶ together with other five pieces also from the Museum of Oriental Art in Venice⁷ – has brought all

16.1. *Tsuba*, late Edo period, metal alloys, 7.5 × 6.6 cm. Venice, Museum of Oriental Art, inv. no. 1770/1885.

16.2. *Tsuba*, late Edo period, metal alloys, 7.5 × 6.6 cm. Venice, Museum of Oriental Art, inv. no. 1770/1885.



their original features, previously obscured by the patina of time, back. The full and flat workmanship of the metal alloy body, as well as the variety of colors created (*iroe* 色絵) by smoothing precious and non-precious metals (*kinkō* 金工), on the recto (*omote* 表) and verso (*ura* 裏), is common to the four *tsuba*, decorated with various motifs linked to symbolic and auspicious elements of nature.

The *tsuba* 1770/1885, in dark metal alloy (*shakudō* 赤銅) polished (*migakiji* 磨地) and with a hammered pattern (*tsuchimeji* 槌目地), has an oval shape (*nagamarugata* 長丸形) with a thin rim (*mimi* 耳) in relief and rounded inwards (*uchikaeshi* 打返し). On the right of the central hole (*nakago ana* 茎孔 or 中心孔), where the blade is inserted – where there is a copper filler that protects the blade from the contact with the *tsuba* (*sekigane* 責金) – there is the *kōgai hitsu ana* 箆櫃孔, a trilobate shape hole, while on the left the *kozuka hitsu ana* (小柄櫃孔), a half-moon hole. The *kōgai*, originally a sort of pin transformed into a blunt weapon, together with the *kozuka*, a small knife kept hidden in the sheath, were both part of the sword accessories and could be passed through those holes becoming additional defensive weapons if necessary; over time both the holes on the *tsuba* and the small fittings were transformed into small and precious decorative elements.⁸

The recto is decorated with *yamazakura* 山桜 motif, a cherry blossom and bud of the most common species in Japan on the thin stem, that follows the curve of the rim at the bottom right, while in the lower part of the *nakago ana* a bud has fallen and three petals seem to float upside down in the wind on the



right and upper left side. The stems and pistils are made with gold inlay (*kin taka zōgan* 金高象嵌), while the petals in silver high mounted inlay (*gin taka zōgan* 銀高象嵌) standing out on the scattered gold dust (*kin hira zōgan* 金平象嵌). The same motif appears on the back of the sword guard with only three cherry petals in silver inlay between the lower left and upper right surface sprinkled with dust and gold flakes. The motif of the cherry blossom that unravels with the petals carried by the wind has often been associated with the ephemeral and the transience of this world, as well as with the essence of the samurai's life; in this case the image is enriched by one of the most famous poetic compositions by Motoori Norinaga 本居宣長, engraved like a calligraphy spread on the surface of the *tsuba*, which refers to Japan (fig. 16.2).⁹

*If someone wonders
about the spirit of Yamato,
I would say:
mountain cherry blossoms,
fragrant in the morning sun*

*Shikishima no
yamatogokoro o
hito towaba
Asahi ni niō
Yamazakurabana*

敷島の大和心を人間はば 朝日に匂ふ山桜花.¹⁰

The *tsuba* inventory number 1939/2158 has a square-shaped flat copper alloy plate with rounded corners (*kakumarugata* 角丸形) and a thin raised and rounded inward rim (*uchikaeshimimi* 打返し耳). It has only one half-moon hole (*kozuka hitsu ana*) on the left side of the triangular central hole (*nakago ana*), where the sword blade is inserted, around which the hammered flatten area (*seppadai* 切羽台) is visible. The front is embellished with a plum blossom motif and two nightingales (figs. 16.3 a-b).

16.3a-b. *Tsuba*, late Edo period, metal alloys, diam 7.9 cm. Venice, Museum of Oriental Art, inv. no. 1939/2158.



16.4 a-b. Ōkawa Sadamoto Teikan, *tsuba*, 1868, metal alloys, diam 5.7 cm. Venice, Museum of Oriental Art, inv. no. 1745/1838.

The final part of a plum tree, represented in a naturalistic way, enters with the twisted trunk from the lower right corner and develops vertically, along the right side up to the upper rim, with a long straight branch drawn like a brush-stroke of black ink, while other shorter twigs spread out in the lower surface horizontally to the left rim. While the petals of the blossoming or still closed flowers are in high inlaid silver (*gin taka zōgan*), with visible engraved pistils, the calyx of the flowers stands out for the orange color of copper or burnished metal, while small gems made in gold like dotted inlay are scattered here and there on the trunk and on the branches of lead-colored metal alloy. The final result is a vivid play of colors, realized with different metals called *iroe*.

In the lower left surface a nightingale in gilt mother of pearl rises in flight with spread wings, and from the opposite upper right corner another nightingale in white mother of pearl goes to meet him flying towards the lower area in a balance that recalls the classic compositions of the genre of “flowers and birds” (*kachōga* 花鳥画) well known in the Edo period especially through the colour woodblock prints of *ukiyo-e*. Both birds present engraved details, such as their eyes and plumage, however the pearl nightingale unfortunately has lost the final part of the tail and its body shows signs of poor handling. Another loss can be found in the mother of pearl that embellished the eyes of the bird positioned in the upper part on the *recto* of the *tsuba*. In the lower left corner of the *tsuba* a plum branch enters twisting diagonally and then stretches a further thin and straight twig upwards, in the left part of the central hole, as if it were a natural development or a continuation of the same tree on the *recto*. The diagonal cut of the pictorial surface with trunks or branches with twisted and decorative shapes that sometimes border on artificiality, entering, disappearing and reappearing in the pictorial space from different sides, is an expedient that many schools of painting have used to decorate large surfaces of folding screens and sliding doors, as seen in many works by the Kanō school 狩野派¹¹ and the Rinpa school 琳派,¹² demonstrated as well as by later works of Nihonga 日本画. Moreover this technique appeared in parallel also on fabrics, lacquers, metals and later on smaller woodblock prints. The exchange between artistic and craft fields, evident in the continuous loans of subjects and techniques, is in fact a peculiarity of Japanese artifacts.



16.5 a-b. *Tsuba*, end of 18th-beginning of 19th century, metal alloys, diam 8 cm. Venice, Museum of Oriental Art, inv. no. 1875/2045.

An oval shape (*nagamarugata* 長丸形) with a flat plate and a thin embossed and rounded inwards rim (*mimi*) of *uchikaeshi* type, with only a half-moon hole (*kozuka hitsu ana*) on the left of the central hole, characterizes the *tsuba* 1745/1838 (figs. 16.4 a-b). This piece is made of a dark metal alloy with a very simplified processing, showing the abutment area around the *nakago ana* in relief both on the *verso* and on the *recto* and displaying the burnished copper filler (*sekigane*) at the ends of the central hole. The peacock on a branch, probably of a cherry tree, is worked in relief in the same alloy as the body of the *tsuba* and is also in this case a reprise of a classic painting subject of the genre “flowers and birds” made famous by the large hanging scrolls painted by the naturalistic school founded by Maruyama Ōkyo 円山応挙¹³ (1733-1795) in Kyōto which found continuity also through to the Meiji era again with several Nihonga artists that promoted a revival of Japanese traditional schools against Westernization. The peacock occupies the area to the right of the central hole, with the feet placed right in the middle of the space where it crosses a branch that cuts diagonally from the lower side, ideally coming out behind its figure to reappear only with a twig in bloom in the right upper corner of the *tsuba*. The curved peacock in profile looks down, while showing the long tail hanging down the rim. Several details such as the flowers and molds on the branch, the legs, the beak, the head and the plumage of the peacock are in gold. The same applies to the simple twig of forked plum that appears, with the same processing, on the upper left corner of the *verso*.

This *tsuba* is the only piece to bear the signature (*mei* 銘) 多知花 貞韓 “Tachibana Teikan”, the seal name (*kaō* 花押) corresponding to Ōkawa Sadamoto 大川貞韓, smith of the Mito 水戸 school,¹⁴ on the left side of the *seppadai*. This brings us back to the common reality of these forging artisans who, at the end of the Edo era, drew on the Shōami 正阿弥 style widespread throughout the territory. The calligraphic engraving on the right side arranged on two columns, instead, refers to the dating with the characters of the last Keio 慶應 era (1865-1869) of the Edo period. In the fourth year Keio (1868) the passage to the Meiji occurred, and the two characters of Boshin 戊辰 refer to the civil war which began on 27 January of the same year 1868.¹⁵ The term *zuu/tōu* 豆雨 (or literally: *mame* 豆, bean; and *ame* 雨, rain) follows, and it

can be considered a keyword (*kigo* 季語) with reference to the summer rain and to the eighth month, and more generally to the summer season, the time in between many of the big changes which Japan was undergoing from Edo to Meiji. The following characters refer to the place of creation and sale of the same sword guard: *oite* 於, that means in, Tōfu 東府, that is the area of Tokyo, since the capital changed its name from Edo (江戸) to Tokyo (東京 Eastern Capital) on 3 September 1868, and Kyōbashi *hen* 京橋邊, that means “around Kyōbashi”, the Tokyo area where many craft and commercial activities were concentrated, including metalworking workshops.¹⁶

The last *tsuba* to be analyzed, inventory number 1875/2045, is probably the oldest among the four (figs. 16.5 a-b). It has a round shape (*marugata*), and is polished (*migakiji*), except for the perforated processing on the upper part (*kosukashi* 透かし) and the flattened and rounded rim (*maru mimi* 丸耳). On the two sides of the central hole *nakago ana*, there are traces of filler for adjusting the blade on to the ends (*sekigane*), there are the *kōgai hitsu ana* and the *kozuka hitsu ana* both in trilobate form and padded in *shakudō* alloy like the two bats on the *recto* in high relief inlay of the same material.

The motif is a reference to the classic symbolic elements brought from literature and painting: the upper part has a stylized openwork cloud that surrounds a wedge of silver inlay crescent moon that bursts into the void, as can be seen from the *verso*. Under the cloud, on the right, a bat with spread wings turns its snout, where the gold eyes stand out as part of the skeleton of the wings, towards the lower left corner, just where another bat seen, but from behind, seems to take off and go towards him. The lower right area shows other motifs in relief (*taka zōgan*) and with the play of several colours of metals (*iroe*): a group of chrysanthemums with stems and leaves in gold inlay and silver petals at the feet of which rest tiles. One of them has a demon motif in silver inlay relief and eyes in gold and small tufts of grass scattered in gold.

On the reverse, as already mentioned, the tips of the silver moon can be glimpsed through the tunnel of the cloud, while on the lower surface of the *tsuba*, between low tufts of grass in gold and chrysanthemums in gold and silver there are tiles with a rounded swastika motif. It is clear how these small objects of high craftsmanship in the field of metalworking (*kinkō*), created to aid the defence of the samurai who takes his *katana* from the *saya* 鞘, have become real objects of art, condensing not only the techniques of forging, engraving, polishing, inlaying on and with metals and other precious and semi-precious materials, but also the choice and transposition of decorative motifs previously codified by the painting of the great schools over the centuries.

The combination of auspicious motifs taken from nature, such as the peacock and the cherry tree, or the peacock and the peony, resting on a branch or a rock, the nightingale and the plum, the bats and the moon – and we could go on with the pairs of cranes and pine, pine, plum and bamboo: carp and waterfall, dragon and clouds, chrysanthemums and watercourse and so on – refers to symbolic images that in poetry are expressed as *kigo*, key words that refer to a season, to a place, to a feeling, while in painting they expand to embrace the same literature from which they take inspiration. The *tsuba*, together with the other objects that accompany the sword and the samurai's equipment: *kozuka*, *menuki* 目貫, *kōgai*, *fuchigashira* 縁頭¹⁷, are among the most refined and smallest creations of Japanese artistic production, but, because of this peculiarity of concentrating the different technical and aesthetic knowledge

from each era, they are also among the most popular collectible works in the world together with *netsuke* 根付.

There are many schools, styles, techniques that have evolved over the centuries and made these pieces unique, by first responding to the practical needs of battle, then evolving to objects that qualified the status, the wealth of an ever less fighting samurai aristocracy, finally becoming a decorative object, to be collected, to be exported in large quantities and lower quality to respond to the oriental fascination exerted on Europe and the Western world starting from the second half of the nineteenth century, when Japan opened his borders after more than two hundred fifty years of almost total closure. The four guards of the Museum of Oriental Art in Venice have to be placed precisely in this last part of the country's history, when the production of swords and consequently also the metallurgical processing of sword hilts is first pushed to respond to an internal demand that responded to the needs of the last civil wars which put an end to the shogunate, then for a wider market of pure exhibition and collecting.¹⁸ The proof also comes from the many illustrated volumes printed with the colour woodblock print technique that in the Meiji era proposed decorative motifs to the artisans to be applied not only on kimonos, combs, fans, ceramics, but also on the *tsuba* themselves.¹⁹

References

- 1 University of Milan, Department of Cultural Heritage and Environment.
- 2 About techniques and materials used on *tsuba* see: S. HARA, *Die Meister der Japanischen Schwertzierathen: Überblick ihrer Geschichte, Verzeichniss der Meister mit Daten über ihr Leben und mit ihren Namen in der Urschrift*, Grafe und Sillem, Hamburg 1902; E. I. SAVAGE, C. S. SMITH, *The Techniques of the Japanese Tsuba-Maker*, in «Ars Orientalis», XI, 1979, pp. 291-328.
- 3 The samurai status was shown by his equipment, which nobody else could wear. It counted a set of *katana* or *tachi* 太刀, long sword, and a *wakizashi* 脇差 or *tanto* 短刀, small sword, together called *daishō* 大小. See: *Arms and Armor*, captions edited by A. M. Watsky, Y. Hiroi, N. Suzuki, Y. Shimizu, in *Japan. The shaping of daimyō culture 1185-1868*, ed. by Y. Shimizu, National Gallery of Art, Braziller, Washington 1989, pp. 229-283.
- 4 M. TANOBÉ, *The Beauty of the Japanese Sword. History and Traditional Technology*, Nippon Bijutsu Tōken Hozon Kyōkai. Online publication: <http://www.shibuiswords.com/tanobearticle.htm> (last access 30 November 2020).
- 5 Exhibition curated by Francesco Parisi, organized by Silvana Editoriale, *Giapponismo. Venti d'Oriente nell'arte europea 1860-1915*, Rovigo, Palazzo Roverella, 28 September 2019 – 26 January 2020.
- 6 R. MENEGAZZO, *Il Giappone che ha ispirato l'Europa: produzione e circolazione dell'arte in Epoca Meiji*, in *Giapponismo. Venti d'Oriente nell'arte europea 1860-1915*, ed. by Francesco Parisi (Rovigo, 28 September 2019 – 26 January 2020), Silvana Editoriale, Milano 2019, pp. 35-45.
- 7 R. FRANCI, in *Giapponismo. Venti d'Oriente nell'arte europea 1860-1915 ...*, nos. 219-231, pp. 335-336.
- 8 M. SAKAI in *Giappone. Potere e splendore 1568/1868*, ed. by G. C. Calza with R. Menegazzo, catalogue of the exhibition (Milano, Palazzo Reale, 7 December 2009 – 9 March 2010), Federico Motta Editore, Milano 2009, III.21, p. 357.
- 9 In the historical archive of the Direzione regionale Musei Veneto (Historic Archive of Direzione regionale Musei Veneto, Museo d'Arte Orientale, F. Lanza, entry 05/00069916), there is mention of the name “Hakuo at the age of 77”,

which seems not to be visible on the guard.

10 These verses, added by Motoori Norinaga (1730-1801), doctor and scholar of Japanese studies (*kokugaku* 国学), to his portrait of 1790 part of the collection of the Norinaga Kinenkan 宣長記念館, represent his most famous *waka* 和歌 and transmit that idealized national image of Japan as the Country of Yamato 大和の国, which is associated to the cherry blossom and to the rising sun, a thought which found its fulfillment at the end of the Nineteenth century with the Meiji Restoration 明治維新 (1868), becoming the base of ideology that brought Japan to the Second World War. In fact, these verses are also associated with *kamikaze* 神風, because the keywords present in the poem were chosen to indicate the names of the first four kamikaze units. See: *Early Modern Japanese Literature: An Anthology, 1600-1900*, ed. by H. Shirane, Columbia University Press, New York 2002, p. 613.

11 An example is the “Old Plum” by Kanō Sansetsu 狩野山雪 (1590-1651) executed on four sliding doors in 1646 for the temple Tenkyūin 天球院 and now part of the collections of the Metropolitan Museum of New York (accession number 1975.268.48a-d). Catalogue online: <https://www.metmuseum.org/art/collection/search/44858>.

12 An example is the *Red and White Plum Trees* by Ogata Kōrin 尾形光琳 (1658-1716) painted at the beginning of the Eighteenth century on a two-panel folding screen preserved at the MOA Museum of Art in Atami, ranked as a National Treasure (*Kokuhō* 国宝). Catalogue online: <http://www.moaart.or.jp/en/?collections=053>.

13 An example is the hanging scroll painted by Maruyama Ōkyo in 1781 *Peacock and plum tree* part of the collection of Nishiaridaishi 西新井大師 temple and registered as “important art object” (*jūyōbijutsuhin* 重要美術品). Visible online: <https://www.nishiaridaishi.or.jp/info/treasure10.html>

14 In Historic Archive of the Direzione regionale Musei Veneto, Museo d'Arte Orientale, F. LANZA, entry 05/00029186, 1994 (revised in 2006). In the entry the name Sadamoto is indicated, together with his art name Teikan, and the date 1868.

15 The Boshin civil war (Boshin *sensō* 戊辰戦争), also called Japanese revolution, saw lined up, on one side, the lords who supported Tokugawa, on the other side, those lords who searched for the restoration of the Imperial power with the favor of Western Countries. On 12 October 1868 Emperor Meiji was enthroned, while officially Meiji Era started from 23 October, even if it was decided to make the era begin from 25 January, before the Boshin war exploded.

16 My sincere thanks to the Director of the Kyūshū Kokuritsu Hakubutsukan 九州国立博物館, Hiroyuki Shimatani 島谷弘幸 and to Yuki Seli 世利ゆき for their help in the transcription of the characters.

17 The term *fuchigashira* 縁頭 means the set of sword-hilt collar (*fuchi* 縁), between the *tsuba* and the base of the grip of the sword hilt, and the pommel (*kashira* 頭), cap at the end of the sword hilt; usually they are crafted with motifs and techniques that make these parts a unique and homogeneous set with the sword at the point they become real miniaturized artworks. See: M. SAKAI, in *Giappone. Potere e splendore...*, III.21, p. 357.

18 O. CHECKLAND, *Japan and Britain after 1859. Creating cultural bridges*, Routledge Curzon, New York and London 2003, pp. 128, 193.

19 S. TSUDA 青楓津田, *Kamonfu* 華紋譜, Unsōdō 芸艸堂, Kyōto 1900, 2 vols; R. MENEGAZZO, in *Giapponismo. Venti d'Oriente nell'arte europea ...*, no. 218, p. 335. Katsushika Hokusai 葛飾北齋, *Banshoku zukō* 萬職圖考, (1st edition 1835) Ōkura Magobei 大倉孫兵衛, Tokyo 1891, 5 vols. See: R. MENEGAZZO, E. LANZA, *Volumi d'arte: motivi di ispirazione, in Pagine giapponesi. Immagini e racconti dal Giappone attraverso i libri della Biblioteca Braidense*, ed. by R. Menegazzo, A. Coletto, M. Zetti, catalogue of the exhibition (Milan, Biblioteca Nazionale Braidense, 21 March-27 April 2019), Scalpendi, Milano 2019, no. 89, pp. 54, 132.

Cold Plasma for Japanese Handguards

Sergio Calò,¹ Alessandro Patelli,² Paolo Scopece,³ Silvia Ulizio⁴

Materials and Methods: Atmospheric Plasma Jet Device

An innovative and patented atmospheric pressure plasma jet device has been used for the present work.⁵ It is a dual frequency, dielectric barrier discharge (DBD) plasma jet device working with Argon noble gas, that has been fully described elsewhere.⁶

The choice to work with argon noble gas, which avoids energy thermalization by molecular roto-vibrational motion and by dissociation/recombination reactions, allows keeping the temperatures of plasma as low as possible. The use of helium was not considered due to its cost. The DBD configuration with electrodes hidden from plasma ensures clean processes with no undesired deposits since they can not be eroded. The electrodes are positioned externally and coaxially to an alumina tube where argon is fluxed and plasma is ignited. Two other ducts are present: an inner duct for reactive gas introduction and an outer duct for atmosphere control at the exit of the plasma nozzle, where air or nitrogen are generally used. The main feature that characterizes the device is the use of a double couple of electrodes: a first upstream couple powered with an high voltage (HV) supply in the kilohertz regime (~ 17kHz) and a downstream couple in radio frequency (RF) at about 27MHz. The RF regime with its fast oscillations avoids the formation of high current carrying streamers and enhances the generation of plasma in the volume and not on the surfaces leading to a more glow regime. The RF choice therefore goes further in the direction of reducing the thermal load on the treated surface without losing plasma density. The general drawback of this design is its ignition and stability in atmospheres when reactive species are added to the plasma. The upstream couple of electrodes solves this problem assuring ignition and stability also when high voltages are needed, without the need to increase the RF power.

[A.P., P.S.]

The State of Preservation

The four metal handguards (*tsuba* 鐔) of the Museum of Oriental Art (inventory numbers 1770/1885; 1939/2158; 1745/1838; 1875/2045) are made of