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COPPER AS CANVAS
Two Centuries of Masterpiece Paintings on Copper, 1575-1775

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COPPER AS CANVAS
Two Centuries of Masterpiece Paintings on Copper, 1575-1775

The Royal Cabinet of Paintings Mauritshuis, June 26-August 22, 1999

FRONT COVER
Ct. 79
Frans van Mieris I
Dutch, 1634-1680
Girl of Poring (Striped, 1661)
5 1/4 x 7 1/8 in. (13.5 x 18.5 cm)
Thy. Paul Getty Museum, Los Angeles

BACK COVER
Ct. 82
Giovanni da Villarosa
Italian, c. 1644-1714
Mary, Virgin of St. Catherine of Alexandria
1668-69
10 7/16 x 8 3/8 in. (26.5 x 21.3 cm)
Cathedral of Puebla

Unless otherwise indicated, all works are on copper, and dimensions are given first in inches, then in centimeters. (Ct.) refers to objects in the exhibition.

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Suppliers of artists' materials are often forgotten when studying art works. However, evidence of their labor and trade materialize from personal marks occasionally found on the reverse of painting supports. Based on a registration and identification of these marks, an extra dimension of the genesis of a painting emerges, placing it not only in time but also in a larger socio/economic context.

THE ANTWERP COPPERSMITHS

In 1602 there were twenty-five master coppersmiths in Antwerp. Together with the more than twenty-one panelmakers registered in 1617, they supplied rigid supports for paintings to the many hundreds of painters enrolled in the St. Luke's guild between 1550 and 1650. Since 1324 any craftsman wishing to exercise his skill in Antwerp had to be a poorter (burger) of the city. All crafts using hammers were organized in the blacksmiths' guild, which since 1503 included the coppersmiths. Only freemasters, who could present a written statement of proper training in the profession, were allowed to practice the copperbeaters' craft. In 1561 the regulations for the copperbeaters, or kettlemakers, were extended with the requirement of a test piece, a milk jar, and a warming pan. These had to be presented to the aldermen after the required two years of education and, after a successful examination, the new masters got the privilege to make, sell, and deliver all sorts of hammered copper wares. However, copper wares from unauthorized coppersmiths were also widely available on the market.

From the Middle Ages until the end of the eighteenth century, specific regulations were applied to the members of the large variety of guilds, which formed the economic bases of the towns. Standards for the quality of products were specified—for example, the composition of alloys of copper, but also specified were the various obligatory contributions to the burial costs of members as well as participation in guild activities such as church ceremonies (Fig. 5.1).
FIG. 5.1 (above and right)
Ambrosius Francken I. Flemish, 1556–1624, The Blacksmith’s Altar: (a) main panel and interior wings of triptych above, (b) exterior wings right, 1588.
Oil on panels, main panel 98 3/8 x 74 (250.0 x 188.0), wings 102 3/8 x 35 (260.0 x 89.0).
Koninklijk Museum voor Schone Kunsten Antwerpen, photograph IRPA-KIK Brussels.
members met regularly in the blacksmiths' guildhouse, Den Beer, on the Grote Markt. The guildhouse was rebuilt in the new Renaissance style in 1566–67 and was decorated with a pointed front and back gable in stone. The craftsmen met on the first floor, where the windows were decorated with the shields of the city of Antwerp and that of the Margraviate. In front of the entrance door there was an iron rail decorated with roses and shields. The coppersmiths, forming an important division within the blacksmiths' guild, surely could associate themselves with the distinguished look of their common guildhouse, especially in a period with a large demand for copper plates for magnificent engraved book illustrations, printed in Antwerp and second to none in Europe, and when painting on copper simultaneously was gaining in popularity.

INVENTORIES AS A SOURCE

In inventories, notarial documents, and correspondence from the early seventeenth century, sporadic information on paintings on copper can be found. It appears that even in large art collections few paintings on copper are mentioned. Illustrative of this is the 1611 inventory of the Italian merchant Giacomo Ghisberti, among whose forty paintings on canvas or panel are mentioned "Due pitture de Paesagij su rame con sue cornise" (two framed landscape paintings on copper) hanging in the Camera grande toward the garden. A smaller picture on copper hung in the front room. Similarly, Filip I van Valckenisse's inventory from 1614, listing hundreds of paintings, sculptures, and other art objects, makes reference to only eighteen paintings on copper. Among those are "Two [small] paintings on plates after Brueghel, in ebony frames," and Flowerpiece, on a plate by Jacques de Gheyn II (Flemish, 1565–1629).

In Steven Wils' inventory, made in July 1628, we discover several paintings op paneel (on panel), op doek (on canvas), op papier (on paper), but only one op een copere plaetken (on a copper plate). Flight into Egypt, of a total of 104 paintings. The existence of relatively few paintings on copper also seems confirmed by the collection of Abraham Matthys, an Antwerp painter, who in 1649 had 8 paintings on copper of 342 registered paintings.

However, a few exceptions to the infrequency of paintings on copper are found, such as in Susanna Willemsen's inventory of 1657. Here Simon de Vos (Flemish, 1603–1676) was represented with no fewer than thirteen (!) paintings on copper: Frans Francken II (Flemish, 1581–1642) with four; one from Peter van Avont (Flemish, 1599–1652), (Maarten?) Pepyn (Flemish, 1575–1642/43), Asphoven (?), Paul Bril (Cat. 6), van Namen (?), Andries van Aertvelt (Flemish, 1590–1652), Hendrick van Balen (Cat. 8), and finally one after Adriaen Brouwer (Dutch, 1605/6–1638). As we see, in Susanna Willemsen's inventory, artists' names are associated with the entries, something that unfortunately is often not the case, most notably in the following laconic entry: "Twenty-eight paintings on copper plates without frames, and without the widowed knowing if they belong to the house of mourning or not."

After examining hundreds of Antwerp inventories we can conclude that only a few paintings on copper are mentioned in the texts. However, the descriptions in the inventories of paintings are often superficial and may very well account for errors as to the material of the support of the paintings. Often copper plates were mounted with an oak panel as a backing board making misidentification highly possible. Inventories should therefore be read with caution and compared with other sources. We may therefore very well assume that paintings on copper were frequently made, although not to the same extent as those on panel or canvas.

Additional information on paintings on copper is found in art dealers' correspondence. The export of Antwerp paintings to Spain was in large part in the hands of the art dealer Crisostomo van Immerseel. He was residing in "the New Rome," Seville, the principal port of Spain for trade with the Americas. Also, the art dealer Forchoudt exported large numbers of
The Coppersmith—Art Dealer—Painter Relationship

An important result of scrutinizing archival material is that it appears that painters often did not acquire their copper plates themselves. The plates were delivered via the art dealers or patrons. This traffic becomes evident from a contract between van Immerseel and the painter Frans Wouters (Flemish, 1612–1659). The latter received a salary of four Flemish pounds as well as paintings, frames, and elaborate decorated cabinets (Fig. 5.2). This can be observed from the extensive correspondence between the dealers on the Iberian Peninsula and Antwerp dealers, contractors, and artists. Among several crates, which in 1628 were shipped from Antwerp, via Calais, to Seville, was one containing no fewer than thirty-three paintings. Among them were four copper plates showing *Four Senses* by Cornelis de Vos (Flemish, c. 1584–1651), and another twelve, of the "devotion sizes," in ebony frames, painted by PeeterLisaert. In a following shipment from January 1629, we find an additional fourteen paintings on copper intended for a decorated cabinet, as well as many other paintings and several empty ebony frames. It is generally believed that paintings on copper were primarily made for export, as they were easy to pack and were less prone to damage by humidity or during traveling by wagon over long distances.
as five copper plates, which he was to return painted by his own hand within five months from signing the agreement. The dealer would then sell the paintings, making up for his payment to the coppersmith and calculating his own profit.

Similarly, van Immerseel in 1631 paid for the material for one of the specialists in paintings on copper, Frans Francken II, whom he supplied with four copper plates and four ebony frames. The price was just over nine and a half guilders total. A few months later the final payment for Francken’s four paintings was made to the artist: Francken received nine guilders for each painting. When a painter such as Francken, who painted approximately one-quarter of his oeuvre on copper, received his copper plates via a dealer, it seems reasonable to conclude that this practice would have been widely accepted. It was thus not only a procedure between a dealer and the many lower-rank artists who painted on fixed contract. One such artist was Adriaen van Stalbemt (Flemish, 1580–1662), the most frequently recurring painter in van Immerseel’s accounts. To facilitate the vast production of small-scale copper paintings, plates were ordered by Philippe Malery and sent to van Stalbemt’s atelier. Malery was not a coppersmith but an engraver, who earlier had delivered four thousand devotional prints to the art merchant. In another instance van Immerseel made payment directly to Antwerp platemaker David Michielsens. For five guilders van Immerseel acquired four plates on which Jan Brueghel II was to paint scenes from the Book of Genesis. A month later Brueghel received another five plates, to be used for the Five Senses, at a total cost of eight guilders. The ebony frames cost eight shillings apiece. We see that the price for Brueghel’s plates was set at just over one guilder each.

Accounts from the middle of the seventeenth century confirm that art dealers bought plates to be delivered to painters. In 1650 the dealer Forchoudt acquired a total of 121 copper plates for 36 guilders. The payment is signed by the wife of platemaker Norbertus van den Eynden. Unfortunately we do not find any information on who was to paint the many copper plates. Probably the plates would be distributed to various studios, like seven copper plates decorating an Antwerp cabinet from about 1615. All seven plates show on the back the same monogram of the still unidentified platemaker GK. The paintings on the front, however, were executed by various painters, among whom were Louis de Caulery (Flemish, active c.1605–1639), Frans Francken II, and some by Francken’s brothers. In one instance we have evidence that an artist gave the dealer the option of having a painting executed on either copper or canvas. In 1611 the Augsburg patrician and art dealer Philipp Hainhofer wrote about a commission to Paul Bril concerning a painting for Duke Phillip II von Pommern-Stettin. In a letter Bril suggested to paint a landscape on copper for 100 golden crowns, or the same on an equal-size canvas for only 80 golden crowns. The dealer chose both options for 150 crowns. We can conclude that dealers habitually supplied artists with copper plates. These were supposedly delivered directly from the coppersmiths, in one case from an engraver, but without involving financial transactions between painter and coppersmith. In addition, although artists’ accounts of debts, which describe unpaid materials received from their suppliers, often mention pigments, canvases, and panels, a debt to a coppersmith is not mentioned in any case.

PRICES ON COPPER PLATES

When the inventories indicate prices on painted copper plates, they vary not only according to size but also in relation to artist, if it was a principal work or a copy, or whether it was framed or not. Often is it difficult to read out of the sources precisely what kind of work is being described, making an attempt to estimate price levels difficult.
Many paintings are recorded in Nicolas Cornelis Cheeus's possession in 1622, but for once also the estimated prices. These works were made by the three painters Peter Goetkindt (Flemish, d. 1644), Hendrick van Balen, and Adriaen van Stalbemt. Among the paintings is \textit{St. John Preaching} on copper estimated at fifteen guilders, which, however, fetched only two and a half guilders. \textit{Susanna} on copper, in an ebony frame, was set to thirty-six guilders but fetched only six. The painters of the individual works are not identified; therefore we cannot judge the quality of the works. Nevertheless, we can conclude that the prices were similar to the many paintings executed on either panel or canvas. It appears that the average price of paintings in the estate lay between five and fifteen guilders, as with Jan Brueghel I's \textit{Landscape with Ponte Molle}, which fetched eleven guilders.

In another case Peeter van den Heyden in 1628 delivered fourteen small paintings on copper framed in modest ebony frames, for fifty-four guilders. Thus these paintings would cost roughly four guilders apiece, including the frames. Double that price was paid to David Teniers II (Cat. 58), who made a contract with the art dealer van Immerseel, whom he met in Dover, England, between 1635 and 1636. They agreed that Teniers would paint twelve \textit{copere grieken} (paintings on copper of a specific size), with religious scenes from the Old and New Testaments. For this he was paid one hundred guilders, making a price of approximately eight guilders apiece. Furthermore, he was to paint two copies after Brouwer, for ten guilders total. This illustrates that the copies were only evaluated about half the price of Teniers' own history pieces, a price relationship seen in many other seventeenth-century accounts. As an exception, a remarkably high price is found in a bill from Jan Brueghel II to van Immerseel. The latter paid for three copper plates directly to the \textit{plaetslager} (plate beater) at ten guilders apiece. These paintings probably would be on large copper sheets, some of which have been found to measure approximately 40–9/16 x 37 (102 x 94). It appears that the ebony frame for each plate is equal in price to the painting, and that the artist required ninety-five guilders for each painted plate. We must imagine these paintings also to be of very high artistic quality. High prices for finished paintings on copper are occasionally mentioned, such as a painted church interior in \textit{Jesuit Church} by Frans Francken II and Peeter Neefs I (Flemish, c. 1578–1656/61) in collaboration, which was set at fifty guilders, including the frame.

From these prices on finished paintings we unfortunately do not learn anything about the actual price of the support. Something can be deduced, however, from the following. Very modest prices of paintings on copper are frequent, with plates costing only one guilder and four stuivers apiece, as well as thirteen copper and lead plates priced at ten guilders total. The price of the support can thus hardly have had any influence on the price of the painting, something also observed with a painting by Hans Siberechts (Flemish, 1627–1703), \textit{Birds and Flowers}, painted on a gilded ground, in itself a very rare phenomenon. This painting fetched only six guilders, a price still very low compared to the precious metal used for the support. It has been generally assumed that copper used by painters would have been a costly material. This would therefore imply higher prices for these paintings compared to those on panel or canvas. This assumption, however, cannot be substantiated by existing data, including information on the cost of copper found in documents from copper shops. One such document mentions copper wire costing nine to ten stuivers per pound in 1604. At the same time, tin was sold to the tinsmelter Daniël Door for half that price. Further, we learn that a platebeater and merchant in 1631–32 made five copper plates for a cabinet, each weighing just over six pounds for thirty-three stuivers per pound. Thus the price of copper plate was related to its weight rather than to its size.

Prices of plates used by engravers, the plates usually slightly thicker and thus heavier than those used by most painters, are in some cases known. The platemaker Jan Vinck once deliv-
FIG. 5-3

Inscribed plate showing the individual marks used by the pewterers in Ghent c. 1730.
Pewter, diameter 9-1/8 (23.3).
Bijloke Museum Ghent, photograph by IRPA-KIK Brussels.
MARKS ON COPPER PLATES

In all towns there were two or more controllers or assaymasters. They had on the one hand the duty to control imported copper, and on the other to check the products made within the town. After a plate was accepted, the controllers would place a mark of approval, often the city arms, and next to it the master craftsman placed his own mark. This practice was applied to a large range of crafts, including tapestries, furniture, gold- and silverware, pewter (Fig. 5.3), and panels for painters. On the back of painted copper plates one also occasionally discovers a tiny

tered two plates to be used for engravings, weighing two and a half ponds, for six shillings a pound.\textsuperscript{42} In the Plantin-Moretus Museum archives in Antwerp, a number of receipts signed by the engraver P. van der Borcht in 1597 mention that three pounds of beaten, uncleaned copper cost fifteen stuivers per pound and that cleaned copper was priced at nineteen stuivers per pound. Twenty-eight years earlier, in 1569, uncleaned copper cost eight stuivers per pound.\textsuperscript{43}

We observe not only that the price of copper varied according to whether it was cleaned or not, but also that the price of uncleaned copper increased by 88 percent between 1569 and 1597. This increase, however, follows the general inflation during the second half of the sixteenth century.\textsuperscript{44} Copper prices also varied according to its availability, which could be affected by weather conditions during transport as well as the danger of armed conflict on the route from the mine via the smelters to the makers of the copper plates.

Applying the evidence of prices from this documentation to existing paintings allows us to make some tentative deductions. A small painting by Jan Brueghel I and Johann Rottenhammer (Cat. 8) Rest on the Flight to Egypt,\textsuperscript{45} 8-11/16 x 11-7/16 (22.0 x 29.0), weighs 520.3 g. As the weight determined the price of a copper sheet, we can make a rough estimate indicating that the price of this plate would have been just less than one guilder. A slightly larger plate, 10-5/16 x 13-15/16 (26.2 x 35.4), also painted by Brueghel in collaboration with Rottenhammer, weighs 702.8 g. and therefore would have cost the painters approximately one and a fifth guilders to acquire. To differentiate the prices of copper plates, a few examples of oak panel prices from the same period are useful in comparison. For a panel and its frames (inner and outer), a panelmaker in 1623 charged one guilder and fourteen stuivers, with another ten stuivers per four panels.\textsuperscript{46} A frame for a painting of approximately 21-3/4 x 28-3/4 (55.0 x 73.0) would cost ten stuivers (half a guilder) in 1616.\textsuperscript{47}

Pigment prices also depended on availability of raw materials, and in 1607 the commonly used blue pigment smalt cost two guilders per pound, whereas the more precious natural ultramarine blue was four times as expensive.\textsuperscript{48} The price of this latter imported pigment could fluctuate wildly, and in 1629 it fetched the exorbitant price of forty-six guilders for only one ounce.\textsuperscript{49} The dry pigments had to be ground with oil to produce paint. This was done on a grinding stone, and the sale of the effects once belonging to Frans Snijders (Flemish, 1579-1657) mentions a grinding stone of porphyry that in 1615 was acquired by another artist for seventeen guilders.\textsuperscript{50} The same price was paid in 1627 for a similar grinding stone, which had belonged to Jan Brueghel I.\textsuperscript{51}

The evidence strongly suggests that the price of thin copper sheets for paintings probably did not exceed the price of, for instance, an oak panel support. Consequently it becomes clear that other factors determined the selection of a copper support. Quite simply, the durability of the copper plate and its smooth surface made painting on copper attractive for delicate renderings of landscapes, history paintings, and flowerpieces.

MARKS ON COPPER PLATES

In all towns there were two or more controllers or assaymasters. They had on the one hand the duty to control imported copper, and on the other to check the products made within the town. After a plate was accepted, the controllers would place a mark of approval, often the city arms, and next to it the master craftsman placed his own mark. This practice was applied to a large range of crafts, including tapestries, furniture, gold- and silverware, pewter (Fig. 5.3), and panels for painters. On the back of painted copper plates one also occasionally discovers a tiny
monogram impressed into the metal. These monograms may be by the platemaker himself or by the keurmeester (assaymaster) of the guild.23

An evaluation of the extent to which guild regulations during the first quarter of the sixteenth century should be taken literally raises many questions. Lax enforcement of the regulations and ineffective control by the guild and their keurmeesters make it difficult to comprehend the various aspects of this practice.24 For instance, an overwhelming majority of copper plates is not marked in any way.25 A compilation of data on the (relatively speaking) few marked plates may provide some insight into early seventeenth-century coppersmiths' working practices.

The works of the copperbeaters in Antwerp were in general not marked. However, shortly after 1584, when the coppersmiths protested against a 5 percent tax put on all goods to be exported to their northern markets in Holland and Zeeland, a compromise was found. The tax would be abolished when the coppersmiths would agree to mark all export goods. The mark probably was the Antwerp hand, as used by many other guilds.26 On a painting by Hendrick van Balen, for example, this Antwerp mark has been recorded twice stamped into the reverse of the copper plate.27 Moreover, it is significant that the earliest punchmark by the most frequently recorded seventeenth-century producer of copper plates for painters, Peeter Stas (c. 1565—after 1616),28 dates from 1587, three years after the conflict and the application of the new guild regulations.

Another important reason for marking goods was a reaction to the numerous nonorganized coppersmiths who produced and sold copperware not only outside Antwerp but also within the city walls. This illegal competition in 1602 led to a new regulation, which, however, only stressed the already existing ordinances. The fine for breaking the laws of unfair competition in 1527 was confirmed as being six Carolus guilders to the Holy Roman Emperor and King of Spain, Carel V (1500–1558), and one guilder to the inspector who caught the offender.29 The problems were so bad for the freemasters that they claimed their craft was being totally undermined by the steady flow of copperware from the nonorganized coppersmiths.

For quality reasons the coppersmiths in 1602 asked the coppersmelters to mark their products with a mark or letters from their name; this was to control those who added too much lead to their copper alloys. No ordinances on the marking of the coppersmelters' products have been found, but the marks of the smelters Hendrik de Ridder (active 1617–37) and Guiliam Pluymakers (active 1620–39) have been found in several instances in combination with the Antwerp hand (Fig. 5.4).60 Simultaneously, Peeter Stas frequently began marking his plates from 1602 onward (Appendix I).

Identifying and subsequently recording personal marks by coppersmiths provide important evidence of the origin and dating of the objects on which they are found. Watermarks in paper have already proved their validity for this kind of research, and the registering of panelmakers' marks are currently routinely recorded.61 Unfortunately, personal marks on Antwerp copper plates are not found as frequently as panelmakers' marks. Since the majority of paintings on copper are on unmarked plates, we have no indication of whom the supplier would have been. Jan Brueghel I, in fact, painted roughly 165 of his approximately 400 paintings on copper, but so far only 12 of his plates have been found to have a coppersmith's mark on the reverse. Frans Francken II evidently got plates by numerous coppersmiths, as his paintings are executed on plates by Stas (6), GK (4), and KW (5), as well as on the abundant number of plates with no imprints. Only five coppersmiths' marks are with certainty associated with the Antwerp production of plates used for paintings: SDM, KW, GK (or CK), Jan Michielsens (IM), and Peeter Stas (PS), those by Stas being the most numerous.
FIG. 5.4
Marks of the copper smelters (a) Hendrik de Ridder, and (b) Guilliam Pluymakers, drawings by the author.

FIG. 5.5
Rubbing of Peter Stas's monogram on the back of a plate for a painting by Frans Francken II, Flemish, 1581–1642. The Defeat of Sarnereds, c. 1606, oil on copper, 16-1/4 x 23-1/2 (41.4 x 59.7), Sammlungen des Fürsten von Liechtenstein, Schloss Vaduz. Courtesy of Daniel Farian and Isabel Horovitz.

FIG. 5.6
(a) Rubbing and (b) drawing of KW's monogram on the back of a plate for a painting attributed to circle of Otto van Veen, Flemish, 1556–1624, oil on copper, 26-9/16 x 20-1/2 (67.5 x 52.0), rubbing courtesy of Sarah Lindsey, Christie's, New York, drawing by the author.

FIG. 5.7
(a) Rubbing of GK (CK)’s mark on the back of a plate for a painting attributed to circle of H. de Clerck, Flemish, c. 1570–1630, Diana and Her Nymphs Surprised by a Satyr, c. 1620, oil on copper, 19-7/8 x 25-7/16 (50.4 x 64.6), courtesy of P. Raison, Christie's Paris, 1994. (b) Photo of GK’s mark on the back of a plate for a painting attributed to Claude Vignon, French, 1593–1670, Saint Paul, c. 1640, oil on copper, 12 x 16 (30.4 x 40.6), Milwaukee Art Museum.

FIG. 5.8
(a) Rubbing and (b) photograph of a mark by Jan Michielsens on the back of an oval copper plate for a painting by an anonymous painter, Entombment, 1660–1690, oil on copper, oval 8-1/2 x 6-3/8 (21.5 x 16.2), Private Collection, England, rubbing courtesy of Isabel Horovitz.
FIG. 5.9
Goldsmith's touchstone engraved with his initials and merchant's mark, Flemish or Dutch, sixteenth century, British Museum, London. Copyright of the Trustees of the British Museum.

FIG. 5.10
(A) Rubbing and (A) drawing of Peeter Stas's mark on the back of a plate for a painting by an anonymous Antwerp artist, *Mountainous Landscape*, signed P. Bril, 1603.
OIL ON COPPER, 11-5/16 x 10-11/16 (28.8 x 27.2),
rubbing courtesy of Sarah Lidsey, Christie's, New York, 1994.
drawing by the author.

FIG. 5.11
Peeter Stas's mark with date on the back of a plate for a painting by Isabella Francken, *Christ on the Road to Calvary*, c. 1604.
OIL ON COPPER, 19-13/16 x 26-1/8 (50.3 x 66.3),
courtesy of F. Wolterbeek, Christie's Amsterdam.

FIG. 5.12
Rubbing of Peeter Stas's mark with date on the back of plate for painting by Denys van Alsloot, Flemish, c. 1573-1625/26, *Wooded Landscape with Elegant Couple*, c. 1606.
OIL ON COPPER, 15 x 21-1/4 (38.0 x 54.0),
courtesy of Gallerie St. Honoré, Paris.
FIG. 5.13
Peeter Stas’s mark with date on the back of an engraving plate for an illustration to Vitae d. Thomas Aquinatis, by Cornelis Bol I (Cat. 72). Flemish, c. 1576–1621, after a drawing by Otto van Veen, 1610.
8-1/4 x 5-7/8 (21.0 x 15.0).
Private collection. Detroit.

FIG. 5.14
Peeter Stas’s mark with date on the back of plate for a painting by an anonymous artist (style of Louis De Caullery), The Shearing of the Sheep, c. 1606.
Oil on copper, 8-3/4 x 12-1/4 (22.3 x 31.0).
Musée des Beaux-Arts, Orléans.

FIG. 5.15
Peeter Stas’s mark with date centered on the back of the plate by scored lines for painting by Ambrosius Bosschaert the Elder. Flemish, 1573–1621.
Chinese Vase with Flowers, 1607.
Oil on copper, 27 x 29 (68.6 x 50.8).
Fundación Colección Thyssen-Bornemisza, Madrid.
FIG. 5.16
Rubbing of Peeter Stas's mark with date on the back of plate for painting by a follower of Otto van Veen, Flemish, 1556-1624. Portrait of a Man, c. 1608.
Oil on copper, 18 x 13-3/4 (45.8 x 34.8).
courtesy Sarah Lidsey, Christie's, New York.

FIG. 5.17
Rubbing of Peeter Stas's mark with date on back of plate for painting by Osias Beert the Elder, Flemish, c. 1560-1624. Still Life of Oysters, Sweetmeats, and Dried Fruit, c. 1609.
Oil on copper, 20 x 17-3/4 (51.0 x 45.0).
courtesy Richard Charlton-Jones, Sotheby’s London.

FIG. 5.18
Rubbing of Peeter Stas’s mark with date on back of plate for painting by Jan Brueghel the Elder, Flemish, 1568-1625. Broad Landscape with Travelers, 1610.
Oil on copper, 8-11/16 x 13-1/8 (22.2 x 33.3).
private collection, the Netherlands, courtesy of Newhouse Galleries, New York.

FIG. 5.19
Peeter Stas’s mark with the Antwerp Hand on the back of a plate for painting by Jan Brueghel the Elder, Flemish, 1568-1625. Extensive Landscape with Travelers on a Country Road, c. 1607-9.
Oil on copper, 13-1/2 x 18-1/4 (33.6 x 46.4).
The Saint Louis Art Museum, courtesy of Paul F. Haen.
Eighty plates marked by Peeter Stas are currently known (Fig. 5.5). Among the many significant Antwerp artists who got plates from Peeter Stas are painters such as Otto van Veen (*1556; active c. 1580–1629), Jan Brueghel I (*1568; active c. 1589–1625), Frans Francken II (*1581; active 1605–42), Abraham Govaerts (*1589; active c. 1610–26), Ambrosius Bosschaert I (*1573; active 1588?–1621). All these painters appear to have used plates from a variety of coppersmiths’, deducible from the presence of marks by Stas, GK, and KW on the reverse of their plates.

Examination of the eighty plates recorded thus far with Stas’s monogram, of which forty are dated, allows us to deduce that they were made in a number of standard sizes. Stas’s largest plate measures $34\frac{3}{4} \times 28\frac{3}{4} \text{(87.2} \times 73.3); his smallest is only $3\frac{3}{4} \times 3\frac{3}{4} \text{(9.7} \times 9.7). The reason for a standard size of paintings is well documented for panels and canvases. A standardization of copper plates, identified by specific size names (grieck-; devotie-; passie-sizes), apparently was introduced for similar reasons as with the other supports: easy to mass-produce and therefore to place in standard frames. Such standard-size paintings were popular for both home and foreign markets. In a diagram (Fig. 5.20, Appendix II) showing the sizes of the marked Antwerp plates we have indications of clusters of specific sizes within Stas’s production. Of the vertically orientated plates there are two specific sizes measuring $8\frac{3}{4} \times 7 \text{(22.0} \times 18.0)$ and $17\frac{3}{4} \times 12\frac{3}{4} \text{(45.0} \times 32.0)$, and two horizontally orientated sizes measuring $8\frac{3}{4} \times 11 \text{(22.0} \times 28.0)$ and $19\frac{3}{4} \times 25\frac{3}{4} \text{(50.0} \times 65.0)$. We also clearly observe a correlation between height and width, a ratio of 1:1.3, that applies to all our recorded marked plates.

As Stas’s personal mark differs over time, so we are able to construct a chronology of his platemaking activities. The variations are often minor, but sometimes more distinct (see Appendix I). It is interesting to note that what appears to be the assaymaster’s mark, a monogram with the letters W/GB, occasionally has been found on Stas’s plates from 1587 until 1608. In the latter year Stas’s mark had changed and now included the Antwerp hand within his punch. This would make a regular check by the assaymasters unnecessary, as the responsibility shifted from the governing bodies to the producers themselves, something that had already taken place in other crafts during the sixteenth century.

MARKS BY SDM, KW, GK OR CK, AND JAN MICHIELSENS

SDM

Only one copper plate has been recorded with the monogram SDM. It was on Extensive Imaginary Landscape by Otto van Veen, dated 1586 on the painting itself. This copper plate, dated one year earlier than Stas’s earliest plate, is the oldest marked plate from Antwerp hitherto registered.

KW

A mark of this unidentified platemaker using a monogram with the letters KW encircled by a ring of pearls has been recorded twelve times (Fig. 5.6). Within the ring of pearls, above the monogram, is a little rosette consisting of seven pearls. The marks do not seem to change format or design over the years. It is noticeable that KW’s mark has never been recorded in combination with an assaymaster’s mark, nor the Antwerp hand or city arms.
Archival information on guild regulations gives us an image of seventeenth-century Antwerp, and in this context in particular, the coppersmiths' working conditions. A picture of struggle for professional rights emerges, as well as the care with which the copper plate fabrication was carried out. The commonly expressed assumption that copper as a support for painters

**GK OR CK**

Of plates with GK's monogram, also circular and framed by pearls, twenty-five have been recorded, but none of them in conjunction with the Antwerp hand or assymarks (Fig. 5.7). Three of GK's plates were painted by Hendrick van Steenwijk I (Flemish, 1550-1603) and, as the artist died in 1603, we can deduce that GK began marking before this date. We can not be sure if GK, like Stas, began to mark his plates more frequently in 1602, but it remains a possibility. The mark of GK also was recorded on two paintings of a series of four Scenes from the Life of Christ attributed to Frans Francken II. Would this indicate that the two other plates were by another platemaker? Or did GK only now and again mark his plates, as we must assume was usually the case? However, in another case he marked all seven plates, painted by different painters, and which once ornamented an Antwerp cabinet. This would presumably be a typical case where a dealer distributed acquired plates from GK to a number of painters, from whom he ordered seven scenes from the life of Christ for this specific contract. An identification of GK is for the present not possible; however a certain Gerard van Kessel (1588-1640) from Antwerp practiced as a tinsmelter in Rotterdam. Might he have been working as a coppersmith in Antwerp before he moved to the northern provinces?

**IM—JAN MICHIELSENS**

On the back of an oval copper plate showing an Entombment, a circular mark encircled by pearls displays a monogram IM crowned by the number 4, two St. Andreas' crosses below (Fig. 5.8). This mark was issued by the Antwerp copperbeater Jan Michielsens. He is mentioned the first time in 1660 and died in 1691. A second painting, Annunciation, also is issued with Michielsens' mark. With Michielsens' mark we may have an indication of continued marking of copper plates into the second half of the seventeenth century. Almost identical to the above-mentioned monogram is a goldsmith's touchstone in the British Museum. The monogram reads ID also with 4 above, and two St. Andreas' crosses below, and is thought to be of Flemish or Dutch origin (Fig. 5.9). There actually was a coppersmith called Jan van (den) Dijck in Antwerp between 1617 and 1618, whose initials would match this mark, but we have no proof of any correlation between the mark and van (den) Dijck.

**CONCLUSION**

Archival information on guild regulations gives us an image of seventeenth-century Antwerp, and in this context in particular, the coppersmiths' working conditions. A picture of struggle for professional rights emerges, as well as the care with which the copper plate fabrication was carried out. The commonly expressed assumption that copper as a support for painters
would imply high costs for the finished product cannot be confirmed. On the contrary, artists' or patrons' choices were dictated by other attractions, namely the smooth surface ensuring a highly finished appearance of the executed painting. Another factor of importance, especially for the export market, was the durability of copper. Thus economic considerations coincide perfectly with the refined way paintings on copper were executed. Finally, the Antwerp practice of marking copper plates with personal marks further adds to our possibility of placing the paintings within a context of the craftsmanship of the past. We can therefore add often overlooked background information to the art works themselves, as well as an approximate dating. The research has just begun, and the future registration of marks may well increase our knowledge.

APPENDIX I

A Chronology of Peeter Stas's Marks on Copper Plates

1587
The earliest information we have on a marked copper plate by Stas dates from 1587, Adoration of the Magi, by an unidentified Flemish artist after Hieronymus Bosch's picture in the Museo del Prado in Madrid (inv. 20448). The assaymaster's monogram W/GB also was recorded on this plate.

1602
Pieter Brueghel II (Flemish, 1564/65–1637/38), Massacre of the Innocents, dated 1602, and Adoration of the Magi, attributed to Jan Brueghel I. Whereabouts unknown.

1603
unknown Antwerp artist, Mountainous Landscape, signed P. Bril, and dated 1603, 8 1/8 x 10 11/16 (20.8 x 27.2). The pendant, River Landscape with Travelers, also is signed and dated 1603 (Fig. 5.10). Stas's house-mark, a heart crowned by the number 4. Below is one Antwerp hand placed in a shield.

1604
Isabella Francken, Christ on the Road to Calvary. Signed DEN.ION.FF. FECIT ET INV., 19–13/16 x 26–1/6 (50.3 x 66.3) (Fig. 5.11). Dated by Stas ANNo 1604 between monogram (above) and Antwerp hand (below).

1605
Denis van Alsloot (Flemish, c. 1573–1625/26), Wooded Landscape with Elegant Couple; signed, 15 x 21–1/4 (38.0 x 54.0) (Fig. 5.12). Dated 1605 by Stas between monogram in heart (above) and Antwerp hand (below).

1606
Print plate with illustration of a scene to Vitae d. Thomae Aquinatis by Cornelis Bol I, after Otto van Veen. The series is dated 1610 (Fig. 5.13 and Cat. 72). Dated by Stas between monogram (above) and Antwerp hand (below).

1606
Unknown artist in the style of Louis De Caulery, The Shearing of the Sheep (after a print by Jan Sadeler after Bassano); 8 7/8 x 12–3/16 (22.3 x 31.0) (Fig. 5.14).
Dated by Stas between monogram (above) and Antwerp hand (below). The monogram is new and consists of a circular mark with "old" monogram within incircled with the full name of the coppersmith: PEETER STAS.

Small mark at top before letter S is the Antwerp hand.

1607 Ambrosius Bosschaert I, *Chinese Vase with Flowers*, 27 x 20 (68.6 x 50.8) (Fig. 5.15).

Dated by Stas between Antwerp hand (above) and circular monogram (below).

The monogram is placed on the center of the plate, which has been scored to locate the central point. Note that from now on the Antwerp hand is always placed above the monogram.

1608 Follower of Otto van Veen, *Portrait of a Man*, 18 x 13–11/16 (45.8 x 34.8) (Fig. 5.16).

Dated by Stas between Antwerp hand (above) and circular monogram (below).

1609 Osias Beert I (Cat. 3), *Still Life of Oysters, Sweetmeats, and Dried Fruit*. Signed with monogram lower left: OB F; 20 x 17–11/16 (51.0 x 45.0) (Fig. 5.17 and Cat. 3).

Dated by Stas between Antwerp hand (above) and circular monogram (below).

1610 Jan Brueghel I, *Broad Landscape with Travelers*. Signed and dated 1610: 20–1/2 x 28–3/4 (52.0 x 72.0) (Fig. 5.18 and Cat. 8).

Dated by Stas between the full Antwerp brand (sic!) (above) and the circular monogram (below). The plate is the first to show not one Antwerp hand but the whole Antwerp coat of arms, two hands above a castle. The monogram is new for Stas and measures 1.0 cm. in diameter. In addition, the ciphers in the date have changed and are smaller. Each numeral 1 is only 0.2 cm. just as the 0 was in the past.

Plates without the year punched into the plate can be tentatively dated according to the design of Stas's monogram, and the Antwerp hand, and their relative placement. The present mark (Fig. 5.19) on the back of a painting by Jan Brueghel I, *Extensive Landscape with Travelers on a Country Road*, can, based on Stas's mark, be dated between 1607 and 1609. In those years Stas placed the Antwerp hand above his personal mark.
APPENDIX II

Sizes of Marked Antwerp Copper Plates: Peeter Stas, SDM, KW, GK or CK, and Jan Michielsens

Sizes of Marked Antwerp Copper Plates

![Graph showing the sizes of marked Antwerp copper plates. The graph plots height in cm against width in cm, with markers for GK, IM, KW, P. Stas, and SDM.](image)

FIG. 5.20

Table of Sizes of Marked Antwerp Copper Plates.
ACKNOWLEDGMENTS

The registration of marks on copper plates would not have been possible without the collaboration of a very large number of individuals, museums, and auction houses. We are extremely grateful to them all. For the biographical information on Peeter Stas we are indebted to Jan Van Damme, Antwerp, who generously spent his precious spare time in the Antwerp city archives. We also are indebted to the following people for valuable information: P. Baudouin, Richard Charlton-Jones, A. M. Claessens-Peré, Nicholas Eastaugh, Massimiliano Floridi, Henry Hall, Paul F. Haner, Ursula Harting, René Hoppenbrouwers, André Jordan, Sarah Joyce, Sarah Lidsey, Paul Raison, Johnny Van Haeften, Hanneke Verschuur, Francine Wolterbeek. For inspiration and constructive comments on the text I am especially thankful to Jan Van Damme, Luuk Pijl, Susanne Stangier, and my wife, Aleth Lorne.

NOTES


3 See Ph. Rombouts and Th. Van Lerius, De Liggeren en andere Historische Archiven der Antwerpse Sint-Luciagilde, Antwerp and s'Gravenhage, 1864-76.

4 The blacksmiths' guild was governed by a number of elected aldermen. In about 1600 the constellation of craftsmen included one lockmaker, one blacksmith, one copperbeater; one harnessmaker, sword- or boxmaker; one farrier; and occasionally a scissor-sharpen or knifemaker, occasionally a maker of steelbows, and since the second half of the sixteenth century, also a strap- and trunkmaker.

5 The governing body of the guild were the métiers de pref. In the sixteenth and seventeenth centuries the coppermelters, also included in the blacksmiths' guild, in vain requested an ordinance with an accreditation of their craft, as well as a two- or three-year obligatory training period before allowing the master proof.

6 Some practical restrictions also were specified, which help us picture the hum and noise of city life in the past. It was so stated, for example, that none of the craftsmen within the guild was allowed to do any work between the evening bell and the morning bell. This decree was already included in the Antwerp blacksmiths' guild regulation of 1435 and was duplicated in 1629. Any violation of the decree would cause serious trouble not only with the assaymaster but also with the closest neighbors.

7 The blacksmiths had two craftshouses, since 1518 in De Beer on the Grote Markt 21 and from 1749 in De Oude Bosch.

8 Stroobants, 551.


10 A small copper plate with Adam and Eve, four landscapes; The Adultery of Mars and Venus; Leda, Venus, and Cupid; a battle scene, another Adam and Eve, and a Hermitage by Latarus vander Borcht; David's Song of Praise; an Entombment by Roelken (?); the Last Judgment, by Hendrick van Balen; The History of Jacob, by Willem van Nieuwlandt I (Flemish, 1584-1630). See J. Denacq, De Antwerpse "Konstcomen." Inventarissen van de kunstvoeringen te Antwerpen in de 16de en 17de eeuwen. Brone voor de Geschiedenis van de Vlaamse Kunst, vol. II, 's-Gravenhage, 1932, 14-27; and Duverger, 1984, 299-311.
21 Denucé, 1932, 15; Duverger, 1984, 301.
23 In 1627 the following statement of certification was made by Bernard van Meurs in the name of Crisostomo van Immerseel: "... Ten Philippe Malery de endol [edel] de cinquantay quatro anos, entallador en la mano y declaro ser verdad, que el vendio y entrega a Crisotomo van Immerseel quatro mill emprentas en papel de devoción y que ellas son fabricadas en esta ciudad de Amberes por sus propios oficiales y lo juro." Denucé, 1934, 59.
24 Denucé, 1934, 60. "Adi 8 Jarn., betaelt aen David Michielsen vaal' 4 platten die Breugel doen maeken heeft om doer op te schildern de Histori van het boeck Cenesis, g. 8." Denucé, 1934, 66.
26 Denucé, 1934, 78.
28 The paintings are at present in Museo Nacional de Soares dos Reis, Porto, Portugal. This information is generously provided by Dr. U. Harting.
29 O. Doering, "Das Augsburger Patriziers Philipp Hainhofer. Beziehungen zum Herzog Philipp II von Pommern-Stettin," in Quellen Schriften fur Kunstgeschichte des Mittelalters und der Neuzeit, Vienna, 1896, 90. We are grateful to Luuk Pijl for drawing our attention to this publication.
30 Denucé, 1934, 29–35.
31 One painting in this auction fetched a very high price, the View on Schelle with Self-Portrait, painted by Jan Brueghel I in 1614. Oil on panel, 20–¼ x 35–¼ (52.0 x 90.2), signed "BRVEGHEL 1614" (Kunsthistorisches Museum, Vienna, inv. no. 9102). The painting was estimated at 350 guilders, but went for just over 58. See Denucé, 1932, 33; K. Etsa, Jan Brueghel der Ältere (1568–1625). Die Gemälde mit kritischem Oeuvrekatolog. Cologne, 1979, cat. no. 278; and A. Monballieu, "Hoog gepredzen, hoog geprijsd: Het ‘Gesicht van Schelle’ met zelfportret (1614) van Jan Brueghel I," in Jaarboek voor het Koninklijk Museum voor Schone Kunsten-Antwerpen, 1982, 153–64.
34 Adriaen van Stalbemt charged seven guilders for each painting of twenty-two plates with Emblems of Love, and twenty-one plates with History of Pollas Athena. Further, he made seventy-five copies on copper, each for three and a half guilders. When Van Stalbemt provided the figures in a large church interior by Peeter Neefs, he was paid twenty guilders, thus a more profitable undertaking. Denucé, 1934, 97-98.

35 Denucé, 1934, 92.

36 The Danish King Christian IV (1588-1648) had the walls in his Oratory in Frederiksberg Castle, Hillered, decorated with twenty-three paintings on copper, each measuring approximately 40-9/16 x 37 (103 x 94). They were executed in 1618-20 by Pieter Isaacsz (Dutch, 1569-1625) and a selection of Amsterdam painters, among whom was Pieter Lastman (Dutch, 1583-1633). Unfortunately they were all lost in a great fire in 1859.

37 Denucé, 1934, 95. Another painting on copper, by Jan Brueghel II in collaboration with Hendrick van Balen, was priced at sixty-five guilders, the frame thirteen guilders.

38 Denucé, 1932, 217.


40 Duverger, 1984, 112-14. It is remarkable that the copper wire, a refined product, cost only ten stuivers a pound, compared to one guilder and a quarter per pound for red copper (copper), and almost three guilders for yellow copper (brass) in 1605.

41 Duverger, 1984, 52.

42 Denucé, 1934, 121-23.


44 See Ekkehard Westermann, "Copper Production, Trade, and Use in Europe from the End of the Fifteenth Century to the End of the Eighteenth Century," 121.

45 Mauritshuis, inv. 283.

46 Duverger, 1984, 273 ff.

47 Duverger, 1984, 487 ff.

48 Duverger, 1984, 201 ff.

49 Denucé, 1934, 153. In 1629 one pound was divided into sixteen ounces.

50 Duverger, 1984, 347 ff.

51 Denucé, 1934, 141.

52 The individual marks are related to the artist or worker, his atelier, and the producer or head of his firm. The control marks by the assayer may be interpreted in more than one way. They could indicate a form of protection for the artist/artisan against fraud, falsification, and competition, and guarantee the quality for those who bought the product. Lastly, the marks would indicate the origin of the product for the buyer, which was especially important in the export markets.


54 As (small) copper plates often show a ragged edge from cutting them to the desired size with a pair of shears, one could speculate whether a large marked plate subsequently would be cut in smaller pieces, leaving only a single plate out of a large sheet with a mark. This idea, however, is contradicted by most plates having the maker's mark positioned close to the center, and by those showing incisions indicating the center where the mark consequently was positioned. No plates so far have shown scored plates without a mark.

55 Many other quality goods were marked, such as gold, silver, and pewter, but also furniture, retables, and oak panels for painters. For Antwerp regulations on the branding of retables see J. Van Der Straelen, Jaarboek der vormende en kostrijke gilde van Sint Lucas binnen de stad Antwerpen..., Antwerp, 1855. For information on the panelmakers' regulations of 1617 see Van Damme, 1990. For an overview of panelmaking and marking in the northern countries see Jørgen Wadum, "Historical Techniques of Panel Painting in the Northern
In 1632 Philip IV of Spain demanded that all copper in Ghent, whether locally produced or imported, should be marked by the maker and the letter C for the town. The penalty was confiscation of the objects and of the carts used for transporting them. The same sort of regulations had been instigated for copper-smelters in Bruges in the fifteenth century, when a smelter had to mark his products with his personal mark and the mark of the town, a capital B.

In this context it is important to know that personal as well as town marks occasionally changed. Modifying a mark as well as requiring new ones had to be approved by the assaymaster or the aldermen of the guild. When a new regulation was made, and therefore the marks were changed, all masters were ordered to come to the guild office to destroy their old marks in the presence of an alderman. This rule also applied when a master died. The regulations stated that all punchmarks in use should be stamped into a copper plate that was kept at the chamber of the guild as a reference in cases of controversy. See also B. Dubbe, Tin en tinnegieters in Nederland, Lochem, 1978, 93.

An asterisk (*) refers to date of birth; the following dates allude to the painters’ active periods based on the year of enrollment in the painter’s guild of St. Luke and to their death.

In the fifteenth and sixteenth centuries similar regulations were applied to pewterware. However, during the sixteenth century the makers began to mark their products themselves with the quality mark. This meant that the assaymasters only had to make sporadic checks to see if the quality met the specifications of the regulations. See M. Mees, "Op dat een yegelic weten mach wat hijk daer af coept—Timmerken in de Zuidelijke Nederlande en het prinsbisdom Luik tijdens het Ancien Régime," in C. Van Vliederen and M. Smeyers, Merken opmerken ..., Leuven, 1990, 85-112.


57 For more details on Stas see Wadum, "Peter Stas ... ." ICC. Paintings ..., London, 1998, 140-44.

58 Letter to Dr. P. Baudouin, former director of the Provinciaal Museum Sterckshof—Zilvercentrum, Antwerp (Deurne). We are grateful to Dr. Baudouin and to A. M. Claessens-Péré, the present curator, for letting us use the documentation collected by Dr. Baudouin during the 1950s.

59 Stroobants, 488.

60 In 1660 Michielsens sold 6,000 pounds of geil mitraille (yellow scrap [brass]) to St. Paul’s Church in Opwijk for 2,250 guilders. In 1689 Michielsens sold copper to Passchien Helliaert (?) for 537 guilders. Courtesy of archive P. Baudouin.

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66 Squilbeck, 21; the paintings were sold on July 9, 1951 at Tavernier, Longue rue de l’Hôpital, Antwerp.

67 See note 29.

68 See Dubbe, 307, fig. 517.

69 The oval plate measures 8-1/4 x 6-3/4 (21.5 x 16.2). Courtesy of Isabel Horovitz, London.

70 In 1660 Michielsens sold 6,000 pounds of geil mitraille (yellow scrap [brass]) to St. Paul’s Church in Opwijk for 2,250 guilders. In 1689 Michielsens sold copper to Passchien Helliaert (?) for 537 guilders. Courtesy of archive P. Baudouin.

71 Archive P. Baudouin; letter of March 5, 1963.


74 Unfortunately it has not been possible to trace the whereabouts of this painting during the present research. Courtesy of archive P. Baudouin.

75 Archive P. Baudouin; letter of September 11, 1962.

77 Sale, Christie's Amsterdam, May 11, 1995, lot 147. Courtesy of F. Wolterbeek. The attribution to Isabella Francken, despite the signature on the painting, is kindly provided by Dr. U. Harting.

78 Gallerie St. Honoré, Paris.

79 Private collection, Detroit.


81 Fundación Collección Thyssen-Bornemisza, Madrid, accession no. 1958.4.


84 Private collection, Netherlands; in 1991 with Newhouse Galleries, New York.