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Thomas M. Bayer and John Page

Arthur Tooth: A London Art Dealer in the Spotlight, 1870–71

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Abstract:
Analyses of the 1870–1871 inventory records of the London art dealing firm of Arthur Tooth reveal widespread trade collaboration that maximized the influx of new artists and optimized the opportunities for sale to the public of their works as well as other paintings by well-established artists. By functioning as both arbitrageurs and market-makers, dealers facilitated stability and growth of a now mature market in luxury goods with added speculative commodity character and thus contributed to a far greater extent to the subsequent, and still ongoing, explosion of styles than hitherto acknowledged.

Arthur Tooth: A London Art Dealer in the Spotlight, 1870–71

by Thomas M. Bayer and John Page

> "The Influence of the Dealer is one of the Chief Characteristics of Modern Art."
>
> Samuel Carter Hall, *Art Journal*, December 1, 1871, 280

This paper contributes to the on-going art-historical investigation of art dealers in Victorian England and their role in shaping our visual culture.[1] Specifically, we explore the behavior of dealers in the art market to determine to what extent and in what manner their agency molded the arts environment of nineteenth-century Britain. By focusing our attention on the activities of middlemen we hope to gain a more nuanced understanding of dealers as institutional exchange agents and offer new insight into the arts environment of mid-Victorian London.(fig. 0) We were also curious if our past experience in operating a gallery specializing in 19th-century French and Victorian paintings, drawings and watercolors for over 25 years would help us detect familiar scenarios. To that end, this study employs quantitative methodologies borrowed from the fields of economics and accounting that have not been used as yet in previous explorations of this specific topic.[2]

Fig. 0, Emily Mary Osborn, *Nameless and Friendless*, 1857. Oil on canvas. Private collection. [larger image]

We start with the assumption that all goods are, to varying degrees, shaped by the markets through which they flow. Art, in economic terms, falls under the category of luxury goods and, like other luxury goods, it is no exception to such formative influences. Markets are dynamic places where owners of goods transfer property rights. Human agency, spread among producers, middlemen, and consumers, is an essential component in this exchange.

The observations presented in this study are based on a series of analyses of two separate but related spreadsheets. The first contains 42,117 individual sales of paintings at auctions in London and, to a lesser extent, in the provinces, between 1709 and 1913.[3] Our examination disclosed, among many other things, a correlation between the explosive expansion of the auction market for contemporary paintings starting around 1840 and an equally strong increase not only in the number of individual dealers, but in the number of paintings each of them purchased. Moreover, it showed that the trade was responsible for over 61 % of all purchases of contemporary paintings sold at auction between 1850 and 1900;[4] yet, as a group, dealers represented less than 7 % of all buyers. Furthermore, we detected another correspondence between the increase in dealers' purchases at auctions and the increase in average auction prices for contemporary paintings. In addition and somewhat surprisingly, the data also showed that the average price dealers paid at auction for paintings was nearly 50% higher than the average amount spent by middle- and upper-class buyers, the very consumer group to whom the dealers ostensibly sold. This observation suggested to us that dealers may have used auctions for purposes other than just inventory acquisition.

These findings occasioned us to construct a second spreadsheet that lists all paintings recorded in the stock books of the London art dealing firm of Arthur Tooth & Sons as bought and sold during the years 1870 and 1871 to augment our macro-observation with a micro-investigation of a specific dealer's business records.[5]

The issues we set out to explore with the help of the second data set were, in general terms, the relationships among middlemen as a market institution, the market model, the goods traded, and the behavior of producers. While some sparse anecdotal evidence to that end exists,[6] we wanted to know if our interdisciplinary application of analytical methods and conceptual models might help us detect patterns that illuminate the manner in which contemporary paintings were traded in mid-Victorian London. We were also curious to investigate in greater depth the observation revealed by our Graves auction data that dealers often paid more for paintings than anyone else, save institutions, such as the National Gallery or other museums. This practice runs counter to the arbitrage practice[7] that is typically associated with middlemen's activities, and challenges our assumptions on the function that dealers are traditionally thought to perform. To address these questions, we examined such topics as the make-up and sources of the gallery's inventory, its sales, the return on invested capital, profitability by artist, profitability by subject and size of the painting, velocity,[8] and other aspects that might shed light onto the modus operandi of a typical art-dealing business at a time when the nearly century-long process of establishment of institutional exchange agents as the hub of the modern art market had reached maturity.

Our findings show that Arthur Tooth appears to have been part of a network of professional and semi-professional dealers that facilitated the introduction of an impressively large number of new artworks into its circle and collaborated to maximize the opportunities for sale to the general public.[9] These dealers also recycled an equally large amount of paintings among themselves, we assume to similar ends. To achieve this goal, Tooth applied the principle of fixed-location retail marketing of maintaining a well diversified and frequently changing inventory.[10] He also took advantage of arbitrage opportunities, as well as performed the role of market maker. The evidence, furthermore, points to the use of fixed-location retail galleries for the business model for marketing contemporary paintings as the main *economic* reason for the increase in stylistic variety and pictorial modes that characterizes the visual landscape of the British arts environment in the latter half of the nineteenth century and beyond.

PROFILE

Arthur Tooth & Sons was a prominent art gallery located at no. 5 and 6 Haymarket in London, near the establishment of another picture dealer, McLean. The firm was founded in 1842 by Charles Tooth, a carver and framer, to set up his son, Arthur, in business. Until the 1880s, the gallery dealt in the occasional 18th-century, but mainly 19th-century British and some Continental paintings, thereafter expanding into old master paintings. Arthur Tooth also had a New York location from around 1900 until 1924 as well as a branch in Paris. The London branch remained in business until the 1970s.[11] Like most of the other larger dealers, Tooth also published reproductive prints, the "cash cow" of the Victorian art market. However, the firm did not undertake any such ventures until 1876.[12] According to our Graves auction data, the gallery's volume and cost of purchases would put it in the second tier of London galleries, together with such dealers as Colnaghi, Permain, Vokins, or Tooth's neighbor, McLean, and it became a major presence on the London auction scene from 1870 onward.[13]

We selected Arthur Tooth & Sons for this investigation for two reasons: unlike other London galleries like Agnew and Colnaghi, the firm dealt mainly in contemporary works by British and Continental painters, and; the gallery's extensive hand-written stock books, held at the Getty Research Center in Los Angeles, were readily available for our research. The years 1870 and 1871 are the first years that are recorded in the collection of the gallery's stock books at the Getty. The 1870 stock book shows no entries carried over from the previous year, although the business was well established by this time. Tooth recorded the inventory chronologically by date of purchase, and as a result, the ledger does not have a column for carried-over inventory. Sales are recorded in the last column when they occur. Thus, the ledger records the transaction histories only of paintings purchased by the gallery during our period. It, however, does not list all sales. Sales of paintings bought before the specific starting date of our data must have been entered in those ledgers in which their purchases were recorded. We therefore assume that Tooth's overall volume of sales was larger than that recorded in the stock books we examined. While we plan to expand our data on Tooth in the future, we feel confident, however, that the two-year time span reflects a representative slice of the gallery's activities.

THE GALLERY'S PURCHASES AND SALES DURING THE YEARS 1870 AND 1871

During the years 1870 and 1871, the gallery ledgers record the purchases of 861 works produced by approximately 274 different artists.[14] This inventory, of which Arthur Tooth sold a remarkable 736 pieces (85%), consisted mainly of inexpensive pictures—under £20—that were disposed of quickly, sometimes within just a few weeks or less. (By comparison, the hugely popular, mass-produced and mass-marketed reproductive print was usually sold for around £3 to the general public). However, Tooth also showed a few rather expensive canvases by well-known English painters in his gallery.[15] Overall, average cost was £39, the average sale price £49, and average gross profit roughly 25% of cost.[16] Since we were unable to obtain any data on rents, salaries, interest on loans, or any other outlays related to the operations of the gallery, any references to profits exclude all expenses save the cost of the artwork itself.[17]

The artists in whose works the gallery dealt were a mix of household names of which 35 were well-known full members of the Royal Academy; another 37 painters were either associate members of the Academy or members of other artists' organizations, such as the British Institute or the Royal Watercolor Society. The rest were lesser-known artists, although almost all had exhibited their works with some regularity at the Royal Academy or, occasionally, at some of London's second and third tier public exhibition facilities, or at both.[18] Not surprisingly, membership in the Royal Academy earned artists a substantial premium.[19] There were also at least 50 painters of Continental origin.[20]

Over half of this inventory (460 paintings), mainly landscapes, Tooth sold within 10 weeks (71 days), usually in groups to other dealers.[21] Around 265 pictures were bought by 100 different private customers, of whom only 7 were repeat clients;[22] 11 works were put on the auction block within less than two weeks after they were listed in the gallery's stock books;[23] and 127 pictures, half of which had been bought during the 2 months prior to the end of the 1871 business year, were carried over to the subsequent year's stock. Figure 1, "Sales by Tooth of the Paintings he Purchased," shows pie charts of his sales to different categories of customers.(fig. 1) The first chart displays the number of paintings sold to each category of buyer, and the second chart shows the profit from each category of buyer.

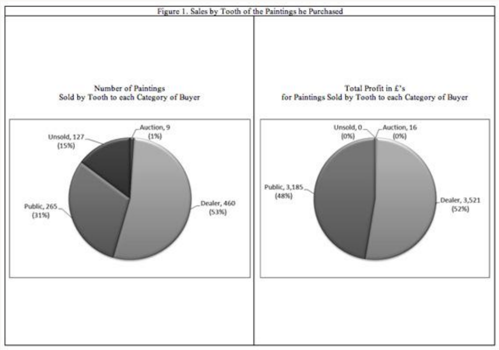

Fig. 1, Sales by Tooth of the Paintings he Purchased. [larger image]

Tooth managed to sell 40 % of his entire inventory in less than 30 days while maintaining an average turnover time of 2 months. With these sales Tooth realized an average profit per transaction of around £9. Yet, 58% of all the artists whose works he sold only generated an average profit per sale of less than £2.[24]

The total sum invested in inventory over the 2 years sampled amounts to £32,872 and generated a cash basis profit of £3,232, or roughly 10% of the total cost of his purchases.[25]

A breakdown to profits of individual transactions reveals that the sales of a surprisingly small number of 10 pictures by 7 different painters with a combined cost of £2,462 were responsible for 45% of the gallery's cash basis profit.[26] Quite clearly, for the years 1870 and 1871, the gallery made its real money here: in terms of cost, 7.5% of the total inventory generated 45% of profits or, stated differently, 10 paintings out of a total of 861 (just over 1%) produced nearly half of the profits for the period analyzed here.[27]

It is noteworthy that Tooth bought 5 of these 10 paintings from George Chester, from whom he acquired a total of 22 works during these two years. Chester was a particularly good source, supplying Tooth with a steady stream of very profitable art works. Such scenarios usually suggest informational inefficiencies in the market and, thus, lucrative opportunities.[28] However, the large number and nature of Tooth's transactions involving the trade as either source or customer,[29] or both, may well be further indication of an expanded role of dealers beyond the one usually associated with typical middlemen relying on traditional arbitrage.

The importance of dealing in established names is further illustrated by a closer look at transactions involving works by artists with Royal Academy affiliation. With an average cost of nearly £110, the number of works sold to dealers and the number sold to private buyers was nearly equal; so were the average profits respectively generated.[30] However, the records also show that the sales of just 100 paintings by this small number of Royal Academy-connected artists—a mere 16% of the total number of different painters in Tooth's inventory—accounted for over one third of total sales and nearly two thirds of total profit.[31]

The reliance of the gallery on these few top sellers for its revenue was extreme. Over three quarters (78%) of all the artists whose works Arthur Tooth sold generated a return below his average transaction profit of £9, and almost 60% (58%) of them earned an average of only £2 or less per sale. However, the business in inexpensive works was actually quite lucrative in and of itself, even if it did not produce the high returns of the earlier-mentioned star-sellers. As a category, the 514 pictures with costs listed at below £20 generated a higher profit than the overall average percentage profit and did so quite quickly.[32] Well over half of these cheaper works were sold to fellow dealers,[33] and Tooth bought 81 of them from trade members, often the same sources to whom he also sold.[34] A further breakdown into price rubrics shows that price was inversely proportional to dealer purchases: the higher the price, the fewer were the sales made to dealers.[35]

In addition to depending on a small number of expensive paintings to generate high profits, the gallery relied on a handful of relatively inexpensive, steadily and profitably selling artists. It is noteworthy that out of the 144 works by the four artists whose paintings Tooth purchased most frequently (twenty times and above), at least 94 (62%) were sold to the trade. Tooth may have had some kind of agreement with these painters —perhaps the right of first refusal—that put him in the position to sell these paintings to the trade even though other dealers could easily circumvent Tooth and go directly to the source.[36]

A similar scenario prevailed for the 15 artists of whose works he bought 10 to 19 examples. In this group, however, transaction patterns are less pronounced.[37] Tooth may have had an arrangement with Georgina Lara or her estate, and, possibly, with Arthur J. Meadows and Charles T. Bale, since 60% of the paintings he bought from these artists were sold to the trade. As to the works of the remaining 12 artists, Tooth sold fewer works to other dealers. Still, 40% went to the trade.

The small number of painters in whose pictures Tooth repeatedly dealt stands in marked contrast to the many artists whose works he only purchased once: nearly 60% (161) of all the different artists recorded in his inventory during the years 1870 and 1871 were represented with only one work. If the names of the 45 artists who are listed in his stock book only twice are added, the percentage swells to nearly 74% (or 206). Of the 401 paintings and watercolors done by these painters, the overwhelming majority was slowly sold to the trade, and only a small fraction went to private buyers.[38] Evidently, these pictures' limited success as reflected by their slow velocity, did not recommend them for repeat purchases.[39] For whatever reasons, it took Tooth considerably longer to sell them to other dealers, and there appears to have been no further demand by the trade for these pictures.

Trade practices affected not only inventory composition and choice of artists, they also influenced such ordinary aspects as picture size; the vast majority of paintings the gallery sold would be described in today's trade vernacular as "sofa-size" or smaller, depending on subject. [40] Sizes clearly had adapted to paintings' use as domestic décor for private middle-class homes, a fact that was commented on by the press.[41] The average measure of these canvases was around 600 square inches, corresponding to dimensions of 20 x 30 inches. There is, however, some variety in size associated with picture type. History subjects, then still the leader of the pictorial hierarchy of genres, were, not surprisingly, the largest.[42] However, while eye-catching and impressive, such paintings occupied a large area of gallery wall space, were expensive to buy, took time to sell, and produced low financial returns. Tooth only purchased 18 such paintings over the 2-year period under examination, and, thus, in some small measure, his inventory reflects the ongoing decline of the genre.[43]

Landscapes, as a category by far the most frequently bought and particularly popular with his trade customers, measured roughly 20 x 30 inches, the typical "sofa-size."[44] The explosion in the production of landscape painting that occurred during the nineteenth century is certainly echoed in this stock.[45] Other picture types, like still lifes, interiors, military subjects, and, surprisingly, coastal scenes were smaller—around 16" x 20", but also sold quite quickly.[46]

ANALYSIS BY SOURCE

The nature of Tooths dealings becomes more narrowly defined by a closer look at the dealer's sources for his inventory. Figure 2, "Source of Tooth's Purchases of Paintings," shows the sources of the gallery's inventory.(fig. 2) The first chart displays sources by number of pieces, the second by profit. Nearly half of the pictures (402) were acquired directly from the artists who made them. This was not just his most profitable source; it was also his cheapest source. [47] The gallery's purchases contributed a total of £10,510 to the income of 91different painters, or an average of £115 per artist. However, 12 painters received over £300 in income from his business alone during this period.[48] Indeed, for these 12 individuals, thanks to Arthur Tooth, these two years were truly a "Golden Age."[49]

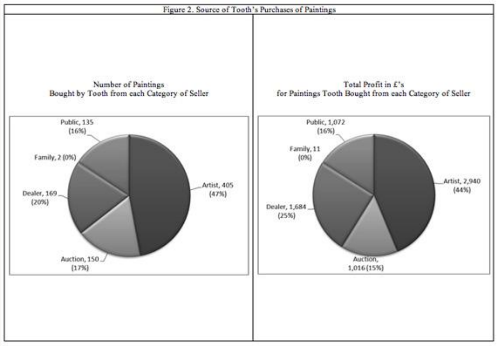

Fig. 2, Source of Tooth’s Purchases of Paintings. [larger image]

Associating this source category with buyers adds further transparency. Seven of the paintings Tooth bought from artists directly were put up for auction within less than 5 days from the date of purchase.[50] Unfortunately, neither our data nor the auction catalogues suggest specific reasons why Arthur Tooth opted to dispose of these canvases by auction. The painters were among those whose works Tooth bought more frequently and sold largely to other dealers,[51] and the prices for which these paintings sold were in line with the amounts he received from his trade and private customers for other pictures by these artists. It is impossible to tell if Tooth put these pictures on the block to establish auction price levels to support his gallery prices, or because he simply needed cash. Liquidity problems are less plausible, since raising money through auction sales is a slow and to that end unreliable process. Moreover, his cash flow from sales appears to have been steady, and, in all instances, the acquisition dates coincided with purchases of other works by the same as well as other painters. Tooth also did not lack customers to whom he could turn for a quick sale if he needed money. Still, there are numerous other scenarios that could explain Tooth's decision concerning the disposition of these seven canvases. Using auctions as market signalers, i.e., to send signals to the market about price levels and liquidity, nevertheless, is a strategy that is plausible and consistent with trade practices.

In the majority of instances, however, Tooth sold most of the paintings he bought directly from artists to fellow dealers.[52] These sales made up the core of his business, as less than a quarter of the pictures he bought directly from artists were sold to private collectors.[53]

Tooth's second largest source for his inventory was auction. He purchased a total of 150 pictures by 117 different artists at various sales.[54] Twenty-one of these painters were affiliated with the Royal Academy and, thus, ranked among the better known and more established artists with correspondingly more expensive pictures.[55] Juxtaposed with purchases of works by the same artists from other sources, these specific auction acquisitions' transaction data, i.e., cost, respective buyers, prices paid, and length in inventory, point to several different scenarios.

There are, for example, instances when Tooth paid hammer prices for artists' works well below those he paid directly to the same artists or when he bought their works from either dealers or private sources. He then sold these pictures for amounts in line with his customary prices for comparable works by these painters.[56] In other cases, the dealer paid higher than usual prices and sold the items with very little profit or, sometimes, even at a loss, to other dealers.[57] Commissioned bids may well be the reason for several acquisitions that appear in Tooth's records as having been sold on the same day they were bought either to other dealers or private clients for profits of 5% or less.[58] Still, there are other transactions that defy a simple explanation.[59]

It appears that Tooth used auctions as a major source for fresh inventory: over one-third of the pictures out of this group were by artists whose works he bought only this once.[60] Of these he sold one-third to other dealers, in several instances with remarkably high profits of 100–300% of cost.[61]

These auction-to-trade sales involving Tooth as a middleman present a conundrum. Auctions were generally well attended by the trade and, we assume, also by many of the same dealers to whom Tooth sold. The prices he paid for his auction purchases were, therefore, no secret. Unfortunately, the data do not tell us the precise circumstances surrounding each of these transactions. They could have involved partnership or consignment arrangements or simply being at the right place at the right time. Whatever the specific cases may have been, he managed to dispose of quite profitably to the trade of many of those pictures the costs of which were public knowledge. These transactions not only earned him, in some instances, significantly more than his average profit, but they did so in less time. Furthermore, on many occasions, these buyers were the same dealers who also sold to Tooth. Again, it appears that the trade operated more under some system of collaboration than open competition.

This notion is further supported by a closer examination of works Tooth bought from other dealers.[62] On average, they were almost twice as expensive as his overall average per-picture cost, to a large extent because nearly one-third of the painters were affiliated with the Royal Academy.[63] Interestingly, over half of the works, (88), were sold back to other dealers; 17 of these were sold at a small loss and 18 at very low profits of less than 3% or at cost.[64] These trade-exclusive transactions are particularly informative on the questions of trade practices and market character. They also show again that some type of cooperative network among dealers existed.

Sometimes he bought from the same dealers to whom he also sold at other times. In seven instances Tooth returned paintings he could not sell to the original sources from which he had acquired them.[65] There were, as well, numerous such exchanges that yielded profits higher than his overall average. The earlier mentioned source, Chester, was involved in several of these. Moreover, Tooth provided an agency through which fellow members of the trade could sell to his special clients, like the banker, De Murietta.[66] Tooth also used favorable arrangements with dealers who, like he, had special relationships with specific high-in-demand artists, to sell their works to yet other dealers with whom he habitually traded.[67] At times, Tooth paid particularly high prices to other dealers only to sell at a very modest profit to private customers or even take a loss at auction.[68] However, for the most expensive paintings he bought from other dealers, he found private buyers, often the well-heeled repeat clients whom he had cultivated.[69]

CONCLUSIONS

The above analyses show that Arthur Tooth operated a business composed, in terms of numbers of items mainly of transactions to the trade of works by a small group of artists for whom he may have acted as an agent. However, his main revenue was generated by a handful of highly lucrative sales of expensive works by several of the period's established names to both the trade as well as to private collectors. In addition, rather than relying only on his few steady sellers and the occasional "big hit," the dealer continuously refreshed his inventory with less costly works by a wide array of different artists, probably to test their market appeal. In these endeavors, Tooth collaborated with or operated within a network of dealers that bought around 75% of these pictures, presumably to try to sell them to members of the public. If any of these new artists' works sold well, then, quite rationally, Tooth continued buying their pictures. However, in the majority of instances—three-fourths of the time, in fact—the dealer did not see any reasons to do business with these painters more than once or twice. Their works sold slowly, tied up his capital, and incurred additional opportunity cost by occupying gallery wall space that could potentially be used for the display of better selling pictures.[70] Since these paintings were mainly sold to the trade, this lack of demand indicated that dealers had difficulties placing them with end consumers. He also frequently acquired inventory from other dealers himself, usually more expensive paintings, which he sold either to the public or, again, back into the trade circle. Apparently, he took on specific works from other dealers' stock that he thought he could sell to the private market, and if unsuccessful, he would recycle them to give others a turn at placing them. In total, Tooth recycled around 330 pictures. Sometimes, such transactions produced little, if any, profit, occasionally even a loss. Of the 78 sales that resulted in a loss, 61 were made to other dealers, mainly to Robinson (29) and Paterson (14). Both dealers also sold to Tooth, and we can presently only speculate what these ostensibly money-losing sales represented in the relationship between these dealers.

Arthur Tooth, as part of this informal dealer network, facilitated, in just the two years under investigation, the entry of an impressively large number of new works into the market. Of the 861 pictures he purchased during this period, 403 came directly from the artists who produced them. Not only was such practice quite profitable, but the business of retailing in luxury goods demanded the continuous refreshment of a well-diversified inventory. The fact that nearly 90% of all the British painters traded among this group of dealers had previously shown their work at one or several of the officially sanctioned exhibition venues[71] indicates that these institutions, in addition to the Royal Academy, were acknowledged and used as integral platforms for artists' exposure to dealers. The network also appears to have cooperated on sales of established names, usually in higher price ranges, to private collectors. To that end, they bought from, sold to, and, we assume, also consigned to, each other to share the cost and risk of doing business in established works while continuously introducing new products. In the physical space of the gallery, the juxtaposition of untried and established art in physical proximity had a positive effect on the commodity character of the new products. The "aura" of the established art rubbed off on, and validated, the new products. It also delineated the new products' range of differentiation.[72] The retail trade's inherent need for product and price diversity and frequent change of inventories, as well as the ongoing establishment of contemporary paintings as speculative goods,[73] drove the forward momentum. In combination, these factors stimulated the earlier mentioned growth of innovations in subject, medium, and style that would characterize the arts from this period onward.

Trade collaboration, thus, optimized the influx of new producers and products into the market as well as maximized the opportunities for eventual sales of works by both new and established painters to members of the public. The cost of membership in this network of dealers is reflected in the many transactions that Tooth had with other members of the trade at low profits or even net losses, as well as the opportunity costs Tooth incurred when he provided access for his fellow dealers to his private clientele in exchange for what appears to be a small fee, rather than selling other works at higher profits to these individuals.[74] In this manner, Tooth and the other similarly operating dealers collectively financed the market entry of a great number of Victorian painters and established themselves as the hub around which the contemporary art market revolved.

Moreover, Tooth's ledger reflects a bullish, low entry-barrier market.[75] On the one hand, the cost of maintaining such low entry-barriers for untested inventory was partially subsidized by a small number of high-value transactions involving well-established artists whose works were sold directly to end consumers. On the other hand, the risk associated with testing these new products was spread across the network as a whole through the purchases of these paintings from Tooth by other members of the group, and vice-versa, in a collective attempt to find end-buyers.

If Tooth's business model represents the trade's norm—and this seems to be the case[76]—it could be argued that the spread of production and consumption of contemporary painting that occurred during the Victorian age was, at least partially, facilitated by a tiny number of high-value transactions involving well-established artists coupled with an industry-wide risk willingness mitigated by cooperative trade practices. The resulting systemic low entry barriers encouraged production, and the associated market expansion stimulated increasing product differentiation. Thus, Tooth's business model offers an explanation on a micro-economic level for the link between growth in middlemen activity and general market expansion that we detected in our earlier investigations of Grave's auction data: the virtual explosion in the number of professional artists[77] during the latter half of the 19th century appears to have been directly linked with the *modus operandi* of professional middlemen operating in tandem. Furthermore, the escalating appearance of different styles that epitomizes late 19th and early 20th-century European painting is, in no small measure, similarly attributable to the very practices of the trade. [78]

We do not suggest here that market composition was solely responsible for the growing thematic and stylistic variety. No doubt, social, political, philosophical or religious reasons also factored into the formal make-up of paintings. However, the data quantitatively support the argument that this institutionalized exchange mechanism of professional dealers played a more complex role than traditional art history has allowed for. As Robert Jansen has pointed out, even the various Secession movements of this period frequently hinged around specific dealers and depended on them for commercial success. While these groups often came into existence initially in direct opposition to what was seen by them as a controlling influence of the trade and/or the academy/salon system, their eventual establishment and recognition was usually linked to the efforts of professional dealers who recognized the commercial potential of conspicuously differentiated new art products.[79] Although the 2-year period that we analyzed precede these Secessions, Arthur Tooth's operation may well provide a rare glimpse of how the associated necessary, and likely unprecedented, market expansion was managed.

As a consequence, contemporary British artists created works that were clearly distinguishable as their own individual product, even to the point of quasi trade mark. Nicknames like James "Waterfall" Smith or "Birds Nest" Hunt are but reflections of successfully distinguished products initiated by this dealer-driven market growth. Charles Ricketts was quite correct in describing these products as those of an age of "competitive painting, i.e., competition to secure attention against other artists, other aims, and other schools."[80]

Economic theory further suggests that, at some point, this ongoing need for differentiation, inherent to any expanding market, would develop products and product identities the merits of which would no longer be measured by traditional means, such as, for example, quantifiable input of labor or measurable degrees of technical skill. In Britain, for paintings and similar visual products, this process began in the nineteenth century with the Etching Revival and the

Aesthetic Movement and has led to the contemporary art of the 21st century in which concept/idea outweighs, if not altogether supplants, the older, labor-based, approach to the extent that physical involvement of an artist in the execution of a work of art is today no longer necessary.[81]

Beyond stimulating stylistic diversity and innovation, dealers collectively also had a stabilizing effect on the market which, in turn, led to further expansion.[82] Tooth's business records together with the auction sales data recorded by Graves reinforce the notion that the trade performed a function that exceeded the traditional arbitrage role of middlemen. In fact, in order to facilitate further market expansion and mitigate the negative effects of market fluctuations, the trade, collectively, performed the role of market-maker similar to certain present-day stock market specialists: de facto guaranteeing a market for the goods in which they traded.[83] To that end, the trade availed itself of methods that ranged from the above described pooling of resources, risk sharing, and cooperative trading, to using art auctions in what appears to be efforts to manipulate the public's perception of the state of the market in general as well as price levels of specific artists' works.

While our data do not reveal the precise reasons for Tooth's use of public sales to dispose of recently purchased works, auction sales of contemporary paintings can perform various functions since the public nature of these events makes them a useful tool with which to send different signals to the market. For instance, aside from liquidity trades necessitated by, for example, death, divorce, or taxes, contemporary paintings might be sold by dealers through auctions to establish price levels for an artist when no prior sales of comparable works exist. Furthermore, auction sales can be used by dealers to generate publicity for an artist without requiring a spectacular sales event. A first-time successful sale of an artist's work signals that a secondary market, allegedly independent of dealers, exists. Similarly, they can also be used effectively to manipulate the perception of a specific artist's or school's market performance.[84] We have written evidence that leaves no doubt that such practices existed in Victorian England.[85] To protect or advance their economic interest, parties with a stake, or toehold, in a particular artist's or school of artists' works will bid for such paintings.[86] Sometimes buyer and seller can be even one-and-the-same.[87] Alternatively, sellers might operate in tandem with buyers. While such methods can be illegal or unethical, depending on the laws and customs of the country in which the sale takes place, the general practice of dealers supporting the works of artists in which they trade is commonly expected and, optimally, serves to buttress the market against overreactions. The "retailization" of the auction business over the last 50 years has dramatically changed the ratio of dealers versus private buyers—personally or represented by agents—at fine art auctions and thereby made the market potentially more vulnerable to fluctuations. However, during the period under examination here, the trade was still firmly entrenched as modifying middlemen.

The expanding role of middlemen was not only responsible for market growth and the associated stylistic diversity. Similar observations can be made about the dimensions of paintings in response to the changing market character. Since the 18th century, when English artists first began to explore systematically new ways to bring their works before the public, the issue of size had become more complex. What had previously been largely a response to specific patrons' wishes became inextricably intertwined with considerations of production and marketing. Since the paintings themselves were, essentially, the only means by which painters could compete for the attention of the exhibition-attending public, producing works with eye-catching dimensions was one way to attract the viewer's eye. So were, of course, subject matter and execution.[88] However, while these canvases indeed caught the public's eye, they were, due to their production cost and size, difficult to sell to an audience that was increasingly composed of an urban middle class living in houses and earning incomes that could not readily accommodate paintings of such dimensions or price.[89] The issue became more intricate when professional middlemen with fixed retail locations started taking an interest in contemporary paintings. Their demand for a diversified, changing, and sizeable inventory, as well as their consumer orientation, sent signals to the artists.[90] As one of the consequences, paintings became, on average, smaller than they had been during the preceding century.[91] In fact, an analysis of size in relation to price shows that artistic labor had a decreasing return to scale: the smaller the painting the greater the income yield of each unit of size. This characteristic was not limited to artistic labor, but also extended to profit: each additional unit of size produced a marginally smaller profit.[92] The domination of "sofa-size" and smaller pictures in Tooth's inventory reflects this dealer's rational behavior and explains, in economic terms, the general trend toward smaller, market-orientated sizes. Moreover, scale has a subtle and difficult-to-measure, yet wide-reaching effect on artists' choice of subject, composition, manner, and style of execution. Finished *en plein-air* canvases in the manner of Corot and the Barbizon School painters, the landscapes of the Impressionist group, or the painstakingly detailed, small and, in their days, very expensive paintings of Jean-Louis-Ernest Meissonier (1815–1891) can serve as examples of these effects. It is no coincidence that they were all sold through professional dealers.

To summarize, Arthur Tooth's records reflect a business model that is consistent with the prudent operation of a fixed-location retail business in a buoyant market of luxury goods with added speculative commodity character. In fact, to many of today's contemporary art dealers the modus operandi of Tooth and his collaborators would ring familiar. The dealer continuously refreshed his inventory, maintained a turn-over rate of 85% of purchases, mixed new and established works, and may have availed himself of the auction market to protect his toehold and provide liquidity. He operated as part of a group of approximately thirty dealers apparently organized in a loose network that extended beyond London and functioned in the market as arbitrageurs as well as market- makers.[93] Without this latter function—assuring liquidity for the products traded—the modern art market, as it operates today, could not have developed. Under this exchange mechanism, painters were challenged to compete for their individual share of an ever increasing market in which institutionalized middlemen were the engines of growth. As an industry, these dealers expanded the market further, thus maintaining a continuous challenge for greater diversity and innovation. Painters and dealers worked in tandem to build and sustain an evidently very vibrant market. Artists contributed works that were not just more suitable in size but also increasingly more distinct from competitors' works, and more diverse. Dealers invested their expertise in promotion and marketing, their access to clients, their exposure to risk, and their share of capital. Joined together by common self-interest, these two entities, artists and dealers, occasioned the unprecedented expansion of art production and consumption that lies at the root of the extraordinary visual and aesthetic diversity that we witness today. The germination of this seed can be observed in the pages of Arthur Tooth's old business ledger.

Thomas M. Bayer was born in 1953 in Munich, Germany, and received his inter-disciplinary Ph.D. in art history, history, and economics from Tulane University, New Orleans, in 2001. He has been teaching art history there since 1992. He is also the founder and president of The International Fine Arts Association, Inc. since 1978 and The Fine Arts Gallery of New Orleans since 1982. His interest in the economics of the art market started during his MA studies, and he published four papers on this topic while pursuing his Ph.D. He considers among his noteworthy achievements a private letter ruling issued by the US Department of Labor in 1979, approving his proposal to allow the inclusion of qualified works of art as assets in HR10 pension plans under the ERISA code and the 2 years he spent as a volunteer repairing flood and storm-damaged houses in New Orleans after Katrina.

John R. Page is a tenured professor of accounting at the A. B. Freeman School of Business, Tulane University. He has taught in executive programs through the business school in New Orleans; Houston; Santiago, Chile; Bogota, Colombia; Monterey, Mexico; Lima, Peru; and Celakovice, Czech Republic. He is also a licensed certified public accountant in Louisiana. He has published four books on accounting and information systems and has published numerous journal articles, including the *Journal of Finance*, *Journal of Financial and Quantitative Analysis*, *Financial Analysts Journal*, and *Financial Executive*. He is a qualified expert in economics and accounting in Federal Court in the United States and provides research and testimony on damages in legal cases.

Notes

This paper is dedicated to the memory of Christopher Wood, dear friend, colleague and mentor. His life-long dedication and personal efforts to promote scholarly and popular interest in Victorian paintings is unequalled. He will be sorely missed. We wish to thank the Tulane University Research Enhancement fund for underwriting the costs of a week's research at the Getty Research Institute. We also want to thank our anonymous first reader for the many helpful comments. Further thanks must go to our copy editor, Robert Alvin Adler, who made the often tedious process of editing an enjoyable and entertaining experience.

[1] A condensed version of this paper forms part of a chapter on Victorian art dealers in our forthcoming book, *The Development of the Art Market in England: Money As Muse 1730–1900* (London: Pickering & Chatto, April 2011). Recent contribution to the specific topic of Victorian art dealers include Pamela M. Fletcher's "The Periodical and the Art Market: Investigating the "Dealer-Critic System" in Victorian England," *Victorian Periodical Review* 41, no. 4 (Winter 2008), 323–51 and her "Creating the French Gallery: Ernest Gambart and the Rise of the Commercial Art Gallery in Mid-Victorian London," *Nineteenth-Century Art Worldwide* 6, no. 1 (Spring 2007), http://www.19thc-artworldwide.org/spring07/creating-the-french-gallery-ernest-gambart-and-the-rise-of-the-commercial-art-gallery-in-mid-victorian-london (accessed December 22, 2009), also Hillarie Faberman, "'The Best Shop in London': The Fine Arts Society and the Victorian Art Scene," in *The Grosvenor Gallery: A Palace of Art in Victorian England*, ed. Susan P. Casteras and Colleen Denney (New Haven and London: Yale University Press, 1996), 147–58; and Anne Helmreich, "The Art Dealer and Taste: The Case of David Croal Thompson and the Goupil Gallery, 1885–1897," *Visual Culture in Britain* 6, no. 2 (Autumn 2005), 31–49. On Gambart see also Jeremy Maas's seminal book, *Gambart* (London: Barrie & Jenkins, 1975). Other related recent essays are Petra ten-Doeschate Chu, "The Lu(c)re of London: French Artists and Art Dealers in the British Capital, 1859–1914," in *Monet's London: Artists' Reflections on the Thames 1859–1914*, exh. cat. (St. Petersburg, FL: Museum of Fine Arts, 2005), 39–45 and, more broadly, Guido Guerzoni's, "The British Painting Market 1789–1914," in Michael North, ed., *Economic History and the Arts* (Cologne, Weimar and Vienna: Böhlau Verlag, 1996), 97–133. The relationship between Victorian dealers and a specific English artist is discussed by Evan R. Firestone, "John Linnell and the Picture Merchants." *The Connoisseur* 183(February, 1973), 124–31. The above listing is by no means complete but mentions only those contributions that deal directly with particular dealers in Victorian England. In general, the multi-faceted influence of middlemen on the art market

was already widely acknowledged during the High Victorian Age. In addition to Samuel Carter Hall's observation quoted in the text, see also Holman Hunt, *Pre-Raphaelitism and the Pre-Raphaelite Brotherhood* (London: MacMillan, 1905), 1:217; and P. G. Hamerton, *Etchers and Etching* (London, MacMillan, 1868), 74.

[2] The use of quantifications in historical research produces often very exact values that are computed on the basis of relationships between different sets of variables. This exactness, however, is best understood as a narrow range rather than a precise number. Working with ledgers hand-written over time by different individuals nearly 140 years ago is inherently difficult. Different spellings of the same name, idiosyncratic abbreviations, different ways of description, ink spots, tears, and faded writing are but some of the obstacles. While we made every effort to verify our data and analyses, some errors may have eluded us. We are, however, confident that the findings and the conclusions we present here are correct.

[3] The data are derived from Algernon Graves, *Art Sales*, 3 vols. (New York: Burt Franklin, 1970), and were checked for statistical validity against another data set we created that lists all auction sales conducted at Christie's from 1840–85. We are indebted to Jeremy Rex-Parkes and Lynda McLeod for their extraordinary help during the 2 weeks spent in Christie's archives. For the purpose of this paper, we truncated the Graves data to sales between 1850–1900. The resulting set lists 22,255 separate transactions at 36 different auction houses in London, Liverpool and Glasgow; approximately 2,560 names of different sellers and 2,500 names of individual buyers. The data were organized as a spreadsheet that lists in separate columns the name of the artist, the artist's birth and death date; a classification of the artist as Old English School, Continental Old Master, English Contemporary, or Continental Contemporary; the date of sale; the auction house where the sale took place; the seller's first and last name; categorization of the seller (aristocracy/gentry, middle-class, dealer, institution); the lot number; the title of the painting involved; the date of the painting; its dimensions; the buyer's name; classification of the buyer; and the hammer price. See also, Thomas M. Bayer, "Money as Muse: The Origin of the Modern Art Market in Victorian England; A Process of Commodification." (PhD. diss., Tulane University, 2001), 13–17. We are in the process of creating a website in conjunction with our forthcoming book that will make this data available to other researchers.

[4] Guerzoni's analysis derives at the figure of 60%. Guerzoni, "The British Painting Market," 108. This trend had already been noticed by 1850. Holman Hunt observed in his reflections on the years 1850/1 that "affluent connoisseurs, whatever their independent instincts might be, did not in modern England decide upon art by their own judgment, but were guided by the voice of the majority and of dealers. Hunt, *Pre-Raphaelitism and the Pre-Raphaelite Brotherhood*, 1:217.

[5] The second spreadsheet lists the date of purchase; the artist's name; the title and dimensions of the painting; the seller's name; the cost of the artwork; the buyer's name; the date of purchase; and the price for which it was sold. On the basis of our own familiarity with dealers' names derived from sources as varied as provenance records, auction catalogues of the period, Victorian periodicals, artists' correspondence and secondary literary sources, we categorized sellers and buyers into dealers or private consumers. We then checked the names of all sellers and buyers against the records compiled by the University of Glasgow, "Exhibition Culture in London 1878–1908," http://www.exhibitionculture.arts.gla.ac.uk, (accessed Spring 2009), as well as the *Art Journal* and the London *Times* for 1870–71. This resulted in the provisional identification of 28 dealers. As best as we can determine, they are: Anderson; Beeforth; Biggs, Bull; City; Clark; Cox; Ellis; Everard; Foster; Gambart; Gilbert; Grindley; Herring; Koekkoek; Levy; Mitchell; Morby; Muirhead; Nathan; Paterson; Phillips; Rhodes; Saunders; Smith, Turner; Wallis; Wigzell. However, we may well underestimate the number of different dealers with whom Tooth engaged in business. The Glasgow site is still being added to and ongoing research may well add other names. Tooth's ledger shows, for example, five individuals who, in our opinion, may have been dealers. Their names are Begbie, Bosomworth, Beckwith, Belton, and Chester. Chester could well be the painter George Chester (1813–97) or George Frederick Chester (fl. 1861–97). It was not unusual for artists to double as dealers. His name also appears as a buyer in our Graves-derived data. Research concerning these lesser-known dealers is still in its infancy but has promising potential. At the very least, it will improve our understanding of the role played by London-based dealers within this web of exchange agents.

[6] For example, Linnell papers, John Linnell archive (Cambridge: Fitzwilliam Museum), accession number MS 399-2001, cited by Maas, *Gambart*, 58; Firestone, "John Linnell."

[7] The term *arbitrage* describes the practice of taking advantage of a price differential between two or more markets.

[8] Defined here as the speed with which goods change ownership measured in days or months. It is also referred to as "turnover" in business vernacular.

[9] Collaboration among the trade was not unknown. In an essay entitled "Picture-Dealing," the author describes a dealer bidding on works at auction that he had previously sold to the

consignor and states that dealers "are enabled to profit...by conspiring and acting together." S. C. Hall, "Picture Dealing," *Art Journal*,August 1, 1852, 246–47. It is worth noting that in this scenario the dealer performs the role of market maker by providing liquidity for the paintings he sold. Dealer networks or consortiums appear to have existed elsewhere and earlier. See M. Szanto, "Antwerp and the Paris Art Market," in *Mapping Markets for Paintings in Europe, 1450–1750*, ed. Neil de Marchi and Hans van Miegroes (Turnhout, Belgium: Brepols Publishers, 2006), 329–39.

[10] The term describes a shop in a fixed location that sells luxury goods to the general public. See also Fletcher, "Creating the French Gallery." Retailing in luxury goods demands a well diversified and frequently changing inventory.

[11] The Tate Research Centre, http://archive.tate.org.uk//DServe/dserve.exe?dsqServer=tb-calm&dsqIni=Dserve.ini&dsqApp=Archive&dsqCmd=show.tcl&dsqDb=Catalog&dsqSearch=(RefNo=='TGA%2089 (accessed March 2009). The *Art Journal* of May 1, 1870, 159 mentions an exhibition at the Arthur Tooth gallery at this address.

[12] Rodney Engen and H. Somerset, *A Dictionary of Victorian Engravers* (Cambridge: Chadwyck-Healey; Teaneck, NJ: Somerset House, 1979), 244, states that Tooth published 177 plates from 1876 to 1894.

[13] Agnew was the largest purchaser overall.

[14] Several entries are partially illegible, and the identities of the artists could not be established with certainty.

[15] A total of 513 paintings by over half of the artists, (142), cost the gallery £20 or less. The average cost of paintings by Royal Academicians, our determinant for "well known," was £120, nearly 2 ½ times the overall average. Accurate conversions to present-day values are notoriously difficult. That notwithstanding, applying conversion rates supplied by the Economic History Association, http://eh.net, (accessed June, 2009), £50 in 1870 translates to approximately $4,500 in 2008 currency based on the retail price index; a conversion on the basis of average earnings results in $ 48,000, while a conversion as a share of GDP amounts to $108,000. More useful, perhaps, than currency conversions, is income. In the early 1870s, a school teacher or governess earned around £50 a year while the annual income necessary to afford a middle class existence was approximately £500. This paid for a coach, driver, a domestic servant, socially required wardrobe, private entertainment and other accoutrements of middle-class life. Leone Levi, *Wages and Earnings of the Working Classes*: *Report to Sir Arthur Bass, MP* (London: John Murray, 1885), 47–52.

[16] The inventory consisted of 310 landscapes; 155 genre scenes; 111 unclassifiable; 87 marine scenes; 52 Interiors; 42 topographical; 28 animals scenes; 27 portraits; 22 still lives; 18 histories; 4 coastal scenes; 2 military subjects; and 1 farm, 1 hunting and 1 sporting scene.

[17] Our figure differs significantly from Guerzoni's conclusion that mark-ups on paintings sold by dealers to private collectors were usually around 12–15%. Guerzoni, "The British Painting Market," 113, without providing substantiating data. Our own experience of operating an art gallery also suggests that Guerzoni's figures are too low to be economically viable. The mark-ups he mentions are customarily only found among perishable goods retailers with extremely high velocity.

[18] Biographical information on the artists in Tooth's inventory and their exhibition records can be found in Christopher Wood, *Dictionary of Victorian Painters*, 2nd ed. (Antique Collectors' Club: Woodbridge, Suffolk, England, 1995).

[19] Ibid. Average profit was £22, or 18% of cost. Well over half of the 113 pictures by Royal Academy members were sold directly to private customers rather than the trade.

[20] There were French, Dutch, German, Spanish, and Italian painters, and some of undeterminable origin.

[21] We learned this as a result of a calendar we created that shows the gallery's day-by- day business activities. The pictures bought by other dealers, at an average cost to Tooth of £30, were slightly cheaper than his general average cost but earned an acceptable profit of 37% of cost. Among these sales to dealers were 172 landscapes; 77 genre scenes; 63 unclassified pictures; 49 marines; 16animal scenes, and 1 coastal view.

[22] Sixty of these private customers bought only one, and 20 purchased two pictures, while the 7 repeat clients whose identity we knew purchased 10 or more works over the period. Their purchasing pattern differed from that of dealers in that these collectors bought one or two pictures at a time while dealers purchased larger groups. Their business accounted for nearly 45% of the period's gross profit, with the Catalan banker de Murietta, alone, contributing over 12% of the total. The special relationship between Tooth and de Murietta extended to the dealer buying paintings back from the client. Average cost of the works sold to all private customers was £55; profit to cost 39% and velocity 58 days. However, the repeat clients showed a tendency

to buy significantly more expensive works by many of the period's well-known painters including T. S. Cooper, G. C. Stanfield, W. P. Frith, and John Linnell.

[23] At an average cost of £89—over twice the overall cost average—these paintings only earned a 16% profit. The specific pictures were seven works Tooth had bought directly from the artists: one by Charles Thomas Bale; a pair by Georgina Lara; two each by Arthur Joseph Meadows and Alfred Montague, respectively. Three paintings, by Thomas Faed, Patrick Nasmyth, and Edward Matthew Ward, which he had bought from George Chester, he sold at Christie's on the same date as they were entered in his inventory, and he bought one by Edward John Cobbett from Grindley, a Liverpool dealer with whom he traded frequently.

[24] The sale on February 14, 1871 to the private collector John H. Chance of a George Clarkson Stanfield work for £450, described in the stock book as *Coastal Scene*, measuring 18 x 26 inches, that Tooth had acquired from George Chester for £205 only 2 months before, was not only the most profitable sale over the two year period but also very much an exception: no other sale earned Tooth as much in currency.

[25] The difference between average transaction profit and cash basis profit is due to the 127 pictures that remained unsold.

[26] Gross profit was £1,421 (or nearly 60% of cost) with an average velocity of 40 days. The painters were G. C. Stanfield (*Coastal Scene*, 18 x 26 in.; *Coastal*, 14 x 24 in.; *Stiff Breeze*, 15 x 22 in.);Richard Ansdell (*Sheep*, 24 x 36 in.); Thomas Faed (*Harvest Time*, 20 x 30 in.; *Draught Players*, 20 x 24 in.); G. B. O'Neill (*Evening Party*, 37 x 45 in.); C. R. Leslie (*Caperman*, 45 x 61 in.); T. Webster (*Doctor's Visit*, 20 x 24 in.); and J. Linnell (*Hill and Dale*, 41 x 58 in.), all very well established and much sought after by other dealers as well.

[27] A time span of only 2 years is insufficient to establish a pattern. His behavior, however, is consistent with present-day trade practices and common business sense. These paintings by well-known artists were very much in demand, as their high prices indicate. Opportunities for dealers to buy them for amounts that can result in high profits were, by definition, rare and very opportune. It is, therefore, no surprise that there were few such transactions.

[28] The Efficient Market Hypothesis assumes that efficient markets, particularly financial markets, generally reflect an equal distribution of information concerning the value of a particular traded commodity. A market is considered inefficient if, as it appears to be the case with Chester, one party to a transaction does not have the same market intelligence as the other and large profits are generated for the other party as a result of this unequal distribution of information.

[29] Approximately 170 and 460, respectively.

[30] While average gross profits were smaller than the overall average, amounting to around 18% of cost, the actual income generated by these few sales was high.

[31] The relationship between the Royal Academy and Gambart's French Gallery is discussed by Fletcher, "Creating the French Gallery." Our research shows that Tooth also relied on lower-ranking exhibition societies for the selection of the artists whose works he sold. See Wood, *Dictionary of Victorian Painters*.

[32] Profit was 47% of cost; the average turnover period was 39 days, and 25 percent of these inexpensive works sold within 7 days. Around ten percent of these paintings were sold at a moderate loss. At times, it appears that these sales at a loss were part of larger transactions and simply entered at the recorded amount for bookkeeping purposes, possibly to adjust an agreed-upon total price of a sale consisting of several works. However, this is conjecture. Since each sale entered in his stock books represents a real economic transaction, all were included in our analyses.

[33] At least 298 (58%).

[34] One hundred twenty-seven pictures were sold to private consumers; 5 sold on the block; 84 remained unsold during this period. Profits resulting from these transactions were highest for sales to private consumers (55%); sales to other dealers yielded 45%, while sales through auction returned 32%.

[35] The categories are: £2 and below; more than £2 through £5; more than £5 through £10; more than £10 through £20.

[36] The artists were: Charles Leslie; 43 pictures, average velocity 2 weeks, 30 works (70%), bought by dealers, profit to cost 38%; James Burrell Smith, 48 works, average velocity 11 days, 32 (66%) bought by the trade, profit to cost 29%; Sidney Richard Percy, 31 landscapes, average velocity 33 days, 23 (74%) to the trade, profit to cost 35%. The exception was Walter Williams's 22 paintings of which only 9 (40%) were re-cycled to the trade, average velocity 16 days, profit to

cost 32%. As a group, their works, at an average cost of only £15 sold quickly—on average within 19 days—and profitably, with an average return on invested capital of 33.5%.

[37] This group, at an average cost of £27, returned an average profit of 41%, and remained in his inventory usually around 55 days. The artists were: E. C. Barnes (19 works, 8 to the trade); Georgina Lara (19 works, 13 to the trade); Arthur John Meadows (19 works, 8 to the trade); Abraham Hulk (14 works, 9 to the trade); Edward John Cobbett (13 works, 3 to the trade); John Clayton Adams (12 works, 4 to the trade); Charles Thomas Bale (12 works, 8 to the trade); Isaac Henzel (11 works, 4 to the trade); Hermanus Koekkoek (11 works, 3 to the trade); Joseph Thors (11 works, 4 to the trade); Edward Turner (11 works, 9 to the trade); George Vicat Cole (10 works, 5 to the trade); Robert Alexander Hillingford (10 works, 2 to the trade); James Baker Pyne (10 works, 2 to the trade).

[38] Two hundred ninety-eight were sold to the trade and 20 to private buyers. Eighty-three were carried over to the next year. As a category, the paintings and watercolors by those 161 artists from whom the dealer only bought once, tended to be on the cheaper side, costing an average of £25, and they were slow to turn over. They remained in his inventory typically 93 days—nearly three times as long as the works of painters from whom he bought 20 or more works. Still, they returned a reasonable profit of 35%. The second group, consisting of paintings by artists from whom Tooth bought 2 pictures, was, at an average cost of £48, a good deal more expensive and moved at a faster rate of 60 days with a slightly lower return of 30% of cost)

[39] They comprise 74% of the 100 transactions with the slowest velocity.

[40] The effects of the market on the size of paintings were already recognized then. See Richard Redgrave, *A Century of Painters of the English School* (London: Sampson Low, Marston & Company, Ltd., 1890), 263–64.

[41] Helene E. Roberts, "Exhibition and Review: The Periodical Press and the Victorian Art Exhibition System," in *The Victorian Periodical Press: Samplings and Soundings*, ed. Joanne Shattock and Michael Wolff (Toronto: University of Toronto Press, 1982), 88.

[42] Around 30 x 40 inches.

[43] The decline in production of history paintings was also associated with their use as designs for reproductive engravings. As demand for such imagery became saturated due to an increase in supply of reproductions, the need for producing new designs to be engraved slowed. As a category, these works cost around £75, remained in inventory over 70 days, and only earned the gallery a modest 18%.

[44] At a cost of £28 they were also quite inexpensive, turned over in less than 2 months, and earned a good profit of 42% of cost.

[45] Other categories, such as animal pictures, figurative subjects, marines, hunting scenes, and portraits were also of similar average size. Collectively, they commonly cost £38, returned a smaller than average profit of 26 %, and sold usually within 68 days. Expectedly, portraits, as a separate category, were, at a 106 days, very slow to turn over. Surprisingly, so were animal subjects, which took about 4 months to sell. By excluding these two genres, the average length in inventory for the remaining picture types drops to 37 days.

[46] Their average cost was £20, profit to cost 31%, and they sold quickly within an average of 44 days.

[47] Average profit of 34.5% percent with an average cost of £25; 56 days average velocity.

[48] The artists were J. Linnell Sr. (£828); G. B. O'Neill (£811); J. Pettie (£655); J. B. Smith (£625); S. R. Percy (£623); G. Smith (£559); G. V. Cole (£488); R. Beavis (£349); J. Webb (£332); E. C. Barnes (£326); T. Faed (£305); R. A. Hillingford (£304). Using the retail price index conversion, £300 pounds translates into approximately $35,000 in 2008 values. Using a conversion based on average earnings, the same amount rises to over $200,000. As to the total, based on the retail price index conversion, Tooth contributed $1.2 million to the production side of art, or around $7 million when converted on the basis of average earnings. Economic History Association, http://eh.net, (accessed June 2009)

[49] Maas, *Gambart*, 123.

[50] These pictures were rather cheap and only returned a 28 % gross profit. A pair by Georgina Lara, bought from her for £14 and sold for £18; one by Charles Thomas Bale, purchased from him for £5 and sold for £7.5; a pair of marines by Alfred Montague for which Tooth paid £14 and received £16; and two pictures by Arthur J. Meadows that had cost the dealer £10.5 each and sold for £13.75 and £14.25 respectively.

[51] Lara: 19, 13 to the trade; Bale: 12, 8 to the trade; Montague: 8, 5 to the trade; Meadows: 19, 13 to the trade. Lara died in 1871, and Tooth may have wanted to test her work at auction.

[52] Two hundred thirty-nine times (around 60%). On average, these works cost him nearly twice as much, £23.5, as those he disposed of through auction, and they returned an average profit of 36% at a velocity (time in inventory) of 57 days.

[53] Ninety-six pictures. In terms of cost, gross profit, and velocity, there was no significant difference from those that dealers bought. Sixty-five out of the 402 pictures remained unsold and were carried over to the next year.

[54] Average price was £34 with a typical return of 37%. The most profitable of this group of 150 paintings and watercolors were the 64 works he sold to other dealers. After an average stay in his inventory of 43 days, they earned him an above average profit of nearly 50% (48%). It took a little longer, 65 days, to sell a further 62 of these auction purchases to private buyers.

[55] Richard Ansdell was the only full member.

[56] Such as the purchase on July 8, 1871 of a winter scene by Alfred Vickers at Christie's for a very low price of £3.5 which Tooth sold 3 months later to the dealer, Paterson, for £7.5. Just a few months earlier, on April 22, Tooth had paid over £5 for a much smaller work by Vickers. Another example involves a picture by John Cobbett that Tooth bought at Christie's for £8.5 and sold for £18. Usually, the dealer paid, on average, nearly £30 for comparable works by Cobbett. The most profitable such example involved a picture by John Bagnoll Burgess that Tooth bought on April 20, 1871 and sold 4 months later to the dealer, Paterson, with a profit of over 630% of cost.

[57] On April 1, 1871, for example, Tooth paid record prices at Christie's—around 8 times as much as he paid to other sources—for 3 paintings by Charles Frere, and then sold them at profits averaging 7.5%; another example is the purchase at Christie's during the same auction of a painting by Charles Baxter for £69, almost twice as much as the average price Tooth normally paid for the artist's works, and its subsequent sale to the dealer, J. W. Lomax for £70 six months later; on July 29, 1871, Tooth acquired a Richard Ansdell for over twice as much as he usually paid for this artist's works and passed it on to another dealer two months later for a less than 10% mark-up. Two works by A. De Bylandt, bought at Christie's for £4.5 each were sold at a loss to a fellow dealer. Beyond these, we identified 8 additional paintings that Tooth bought at auction and then sold to dealers at a loss. These are but a few transactions involving auctions as sources for paintings that indicate purposes other than arbitrage.

[58] There are numerous examples such as the purchase of a work by Alfred Vickers at Christie's on April 22, 1871 for £5.25. It is recorded as sold on the same day to Tooth's important client, the banker De Murietta, for £5.5; or the picture by Alfred Elmore that Tooth got at Christie's on April 1, 1871 for £63 and recorded as sold on the same day for £66.25.

[59] A particularly confounding set of transactions appears in his stock book for May 8, 1871. On that day, Tooth purchased a painting by William Gale, entitled *Gethsemane* at Christie's for £51.9 s. It was, most likely, a commissioned buy, since the transaction earned him just over £3. The date of sale to a Mr. W. Smith for £54 is marked as June 5, 1871. The next line in his book for that day records the purchase of the same painting from Smith for the same £54 and its subsequent sale to the dealer Paterson on July 14 at a loss of £18.

[60] Sixty-three were by painters whose works he bought only this one time, and the remaining 87 works were by 40 different artists of whose works he had acquired, or would acquire, more than one at public sales or elsewhere.

[61] An untitled picture by Alfred Elmore, purchased at Christie's on January 17, 1871, realized a 220% gross profit in less than 2 months; a painting by Frederick Richard Lee returned a 143% gross profit in 72 days; a small picture by Harry Johnson realized a 250% profit.

[62] One hundred sixty-nine works by 73 different artists.

[63] Twenty-one painters were affiliated with the Royal Academy. Their works cost on average around £70, stayed in his inventory around 2 months, and were sold at a gross profit of around 30% of cost.

[64] It appears that the trade circled certain works among its members until one of them succeeded to make a sale to a private collector. Good examples are several transactions involving works by Erskine Nicol. Tooth bought 3 of this artist's paintings from fellow dealers and sold them with no more than a nominal mark-up to other dealers after a relatively brief period of time. The sellers and buyers were all individuals with whom he frequently traded.

[65] A Cooper bought from and returned to Cox; an E. Nicols bought from and returned to Hornby; a Niemann, a collaborative landscape by Linnell and Varley; a De Fleury; a Hayllar; and a Barnes all bought from and returned to Rhodes.

[66] Among several such examples is the sale to Murietta of a picture by Frederick Goodall for which Tooth had paid the dealer, Morby, £250 and received a £5 profit. The amounts involved and the fact that purchase and sale were only 2 days apart suggest that Tooth just charged a nominal handling fee. Another example is the sale to the same client of a Linnell Sr. landscape

bought from the dealer, J. Muirhead, for £550 and passed on a day later for £575, having received what must have been a £25 handling fee.

[67] Tooth must have had such a relationship with J. and W. Belton from whom he bought 37 of the 43 paintings by Charles Leslie that were listed in his inventory. He sold 30 of them to other dealers.

[68] Among such examples is the purchase of a work by Georgina Lara for the high price (for the artist) of £10 from the dealer, E. H. Hartmont, that Tooth sold to a private buyer named Baidora at no profit. In another instance, he bought a John Cobbett shrimping scene from the dealer, Grindley, for the high price (for the artist) of £94 that he sold at Christie's 21 days later at a loss of £23.5.

[69] At an average cost of £98, these 63 pictures earned a lower than average profit of 27% but still sold within 2 months. De Murietta was among those clients. Among many other works, Tooth sold him a small 8" x 10" landscape by John Linnell, described as "Dusk" for £143 for which he had paid the dealer, Chester, £122. This canvas turns out to the most expensive painting per square inch at £0.5 and £0.65, respectively).

[70] Opportunity cost describes the costs one incurs by choosing one activity over another. In this instance, the amount of additional money Tooth could be earning were he to replace slow selling items with better selling ones is considered the opportunity cost of doing business in slow-selling pictures.

[71] Such venues included the Old Watercolor Society, the New Watercolor Society, and the Society of British Artists.

[72] Product differentiation describes a marketing device that emphasizes the differences between closely related products. Differentiation looks to make a product more attractive by contrasting its unique qualities with other competing products. Successful product differentiation creates a competitive advantage for the seller as customers view these products as unique or superior.

[73] Frequent press reports, like the *Art Journal's* financial report of the Bicknell sale (April 1863) that juxtaposed the amounts this collector had initially paid with the hammer prices, promoted the speculative commodity image of contemporary paintings. Samuel Carter Hall, *Retrospectives of A Long Life from 1815–1883* (New York: D. Appleton and Company, 1883), 197–98. Guerzoni is incorrect in suggesting that American collectors "were perhaps the first to consider art as an investment." Guerzoni, "The British Painting Market," 104.

[74] The profits we calculated do not take overhead or opportunity costs into account. While we cannot accurately quantify these factors, we think it is reasonable to assume that gross returns of 5% or less actually reflect economic returns of 0 or net losses.

[75] These low entry-barriers represent one of the major differences between the English and French art market environment. British artist had numerous avenues open to them to enter the market place. While the Royal Academy clearly enjoyed a hegemonic position, it was not the only path to commercial success. The business-focused and entrepreneurial character of the British art market, while highly competitive, was designed to attract producers through a variety of channels made up of different exhibition venues and a layered system of dealers working jointly to maximize their marketing endeavors. For a critical discussion of Harrison C. White and Cynthia A. White's seminal book, *Canvases and Careers: Institutional Change in the French Painting World* (New York: John Wiley and Son, 1965) and the French art market in the latter part of the 19th century, see David Galenson and Robert Jensen, "Careers and Canvases: The Rise of the Market for Modern Art in Nineteenth-Century Paris," in *Van Gogh Studies: Current Issues in 19th-centuryArt*,ed. Chris Stolwijk (Zwolle: Waanders Publishing, 2007), 1:137–66. The exclusiveness of the prevailing French market structure the authors describe may well have factored into the degree of radicalism that challenged it.

[76] While we have not undertaken similarly detailed analyses of other dealers' business ledgers, a cursory examination of a 10 year period (1870–80) of the stock books of the firm of Agnew, also held at the Getty Research Center, shows similar features. Maas, *Gambart*, 109, reports that in 1859 Gambart bought 10 pictures from Agnew's Manchester branch and sold 105 paintings to it—"more than twice as many as in any other year of his career." Obviously dealer to dealer sales were nothing unusual.

[77] Wood's, *Dictionary of Victorian Painters* lists over 11,000 different artists active during the Victorian period. The *London Post Office Directory* for the year 1840 lists 168 painters; in 1845, the directory lists 603. By comparison, for the 18th century, Ellis Waterhouse features less than one fifth of the number of active painters that Wood recorded. Ellis Waterhouse, *Dictionary of British 18th Century Painters in Oils and Crayons* (Woodbridge, Suffolk: Antique Collectors' Club, Ltd., 1981).

[78] Most auction catalogues from the mid-1970s of sales of Victorian paintings, drawings and watercolors from Christie's, London, or Sotheby's Belgravia location, the no-longer- extant sales room specifically set up for Victorian art, give a convincing account of the high degree of artistic individualism pervasive during the Victorian age. During the 1970s, consignments were more frequently composed of liquidity sales and present, most likely, a more accurate reflection of the diversity of Victorian painting. Current sales of Fine Victorian Paintings tend to reflect more contemporary tastes.

[79] Robert Jansen, *Marketing Modernism in Fin-de-Siècle Europe* (Princeton: Princeton University Press, 1994), ch. 6.

[80] Quoted in David Peter Corbett, *The World in Paint* (University Park: The Pennsylvania State University Press), 131.

[81] Tim Barringer, *Men at Work* (New Haven and London: Yale University Press, 2005), 313–21, discusses the tension surrounding the issue of artistic labor during this period that came to a head in the Whistler vs. Ruskin trial in 1878. An even earlier challenge to the labor-based system against which Whistler took issue was launched by P. G. Hamerton and the Etching Revival. See P. G. Hamerton, *Etching and Etchers* (London: McMillan and Co., Ltd., 1868). Hamerton went about systematically to create a "Renaissance" for an art product that had, in fact, never disappeared, by advocating a sensual and intellectual appreciation of it opposed to the prevailing standards. The central issue of Hamerton's argument was not the quantifiable input of labor but the promotion of an art product the merits of which should be measured, among other things, independent of the amount of time it took an artist to create it. Twenty-first century conceptual art is but a logical consequence of the steps taken by this and other artists of similar persuasion. On the role of the Aesthetic Movement in this process of artistic product innovation see Corbettt, *World in Paint*, 83–127. As an aside, it is worth noting that Joshua Reynolds, the first president of the Royal Academy, had already paved the way for the pre-eminence of the intangible when, in 1780, he delivered his *Discourse IX* at the Royal Academy. Sir Joshua Reynolds, *Discourses on Art*, ed. Robert R. Wark (New Haven and London: Yale University Press, 1959), 171.

[82] Guerzoni, "The British Painting Market," 100, mentions that small operators contributed to the stability of the market.

[83] Good examples are the sale in 1871 of the Bullock collection and the sales of the inventory of the dealers Gambart, Wallis, and Agnew. Dealers were the biggest buyers at these sales. *Art Journal*, May 1871, 140; June 1871, 167; Sept. 1871, 226. The data do not explicitly show when Tooth individually performed this function except in the case of re-purchasing a picture by Frith from De Murietta that the dealer had sold only 8 months earlier. The collector incurred a loss of around 10% but had a ready market; Tooth, however, still made a small profit on the two transactons.

[84] In its June 15, 1829 review of the George Hibbert sale at Christie's on June 13, 1829, the *Morning Chronicle* reported that J. W. M. Turner's *Abingdon* (National Gallery # 485) was bought by the artist himself, "who, very prudently ... always attends sales to keep up the price of his work." William Whiteley, *Art of England 1821–1837* (Cambridge: Cambridge University Press, 1930), 167. It should be noted that such practices still exist today.

[85] For example, in a letter to his wife and model, Effie, of June 27, 1861, John Everett Millais, reflecting on the conditions of the art market, made the revealing remark that "nearly all the picture sales we have seen in the paper have been false." Pierpont Morgan Library, New York. Accession number: MA1485D, record identification: 132647.

[86] On "toeholds" and bidding strategy see Jeremy Bulow, Ming Huang, and Paul Klemperer, "Toeholds and Takeovers," *Journal of Political Economy*, 107, no. 3 (1999), 427–54; also Mike Burkart, "Overbidding in Takeover Contests," *Journal of Finance*, 5, no. 5 (December, 1995), 1491–1515; and Rajdeep Singh, "Takeover Bidding with Toeholds: The Case of the Owner's Curse," *Review of Financial Studies* 11, no. 4 (Winter 1998): 679–709.

[87] Such practices are very difficult to document largely because they are either illegal or in violation of auction contracts. The real identity of the seller is as easily concealed as that of the buyer by having associates perform those roles. Yet it is common practice in the building of an artist's reputation to test the auction market for her/his work and protect it, if need be. Our auction sales data identifies 89 transactions that record the same name for the seller and associated buyer. Well over 1/3 (33) of these trades involved dealers. For some reason, these businessmen decided to incur the costs associated with these sales. Most likely, one can reasonably assume, this was because these transactions produced more benefit—of whatever kind— than they incurred in cost.

[88] John Singleton Copley's *Death of Chatham* (1781; 90 x 121 in.) is but one example of this trend towards attention-grabbing pictorial sensations.

[89] For the relationship between the production of pictorial salon or academy sensations and their derivative products of print and commercial exhibition revenues, see Bayer, "Money as Muse," ch. 11.

[90] Concerning the trade's consumer orientation, the critic R. St. J. Tyrwhitt wrote that dealers demanded of artists to "paint what we can sell." "Skilled and Literary Art-Criticism," *Contemporary Review* 11 (1869): 107. Concerning the propensity among artists to make rational business decisions, see Thomas Bayer, John Page, Yaron Raviv, and Joshua Rosett, "Age, Human Capital and the Quality of Work: New Evidence from Old Masters." Abstract, http://ssrn.com/abstract=1364417, (accessed March 2009)

[91] Bayer, "Money as Muse," 108n216.

[92] Out of curiosity, we ran a test to calculate the most profitable picture size. The result supports Tooth's choice: the most profitable size, 600 square inches, was the most common one in his inventory and matches the average size of landscapes, his most frequently traded picture category.

[93] The dealer, Morby, operated in Scotland, while Grindley was located in Liverpool. We suspect that there were more among the group of dealers that sold paintings in other urban centers that we could not identify as yet.

Illustrations

Fig. 0, Emily Mary Osborn, *Nameless and Friendless*, 1857. Oil on canvas. Private collection. [return to text]

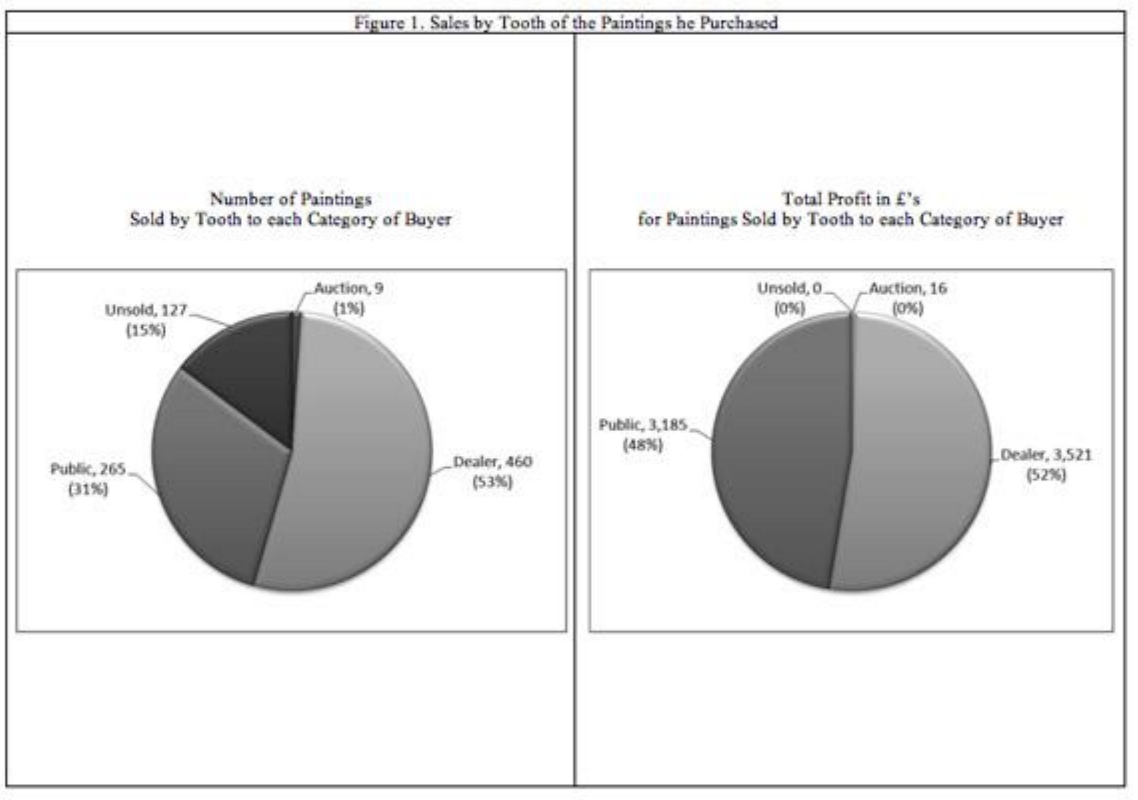

Fig. 1, Sales by Tooth of the Paintings he Purchased. [return to text]

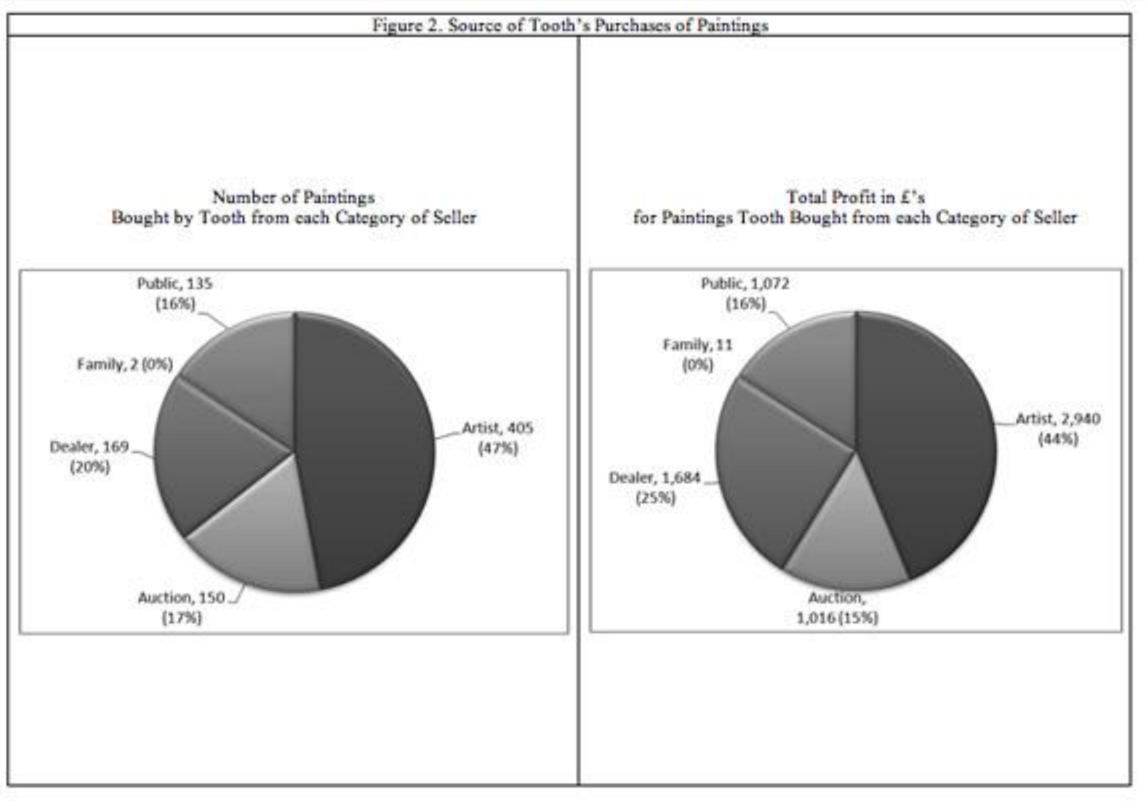

Fig. 2, Source of Tooth's Purchases of Paintings. [return to text]