

In His Milieu

*Essays on Netherlandish Art
in Memory of John Michael Montias*

Edited by

A. Golahny, M.M. Mochizuki and L. Vergara

- 10 Edmé François Gersaint, *Catalogue raisonné de toutes les pièces qui forment l'oeuvre de Rembrandt* (Paris, 1751), p. xxviii.
- 11 A fuller version of these political considerations can be found in Paul Crenshaw, *Rembrandt's Bankruptcy*, Ph.D. diss., New York University, 2000, pp. 174-186.
- 12 Flinck was contracted on 28 November 1659 to paint twelve pieces for the gallery of the Town Hall, two per year, for 1,000 guilders each.
- 13 GAA (Gemeentearchief Amsterdam), Ms. Res. Thes. Ord., no. 2, f. 66.
- 14 GAA, Ms. Res. Thes. Ord., no. 2, f. 97v. For more on the payments to these artists, and the municipal support for Jordaens' delivery of his painting, see Crenshaw 2000, esp. p. 176.
- 15 Johann E. Elias, *De Vroedschap van Amsterdam 1578-1795* (Haarlem, 1903-05), vol. 1, p. cxiv, n. 1.
- 16 Jan Zoet, *Zabynaja, of vermomde loosheid* (Amsterdam, 1648), fol. C2. See Walter L. Strauss et al., *The Rembrandt Documents* (New York, 1979) [hereafter as *Documents*], 1648/9, for a reproduction of the page on which Rembrandt is mentioned.
- 17 Benesch, no. 1274; Munich, Staatliche Graphische Sammlung, inv. no. 1451. For transcription and bibliography, see *Documents*, 1661/3.
- 18 Egbert Haverkamp-Begemann, "Eine unbekannte Vorzeichnung zum Claudius Civilis," in Otto von Simson and Jan Kelch, eds., *Neue Beiträge zur Rembrandt-Forschung* (Berlin, 1973), pp. 31-41.
- 19 Melchior Fokkens, *Beschrijvinge der wijdt-vermaarde koop-stadt Amstelredam* (Amsterdam, 1662), pp. 159ff.
- 20 *Documents*, 1662/6, although the English translation given there wrongly indicates that Rembrandt had not yet finished the painting.
- 21 Albert Blankert, *Kunst als regeringszaak in Amsterdam in de 17e eeuw: Rondom schilderijen van Ferdinand Bol* (Lochem, 1975).
- 22 Henri van de Waal, "The Iconological Background of Rembrandt's *Civilis*," *Konsthistorisk Tidskrift* 25, nos. 1-2 (1956): 11-24.
- 23 Henri van de Waal, *Drie eeuwen vaderlandsche geschied-uitbeelding, 1500-1800: Een iconologische studie* (The Hague, 1952), vol. 1, pp. 224ff.; Carl Adam Johan Nordenfalk, *The "Batavians' Oath of Allegiance": Rembrandt's Only Monumental Painting* (Stockholm, 1982), p. 37.
- 24 Nordenfalk 1982, pp. 23ff.
- 25 B.J. Buchbinder-Green, *The Painted Decorations of the Town Hall of Amsterdam*, Ph.D. diss., Northwestern University, 1974, p. 201.
- 26 *Documents*, 1649/6.
- 27 For more on the relationship between Rembrandt and Witsen, see Crenshaw 2006.

The Antwerp-Mechelen Production and Export Complex

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Introduction

In the sixteenth and seventeenth centuries, Antwerp and its near-neighbor Mechelen comprised a formidable complex for the production and export of paintings. Antwerp's production capability has begun to receive renewed scholarly attention,¹ and the activity of such leading Antwerp traders in paintings as the Van Immerseel-Fourmestraux, Forchondt, and Musson-Fourmenois firms has been known about for some time. Mechelen, however, has never commanded the same interest. Several archival-based studies on aspects of the painters' guild have appeared over the years.² However, the city has often been marginalized as a center of artistic production. Our aim here is to provide a quantitative basis for appreciating Mechelen as a production center of paintings and to suggest that Antwerp and Mechelen were part of a single artistic-economic complex.

The two cities complemented each other in three ways. First, they avoided overlapping specialization by product type. Mechelen's artists for the most part made "watercolor" (*waterverf*) paintings on thin linen, whereas Antwerp artists mostly painted in oil on panel and on canvas. This specialization allowed the painters in each city separately to take advantage of economies of scale and to hone specific applications of their respective methods. Second, Mechelen painters depended heavily on Antwerp dealers to market their work. Many artists/dealers handled paintings in Mechelen, but the record points to Antwerp merchants as the principal controllers of the export of paintings and their sale in foreign markets. This arrangement was almost inevitable; Antwerp was four to five times as large as Mechelen. More importantly, for much of the sixteenth century, Antwerp had a resident population of foreign merchants, and its fairs were internationally known. Mechelen had neither of those trading advantages. Finally, whereas both oil paintings from Antwerp and watercolors from Mechelen were available at a range of prices, there was little over-

lap in the two ranges. Using seventeenth-century data, the bulk of Mechelen paintings sold for between 8 and 60 stuivers (0.4 to 3.0 guilders), while relatively few Antwerp oil paintings were priced at, or under 3 guilders.³ It is not misleading to think of Mechelen's watercolorists as catering to a market whose demand curve – more accurately, price-sensitivity curve – was more elastic, flatter than, and mostly below the one facing Antwerp painters. The two cities together therefore could cover the full range of prices and tap into buyers both high and low on the wealth pyramid. Figure 1 portrays this schematically.⁴

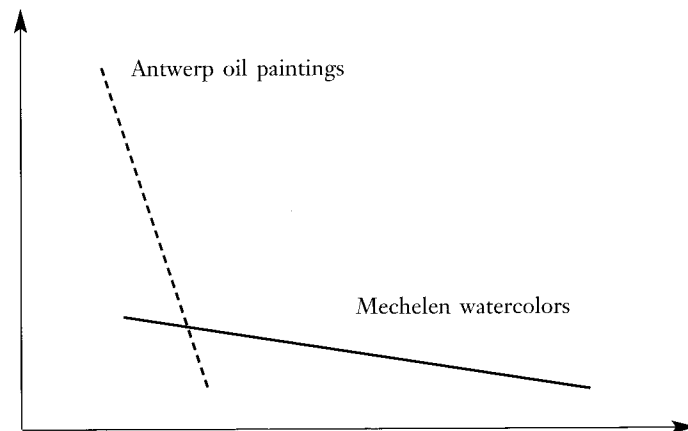


Fig. 1. Price sensitivity curves for the high and low ends of the market.

There was precedent in Mechelen's history as a textile producer for occupying the lower reaches of a market. The city was repeatedly forced to adapt its textiles to what would sell in the face of changing pressures imposed by international competition.⁵ In large part this meant cutting costs and prices, though ultimately also compromising on quality. Despite these moves, over the extended period 1322-1550, the volume of traditional luxury textiles produced in Mechelen fell by a full nine-tenths.⁶ Perhaps sensing that the authorities might be more open to facilitating alternative low-cost exports once even quality-compromised textiles could no longer compete, the painters, in the 1530s, sought permission to reorganize. By the early 1540s, from having been a "company" (*gezelschap*), they had become a guild proper. Within a very few years new masters were being added at a surprising rate and, with a short lag, apprentices in even more startling numbers (see Fig. 2).⁷ This early growth was interrupted by iconoclastic riots in the 1560s and by political conflict between Spain and the orangist faction in the 1580s. Each time the guild recovered, though a period of stagnation followed in the 1630s and 1640s, presaging long-term decline.

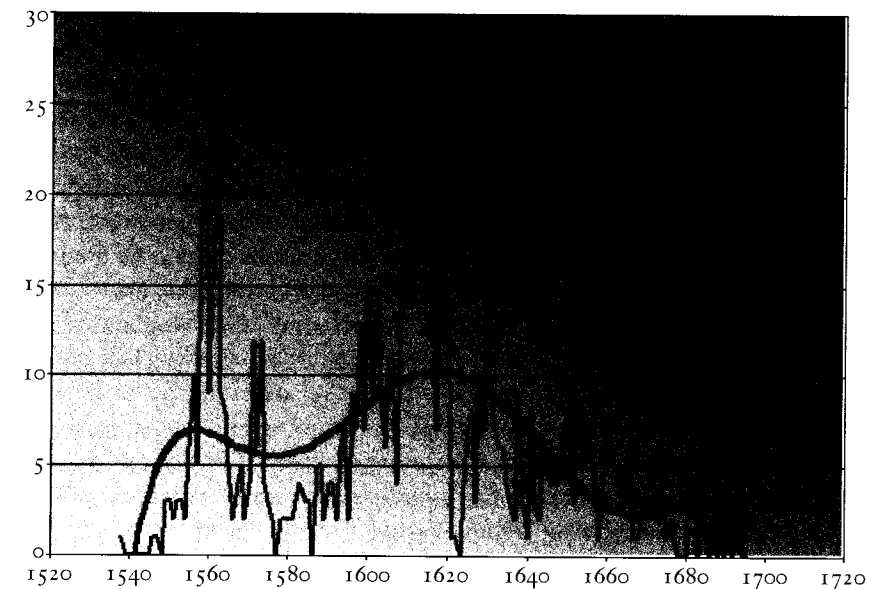


Fig. 2. New apprentices in the Mechelen painters' guild, 1540-1700. Source: Mechelen, Stadsarchief, *DD Notices S1 no. 32*. Also published by H. Coninckx, "Memorien wegens de Mechelse Schilders ende Beeldsnyders uyt den ambachts boeck. De Leerjonghens boeck," *Handelingen van de Koninklijke Kring voor Oudheidkunde, Letteren en Kunst van Mechelen* 13 (1903): 177-204.

Just why the painters succeeded so well in the mid-sixteenth century is unclear.⁸ We confine ourselves therefore to delineating the scope of Mechelen's success after 1540 and the mechanisms involved. We will try first to quantify the production of paintings, then begin to explore marketing mechanisms. Not enough is known as yet to generalize about the channels of selling, but we draw attention to a fifteenth-century connection between the painters and the Franciscans that may have resulted in sales through a dedicated venue similar to the early *panden* (cloister-like structures) of Antwerp. And we illustrate the energy and creativity involved in the Mechelen primary (first-sale) market through two episodes, from the boom periods of 1555 to 1564 and 1596 to 1619. Rules were bent in both instances, in the first by dealers, and in the second by apprentices, each seeking competitive advantage through price in crowded markets, one for paintings and the other for painters' services.

How large was the output of paintings in Mechelen?

To answer this question we need a representative price for paintings at the upper and lower ends of the market. If the daily wage of an established artist,

or artists is also known, the prices can be divided by the daily wage to determine the number of days required to produce an upper-level painting and one at the lower level. Output per artist per week and per year can then be inferred. We assume a six-day workweek and, as is commonly done for this period, a working year of 270 days (38.5 weeks). Finally, if we know the number of masters at a point in time, total production at that moment follows as the simple product of this number and of annual output per artist. Strong assumptions are involved here but the resulting numbers give us a sense of the potential for producing paintings in Mechelen during this era.

As so often happens, we have in fact not an array but a single instance of prices and a single instance also of day rates. In 1654, the Mechelen painter Michiel Verhuyck, responding to an order placed with him by Willem Forchondt, stated that his "large" paintings would be priced at 36 stuivers and his "small" ones at 25.⁹ No subjects (or actual sizes) were given.¹⁰ However, the weighted average of Mechelen paintings purchased by the Forchondts from 1625 to 1669 was 35.5 stuivers (range 20-60) and for those purchased by Musson and Fourmenois from 1654 to 1674, 29 stuivers (range 8-46). These weighted averages incorporate all size variants and the whole range of subjects, and are thus representative. Since Verhuyck's two prices are close to the weighted averages, his prices can serve as proxies for works at the upper and lower ends of the market, respectively.

Turning to day rates, our one observation comes from a contract dated 5 March 1634, between the artist and dealer Gillis Nyns and the established (and much copied) painter of sea battles Baptist van Ophem. The terms required Van Ophem to work for Nyns for a period of two years, in the summer from 6 a.m. until dusk and in the winter from dawn until 8 p.m., for 16 stuivers per day.¹¹

Combining the information in these two contracts, and assuming that the relationship between prices and day rates held also for the sixteenth century, we can generalize for the period 1540-1650: at the upper end a *waterverf* painting would have taken 2.25 days and at the lower end, 1.56 days.¹² An artist in Mechelen, then, could have made in one week either 2.67, or 3.85 paintings, and in a year of 38.5 six-day weeks, either 103 paintings of the more costly sort, or 148 of the less expensive variety.

How many painters were at work in Mechelen?

Here we know of three relevant pieces of information. First, in 1566 and again in 1568, the chronicler Marcus van Vaernewijck stated that Mechelen had upwards of 150 workshops of masters in the guild of painters (*schilders*), sculptors (*beeldsnijders*) and sculptors of small alabaster figures and altarpieces (*kleyNSTEKERS*).¹³ However, in the first boom period for new apprentices, from

1555 to 1564 (Fig. 2), 86 percent of the guild masters whose workshops they joined and for whom a profession is known with some certainty were painters. Accepting the 150 figure, but adjusting for the proportion of painters among guild masters, we reach the number 129 for painters' workshops.

The 150 number itself is not improbable as an estimate for all masters.¹⁴ It is a total, moreover, that roughly accords with two other observations, one for the terminal year of the second boom, 1596-1619, and one for 1632, when accessions of apprentices were slowing (Fig. 2). The numbers contained in the information from 1619 and 1632 are in fact lower – by about a third – than the 150 estimate from the late 1560s, but they also come from a period when the guild had suffered losses as the population of the city slumped. The drop was sharp in the years 1585-94, following the reassertion of Spanish control over Antwerp and its neighbors: from a high of perhaps 30,000 in 1544 to 11,000.¹⁵ Mechelen's population recovered somewhat but hovered around 20,000 in the seventeenth century.¹⁶ Setting aside the slump of 1585-94 as abnormal, the number of masters might be expected to have adjusted to the longer term decline in population from 30,000 to 20,000, a decrease of one-third.

The second and third observations that contribute to our question concerning the number of painters in Mechelen are the following: a guild protest of 1619 was signed by 96 masters (not only painters);¹⁷ and in 1632, a guild account book (now lost) claimed 100 masters (not only painters), plus 8 widows and 27 journeymen (*knechten*) – qualified craftsmen who had not acquired the status of master.¹⁸

Martens has shown that in fifteenth-century Bruges, more than 70 percent of apprentice painters did not become masters.¹⁹ Many no doubt died, or dropped out during training, and for those who finished, the cost of mastership must have led many to practice as assistants, or journeymen rather than as free masters. We will treat the 1632 observation for Mechelen – 100 masters plus 27 journeymen – as the average relation prevailing there between the two, for painters. Our two seventeenth-century numbers for masters still need to be adjusted for the fact that in the 1596-1619 boom period, just 60 percent of the masters whose profession is known with some certainty were painters. Applying this reduces the number of master painters to 58 in 1619 and to 60 in 1632, an average of 59. Thus we are left with two adjusted numbers of painters: 159 (129 masters plus 30 journeymen) for the 1560s, and 69 (59 masters plus 10 journeymen) for 1619 and 1632.²⁰ Using those figures, Mechelen's total yearly output of paintings in the 1560s could have been between 16,377 and 23,532, and in the early decades of the seventeenth century between 7,107 and 10,212.

How did Mechelen's production capability compare with Amsterdam's?

Three comments on these results are in order. First, those for the early and mid-seventeenth century are comparable to Montias' estimates for Amsterdam c. 1630.²¹ His estimated productivity is lower for paintings in the upper reaches (paintings costing fl. 10 and up): 1.6 versus our 2.7 paintings per week. The difference is less, though still present, for paintings at the low end (fl. 5-9): 3-4 versus 3.85. These differences, however, are consistent with the fact that Montias was dealing with oil paintings. The *waterverf* technique is faster for all but the most "monochromatic," wet-in-wet, and single-layered of oil paintings – those of Jan van Goyen, for example. Montias takes 100 as the number of artists in Amsterdam in 1630, yielding between 9,000 and 15-18,000 paintings per year. At its peak, 1555-64, Mechelen's production capacity was in fact closer to that of Amsterdam at its height (1650, with 175 artists), though with a population one-sixth as large.²²

Second, whereas Amsterdam c. 1630 had a ratio of artists to population ('000) of only 0.8, and at its peak c. 1650 of just 1.0, Mechelen's was perhaps 5.3 in the mid-sixteenth century and still 3.5 in 1632. Since Montias has argued persuasively that Amsterdam was at all times a net importer of paintings,²³ it is likely that Mechelen was a net exporter, on a grand scale.

Third, although the number of masters in Antwerp is difficult to estimate because we possess only the records of new masters added each year, employing conservative assumptions about net immigration and length of career, Antwerp probably had no fewer than 100 artists in 1630, a number also accepted by Montias.²⁴ The actual number probably was much higher in the mid-sixteenth century, Antwerp's apogee. Nevertheless, using the figure of 100 throughout for Antwerp, and applying Montias' own assumptions about productivity in oil paintings, we infer an annual output for the Antwerp-Mechelen complex in the range of 9,000 to 15-18,000 for Antwerp (as for Amsterdam) plus either 16,000-23,500, or 7,000-10,200 for Mechelen in the mid-sixteenth and early seventeenth century, respectively. All told, then, and conservatively reckoned, the Brabantine complex had a production capability of between 25,000 and 40,000 paintings a year (mid-sixteenth century), or between 16,000 and 27,000 (c. 1630).

How were all the paintings made in Mechelen marketed?

A Franciscan pand for Mechelen?

The painters of Mechelen seem to have had close links to the Franciscans dating back to the mid-fifteenth century.²⁵ On 16 October 1443, a contract was drawn up between the order and the painters concerning a yearly service in their Chapel of the Magdalene, located in the church of the Francis-

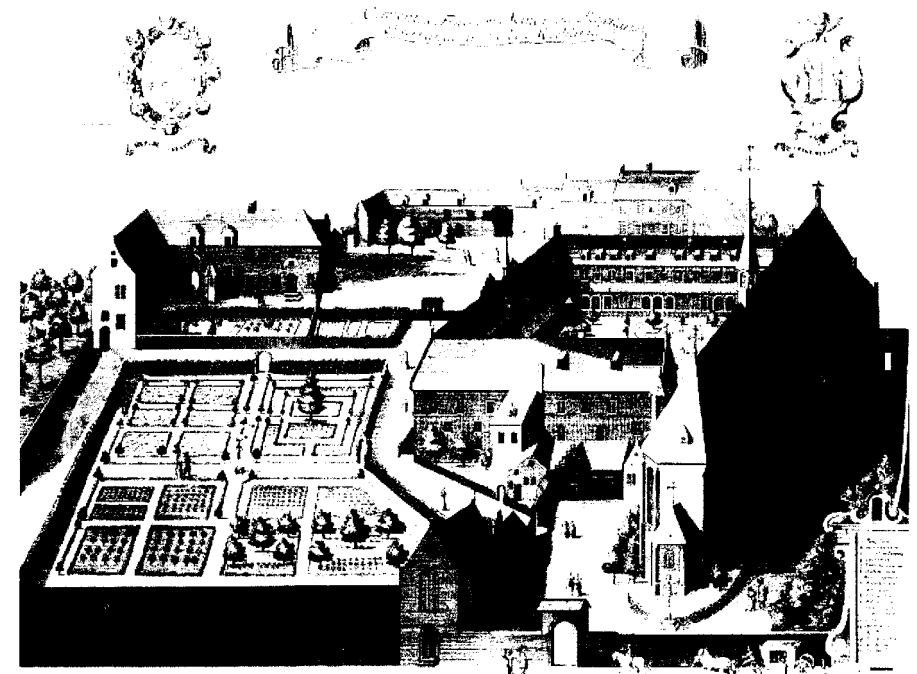


Fig. 3. Anonymous, *Franciscan Church and Cloister in Mechelen*, ca. 1690-1710, engraving. Mechelen, Diocesan Museum.

cans.²⁶ There is also some evidence that the Franciscans held exhibitions – and perhaps sales? – of paintings in their compound (Fig. 3).²⁷

Such an arrangement would not have been unusual: the first *pand* in Antwerp was situated in the cloister of the Dominicans.²⁸ But from the perspective of location, being able to use the cloister of the Franciscans in this way would have served the painters of Mechelen particularly well. Throughout the sixteenth century, a number of artists and dealers resided close to the Franciscan church and compound on the Katelijnestraat. This street ran from the administrative and commercial center of the city – the Town Hall and Grote Markt – past the Cathedral church of St. Rombouts (directly opposite the Franciscan church) and became the road to Antwerp (Fig. 4). Among prominent workshops on this road were those of the Bessenmeers and Verhulst families and dealers such as Claude Dorizzi (Dorisy) and Daniel Snellinck.²⁹

The relation between the Franciscans and the painters must have ended soon after the religious riots of 1572, for in 1580 the church was sold to Adriaan Gootens, and many of the related buildings destroyed.³⁰ There may be a connection between these events and what appears to have been a shift toward greater dependence on Antwerp dealers and traders for the marketing of Mechelen paintings.

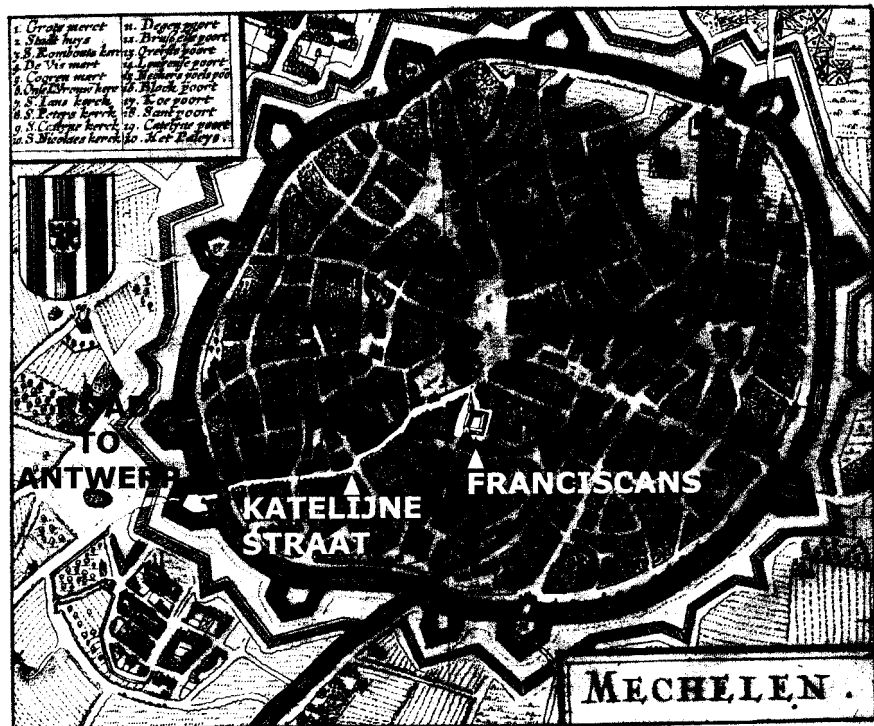


Fig. 4. Lodovico Guicciardini, *Descrittione di tutti I Paesi Bassi: Plan of Mechelen*, 1567. Reprint, Nicolaas Visscher, Amsterdam, 1680.

Dealers in various guises

There is scattered evidence of paintings from Mechelen being exported to many points in Europe in the second half of the sixteenth century. Sometimes the connection was with an Antwerp dealer, as in the case of the artist/dealer Jan van Kessel, who rented a larger than usual space at the Exchange (*beurs*) *pand* in Antwerp and obtained some of his stock from Mechelen.³¹ Mechelen artists were also employed by Antwerp artists/dealers. It is not known whether Van Kessel had Mechelen artists in his employ, though that was the case with the artist/dealer Abraham Liesaert, who exported paintings made in Mechelen to Cologne.³² Another Antwerp master, the Italian transplant Anthonis di Palermo (master 1545), seems to have moved back and forth between Antwerp and Mechelen and worked with artists such as Jacob de Backer.³³ Van Mander noted that Di Palermo profited handsomely from sales of paintings by De Backer, especially in France.³⁴ A second Italian, Claude Dorizzi, who held a large lottery of costly paintings, marble statues and alabaster reliefs on his premises in the Katelijnestraat in 1559, is also known to have exported paintings to Dordrecht.³⁵ Finally, some Mechelen artists appear to have branched out and exported paintings made in the city.

One such was Cornelis Inghelrams (first apprentice taken in 1556), who sent paintings to Hamburg.³⁶

Despite such indications that dealers based in Mechelen might have had direct relations with foreign clients, supplying Antwerp dealers was always important, and the balance seems to have tilted more in that direction over time. There are many instances in seventeenth-century Mechelen of artists employing other artists and sending their paintings to Antwerp dealers. Gillis Nyns fits this model; recall his 1634 contract with Van Ophem. The previous year he made a similar contract with the painter Cornelis Steenbanck.³⁷ Earlier Nyns had supplied paintings to Chrisostomo van Immerseel, and he is recorded as having sold to Willem Forchondt in the late 1630s and early 1640s.³⁸ The Nyns model – intermediary between Mechelen artists and Antwerp dealers/traders – likely applies to many others.

This model seems to have gained currency. In a complaint lodged with the magistrates in 1619, Mechelen painters claimed that “foreign” merchants – thus including *Antwerpenaren* – had taken to stopping off to pick up paintings, then leaving immediately. This was in contrast to the earlier custom of merchants, who would spend up to two weeks in Mechelen, visiting artists and selecting paintings.³⁹ Mechelen’s own dealers, it is implied, had taken to assembling stock for pick-up, either by “foreign” merchants, or more likely, their agents.

Mechelen dealers in pursuit of competitive paintings

Returning to Nyns and others like him, why would an artist/dealer in Mechelen employ another artist rather than purchase stock from artists’ shops? Two reasons suggest themselves. First, the strategy would make sense for a dealer who received regular orders from an Antwerp trader in paintings and who therefore could be reasonably sure of being able to sell large numbers of particular sorts and sizes. Second, there would also have been a security advantage to an artist under contract; in a crowded market for painters’ services, part of that advantage could be extracted by the employing dealer, who would also thereby save on costs. Not only was there, as noted, a tradition of vigorously pursuing cost advantages in the textile industry, but dealers in paintings behaved at times in ways that were unmistakably driven by that motive.

An instance of such behavior is signaled by a guild complaint of 1562. Unnamed dealers were accused of undermining the accepted order by seeking out apprentices and drawing them away from their masters and into their own employ by offering loans with which apprentices could pay their mastership fee in advance. The advantage was that such apprentices could be used to paint selected subjects more cheaply than if they were fully trained and had become masters in the normal way.⁴⁰

Apprentices becoming entrepreneurs

Nor was this sort of initiative limited to rogue dealers. In 1619, in the guild complaint already mentioned, masters alleged that apprentices were engaging in illicit competition by setting up clandestine workshops, outside the control of their masters and of course beyond the purview of the guild.⁴¹ Predictably, these illegal workshops were said to be selling cut-rate paintings.

This complaint, like that of 1562, was made toward the end of a period of rapid expansion in the annual enrollment of apprentices (see Fig. 2 and Table 1). Such enrollment booms resulted from a perception by youngsters that painters faced a bright future. Initially, therefore, painters' services must have been in strong demand. This was particularly so in the first few years of a twelve-year truce between the Spanish occupiers and the orangist faction from 1609 to 1621. This truce meant that both warring parties could trade without restriction, and the export market for paintings from Mechelen could reasonably have been expected to expand along with trade in general. But the truce caused a one-time boost, and after some time the increasing numbers of new apprentices would have begun to crowd the market. This upward surge, followed by a decline, is shown clearly in Table 1, column 1. The table also shows that in the early growth phase, painting was preferred above alternatives such as sculpture. The sculptors (column 2), for example, took in just 20 new apprentices in the first eleven years between 1600 and 1619, but 30 in the next eleven.

So great was the demand for apprentices in the early years of this boom, and at the start of the truce, that in 1611 the Deans of the Guild asked permission of the magistrates to take in orphans from the city orphanage as additional "pupils," even in cases where they already had apprentices.⁴² But when overcrowding began to be felt, both new master painters and trainees must have felt pressured to find market space for themselves. Apprentices caught in this situation could hardly be blamed for trying to establish a low-cost niche for themselves before being thrown onto the open market, nor could those who accepted early offers of guaranteed employment by dealers in the similarly crowded market of the early 1560s. Both were responding creatively to a rosy prospect turning gloomy.

Conclusions

We have quantified the production of Mechelen, making possible a comparison with that of Amsterdam and creating a basis for a new assessment of the scope of the Mechelen-Antwerp complex. The numbers show very substantial production in a town far too small to absorb much of it. Exports therefore were essential.

How was the exporting managed? Dealers filled various roles, some oper-

Table 1. Apprentices accepted in the guild between 1600 and 1621, by category.

	<i>Schilders</i> (Painters)	<i>Beeld- snyders</i> (Sculptors)	<i>Kleyn stekers</i> (Micro- Sculptors)	<i>Staffeer- ders</i> (Poly- chromers)	Other	TOTAL
1600	9	5	0	0	1	15
1601	7	2	0	0	0	9
1602	12	0	3	0	0	15
1603	6	2	1	0	0	9
1604	5	0	1	0	0	6
1605	5	3	3	0	0	11
1606	6	3	1	1	0	11
1607	2	1	1	0	0	4
1608	6	3	2	2	0	13
1609	13	0	5	1	0	19
1610	9	1	3	1	0	14
1611	13	8	2	0	0	23
1612	16	2	4	0	1	23
1613	14	2	0	2	0	18
1614	13	3	1	0	0	17
1615	14	3	2	0	1	20
1616	8	3	1	2	0	14
1617	5	1	1	0	0	7
1618	9	4	4	2	2	21
1619	8	1	2	1	0	12
1620	3	3	5	3	0	14
1621	1	0	0	0	0	0
TOTAL	184	50	42	15	5	295
%	62.3%	16%	14.2%	5%	1.5%	100%

Source: Mechelen, Stadsarchief, *DD Notices S1 no. 32*. Published by H. Coninckx, "Memorien wegens de Mechelse Schilders ende Beeldsnyders uyt den ambachts boeck. De Leerjonghens boeck," *Handelingen van de Koninklijke Kring voor Oudheidkunde, Letteren en Kunst van Mechelen* 13 (1903): 177-204.

ating as international traders in Mechelen, though, by the seventeenth century, the prevailing model seems to have been that of intermediary feeding Antwerp merchants.

Mechelen painters may have organized a *pand* in collaboration with the Franciscans, though more research is needed to determine this. When the Franciscans were forced out of the city, the Antwerp dealers became more central. But whereas once they had visited for extended periods, by the early 1600s they, or their agents could quickly pick up painting stocks from local intermediaries and illegal ateliers – to the chagrin of the established masters.

We have also observed short economic cycles in the paintings market, and

moves by dealers and apprentices to compete by price as markets became crowded in the later phase of a boom.

Our next steps will be: (1) to create estimates for output in Antwerp in a way comparable to those we have arrived at for Mechelen; (2) to study closely the relations between painters in Mechelen and dealers in Antwerp in the seventeenth century; and (3) to verify whether there was indeed the shift in those relations that we suspect occurred.

Authors' Note: We were fortunate to have had Michael Montias on the team for our Mapping Markets project. He brought an extraordinary combination of skills and personal qualities to this, as to all his work: modesty, precision, expertise in statistical methods, to enlarge his intellectual resources as an economic historian. These resources enabled him to chart new directions in the study of art in context and to set new standards for interdisciplinary scholarship. Michael always put first the common goal of getting at the truth; in this, and in his great generosity toward younger scholars, he stood as a model to us all.

- 1 On both production and exports, see Filip Vermeulen, *Painting for the Market: Commercialization of Art in Antwerp's Golden Age* (Turnhout: Brepols, 2003). See also his "Exporting Art across the Globe: The Antwerp Art Market in the Sixteenth Century," in Reindert Falkenburg, Jan de Jong, Dulcia Meijers, Bart Ramakers, and Mariët Westermann, eds., *Kunst voor de markt, 1500-1700, Nederlands Kunsthistorisch Jaarboek* 50 (1999): 13-25; and his "The Commercialization of Art: Painting and Sculpture in Sixteenth-Century Antwerp," in Maryan W. Ainsworth ed., *Early Netherlandish Painting at the Crossroads: A Critical Look at Current Methodologies* (New York, New Haven, and London: Metropolitan Museum of Art and Yale University Press, 2001), pp. 46-61, with "Commentary" by John Michael Montias (pp. 62-65). On the numbers of painters, see the last-mentioned, but also M.P.J. Martens and N. Peeters, "Artists by Numbers: Quantifying Artists' Trades in Sixteenth-Century Antwerp," in Molly Faries, ed., *Making and Marketing: Studies of the Painting Process in Fifteenth- and Sixteenth-Century Netherlandish Workshops* (Turnhout: Brepols, 2006).
- 2 See, in particular, Eugeen van Autenboer, "Nota's over de Mechelse Waterverfschilders," *Mechelse Bijdragen* 11 (1949): 33-45; and Autenboer, "Mechelen in de 16de eeuw: Schade wordt toegebracht en hersteld," *Handelingen van de Koninklijke Kring voor Oudbeidkunde, Letteren en Kunst van Mechelen* 89 (1985): 197-242. See also Adolf Monballieu, "Documenten van het Mechels schilders- en beeld snijdersambacht. I. De Rol van 1564," *Handelingen van de Koninklijke Kring voor Oudbeidkunde, Letteren en Kunst van Mechelen* 73 (1969): 88-106; and his "Documenten...II. Het rekest van 1562 en het probleem van de 51 of 150 ateliers," *Handelingen van de Koninklijke Kring voor Oudbeidkunde, Letteren en Kunst van Mechelen* 75 (1971): 71-82. Among the still valuable older sources, see Emmanuel Neeffs, *Histoire de la peinture et la sculpture à Malines*, 3 vols. (Ghent: Vanderhagen, 1876). We are greatly indebted to Adolf Monballieu, Raphael De Smedt, and Joost Vander Auwera for directing us to materials in the Mechelen city archives.
- 3 The numbers are derived from purchases of Mechelen paintings by the Forchondts and

Musson. See J. Denucé, *Kunstuitvoer in de 17e eeuw te Antwerpen. De Firma Forchoudt* (Antwerp: De Sikkell, 1931); and Erik Duverger, *Nieuwe gegevens betreffende de kunsthandel van Matthijs Musson en Maria Fourmenois te Antwerpen tussen 1633 en 1681*, reprint of *Gentse Bijdragen tot de Kunstgeschiedenis en de Oudbeidkunde* 21 (1969).

- 4 It is not quite accurate to speak of demand curves, since more was involved than the quantities purchased at different prices of the *same* good. Even cheaper paintings were differentiated by author and treatment. Figure 1 therefore conveys only the notion that buyers were not insensitive to price, and captures the fact that the market was segmented. The upper ranges belonged pretty much to oil paintings, the lower reaches to watercolors. Upper and lower here refer only to price, not to quality.
- 5 This history of adaptation and compromise has been traced in detail by John H. Munro in "Spanish Merino Wools and the Nouvelles Draperies: An Industrial Transformation in the Late Medieval Low Countries," *Economic History Review* 58 (2005): 431-84. See also Jean-Paul Peeters, "Het verval van de lakennijverheid te Mechelen in de 16de eeuw en het experiment met de volmolen," *Handelingen van de Koninklijke Kring voor Oudbeidkunde, Letteren en Kunst van Mechelen* 89 (1985): 143-95.
- 6 Walter Prevenier and Wim Blockmans, *De Bourgondische Nederlanden* (Antwerp: Mercator Publishers, 1986), p. 95. These authors note various ways in which Mechelen sought to diversify beyond textiles; textiles, however, bore the brunt of competitive challenges.
- 7 Records pertaining to masters have vanished, but in the case of apprentices the numbers, names, and the name of the master involved are preserved and have been published. See H. Coninckx, "Memorien wegens de Mechelse Schilders ende Beeldsnyders uyt den ambachts boeck. De Leerjonghens boeck," *Handelingen van de Koninklijke Kring voor Oudbeidkunde, Letteren en Kunst van Mechelen* 13 (1903): 177-204.
- 8 Recent research can be applied to the question, but unfortunately space limitations preclude our examining it here. See, however, the argument of Jay Bloom that, from about 1470, linen paintings came to be used as a cheap substitute for tapestry: Jay Bloom, "Why Painting?" in Neil De Marchi and Hans J. Van Miegroet eds., *Mapping Markets for Paintings in Europe, 1450-1750* (Turnhout: Brepols, 2006), pp. 1-17. One body of evidence that can be read as confirmatory of the Bloom thesis is the decorations of the principal Medici villa at Careggi: see Paula Nuttall, *From Flanders to Florence: The Impact of Netherlandish Painting, 1400-1500* (New Haven and London: Yale University Press, 2004).
- 9 See Denucé, *Kunstuitvoer* (1931), p. 289.
- 10 There are indications as to how price varied by size and subject but the variations are such that at this stage we prefer to work with weighted averages.
- 11 The contract is spelled out in Autenboer, "Nota's" (1949), p. 38.
- 12 Combining the sixteenth and seventeenth centuries may stretch credulity. Montias, for example, found a "statistical anchor" for the 1540s in the day rate for master carpenters in Antwerp of 7.5 stuivers, which is much less than our 16 stuivers for a mid-seventeenth-century painter in Mechelen. However, the significant inflation of prices in Antwerp in the second half of the sixteenth century was almost matched by wage increases, leaving the relation between the two roughly the same. Both were stable in the seventeenth century. Moreover, the Antwerp experience was mirrored in Mechelen. See Jan A. van Houtte and Léon van Buyten in Charles Wilson and Geoffrey Parker eds., *An Introduction to the Sources of European Economic History, 1500-1800* (London: Methuen, 1980), vol. 1, p. 105, fig. 4.15; Montias, "Commentary" in Ainsworth, *Early Netherlandish Painting* (2001), p. 63.
- 13 Monballieu, "Documenten. II," (1971), p. 74, citing Marcus van Vaernewijck, *Den Spiegel der nederlantscher aubeyt* (Ghent, 1568), fols. 135v-136r. Monballieu noted that Karel van Mander later also used the number 150, though whether this was his own inde-

- pendent count at that time, or a repetition of Van Vaernewijk's observation is difficult to say. Eventually the guild would include masons, goldbeaters, glaziers, and jewelers. See Neeffs, *Histoire*, vol. 1 (1876), pp. 10-11.
- 14 The painters, in a complaint submitted to the magistrates in 1562, noted that 51 new masters had joined the guild in just three years, a claim verified by Monballieu, "Documenten. II," (1971), who has reconstructed the accessions for 1560, 1561, and 1562. This large number of new masters plus the fact that there were 134 new apprentices added in the period 1555-64, 115 of whom (134 x .86) might have been aspiring painters, makes 150 workshops a plausible overall estimate.
 - 15 See J. Verbeemen, "De demografische evolutie van Mechelen, 1370-1800," *Handelingen van de Koninklijke Kring voor Oudbeidkunde, Letteren en Kunst van Mechelen* 57 (1953): 63-97.
 - 16 Raymond van Uytven, *De geschiedenis van Mechelen: Van Heerlijkheid tot Stadsgewest* (Tielt: Lanno, 1991), pp. 149-50.
 - 17 The complete list of signatories is given in Neeffs, *Histoire*, vol. 1 (1876), pp. 28-29.
 - 18 Monballieu, "Documenten. II," (1971), p. 75.
 - 19 See Maximiliaan P.J. Martens, "The Position of the Artist in the Fifteenth Century: Salaries and Social Mobility," in Wim Blockmans and Antheun Janse, eds., *Showing Status: Representation of Social Positions in the Late Middle Ages* (Turnhout: Brepols, 1999), pp. 387-414. Similar numbers are reported by Lorne Campbell for Doornik (Tournai): "The Art Market in the Southern Netherlands in the Fifteenth Century," *Burlington Magazine* 118 (1976): 188-98.
 - 20 As a check on the latter number, there were 75 masters who took apprentices in the period 1595-1619, suggesting that the figure of 69 may be on the low side.
 - 21 John Michael Montias, "Notes on Economic Development and the Market for Paintings in Amsterdam," in *Economia e Arte, Secc. XIII-XVIII* (Atti della "Trentatreesima Settimana di Studi," Istituto Internazionale di Storia Economica 'F. Datini', Prato, April-May 2001, C. Cavacciocchi, ed.) (Florence: Le Monnier, 2002), pp. 115-30.
 - 22 It bears stressing that our estimates are only as good as the assumptions underlying them.
 - 23 See Montias, "Notes," in Cavacciocchi ed. *Economia e Arte* (2002), p. 127. The original source is John Michael Montias, "Flemish and Dutch Trade in Works of Art in the Seventeenth Century," unpublished MS (1985), though see also his "Works of Art in Seventeenth-Century Amsterdam: An Analysis of Subjects and Attributions," in *Art in History / History in Art: Studies in Seventeenth-Century Dutch Culture*, eds. David Freedberg and Jan de Vries (Santa Monica: Getty Center for the History of Art and the Humanities, 1991), pp. 331-72, table 8.
 - 24 Montias, "Notes," in Cavacciocchi ed. *Economia e Arte* (2002), p. 120.
 - 25 Josef Baetens, "Minderbroederskloosters in de Zuidelijke Nederlanden: Kloosterlexikon," *Franciscana: Bijdragen tot de geschiedenis van de Minderbroeders in de Nederlanden. St. Truiden, België* 39 (1984): 97-124; Thomas Coomans, "L'Architecture Médiévale des ordres Mendicants (Franciscains, Dominicains, Carmes et Augustines) en Belgique et aux Pays-Bas," *Révue Belge d'Archéologie de Belgique* 70 (2001): 3-81. We would like to thank Robert Mayhew for sharing these references with us.
 - 26 The original text of the 1443 document reads: "jaerlycx een mysse te syngene metten orghelen, op Sint Lucas dach, int convent voerscreven, in Sinte Maryen Magdelenen capelle tot salicheyen ons voerscreven vryents Jans van Battele ende te weerdicheyen des eerbaren ambacht der schylders met haren medegesellen..." Neeffs, *Histoire*, vol. 1 (1876), pp. 6-7.
 - 27 This idea was first introduced by Neeffs, who noted that there is much information in the Mechelen archives on "exhibitions of paintings" and that paintings were put on display in the cloister of the monastery: "Le local habituel ou s'ouvraient ces galleries était le cloître du préau, au monastère des Frères-Mineurs, dits Rêcollets." Neeffs, *Histoire*, vol. 1 (1876), p. 18.
 - 28 Dan Ewing, "Marketing Art in Antwerp, 1460-1560: Our Lady's Pand," *Art Bulletin* 72 (1990): 558-84; Vermeylen, *Painting for the Market* (2003).
 - 29 The Verhulst enterprise comprised Peter Verhulst and his sons Peter, Floris, and Maerten. His daughters married into other prominent artist families: Maria with Pieter Coecke van Aelst, Barbel with the painter/dealer Daniel Snellinck, and Margaret with Michiel Coecke. See Adolf Monballieu, "De kunstenaarsfamilie Verhulst Bessemeers," *Handelingen van de Koninklijke Kring voor Oudbeidkunde, Letteren en Kunst van Mechelen* 78 (1974): 108-09.
 - 30 Autenboer, "Mechelen in de 16de eeuw," (1985), p. 234, quoting E. Gouverneur, *De Minderbroeders in Mechelen, 1231-1981* (Brussels: Licap, 1981).
 - 31 Vermeylen, *Painting for the Market* (2003), pp. 70-72.
 - 32 Jan van Roey, "Een Antwerpse schildersdynamie: de Liesaerts (XVIe-XVIIe eeuw)," in *Jaarboek van het Koninklijk Museum voor Schone Kunsten Antwerp* (1967): 102-03. We are grateful to Filip Vermeylen for this reference.
 - 33 His son Scipio Palermo had three stalls at the Saint Germain fair, taken over from his uncle Pieter II Goetkint. See Vermeylen, *Painting for the Market* (2003), p. 116, n. 34.
 - 34 Karel van Mander, *Schilder-boeck* (Haarlem, 1604), fols. 231v-232r. See also Karel van Mander, *The Lives of the Illustrious Netherlandish and German Painters*, vol. 4, trans. and ed. by Hessel Miedema (Doornspijk: Davaco, 1994), pp. 204-05. Di Palermo's daughter Catharina married the Antwerp painter Victor Wolfvoet and a second daughter, Lucretia, married Pieter Goetkint, who, with his brother Antoon, dominated selling at the pre-Lent fair of Saint-Germain-des-Prés in the early decades of the seventeenth century.
 - 35 Adolf Monballieu, "Claude Dorisy," *Nationaal Biografisch Woordenboek* (Brussels, 1966), vol. 2, pp. 182-83. For the printed description of the lots and their estimated values, see Henry H. Cordemans, "Une loterie de tableaux at d'objets d'art," *Bulletin du Cercle Archéologique, Littéraire et Artistique de Malines. Mémoires, Rapports et Documents. Tome II* (1891): 343-63, and 346, n. 1, for a shipment to Dordrecht.
 - 36 Neeffs, *Histoire*, vol. 1 (1876), p. 216.
 - 37 Autenboer, "Nota's," (1949), p. 37. Steenbanck later became a master in Antwerp, another not uncommon phenomenon: see Philippe Rombouts and Théodore Leries, eds., *De liggeren en ander historisch archieven der Antwerpse Sint Lucasgilde* (Antwerp and The Hague, 1864-76), vol. 2, pp. 346, 353.
 - 38 J. Denucé, *Brieven en documenten betreffende Jan Breughel I en II* (Antwerp: De Sikkel, 1934), p. 75. See also Denucé, *Kunstuitvoer* (1931), pp. 28-29.
 - 39 Autenboer, "Nota's," (1949), p. 30.
 - 40 Monballieu, "Documenten. II," p. 75.
 - 41 Neeffs, *Histoire*, vol. 1 (1876), pp. 28-30.
 - 42 Neeffs, *Histoire*, vol. 1 (1876), pp. 24-25.