

CLAARTJE RASTERHOFF

Painting and Publishing as Cultural Industries

The Fabric of Creativity in
the Dutch Republic, 1580-1800



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AMSTERDAM STUDIES IN THE DUTCH GOLDEN AGE

Painting and Publishing as Cultural Industries

Amsterdam Studies in the Dutch Golden Age

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Claartje Rasterhoff

Amsterdam University Press

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1. Introduction

On 25 October 1779, Isaac Ouwater, a Dutch painter best known for his townscapes painted the peculiar picture that adorns the cover of this book. The painting depicts a street scene featuring a group of people jostling each other to enter a building. On closer inspection, the inscription reveals that the building in question was the Amsterdam office of the state lottery, run by bookseller Jan de Groot, and that it must have been lottery day.¹ Tucked away between two inns, the ‘ninth house from the Dam’ at Kalverstraat nr. 10 was only a stone’s throw away from Dam Square, the centre of Amsterdam, and from numerous fellow publishers, booksellers, art shops, and print publishers.² In 1742, someone taking a stroll from Dam Square, via the Kalverstraat, to the Munt and back along the Rokin, would have passed as many as forty-four bookshops and mapsellers, not even counting the smaller shops in the alleys.³ Many of these, including De Groot’s shop, had been occupied by booksellers, publishers, and engravers for well over a century.⁴

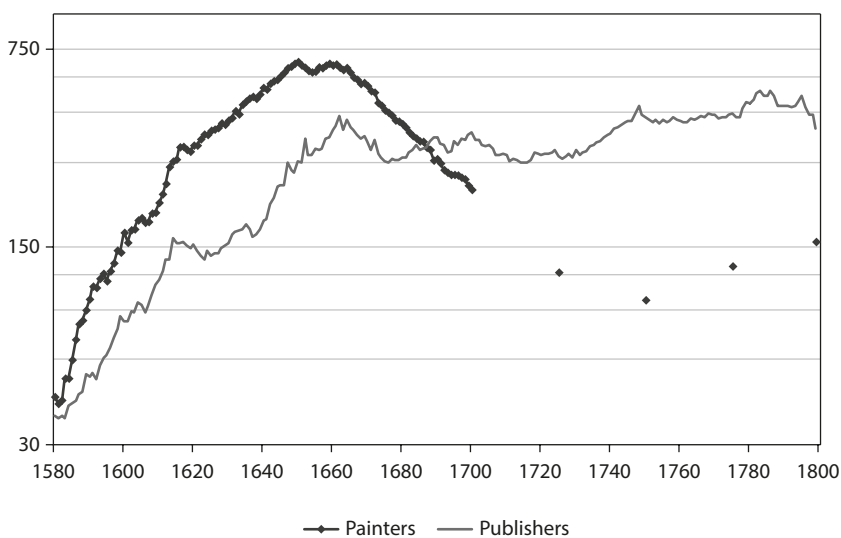
In this book I argue that the spatial concentration of Amsterdam publishers and other producers of art and culture, as well as its persistence over time, are more than nice-to-know facts. The century-long use of Kalverstraat nr. 10 as a bookshop testifies to the importance of the local reproduction of skills and routines for sustained cultural achievements. Creative outbursts such as the ones in Renaissance Florence, fin-de-siècle Paris, and, the topic of this book, the Dutch Golden Age can, at least partly, be explained by specific local conditions.⁵ But what are these conditions, and how do they enable the turning of creative potential into cultural, but also commercial, achievements? In this book these questions are studied through the case of the early modern Dutch Republic, and the answer is sought in the industrial organization of cultural production and consumption.

The research traces the development of two markets for cultural goods – paintings and books – through the seventeenth and eighteenth centuries. Both have been extraordinarily well-researched by experts on art, books, their makers, and their admirers. My aim is to integrate this research through the quantitative mapping of spatial and diachronic patterns, and through the use of analytical concepts from the academic fields of economic geography and cultural economics. The concepts of ‘spatial clustering’, ‘cultural industries’, and ‘life cycle’ in particular make it possible to interpret familiar patterns in novel ways, because they bridge the macro-level explanations favoured by social scientists with the micro-level research of specialized historians.

The Dutch Golden Age

Between the 1580s and 1650s, the Dutch Republic of the Seven United Provinces (hereafter referred to as the Dutch Republic) became the centre of the world economy. The question of how such a small country, in the midst of political troubles, could come to domination has long puzzled historians. Epitomized by world-famous painters such as Rembrandt and publishing houses like the Blaeu firm, cultural production also reached unprecedented levels in terms of scale, scope, and quality during this famous Golden Age.⁶ The sheer volume and variety of genres and styles are as much a characteristic of Golden Age culture as the large number of high-end artists. Dutch painters, for instance, produced a breathtaking number of paintings in a variety of genres; a figure in the region of several million is now commonly accepted.⁷ For book publishing, estimates are equally impressive: the Republic had the highest per capita consumption and production of books in Europe, and Dutch publishers and merchants fulfilled important export functions.⁸ The success, however, did not last, and from the late seventeenth century onwards, the Dutch economy, including its cultural markets, lost much of its momentum (Figure 1.1). Other countries caught up, local markets were saturated, and the market

Fig. 1.1 Number of painters and publishers active in the Dutch Republic, 1580-1800



Source: Thesaurus; Ecartico; RKDartists (5-year moving average; semi-log scale)

for paintings was hit particularly hard when substitute products such as wall hangings became increasingly popular.

How can the dramatic rise in the production and consumption of cultural goods such as art and books be explained? For a long time, historians have attributed the success of Dutch Golden Age painting and publishing to general favourable circumstances as well as to the ingenuity of creative minds.⁹ Economic prosperity, population growth, secularization of demand, relative freedom of press and thought, high levels of literacy, and a developed trade network provided fertile ground for cultural production, while artistic geniuses pushed quality and innovation further and further by introducing new subjects and techniques.¹⁰ From these explanations, a coherent picture emerges of the context in which the painting and publishing industries developed, but it leaves unspecified where exactly the favourable circumstances and the artistic geniuses crossed paths. For an answer to this question I turn to economic art historians and urban historians, who suggest we look at markets and cities to identify the mechanisms that propelled cultural production.

Economic art history: markets

The field of art history offers convincing additional explanations for the cultural upswing in the Dutch Golden Age. The general premises in what is now widely known as economic art history are that paintings can be seen as commodities, artists as entrepreneurs, and buyers as rational consumers. French-American economist John Michael Montias has been credited with sparking the field of 'art and market' studies in the early 1980s through his use of both general economic theory and micro-level archival research to analyse the size and composition of Dutch local art markets.¹¹ By so doing he revisited questions that had already been asked by art historian Wilhelm Martin in the first decade of the twentieth century but that remained shelved for more than half a century: 'What was the origin of the hundreds, nay thousands, of pictures which were produced in Holland in the short period from about 1620 to 1700? What motives, what circumstances, occasioned their production? How were the pictures painted, and for what purpose? How did their authors live, and how did they earn their livelihood?'¹²

Now, thanks to manifold studies on these issues by scholars such as Neil De Marchi and Hans Van Miegroet, Marten Jan Bok, Eric Jan Sluijter, Filip Vermeylen, Jan De Vries, and Ad van der Woude, early modern Dutch art and artists have been relatively well examined from an economic perspective.¹³ This approach has also been applied to other times and places, but it has

taken hold particularly firmly in the Netherlands, alongside the study of painting of the Golden Age. In book history, publishers and printers have been recognized as entrepreneurs and traders, but a distinct specialization of economic book history was never established.¹⁴ Although studies of the production of books during the Dutch Golden Age discuss many aspects of the business of printing and the book trade, they tend to do so without the explicit use of economic theory or methods of analysis.¹⁵

The economic approach has informed the by now widely held belief that market forces did much to shape early modern Dutch cultural production.¹⁶ In particular, it has brought to the fore the fortuitous meeting of supply and demand conditions in the first half of the seventeenth century, as well as the successful strategies employed by Dutch painters to tap into new and existing markets. After Antwerp fell to the Spanish in 1585, cities in the Northern Netherlands began to take over as commercial centres, seeing a dramatic increase in wealth, while the last decades of the sixteenth century also witnessed the influx of skilled craftspeople from the Southern Netherlands. At a time when demand for luxury goods increased, immigrant-producers were ideally placed to provide these goods in great quantity and variety.¹⁷

These favourable conditions shaped a large and varied domestic market, and to meet this demand painters had to increase productivity, preferably without sacrificing the quality of their works. They were able to save time while also introducing novelties for affordable prices, and through the development of novel and affordable types of paintings they managed to further broaden and deepen the market for images. The artistic innovations for which Dutch Golden Age painting became famous, most notably the inconspicuous yet powerful landscapes associated with Jan van Goyen, can therefore be seen as not only creative achievements, but also as product and process innovations that lowered production costs and increased output.¹⁸

These economic art historical studies also revealed that markets are not simply the net sum of exchanges between buyers and sellers who behave rationally but constellations of institutions, social relations, and conventions.¹⁹ Historians such as Jan de Vries, Marten Jan Bok, and Maarten Prak have emphasized that market conditions alone cannot account for the dramatic expansion of the Dutch art market. A large, sophisticated, and varied market is a necessary but not in itself sufficient condition to account for outstanding achievements, and the cultural expansion in the Dutch Golden Age was supported by formal and informal institutional structures such as local guilds.²⁰ Increasingly, studies of the early modern Dutch art and book markets have started to recognize the importance of social networks and institutions for cultural market development. Their role, however, has

yet to be analysed in a systematic way.²¹ With this study I aim to redress this, by focusing less on market forces and more on the issue of local organization, especially on an urban level.

Urban history: cities

A second set of explanations for cultural booms can be found in the field of urban history. In recent decades the relationship between cities, creativity, and innovation has become of particular interest to academics and policy-makers following what has become known as the ‘creative city’ debate.²² But even before the notion of creative cities was popularized, several historians and geographers observed that there is something specifically urban about cultural achievements, and about innovation and creativity in general.²³ In his book *Cities in Civilization: Culture, Innovation and Urban Order*, Peter Hall asked why ‘the creative flame should burn so especially, so uniquely, in cities and not the countryside [...]’?²⁴ And in the edited volume on material and intellectual culture in early modern Antwerp, Amsterdam, and London, Patrick O’Brien has posed the question, ‘Why do recognized and celebrated achievements, across several fields of endeavour, tend to cluster within cities over relatively short periods of time?’²⁵ Cities are often viewed as inherently open sites where people and ideas meet and where the entrepreneurial spirit convenes with the reception and adoption of ideas, a union that in turn gives way to innovation. While the relationship between cities and creativity may seem irrefutable at first sight, further investigation into correlation and causation is warranted. How sudden were the onsets and closings of such golden ages really? What do we mean when we speak of urban creativity, innovation, and achievement? And how helpful is it to view them as distinctly urban phenomena? For even if cities were usually the sites of cultural achievements, this does not necessarily mean that they were also their source.²⁶

Economic geographers refer to the more specific advantages that urban areas may offer to producers and consumers as agglomeration economies.²⁷ First of all, cities provide access to shared infrastructure such as finances and transport, to a sizable and varied market, and to a sizeable and varied labour force. Such advantages, also known as urbanization economies, are in theory available to all urban participants, and they help producers and consumers alike to cut costs and save time. Secondly, cities also provide opportunities for market participants to be in close proximity to each other. This facilitates specialization, differentiation, exchange of know-how and information, and collaboration, which, in turn, may reduce costs and foster innovation and yield quality improvements – advantages known as localization economies.

It is not difficult to see how urbanization and localization economies may have been at work in early modern European cities in general and in the highly urbanized Dutch Republic in particular. By the sixteenth century, urban Europe had several large cities with over 100,000 inhabitants and a host of smaller towns integrated in regional urban networks.²⁸ These cities and towns, hosting a number of specializations, ranged from capitals, through court and port cities, to trading and university towns. Many of the large commercial and financial centres also established reputations as hotbeds of innovation and culture. The advantages of such centres for cultural entrepreneurs were well summarized in the sixteenth century by one of the most important publishers in history, Christophe Plantin, in a letter to Pope Gregory XIII: 'I chose to settle down in Belgium and in this town of Antwerp in particular. What made me decide this was the fact that, in my opinion, no town in the world provides more advantages for the profession I wanted to pursue. It is easy to get here; one sees different countries getting together at the market; one also finds all the raw materials which are indispensable for my craft; and for all professions there is no problem of finding labourers who can be instructed within a short time.'²⁹ In other words, commercial towns such as Antwerp offered entrepreneurs such as Plantin plenty of opportunities for easy market access as well as for saving costs on materials and labour.

The concept of agglomeration economies is helpful in explaining why cultural production is concentrated in cities rather than the countryside, and why cities that score high on available infrastructure and resources might be particularly attractive to cultural entrepreneurs. Given the rapid commercial development of the already highly urbanized Dutch region during the seventeenth century, we would expect to see nothing less than an expansion of urban cultural production and consumption during the Golden Age. But even if the relationship between the cultural and the commercial seems clear cut, not all large cities were cultural hotbeds, and relatively small cities such as Utrecht and Haarlem could also play major cultural roles.³⁰ And even if it helps us understand why we should turn to cities when researching cultural achievements, these advantages do not explain how exactly the range of innovations and quality improvements that characterize the Dutch Golden Age came into being. In order to address these questions, my own research focuses less on general urban characteristics and more on local industrial interactions. This approach thus neatly complements explanations that focus on the genius of individual entrepreneurs or firms as well as explanations that emphasize general economic circumstances or urban amenities.³¹ In order to operationalize such a meso-level approach, I propose to view the early modern Dutch book

and art sectors as cultural industries with their own socio-economic and spatial organizational structures.³²

Cultural industries

Critical theorists Theodor Adorno and Max Horkheimer coined the term culture industry in the 1930s in their work on popular culture vs. high culture, but today industries involved in the production of cultural artefacts are contrasted mainly with ordinary manufacturing and service industries.³³ The purpose of viewing different types of cultural artefacts such as art, books, and architecture as products of the same source – cultural industries – has a straightforward purpose; namely to shed light on how cultural economic competitiveness may be created and sustained. From the 1990s onwards, culture and knowledge have increasingly been presented as the key ingredients for promoting urban and regional economic development in post-industrial societies.³⁴

As a result, research on the relationship between culture and economics has become more urgent to academics and urban planners, as is evident from the popularity of terms such as ‘creative industries’, ‘creative city’, ‘creative class’, ‘cultural entrepreneurship’, and ‘creative economy’.³⁵ It is important to note that these terms often feature as policy catchphrases rather than academic tools of interpretation and explanation. However, the academic literature itself is not all that clear and consistent in defining what they mean. Rather than adding to hype and the often indiscriminate application of these terms to historical case studies, I wish to specify what they mean for me and what they can and cannot contribute to the present study of pre-industrial societies.³⁶

The words creative and cultural are often used interchangeably, and while they may indeed overlap in practice, cultural production is not by definition creative, and creative activities are not always cultural.³⁷ Since my research is concerned with the production of cultural goods rather than with creativity or intellectual property in general, I will employ the term cultural industries rather than creative industries. Most definitions of the cultural industries are based around a combination of five main criteria: creativity, intellectual property, symbolic meaning, use value, and methods of production and distribution.³⁸ The list of cultural industries varies according to the different emphases in definitions, but most scholars agree on the inclusion of the arts, print media and publishing, cultural heritage, audio-visual media (film, music, television,

video, computer games, etc.).³⁹ Still, the issue of inclusion is not a minor one. Different definitions can, for instance, lead to dramatically different outcomes in terms of economic impact, since a more inclusive categorization amplifies the (perceived) economic relevance of a sector. The scope of the definition also leaves the concept prone to criticism as to its analytical value since it is hard to maintain that all these activities, from art to entertainment to advertising, genuinely share comparable sources of competitiveness.

Although cultural products may be heterogeneous, the sectors that make them are all engaged in the creation of artifacts that are exchanged in commercial transactions but whose symbolic or aesthetic qualities are high relative to their utilitarian purposes.⁴⁰ Cultural industries do not just share commonalities in terms of the type of products involved – what I shall define as cultural – but they also share a strong sensitivity on the demand side to rapidly changing fashions and unpredictable consumer preferences in general. And they embody a tendency to compete with one another on the basis of novelty, differentiation, and quality, rather than in terms of radically innovative technology or costs alone.⁴¹ These characteristics have consequences for the ways in which market participants in cultural industries behave and by implication for the ways in which these industries are organized. This, in turn, influences the ways in which industrial competitiveness can be developed and sustained.

In this book I look at the features and consequences of early modern Dutch cultural industrial organization. The aim is not to demonstrate the existence of cultural industries or assess their importance for economic development, but to ascertain whether or not the explanatory frameworks that accompany these terms hold any potential for research into historical cultural achievements such as those of the Dutch Golden Age. One of the most important frameworks in explaining patterns of cultural competitiveness is that of spatial clustering: the geographic concentration of interconnected companies, consumers, and associated institutions in a particular sector or field, linked by commonalities and complementarities.⁴²

Spatial clustering

Economic geographers have not only observed that artistic and commercial achievements in cultural industries tend to take place in cities, but they point out that these industries tend also to be embedded in distinct organizational structures. Production and consumption often take place in

small- to medium-sized firms that maintain flexible relationships with each other and with customers, are located in close proximity to one another in urban areas, and are underpinned by local institutional support.⁴³ Such geographic and social concentration of producers in similar or related economic activities is also known as spatial clustering, the most famous contemporary example being the high-tech hub of Silicon Valley.

Although the observation that economic activities tend to cluster in specific places can be traced back well over a century, it gained much more traction in recent years. Researchers and policymakers inferred that this distinct organizational characteristic must offer distinct advantages for post-industrial economies.⁴⁴ In general, economic geographers argue, the interaction between producers, consumers, and suppliers, located in close proximity to one another, can create a positive industrial atmosphere, or 'buzz'.⁴⁵ More specifically, the main advantages of clustering have to do with economic efficiency and innovation that are external to the firm but internal to the (local) industry. Spatial proximity allows producers to share a specialized pool of labour and suppliers and eases reproduction and transmission of relevant knowledge and skills. Local industrial concentration may therefore lower costs of search, transaction, and transport, while at the same time facilitating the learning and innovation that enable cultural industries to flourish.

Although the concept of spatial clustering is modelled on contemporary industrial development, there is no reason to assume a priori that early modern producers and consumers did not experience similar benefits from clustering. In fact, the characteristics of post-industrial economic sectors in some ways resemble the organization of pre-industrial crafts. Much like their modern counterparts, early modern cultural firms were small-to-medium-sized firms that often required skilled and specialized labour, faced volatile demand, competed on the basis of product differentiation, and clustered in urban areas.⁴⁶

Note too, that spatial clustering theory has an explicitly historical component since it recognizes that relationships between the producers in a cluster evolve over time and become rooted in specific socio-professional networks and locations. Interactions within geographic concentrations of producers, consumers, and institutions in similar or related fields therefore may have considerable and long-term benefits for the relative competitiveness of those involved. These benefits in turn influence productivity, the direction or pace of innovation, and the character or number of new start-ups, resulting in a self-reinforcing growth dynamic. What follows from this is that location itself can become a key competitive asset, because a complex set

of relationships, historically developed and location dependent, is difficult to reproduce elsewhere.⁴⁷

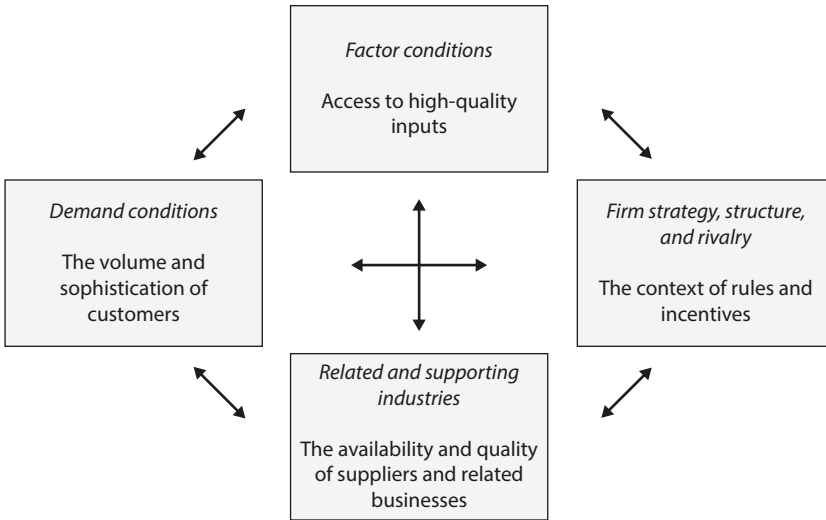
The question I raise in this book is if and how the evolution of early modern Dutch cultural industries of the seventeenth and eighteenth centuries was shaped by such specific forms of local industrial organization. Although cluster theory can offer a coherent framework with which to research how place and time might have affected the development of the early modern Dutch painting and publishing industries, it also comes with several weaknesses.⁴⁸ To offset these, adaptations to the general analytical framework of clustering are introduced below. The new framework's primary strength is its ability to organize the plethora of information available in the literature on early modern Dutch cultural industries while promoting an inclusive, long-term, and comparative approach.

A dynamic analytical framework

In order to apply cluster theory to the case of the early modern Dutch Republic, the general theory of spatial clustering can be made more specific. My main concern here is the relative lack of attention given in the academic literature on clusters to structural differences between the composition of local production systems, between types of economic activities or industries, and between stages in the cluster's existence. I shall add three complementary analytical tools in order to redress these issues: Michael Porter's diamond model, Richard Caves's model of the properties of creative industries, and the concept of the industry life cycle.

Michael Porter's diamond model

Spatial clusters can be conceptualized through what is commonly referred to as the 'diamond model' (Figure 1.2).⁴⁹ Developed by economist Michael Porter, this model underscores the interactions between four main sets of local factors: demand conditions; factor conditions; related and supporting industries; and firm strategy and rivalry. The more intense the interactions between these four bases, the greater the productivity of the firms involved. The model emphasizes that strategies and structures of firms are strongly contingent on these specificities and that such local business environments differ between towns, regions, and countries. The diamond model also clarifies that spatial clustering is more than a co-locating of producers; rather, it is about the relationships between different actors that are in close

Fig. 1.2 Representation of diamond model (Michael Porter)

proximity of one another and that develop over time.⁵⁰ Using this model for the analysis of early modern painting and publishing, I anticipate, will help to identify important actors and relationships in local production systems as well as (potential) sources of industrial competitiveness.

Caves's properties of cultural industries

In this study, the sectors of painting and publishing are both presented as examples of cultural industries. However, within the group of economic activities that qualify as cultural industries, there are also marked differences. The products of the painting and publishing industries can differ considerably in the degree to which aesthetic or symbolic distinctions prevail over more functional purposes. Arguably, a handbook on accounting has more direct functional use than, for instance, a painting of a landscape. A closer look at the work of Richard Caves on creative industries helps to interpret the potential role of clustering for patterns of growth and innovation in different cultural industries.⁵¹ Caves has argued that the specific properties of services and goods have consequences for the behaviour of producers and consumers, and accordingly also for the economic organization of the sector, contracts in particular.⁵² Applying this reasoning to creative industries, he identified and classified seven main properties (Table 1.1) and explained how such properties can give rise to distinct forms of industrial organization. In the case of cultural industries, features such as high levels

of demand uncertainty and quality uncertainty or the prominence of highly specialized skills can, for instance, amplify the possible benefits of spatial clustering. This implies that the role of industrial organization in shaping patterns of competitiveness can also vary between different types of economic activity. Variations in the intensity of the properties can also influence the dynamic in Porter's diamond model, for instance in terms of the relative importance of relationships with consumers; potential appeal to foreign markets; production methods and the intensity of competition; and the use of related and supporting industries. Analysing two industries that demonstrate comparable but different characteristics helps me to clarify the importance of both general and industry specific developments as well as the importance of spatial clustering in different economic activities.

Table 1.1 Properties of creative industries

Properties of creative industries	Implications for market organisation
Nobody knows: demand uncertainty	High risks involved, overproduction, importance of selection mechanisms, close relations with (potential) consumers
Infinite variety: endless horizontal and vertical differentiation	Information asymmetries, importance of selection mechanisms, potential for creating demand (niches)
Art for art's sake: attitude of producers towards their products	Abundance of (would-be) artists, relatively low profit margins
Motley crew: projects involve complex interactions	Network embeddedness, flexibility
Time flies: timing is essential	Flexibility, distribution, marketing
Ars longa: durability of products	Copyright protection, oversupply
A-list/B-list: creative inputs are vertically differentiated	Ranking of talent, skewed income distribution, importance of gatekeepers

Source: Caves 2000

Stylized industry life cycles

Cluster theory is often unclear on the origins of spatial industrial concentration. Few studies have taken a long-term approach, and most research is limited to periods in which cultural clusters are highly successful.⁵³ Recently, though, a growing historical sensitivity has developed within spatial clustering theory, perhaps most pronounced in the model of the industry life cycle.⁵⁴ The general idea in this model is that industries converge to common patterns, known as stylized life cycles and characterized by four stages: emergence, growth, maturity, and decline or saturation (Figure 1.3). The

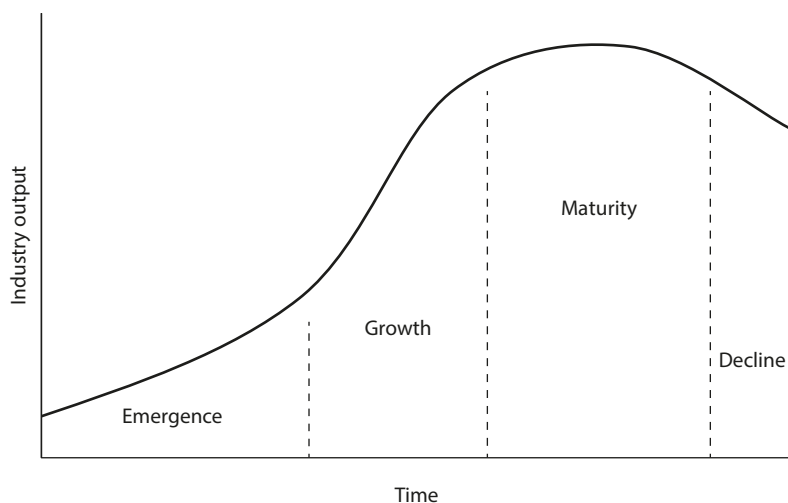
speed with which industries move through the cycle depends on the type of industry it is and the prevailing competitive circumstances.⁵⁵ Stages in the life cycle differ not only in terms of size of the sector and growth rates, but also in type and degree of innovation, character of firms (old or new, large or small), and patterns of spatial distribution (concentrated or dispersed).

What happens in one stage also affects the next one, as previously acquired competitive advantages determine the available options and adaptive capacities in later stages. This dynamic is also known as path dependency.⁵⁶ This does not always have positive effects, as it can also cause a reduction of adaptive capacities, known as 'lock-in', due to the resilience of established routines and relationships. In itself, however, life cycle theory has no fundamental explanatory power. Like Porter's diamond model, it offers only a simplified reflection of reality, not its complete and true representation nor detailed causal development. The life cycle model does however allow us to trace the way in which local industries move from one stage to the next more precisely, and distinguish between factors that initiate and factors that sustain upswings in economic and cultural activity.⁵⁷ This is particularly interesting in the case of early modern cultural production, since the patterns in the output of book publishing and painting clearly diverged after c.1660. Attending to life cycle histories compels me to consider not only the period of success – the Golden Age – but also the often disregarded eighteenth century.

Book structure and approach

This study offers a novel interpretation of Dutch artistic and commercial achievements during the seventeenth and eighteenth centuries. It does so by developing a long-term analysis of diachronic and spatial patterns of artistic and economic competitiveness in Dutch painting and publishing, and by testing and adapting the explanatory framework of clustering for this historical case study. Informed by the larger question of how to explain the extraordinary cultural production in the Dutch Republic, I developed an all-embracing quantitative and qualitative approach, made possible thanks to the numerous studies on art and book production and access to large datasets for both.

Early modern Dutch cultural production is extraordinarily well researched. The general context in which paintings and books were produced has received ample attention, and centuries of detailed investigations by art and book historians have yielded a wealth of data on producers and the

Fig. 1.3 Stylized 'life cycle' representation of industrial development

products they made. In recent years, important datasets have been built that allow for statistical analyses of this information. For the quantitative analyses in this book, extensive research was carried out on the basis of four datasets: *Short Title Catalogue Netherlands* (STCN) and *Thesaurus 1473-1800* (*Thesaurus*) for books and publishers, and ECARTICO and RKDartists& for artists and art.⁵⁸ The datasets are comprehensive enough to allow for statistical analysis, but to accurately interpret the estimates of size, scope, and quality of production presented in this book, a brief discussion of the limitations of these data-sets is provided in Appendix I.⁵⁹

In addition to the aggregate data on the Dutch Republic and its most important cultural centres, one town in particular takes centre stage. Amsterdam was the largest town in the Dutch Republic as well as the most important and most culturally diverse centre. This case study serves to take a closer look at the local production system and illustrate the findings. In order to identify common characteristics of local groups of painters and publishers, the method of prosopography has been applied.⁶⁰ Prosopographical research aims to identify patterns of relationships and activities of a group of people through the study of their collective biography. Here this was done by collecting and analysing biographical data concerning the occupational groups of painters and publishers for several sample years: 1585, 1600, 1630, 1674, and 1742 (see Appendix I).

The research I undertook is organized in two parts in order to separate the trajectories of the two industries. This helps to present the material in

an accessible manner, and it makes for an analytically meaningful outline of industrial trajectories. In the conclusion, the differences and similarities between the two industries are discussed in more depth. Both parts are subdivided into four chapters each, and the chapters are arranged chronologically. This choice is not arbitrary as the time periods studied in the individual chapters correspond to distinct stages in the life cycles of the industries. Within the chapters, Porter's diamond model is used where possible to distinguish between different key determinants of competitiveness and to trace the relationships between them. For both industries, the period 1610-1650 is treated more extensively, over two chapters, because the evidence and arguments presented there are crucial to the central question of this book: How can we explain the high levels of cultural production of the Golden Age?

Notes

1. It reads: *Hier werdt Gecolletet ... Ginnera ... loterij* or paraphrasing *Hier wordt gecollecteerd voor de Generaliteitsloterij*. The inscription on the plaque refers to the sign of the Wetsteins, an image of a hand grinding a chisel on a stone: *Dum teritur cos literatis, usui et literis prosit bonis*, or in Dutch: *Terwijl de wetsteen slijt, strekke hij den geletterden tot nut, den letteren tot voordeel*. Translation from Ter Gouw and Van Lennep, *De uithangteekens*, vol. II, p. 42.
2. Cf. Van den Brink and Werner, eds., *Gesneden*.
3. Lesger, 'De locatie van het Amsterdamse winkelbedrijf', p. 50; Van Nierop, 'De handeldrijvende middenstand', pp. 209-210.
4. For the history of the building see Heijbroek, 'Bij de voorplaat'.
5. This is argued in Pratt, 'Creative Clusters'; Scott, 'Cultural-Products Industries'; Scott, *The Cultural Economy of Cities*.
6. Cf. Bok, 'The Rise of Amsterdam'; De Vries, 'Art History'; Hoftijzer, 'Metropolis'.
7. Cf. Van der Woude, 'The Volume'; Montias, 'Estimates'.
8. For these estimates see Buringh and Van Zanden, 'Charting the "Rise of the West"'; Van Zanden, *The Long Road*, chapter 6. On export consider the contributions in: Berckvens-Stevelinck et al., eds., *Le magasin de l'univers*.
9. *Kopij en druk revisited*; Hoftijzer, 'Metropolis'; De la Fontaine Verwey, 'Het Hollandse wonder'; Hellinga, De la Fontaine Verwey, and Ovink, *Kopij en druk*; Berckvens-Stevelinck et al., eds., *Le magasin de l'univers*.
10. Cf. Hoftijzer, 'Metropolis', p. 256; Gombrich, *The Story of Art*, chapters 18 and 20. This point is made in Prak, 'Painters', p. 144.
11. There are too many studies to mention them all here. By Michael Montias for example Montias, *Artists and Artisans*; Montias, 'Cost and Value'; Montias, 'The Influence of Economic Factors'; Montias, 'Estimates'. Consider for example also Bok, 'Vraag en aanbod'; De Vries, 'Art history'; Van der Woude,

- 'The Volume'; De Marchi and Van Miegroet, *Mapping Markets*; North and Ormrod, eds., *Art Markets; Kunst voor de markt*; North, *Art and Commerce*. On England: Bayer and Page, *The Development*. On the Southern Netherlands: Vermeylen, *Painting for the market*; Honig, *Painting and the Market*. On Italy, for example: Etro and Pagani, 'The market'; Spear and Sohm, eds., *Painting for Profit*.
12. Martin, 'The life'. Also quoted in Bok, 'De schilder', p. 334. Cf. Floerke, *Der Niederländische Kunst-Handel*.
 13. Cf. De Vries, 'Art History'; Van der Woude, 'The volume'; Bok, 'Vraag en aanbod'.
 14. Exceptions are Cruz, *Paradox of Prosperity*, and De Kruif, *Liefhebbers*; For a similar exercise regarding Dutch architecture see Prak, 'Market for architecture'.
 15. In England there is a more established tradition in economic studies of book history, cf. Plant, *The English Book Trade*; Raven, *The Business of Books*. Most Dutch book-historical publications are either general or highly detailed. Cf. *Kopij en druk revisited*; Van Delft and Bots, *Bibliopolis*; Hoftijzer, 'Metropolis'; De la Fontaine Verwey, 'Het Hollandse wonder'; Hellinga, De la Fontaine Verwey, and Ovink, *Kopij en druk*; Van Eeghen, *De Amsterdamse boekhandel*. For Amsterdam printers, see the work by Paul Dijstelberge on the location of printers, <http://arkyves.org/view/geocontext/?q=geocontexting> and by Piet Verkruijssse on individual case studies. <http://cf.hum.uva.nl/bookmaster/>.
 16. For a different explanatory model see Brulez, *Cultuur en getal*, pp. 84-88. Brulez denies the relationship between culture and economy altogether and stresses the importance of political power.
 17. Bok, 'The rise of Amsterdam', p. 187.
 18. Cf. Montias, 'The Influence of Economic Factors'.
 19. These views have been most established in the fields of new institutional economics and economic sociology. Cf. Nee and Swedberg, 'Economic Sociology'.
 20. De Vries, 'Art History', p. 266.
 21. Montias, *Artists and Artisans*, p. 329; Prak, 'Painters'; Bok, 'Paintings for Sale'.
 22. Damme, 'Het 'creative city'-debat'. There are too many publications to mention here. Seminal publications are Lash and Urry, *Economies of Signs and Space*; Scott, 'The Cultural Economy'; Landry, *The Creative City*; Florida, *The Rise of the Creative Class*.
 23. See also Mijnhardt, 'Urbanization'; Hessler and Zimmerman, eds., *Creative Urban Milieus*.
 24. Hall, *Cities in Civilization*, p. 3.
 25. O'Brien, 'Reflections and Mediations', p. 5. This question is attributed to Gerry Martin.
 26. O'Brien, 'Reflections and Mediations', p. 13-19.

27. See for instance Lorenzen and Frederiksen, 'Why do Cultural Industries Cluster?'
28. Clark, *European Cities and Towns*, pp. 36-37.
29. See Limberger, "No town in the world", p. 59. Original in Sabbe, *De meesters van den Gulden Passer*, p. 14.
30. Burke, *Antwerp*, p. 8.
31. Parr, 'Agglomeration Economies', p. 719.
32. Hessler and Zimmerman, eds., *Creative Urban Milieus* touches on this issue, and Maarten Prak first suggested to view early modern guilds as spatial clusters, Prak, 'Guilds', p. 169.
33. Adorno and Horkheimer, *Dialectic of Enlightenment*; Hesmondhalgh, *The Cultural Industries*.
34. See Kloosterman, 'Recent employment trends'; Power and Scott, eds., *Cultural Industries*. See Lash and Urry, *Economies of Signs and Space* on the 'culturalizing of the economy'. The concept of the creative city has been popularized through the seminal works of Florida, *Cities*, and Landry, *The Creative City*.
35. Cf. Scott, *The Cultural Economy of Cities*.
36. Cf. Hessler and Zimmerman, 'Introduction', p. 12. For discussions of definitions see for instance Markusen et al., 'Defining the Creative Economy'; Galloway and Dunlop, 'A Critique of the Definitions', p. 19.
37. As a result the term creative economy often includes science, engineering, and education sectors as well. Cf. Markusen et al., 'Defining the Creative Economy'.
38. Galloway and Dunlop, 'A Critique of the Definitions', p. 19.
39. See Power and Scott, eds., *Cultural Industries*; Towse, 'Cultural Industries'. Some lists include the industries that support cultural creation, such as retail bookselling or art dealing. More problematic categories are, for instance, sports, religion, restaurants, software, and education.
40. Scott, *The Cultural Economy of Cities*, p. 323.
41. Scott, *The Cultural Economy of Cities*.
42. Porter, 'Location', p. 254.
43. Scott, *The Cultural Economy of Cities*.
44. Marshall, *Principles of Economics*, vol. 7.
45. Gertler, 'Buzz Without Being There?'; Storper and Venables, 'Buzz'; Bathelt, Malmberg, and Maskell, 'Clusters and Knowledge'.
46. See the work of Piore and Sabel, *The Second Industrial Divide*, and Sabel and Zeitlin, 'Historical Alternatives'.
47. Cf. Amin and Thrift, 'Cultural-Economy and Cities'; Amin and Thrift, 'Globalisation'.
48. Discussions of this concept can be found in Maskell, 'Towards a Knowledge-Based Theory'; Asheim, Cooke, and Martin, 'The Rise of the Cluster Concept'; Boschma and Kloosterman, 'Further Learning from Clusters'; Boschma and Kloosterman, *Learning from Clusters*; Martin and Sunley, 'Deconstructing Clusters'; Malmberg and Maskell, 'The Elusive Concept'.

49. Porter, *On competition*; Porter, *Competitive Advantage*; Porter, 'Location', p. 254; Asheim, Cooke, and Martin, 'The Rise of the Cluster Concept', p. 10.
50. See Power, 'The Difference Principal'.
51. Caves, *Creative Industries*.
52. Cf. Scott, *The Cultural Economy of Cities*; Kloosterman, 'Recent Employment Trends'; Hall, *Cities in Civilization*.
53. The following studies did take a long-term approach: Glasmeier, *Manufacturing Time*; Glasmeier, 'Technological Discontinuities'; Wenting, 'Spinoff Dynamics'; Wenting, 'Evolution of a Creative Industry'; Heebels and Boschma, 'Performing in Dutch Book Publishing'; Deinema, 'The Culture Business'; Kloosterman and Stegmeijer, 'Delirious Rotterdam'; Röling, 'Small Town, Big Campaigns'.
54. Boschma and Wenting, 'The Spatial Evolution of the British Automobile Industry'; Wenting, 'Spinoff Dynamics'; Malmberg and Maskell, 'The Elusive Cconcept'; Menzel and Fornahl, 'Cluster Life Cycles'; Press, *A Life Cycle for Clusters?*.
55. This theory is well-summarized in, for example, Klepper, 'Industrial Life Cycles', and Jovanovic, 'Michael Gort's Contribution to Economics'. See also Menzel and Fornahl, 'Cluster Life Cycles', and Neffke, 'Who Needs Agglomeration?'
56. See for instance Mahoney, 'Path Dependence', and Pierson, 'Increasing Returns'.
57. See O'Brien, 'Reflections and Mediations', p. 19.
58. <https://www.kb.nl/en/organisation/research-expertise/for-libraries/short-title-catalogue-netherlands-stcn> (last accessed 16 October 2015); <http://www.vondel.humanities.uva.nl/ECARTICO/> (last accessed 16 October 2015); <https://rkd.nl/nl/info/RKDartists&> (last accessed 15 October 2015). The dump of the *Thesaurus* dataset was generated 13 March 2009. All maps of the Dutch Republic are based on Jona Lendering, The Dutch Republic in 1672 [Cornelis de Bruijn] - http://www.livius.org/a/1/cornelis_de_bruijn/debruijn_holland_map.gif (last accessed 20 June 2016. Many thanks to Ivan Kisjes.
59. For a discussion of the use of STCN see Van Delft, 'Kwantitatief onderzoek'; Mathis, 'The STCN in a Global Scope', p. 44.
60. Roorda, 'Prosopografie'; Stone, 'Prosopography'.

Part I
Publishing

2. 1580-1610: Window of Opportunity

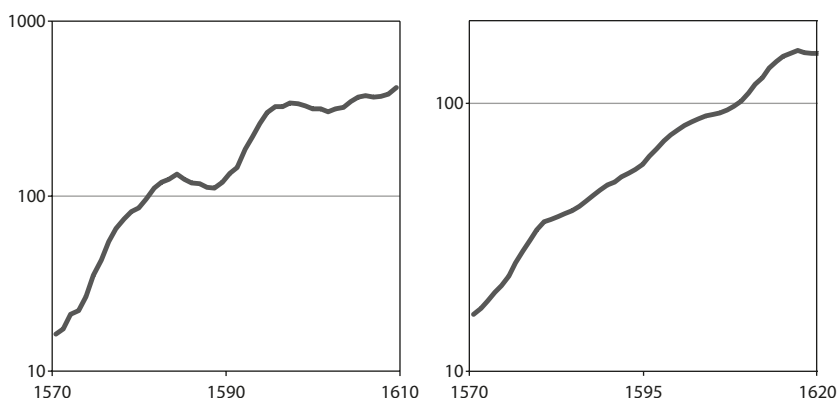
To understand the success of Dutch book production during the seventeenth century, cluster theory suggests we should go back to its roots.¹ Cluster growth is generally attributed to the reproduction of sets of skills, routines, and specializations that take root in the early stages of development. How and why such sets develop in the first place tends to remain unexplained or it is attributed to chance, such as radical innovations, revolutions, wars, or general economic crises, or the arrival of exceptionally talented individuals. Such contingencies can disrupt industrial development, as they may attract entrepreneurs or, just the opposite, discourage them from setting up shop in certain locations. Other scholars have emphasized not all locations qualify equally for potential cluster development. Some places may simply be better suited for certain types of production or consumption than others.²

The discussion on chance and preconditions links up to an ongoing debate in Dutch historiography on the roots of the Dutch Golden Age and the relative importance of exogenous and endogenous factors. The chance event here is The Eighty Years War (1568-1648), also known as the Dutch Revolt or the Dutch War of Independence.³ During the course of the Revolt against Spanish rule, and especially after the siege of Antwerp and the blockade of the Scheldt, many artisans and merchants left the Southern Netherlands for the northern provinces, importing commercial know-how, artisan skills, specific consumer preferences, and trade networks.⁴ In the 'external shock' interpretations, these events are considered key factors in explaining the rapid economic growth in the Dutch Republic.

While historians generally acknowledge the importance of immigration for the rise of the Republic during the seventeenth century, they do not fully agree on the extent and nature of this contribution. Several scholars have downplayed the impact of the Dutch Revolt in explaining the Republic's economic expansion.⁵ Distinct social and economic characteristics crucial for commercial development were in place well before the end of the sixteenth century, such as peasant landownership and the absence of feudal structures, specialization and commercialization in agriculture, rise of wage labour, urbanization, increasing demand for consumption goods, and efficient markets.⁶ This view stresses the established competitive advantages of the northern provinces, and suggests that troubles and events during the Revolt merely facilitated potential commercial expansion.

In this chapter, we see how these endogenous and exogenous conditions played out on a local industrial level. To what extent were resources, latent

Fig. 2.1 Number of publishers (left) and number of titles (right) in the Northern Netherlands/ Dutch Republic, 1570-1620



Source: Thesaurus; STCN, accessed 12-02-2010 (5-year moving average; semi-log scale)

or obvious, already in place to underpin seventeenth-century Dutch book production, and which events or actors set the spark to the impressive growth and innovation patterns that characterize the Golden Age?

The Dutch Revolt, an external shock

The steep incline in Figure 2.1 suggests that the onset of the Revolt and the fall of Antwerp were of great importance to the development of the book trade in the northern provinces. In contrast to, for instance, the occupational group of merchants, book production had been only a small-scale activity before 1580.⁷ During the fifteenth century, the publishing industry in the Low Countries had been on the rise, but this had largely been limited to towns with an above average demand for reading material, fueled by the presence of a university (Leuven) or schools run by the Brethren of the Common Life (Zwolle and Deventer).⁸ A century later it had become increasingly tied to commerce, with Antwerp having become the centre of book production in the Low Countries. Booksellers in the northern provinces, by contrast, were mainly left producing for their own local markets and importing books from the south.⁹

The tumultuous years after the onset of the Dutch Revolt dealt a serious blow to Antwerp's publishing industry, and as publishers started seeking refuge elsewhere, the city soon lost its position as a centre of humanist printing. Just how dramatic the Revolt's impact on Antwerp's publishing was can be illustrated by a closer look at the largest printing firm in the

Low Countries during this period. In the sixteenth century, the so-called *Officina Plantiniana* in Antwerp, established by Christophe Plantin, had become the most famous printing house and centre of humanism and learning in Europe.¹⁰ In 1574, Plantin had fifty-six workmen operating as many as sixteen presses, but just two years later, only three of these were still in use.¹¹ The downscaling of Plantin's printing establishment was a direct result of Spanish troops' sacking of Antwerp in three days of destruction, an event that came to be known as the 'Spanish Fury' (1576). In 1583 Plantin left Antwerp for Leiden where he established a new branch of his firm. He soon returned to Antwerp, which was by then once again in Spanish hands, but things were not quite back to normal yet in the printing business. Plantin had to deal with scarcities of paper and other materials, and the number of orders from the Northern Netherlands had dropped from over 600 in the period 1566-1570 to a mere 151 in the period 1586-1589, the year of Plantin's death.¹²

Plantin's returning to Antwerp was unusual. Most migrants opted to remain in the Dutch Republic. It is estimated that over 150 booksellers and printers relocated from the Southern to the Northern Netherlands in the period 1570-1619.¹³ About half of these migrant-booksellers moved between 1570 and 1595, the other half between 1595 and 1619.¹⁴ Amsterdam and Leiden attracted roughly 40 per cent of the booksellers who migrated during the first stage. This share rose to about 50 per cent between 1600 and 1630, although many migrant-booksellers tried their luck in other (Dutch) towns before moving to Amsterdam after 1590.¹⁵ Of the nine Amsterdam-based publishers identified as active in 1585, two or possibly three were Amsterdam-born, and only one was born in the Southern Netherlands.¹⁶ By 1600, just a few of the twenty-nine publishers were native to Amsterdam and some ten came from the Southern Netherlands. More than half the immigrants from the Southern Netherlands who were working in Amsterdam had resided elsewhere before they set up shop there.¹⁷ Presumably, some had planned to return to Antwerp as soon as possible and had therefore lingered in towns closer to the borders, such as Middelburg and Dordrecht, while others had first tried to set up shop in London, Cologne, or other towns in the Dutch Republic.¹⁸

Of course, the importance of immigrants was neither unique to the book trade nor restricted to Dutch towns.¹⁹ Nevertheless, the situation in the Low Countries during the final decades of the sixteenth century does differ from general early modern migration patterns in the sense that a large number of immigrants entered the labour market in a very short period of time. Just how dramatic the impact of the Dutch Revolt and the fall of Antwerp

on Dutch book production must have been can be appreciated by taking a closer look at its relative underdevelopment during the sixteenth century. Before the Revolt, Antwerp had been the place to be for publishers; it offered skilled labour, access to capital, and easy access to local and foreign markets. But by 1585 it could no longer offer the favourable conditions that had attracted publishers like Plantin around the middle of the sixteenth century.²⁰ Many skilled producers and merchants went in search of an alternative location.²¹ Besides geographic proximity, the Dutch Republic offered cultural and socio-economic vicinity. After all, the provinces in the Low Countries had been subject to the same sovereign, operated within an interconnected economy, and shared a linguistic and cultural heritage. The strong pull exerted by the northern towns therefore need not surprise us, though it does raise the question why there were so few publishers in the first place.

Even though there was no commercial hub that remotely resembled Antwerp, the provinces, like their Southern Netherlandish counterparts, offered a sophisticated labour market, a literate and urban population with some money to spend, and an established position in trade networks.²² The northern provinces were highly urbanized, with an urbanization rate of 27 per cent around 1525, when the average for Europe was only 9 per cent.²³ The province of Holland, the most commercialized region in the north, even had a remarkable 45 per cent urbanization rate. Already during the sixteenth century, the occupational structure of the northern provinces was characterized by a high proportion of non-agricultural economic activities and wage labour, as well as a high degree of specialized labour, even in rural areas.²⁴ Commercial activities were ubiquitous, and Dutch merchants and shipmasters were well positioned throughout trading networks, especially in the Baltic trade routes.²⁵

On the demand side, prospects were also favourable. Observations by contemporary visitors suggest that many Dutch men and women, in the cities as well as the countryside, were able to read and write, observations that are confirmed by estimates of Dutch literacy based on marriage registers.²⁶ In fact, Holland had the highest literacy rates in sixteenth-century Europe.²⁷ Its inhabitants, moreover, were able to spend some money on consumer goods. Estimates of GDP per capita and real wages are not dramatically different for the northern and southern provinces throughout the sixteenth century.²⁸ The fact that no significant book production had developed in the northern towns during the sixteenth century suggests that these generally favourable conditions were not sufficient. This also means that even if spending power had improved during the seventeenth century,

independently of developments in the Southern Netherlands, there is no reason to assume that domestic book production would have expanded as substantially as it did. Moreover, as we will see in the next sections, it is inconceivable that any such expansion such as did occur would have transpired quite as quickly.

New publishers, new markets

In point of fact, socio-economic circumstances in the Northern Netherlands changed dramatically around the turn of the sixteenth century as is clearly visible in the dramatic increase in the total size of the population. Though we lack exact numbers, estimates are that on the whole the population of the northern provinces increased from 1.2 million to 1.3 million around 1550, to between 1.4 million and 1.6 million by around 1600, and to close to 2 million a half a century later.²⁹ On the regional or urban level, growth rates were even more impressive; Holland and Friesland in particular showing an upsurge unparalleled in Europe at the time.³⁰ GDP per capita also increased and wages tripled, a development that by and large took place between 1580 and 1620. Although the increase in real wages was more modest, it still comprised 20 to 40 per cent, depending on occupation and place of residence. Compared to other countries, wages were high and increasing, whilst an unparalleled share of the rapidly increasing population was able to read. Potential demand was large, to say the least.

In this period of economic growth, rapid population increase, rising purchasing power, and ongoing commercialization and professionalization, we should expect nothing less than an increase in demand for cultural products such as books. To some extent, the expansion of the publishing sector should indeed be attributed to the general increase in population size and the number of towns with a substantial number of publishers – both amounting to a potential absolute increase in demand (Table 2.1, Figure 2.2). Population size is an important determinant in predicting in which towns one or more publishers would be active in 1610, though it does not fully account for the exact geographic distribution of publishers. Soon after the onset of the Revolt, the number of towns in which publishers were located increased from 8 to 24. Typically, publishing was concentrated in towns and not in the countryside, yet in most urban areas the scale of book production was still fairly modest. Even in towns housing over 20,000 inhabitants, we typically find only a handful of booksellers.

Table 2.1 Distribution of publishers in the Dutch Republic, 1570, 1585, and 1610

	1570	1585	1610	Number of titles 1600-1609	Population size 1622, unless other- wise indicated ***
Leiden	0	10	12	1234 (430*)	44,500
Amsterdam	2	5	34	369	105,000
The Hague	0	0	4	220 (70**)	16,000
Franeker	0	0	4	202 (63*)	3500 (1670)
Middelburg	0	1	7	117	20,000 (1600)
Delft	3	3	7	105	20,000
Rotterdam	0	1	10	82	19,500
Arnhem	0	1	2	52	7000 (1600)
Dordrecht	0	3	8	50	18,500
Haarlem	0	2	1	33	39,500
Utrecht	1	2	4	30	30,000 (1623)
's-Hertogenbosch	2	2	2	29	18,000 (1610)
Alkmaar	0	2	1	28	12,500
Groningen	0	0	2	25	16,500 (1600)
Gouda	0	1	1	17	14,500
Enkhuizen	0	1	2	12	22,000
Hoorn	0	0	2	12	14,000
Gorinchem	0	0	2	11	6000
Leeuwarden	0	1	2	11	11,500 (1606)
Deventer	1	1	2	10	8000 (1628)
Vlissingen	0	0	1	8	5000 (1600)
Schiedam	0	0	1	6	6000
Nijmegen	0	0	2	4	12,000 (1611)
Kampen	3	0	2	3	7500 (1628)
Harlingen	0	1	0	2	8800 (1670)
Steenwijk	1	0	0	1	1000 (1636)
Total	14	37	115	-	-
Total towns (N >1)	8	16	24	-	-

Source: Thesaurus. Population estimates based on (Lourens and Lucassen 1997).

*= excluding academic texts; **=excluding state publications, ***= the population figures are rounded to the nearest 500.

In order to further explain the uneven distribution between towns, local characteristics have to be taken into account. By looking at the level and nature of local titles produced in the decade 1600-1609, the only towns where over 100 titles were produced were Leiden, Amsterdam, The Hague, Franeker, Middelburg, and Delft. When academic texts are excluded, the level of production in the university towns Leiden and Franeker drops

significantly. The Hague's high production levels can be easily explained by its function as the seat of government, a factor whose influence extended to the nearby town of Delft. After excluding the category of state publications, the shares of The Hague and Delft in book production lose much of their significance. Amsterdam and Middelburg, both highly commercial towns, scored a lot lower in the categories of academic and state publications and feature mainly as centres of commercial information production. Each of these towns had distinct competitive advantages in attracting (potential) publishers, and these functions would strongly determine the development of local specializations and new (sub)genres in the course of the seventeenth century. Amsterdam would turn into the country's information hub and Leiden into its centre of academic printing, while The Hague became synonymous with political news, official state publications, and judicial printing.³¹

Patterns of specialization

Leiden was the first town in which book production took off at the end of the sixteenth century. The town had been an important centre of textile production throughout the fifteenth century, but during the sixteenth century its economy had not fared so well. This all changed after the Revolt when the textile industry recovered and Leiden became a centre of academic studies. Following the end of a Spanish siege in 1574, the leader of the Dutch Revolt, William I, Prince of Orange, rewarded the town for its sacrifices and endurance by establishing a university. Only one year later, this first university of the northern provinces welcomed its first students. Despite this, in the university's early years, the local book trade scarcely existed, and printing jobs had to be filled by immigrant printers. In 1577, Willem Silvius, who had been active in Antwerp, was appointed as the academy's first printer. When he died after a mere three years, famous humanist and classical scholar Justus Lipsius suggested Plantin as his successor, and so the famous Antwerp printer transferred part of his printing shop to Leiden. Through the joint efforts of the university and the local government, Leiden was able to attract the best possible printers and scholars and swiftly acquire pan-European fame.³²

Court and government town The Hague, by contrast, attracted many civil servants, officers, ambassadors, as well as numerous diplomatic emissaries in need of printed texts, and this exerted a pull on both printers and booksellers.³³ Given the presence of the court and the States General (Dutch parliamentary conclave) it is not surprising that many of The Hague's

Fig. 2.2 Distribution of publishers in 1580 (left) and 1610 (right)

Source: Thesaurus

publishers specialized in semi-official or specialist legal titles as well as in relatively cheap opinionating and informative works.³⁴ Contrary to what might be expected in view of its relatively wealthy population, however, there was little or no luxury printing, and hardly any of the more popular mass products such as songbooks or almanacs originated in The Hague. Perhaps The Hague publishers and printers did not have the copy, the type, or the skills, or possibly they lacked the local basis to counter the risks of capital intensive and expensive works.³⁵ It was, moreover, relatively easy for salesmen of books, maps, and prints from the city and from other towns to capture a slice of the book market in The Hague.³⁶ In contrast to other towns and the city of The Hague itself, booksellers did not have to become members of the local guild in order to sell at the Inner Courtyard (*Binnenhof*), the meeting place of the States General and the court of the Prince of Orange.³⁷

The development of Amsterdam as a centre of the book trade differed from both Leiden's and The Hague's. The expansion of its local book production industry only started after 1585 and was fueled by the pulling force of commerce rather than by government initiative. Already by the sixteenth century, Amsterdam, as a commercial satellite of Antwerp, had managed to expand its role in international trade. It held a dominant position in the import of Baltic grain and iron, and within Holland it became the major gateway to overseas trade owing to its well-developed transport connections

with the hinterland and a deep harbour in the IJ River.³⁸ Its location, trading relations, and frequency of shipping also made Amsterdam one of the most important hubs in the flow of international information.³⁹ Not only for merchants but also for publishers, this was a crucial local resource, and it is no coincidence that Amsterdam was strong in the publication of books relating to commercial know-how. On that front it took over Antwerp's lead in cartography and nautical works, and it became the first international newspaper centre.⁴⁰ Although Amsterdam would develop a strong reputation for publishing commercial information, its production was more varied than either Leiden's or The Hague's and was characterized by a relatively small share of cheap prints, broadsheets, and pamphlets, also known as ephemeral titles.

New markets, new products

From 1580 onwards, the book production industry expanded rapidly. The number of titles annually produced in the Dutch Republic increased from c.70 in 1580 to c.360 in 1610.⁴¹ At the same time, there were also significant changes in terms of style and content. In the interplay between expanding potential demand, differentiation of demand, and competitive entrepreneurial strategies of publishers, new products were created. A comparison of genres of titles published in Amsterdam during the decades 1580-1589 and 1600-1609 shows that relatively novel genres became more prominent. Although traditional genres such as theology (c.25 per cent) and history (c.35 per cent) remained prominent, modern subjects such as geography increased from 5 to 12 per cent, Dutch literature from 5 to 10 per cent, and poetry from 8 to 13 per cent of all local publications.⁴²

Within popular genres such as vernacular songbooks as well as more luxurious genres such as travelogues, new subgenres emerged to target new market segments. In 1601, publisher Hans Matthysz published Daniel Heinsius' *Quaeris quid sit amor*, the first romantic poetry and emblem book in Dutch.⁴³ Besides being the first of its kind ever written in Dutch (contrary to what the Latin title suggests), it was also innovative in terms of typography: published in quarto oblong, with a spacious type page, various fonts, and artistic emblem prints. Quarto refers to a sheet folded twice to produce four leaves (or eight pages), and oblong is what we would now call 'landscape' layout – where the horizontal axis is longer than the vertical axis. A year later Matthysz launched a new type of songbook, *Den nieuwen lust-hof* (1602), which introduced a further upgrade to the

conventional genre by adding new lyrics to familiar melodies, using a variety of fonts, illustrations, and again the large format of quarto oblong.⁴⁴ With this expensive deluxe songbook, Matthysz targeted a specific group of clients: wealthy youngsters or *jeunesse dorée*.⁴⁵ This costly collection of songbooks was soon revised and reprinted, and it became the leading template for publications of its kind in the first quarter of the seventeenth century.⁴⁶

Similar developments occurred in the production of travelogues. While travel accounts had already been in demand in Europe throughout the sixteenth century, Amsterdam publisher Cornelis Claesz further popularized the genre by differentiating his publications from the typical travel books, starting with the heroic story recorded by Gerrit de Veer on the suffering and endurance of Willem Barentsz' crew on Nova Zembla.⁴⁷ Although his strategies, for instance the combination of copperplate engravings with letterpress type, were not altogether new – Claesz would have certainly used Plantin as a model here – the way he applied it to the travel genre was unique at the time. He included more illustrations and had engravers expand the compositions. Moreover, he also used the quarto oblong format as opposed to the traditional standard atlas in folio size.⁴⁸ With folio the original paper sheet was only folded once, whereas in the case of quarto, the sheet was folded twice, producing a smaller book format. The oblong quarto format, gothic typeface, and use of the vernacular suggest that Claesz aimed for the broadest possible Dutch audience, albeit a relatively wealthy one.⁴⁹ In addition, he also published these books in Latin and French in a Roman typeface and vertical folio to cater to international audiences.

Through these novel genres as well as through novel use of copy, fonts, format, images, and language, publishers such as Claesz and Matthysz tried to tap into traditional markets as well as the new markets that were forming as a result of economic (income) growth. Between the expensive, scholarly work for the international elite and cheap print work for the masses, new markets were opening up. Publishers exploited the new niche markets, catering to wealthy merchants and ship owners as well as to the middle classes interested in the exploits of Dutch explorers.⁵⁰ Because the new products were intended for a different and specific market niche, they did not replace the old, simpler songbooks but rather formed an additional subgenre. The number of titles further expanded and diversified as a result of the reciprocal relationships between copy production, demand for certain types of information and texts, and the availability of printing and publishing skills.

Notwithstanding their entrepreneurship, these achievements were not solo endeavours. In the production phase, publishers required copy, paper, type, ink, and – depending on the type of book – print designs, printcuts, translations, and editing. Publishers functioned as general contractors, as booksellers, and sometimes also as printers; authors functioned as suppliers of texts; paper dealers as providers of the essential primary ingredient; engravers as illustrators; scholars as translators and correctors; and finally, type founders and punchcutters were crucial in shaping the appearance of books. These activities are clear-cut examples of what Michael Porter labelled ‘related and supporting industries’, which are of particular importance for cultural industries in which the production of goods is a collaborative enterprise such as book production. In order to understand just how important the interplay between publishers and related or supporting industries was for the development and sustainment of an innovative and expanding book industry, we may take a closer look at the three main supporting industries: production and trade in type, paper, and copy.

Type

Den nieuwe lust-hof, the songbook published by Leiden publisher Matthysz, drew on a variety of fonts, whereby Matthysz broke with the style of sixteenth-century Dutch books whose pages were dark, crowded, with medieval-style decoration. At the end of the sixteenth century, Southern Netherlandish printers introduced the more elegant French style, characterized by balanced pages, a structure of chapters and paragraphs, the use of notes and references, different fonts, and ornate and decorative letters.⁵¹ To achieve these effects, printers needed type in multiple sets and in various sizes. The three main types in use during this period were roman (basic upright), italic, and gothic (blackletter). Printers could buy up old type, order new type from type founders who used existing matrices, or they could have their own typeface designed and cut for them. This, of course, required investment. Once punches and matrices were bought, they required little further expenditure, but stocks of printing type could become quite a burden for early modern firms.⁵² Expenditure on stocks of type came third after paper and labour in terms of the production cost of books, and it was the most expensive part of the firm’s fixed capital.⁵³

Prior to the Revolt, printers in the northern provinces had procured their type in the south where Hendrik van den Keere, who was Plantin’s

sole supplier after 1570, had a virtual monopoly.⁵⁴ In 1577, when the city council of Leiden set up a printing press, type still had to be ordered in the Southern Netherlands, but gradually several typecutters such as the Van den Keere family and their former foreman Thomas de Vechter started to arrive in the Republic, bringing with them tools and matrices.⁵⁵ Even the last remaining famous punchcutter in the Southern Netherlands, Geeraert van Wolscharen, was also almost lured north, as it is known that in 1609, a Dutch town, perhaps Leiden or Amsterdam, had offered him favourable settlement conditions.⁵⁶ After Plantin's death in 1589, the enormous collection of typographic material he had built up was divided between his sons-in-law Jan Moretus in Antwerp and Franciscus Raphelengius in Leiden.⁵⁷ During this period of early growth in the book industry, Dutch printers were still content to rely on Southern Netherlandish type and type founders, with the type and associates of Van den Keere linking the sixteenth- and the seventeenth-century styles. Few new types seem to have been cut in the Dutch Republic, with the exception of a few specialized series commissioned by Raphelengius such as Arabic, Ethiopian, and Samaritan, as well as the cutting of a Hebrew typeface tentatively attributed to Jodocus Hondius.⁵⁸ This was not limited to the Northern Netherlands; it has been observed that throughout Europe the profusion of high-quality typecutters in the third quarter of the sixteenth century was followed by half a century of relative inactivity, after which type founders started to innovate once more.⁵⁹

Book illustrations

Along with the use of various fonts in the newly produced books such as *Den nieuwen lust-hof* and Claesz's travelogues, the inclusion of illustrations was another innovative feature.⁶⁰ As soon as illustrations were involved, the production of books became much more complex and expensive. The printer had to decide whether to reuse old plates, order new plates, or perhaps even use new designs, and if so, order, produce, or otherwise get access to engraved or etched copperplates or woodcuts. This required not only an investment; it also involved a more complex production process, as collaboration was called for with engravers and artists. During this period there was no clear-cut occupational differentiation: some large publishers employed artists and engravers; artists also etched and engraved; while still other engravers published their own work.⁶¹

Like printing, the activities of print publishing and engraving had also been concentrated in Antwerp during most of the sixteenth century. Until

1578, Harmen Jansz Muller had been the only print publisher in Amsterdam, but soon after 1580 both the number and output of engravers and designers increased.⁶² As with type, this did not immediately result in an abundance of new book illustrations. Demand for illustrations was partly met by reusing old plates. Cornelis Claesz, for instance, who was quickly becoming the largest map and book publisher in the Republic of his time, based virtually all his artistic prints on existing impressions or plates originally published by others.⁶³ He owned hundreds of plates made by contemporaries such as Jan Saenredam and almost the entire production of Jacob II de Gheyn.⁶⁴

Another way in which old images could be reused was by designing and engraving new plates after older impressions. This is not to say that such reprints were always carbon copies. The adaptation of older series could also be creative acts, resulting in the production of a new artistic product. Arguably the best-known print designers and publishers from this period, Hendrick Goltzius and Jacob II de Gheyn, both made many reproductions while also developing distinct personal styles. Although new and original designs were becoming more widespread around the turn of the seventeenth century, it was only in the next phase, the Golden Age of Dutch book illustration, that a new generation would *en masse* produce new designs.

Paper

Like their Southern Netherlandish counterparts, Dutch book producers active between 1580 and 1610 had to import printing paper because it was not yet produced in the Dutch Republic on any significant scale. Attempts at setting up paper mills were made, but early mill owners complained about the dearth of the necessary know-how in the Dutch labour market.⁶⁵ The development of a domestic paper industry was inhibited not only by a lack of skills, but also by geographic conditions.⁶⁶ Unfortunately, we have very few figures on the import of paper and even when they are combined, they merely confirm that significant amounts were brought into the country.⁶⁷ Before the Revolt, Dutch printers had mainly used Troyes paper from northern France which was imported through Antwerp, but the Dutch Revolt disturbed trade, making imports irregular and causing costs to soar.⁶⁸ Soon, many of Antwerp's merchants, including those involved in paper, moved to the Northern Netherlands where they invested in new trade routes.⁶⁹

Several Dutch merchants and booksellers, including mapmaker Jodocus Hondius and later his widow Colette van den Keere, were closely involved

in financing paper imports.⁷⁰ When, around 1580, Basel papermakers were having trouble competing with German and French paper production, the newly founded Dutch *Compagnie van Duitse papieren*, set up by the first major Dutch paper dealer, Amsterdam merchant Cornelis van Lockhorst, soon revived the faltering Swiss paper production. Just how intertwined paper trade and book production were is evident in the procedures following the death of the largest bookseller in the Republic, Cornelis Claesz, in 1609. The execution of his estate took place in the house of Van Lockhorst, and shortly after Claesz's widow had proposed to pay off her brother-in-law's claim on the inheritance for the total sum of *f*25,000, Van Lockhorst took over this debt.⁷¹ The dependence went both ways: men like Van Lockhorst supplied paper and allowed publishers to pay in instalments, while the large printers expedited the paper trade.

Copy

In addition to choosing paper, type, and illustrations, publishers also had to decide on the content of books. They could use old texts – in translation, as adaptation, or direct copy – or new texts, either produced on their own initiative or submitted by authors.⁷² The rise of Amsterdam as an information hub and Leiden as an academic centre, as well as cultural transformations, all stimulated copy production. But in order to turn information and copy into marketable goods, publishers had to take the initiative, as is visible in the examples of cartography and poetry.

Before 1580, Dutch merchants would have obtained their charts abroad, in Antwerp or Portugal, but subsequently, an independent production and trade developed rapidly, fuelled by the need for new and accurate information, by the immigration of cartographers and publishers, and by the new flow of information into towns.⁷³ Local governments and merchants were interested in capturing new trade routes, contributing to the boom of voyages of discovery in the 1590s. The amount and intensity of Dutch overseas traffic had already increased in the sixteenth century, but only within a limited area circumscribed by the Baltic, England, and the Canary Islands.⁷⁴ By 1585, direct trading links were established between the Republic and Africa, America, and Asia, and Dutch publishers responded quickly to information flowing in as a result of these new sea voyages.⁷⁵

The increasing flows of information may be considered one of the most important drivers of Dutch book production as they formed a unique selling point, improving its international competitiveness.⁷⁶ In domestic markets,

increasing political and cultural self-awareness following the Revolt provided an impulse for the production of literature in the vernacular, though the question of whether the Dutch language was at all suitable for poetry was far from answered.⁷⁷ During the phase of emergence, the rhetoricians (*rederijkers*) dominated public literary life. Between the Amsterdam and Leiden chambers, people like Hendrick Laurensz Spieghel, Dirck Volckertsz Coornhert, Roemer Visscher, and Jan van Hout stimulated the use of the Dutch language, forging the link between older sixteenth-century traditions and newer seventeenth-century Dutch poetry. These poems were, however, often distributed in private networks, and it was up to the publishers to turn them into commodities.⁷⁸ Through individual business acumen and intricate relations, Dutch publishers did so, setting off a period of expansion and product differentiation in the book trade.

Business structure and strategy

Compared to later periods, the most distinctive feature of the early years of Dutch book production was the degree of concentration of production in just a handful of firms. The Hague's high level of title production but relatively small number of publishers can be attributed to the presence of one particular printer, Hillebrant Jacobsz van Wouw I. When the government moved to The Hague in 1588, the Van Wouws followed and became responsible for all official printing on behalf of the States General such as placards and ordinances. Between 1600 and 1609, the firm produced almost half of all publications in The Hague. In the same period, Jan Jacobsz Paets alone produced three quarters of all titles published in Leiden. Book production in Amsterdam was less concentrated, but here too several individuals dominated most notably Cornelis Claesz. In order to gain a better understanding of the importance of individual publishers and day-to-day practices during the first decades of the Dutch publishing industry, we zoom in on industrial and firm structure in Amsterdam.

Table 2.2 shows the distribution of names found on imprints published in Amsterdam between 1585 and 1589 and 1600 and 1604, respectively.⁷⁹ Cornelis Claesz clearly was the linchpin around which much production revolved; his name can be found on almost half of all editions in the former period. Claesz's prominence is also visible when the output per individual career of the eight publishers active in 1585 is compared. During his career, he published more than the rest combined: 303 titles, followed by Laurens Jacobsz with 88, and Harmen Jansz Muller with 82.⁸⁰ In other words, during

the early years, more than half of the Amsterdam output was concentrated in one firm. By 1600, this had changed. When production during the entire careers of the 25 book producers active in 1600 is considered, we find that Claesz is still the largest with his 303 titles, followed closely by Jan Evertsz Cloppenburgh with 226 titles, and that there remains a considerable gap between these two and the rest.⁸¹

Claesz, who was not only the largest producer of books but, at least in 1585, also the wealthiest, will be the central figure in the rest of the chapter.⁸² This is not because he was a typical Amsterdam publisher around the turn of the century, but because he was a crucial agent in the take-off of Dutch book production, and his business dealings reveal the specificities of this early period. Other prominent firms such as the native Amsterdam publishers Muller and Adriaan Barentsz (Hartogvelt) were both established family-run firms that would last for over a century, but they would not be remembered as the pioneering firms that would put the Amsterdam book trade on the European map.⁸³

Table 2.2 Distribution of names found on imprints published or printed in Amsterdam, 1585-1589 and 1600-1604

1585-1589	N	%	1600-1604	N	%
Cornelis Claesz	44	48.9	Cornelis Claesz	38	26.0
Harmen Jansz Muller	21	23.3	Laurensz Jacobsz	32	21.9
Laurensz Jacobsz	10	11.1	Herman de Buck	20	13.7
Barent Adriaensz	8	8.9	J.E. Cloppenburgh	12	8.2
Nicolaes Biestkens	4	4.4	Zacharias Heyns	11	7.5
Buyts (Gyse)	3	3.3	Willem Jansz van Campen	9	6.2
J. E. Cloppenburgh	1	1.1	Barent Adriaensz	7	4.8
Adriaan Barentsz	1	1.1	Hans Matthijsz	5	3.4
Others	-	-	Others (N <5 editions)*	26	17.8
Unknown	1	1.1	Unknown	4	2.7
Other towns (11 towns)	21	23.3	Other towns (15 towns)	32	21.9
Total hits editions	90	100	Total hits editions	146	100
N total hits names	114	-	Total hits names	196	-

Source: Thesaurus; STCN accessed 5 July 2011; * =17 persons.

Cornelis Claesz

Cornelis Claesz has received much attention in book-historical and cartographic literature, but little is known about his personal life.⁸⁴ It is assumed that Claesz was born in the middle of the sixteenth century in the

Southern Netherlands, probably in Leuven. In 1572, he moved from Emden to Cologne, while in 1578 he can be traced to Enkhuizen, a port town on the Zuiderzee northeast of Amsterdam, and home to cartographers such as Lucas Jansz Waghenauer. Almost immediately after Amsterdam sided with the anti-Spanish rebels in 1578, Claesz moved to Amsterdam, where he joined Harmen Jansz Muller and would kick-start local book production. A closer look at what Claesz produced and sold during the early decades of Dutch book production, as well as the networks in which he operated, reveals the business strategies of one of the key figures in Dutch book history.

Specialization

A distinction should be made between Claesz's own publications – his publishing list – and what he sold from his shop – his stock. Although Claesz is best known for his cartographic work, he did not immediately start publishing in this genre. Between 1582 and 1587, he published works on various topics, ranging from bookkeeping to state publications, as well as the *Deux Aes* and *Liesvelt* Bible editions.⁸⁵ In 1587 Claesz issued his first geographical publications, but his career in geographical printing only really took off after 1589 when he started to publish all of Lucas Jansz Waghenauer's work, including the *Spiegel der Zeevaerdt*, originally published in 1584 by Plantin, the first editions of the *Thresoor der Zeevaert* in 1592, and, in 1598 his real hit: Gerrit de Veer's account of the 1594-1597 expeditions to explore the elusive northern Anián passage to the Indies.

From this point onwards, Claesz became the 'stimulator and driving force of Dutch cartography', a description that, whilst grand, hardly overstates his role.⁸⁶ According to the STCN, 121 titles were published in the subject 'geography' between 1570 and 1609, 82 of which in Amsterdam. Claesz was responsible for 72 of these – almost 90 per cent of all geographic titles published in Amsterdam and 60 per cent of those published in the Republic. A comparison with other publishers' lists reveals strategies of specialization.⁸⁷ Table 2.3 shows the genre distribution in titles published by the firms of Claesz, and Harmen Jansz Muller and Laurens Jacobsz – two other major Amsterdam publishers active in the same period. Claesz focused mainly on the subjects of history and geography, Claesz's pupil, friend, and neighbour Jacobsz on theological publications, and Muller on poetry.⁸⁸

Table 2.3 Genre distribution Cornelis Claesz (1582-1609), Harmen Jansz Muller (1572-1617), and Laurens Jacobsz (1588-1603)

Genre	Harmen Jansz Muller		Cornelis Claesz		Laurens Jacobsz	
	N	%	N	%	N	%
Theology	24	27.3	37	11.9	66	74.2
History	13	14.8	127	40.7	18	20.2
Geography	2	2.3	72	23.1	0	0
Dutch literature (poetry)	19	21.6	19	6.1	3	3.4
Latin literature (poetry)	11	12.5	3	1.0	0	0
Business administration	2	2.3	7	2.2	0	0
Public and social administration	11	12.5	28	9.0	0	0
Medicine	1	1.1	13	4.2	1	1.1
Almanacs	0	0	11	3.5	0	0
Political science	0	0	9	2.9	2	2.2
Total	88	100	312	100	89	100

Source: STCN, accessed 5 July 2011

Although Claesz dominated the field of travel accounts and cartographic works, his publishing list was still varied.⁸⁹ Ephemeral printing made up a large part of his work; Bert van Selm has estimated the share of pamphlets in Claesz's total output at 20 per cent, and he also published news information, prognostications (astrological predictions), prophecies, and almanacs for a broad audience. Such steady-selling publications required fewer investments, offered quick returns, and served as counterweights to expensive publications. They could also be used to finance works requiring more considerable investments, such as Waghenaer's *Thresoor der zee-vaert* and Jan Huygen van Linschoten's *Itinario, voyage ofte schipvaert* (Image 2.1); the world atlases under the name of *Caert-thresoor*; and the *Atlas Minor* by Gerard Mercator, which he published in collaboration with Jodocus Hondius and Johannes Janssonius.

Wholesale and internationalization

Like most other booksellers, Claesz did not only produce his own works; he also purchased books published by others to sell in his shop. The items listed in the 1610 inventory catalogue, drawn up after Claesz's death, indicate that he sold much more than just the maps and travel accounts for which he

is now well known. There was a significant difference between what was offered in Claesz's shop and what he published, both in terms of language and genre.⁹⁰ By publishing, trading, and buying books, but also by bidding at auctions and even collecting redundant books from the town library in 1580, he would eventually build up an extensive, international, and varied stock.⁹¹

Image 2.1 Title page of Jan Huygen van Linschoten's *Itinerario, voyage ofte schipvaart, naer Oost ofte Portugaels Indien inhoudende een corte beschryvinghe der selver landen ende zee-custen*, 1596, published by Cornelis Claesz in Amsterdam



Source: The Hague, Royal Library, 1702 B 4

The records of the *Officina Plantinina* show that Claesz was their largest Dutch buyer; he expanded his stock by buying books from the Antwerp-based firm on as many as twelve occasions in 1578.⁹² Increasing internationalization is also evident in Claesz's activities at the biannual Frankfurt book fair, the undisputed centre of international book trade at the time. Claesz was the first Dutch publisher to be represented at the fair in the post-Revolt years where he became particularly active after 1602, soon joined by other Dutch publishers.⁹³ At the fair, Claesz did not buy haphazardly; the choices he made at the fairs reflected the distinct preferences of his Amsterdam book-buying base.⁹⁴ Claesz's role in the distribution of imported specialist Latin books further reveals that he not only tied foreign production to Dutch readers, but that he also acted as a wholesaler to fellow booksellers.⁹⁵ His 1609 '*Const ende Caert-Register*', a publishing list with advertised prices in which he only included the prints and maps for which he himself possessed the copperplates, encouraged buyers to purchase in bulk, which suggests that Claesz must have targeted fellow sellers of books and prints, and possibly other wholesaling merchants.

Claesz served as a major intermediary between foreign publications and local readers through both his shop and his own publications. As soon as Claesz took up publishing in addition to simply selling books, his trading position in the exchange system must have improved. His foray into the geography niche provided Claesz with a crucial selling point and enabled him to move into the international book trade.⁹⁶ Claesz did not hesitate to translate, for example, Van Linschoten's *Itinario* into different languages, and conversely he had German, French, and English travel journals translated into Dutch.

Collaboration

The importance of Claesz's ability to collaborate and build up networks outside the book trade and in specific intellectual and cultural milieus is evident in the production of his travel accounts.⁹⁷ The Dutch economy was booming, Amsterdam merchants were conquering overseas trade, Haarlem artists were developing a unique northern mannerist style, and Leiden University attracted scholars and printers. The specialization of the three towns came together in Claesz's business, where merchants, cartographers, seafarers, professors, designers, and engravers, each with different skills, were all set to work. Peter Sutton's assertion that Claesz's *modus operandi* was collaboration does not seem too bold a statement.⁹⁸ A closer look at his network neatly underlines the interconnection of publishers in a structure

of both related and supporting industries and inter-firm relations that surpassed local boundaries.

Claesz could draw on a number of resources to make his products successful. He had access to skilled engravers, often students or imitators of Haarlem mannerists, humanist scholars in Leiden, merchants and skippers in Amsterdam, and cartographers in Enkhuizen, Hoorn, and Amsterdam.⁹⁹ The listings of prints advertised in Claesz's *Const ende Caert Register* of 1609 highlight the connections between Claesz and the major engravers and publishers of Antwerp and Haarlem working in the last quarter of the sixteenth century. He had direct and indirect links to Jacques de Gheyn, Hendrick Goltzius, and Karel van Mander, while most engravers of Claesz's travel book illustrations were students of Haarlem mannerists.¹⁰⁰ His cartographic connections, partly based on his years in Enkhuizen, were intensified during the 1580s through contacts with the Van Doetecum family, Jodocus Hondius, and Petrus Plancius who was one of Claesz's major business partners. Through his contacts, Claesz could also tap into Leiden intellectual circles, inhabited by scholars who were also highly interested in voyages of discovery.¹⁰¹

Claesz did not only seek out collaborations outside the book trade. Expensive folios that involved a lot of plate work, for instance, were often published in collaboration with others, as was the case with the *Atlas Minor* mentioned above.¹⁰² Moreover, many books published in Amsterdam were printed elsewhere.¹⁰³ When Claesz's practices are compared to those of other significant Amsterdam publishers who had started before 1600, we find that Claesz outsourced most of his printing, often to printers located outside of Amsterdam. He used as many as 24 different printing firms for the 46 publications that specified the name of other printers, and only four of these were located in Amsterdam.¹⁰⁴ Moreover, 23 of the titles in Dijstelberge's sample show a form of collaboration between Claesz and other publishers such as Franciscus Raphelengius in Leiden and Jan van Waesberghe in Rotterdam, and 164 imprints bear only his name.¹⁰⁵ In comparison, his neighbour and friend Laurens Jacobsz published 39 titles on his own account and collaborated with only one other publisher – Cornelis Claesz himself – on eight occasions. He did, however, have his printing done by as many as fifteen different printers in Alkmaar, Delft, Dordrecht, Franeker, Haarlem, and Leiden.¹⁰⁶ Other publishers such as Zacharias Heyns and Jan Evertsz Cloppenburgh also had many titles printed outside of Amsterdam, in Haarlem, Leiden, Utrecht, Franeker, and Kampen for instance.

Apparently, it was common practice to outsource printing, but Claesz was the only one whose collaborations were so extensive. His geographic network covered as many as seventeen towns, mostly Dutch, but also

Antwerp, Calais, and Edinburgh.¹⁰⁷ That Amsterdam publishers, Claesz in particular, outsourced much of their print work to other towns may be partly explained by lower wages in other provinces. Although wages outside the province of Holland were indeed somewhat lower, this cannot explain the fact that often competitors in other towns such as Leiden or Haarlem were favoured over local Amsterdam printers.¹⁰⁸ An additional explanation may be that the necessary skills were simply not sufficiently available in Amsterdam in the early decades of book production.

University towns such as Leiden and Franeker appear to have attracted high-quality printers from the Southern Netherlands like Franciscus Raphelengius and Gillis van den Rade. Port towns such as Amsterdam and Rotterdam attracted entrepreneurs more involved in bookselling and publishing.¹⁰⁹ In 1585 the only local printer of significance had been Harmen Jansz Muller. Fifteen years later, at least eight printers were active, and within Amsterdam, Nicolaas III Biestkens and Herman de Buck were the popular choices.¹¹⁰ The delayed establishment of printers may also explain why the volume of production in the Republic was initially relatively low compared to the number of booksellers.

Conclusion

In the case of Dutch publishing, the Dutch Revolt is a perfect example of chance events setting off local growth trajectories. In a relatively short time span, immigrant publishers from the Southern Netherlands boosted the underdeveloped Dutch market for books. Favourable conditions on both the demand and supply sides as well as individual entrepreneurial strategies further reinforced and shaped the rapid expansion of Dutch book production. In this early phase of market expansion, immigrants were important in both quantitative and qualitative terms. Some of them, most notably Franciscus Raphelengius in Leiden and Cornelis Claesz in Amsterdam, played a crucial role in expanding and opening up markets, in increasing the volume of production, and in training and providing business models for aspiring printers and booksellers. They managed to develop their new companies into strong players, while more traditional players jumped on the bandwagon and increased their range and scale of production.

The example of Claesz demonstrates the importance of key entrepreneurs in the early decades of Dutch book production after the Revolt. He single-handedly doubled Amsterdam output, established international contacts, developed the specialization of cartographic publishing, trained the future

generation, and enabled new start-ups to set up shop. His publications and business strategies also demonstrate that successful entrepreneurs did not operate in a vacuum. Relationships between actors in related and supporting industries, local and inter-local, were of crucial importance for the market expansion through product differentiation that characterized the early stages of Golden Age book production. At the close of the sixteenth century, however, Dutch competitiveness in the related and supported industries was still a long way off. In terms of paper, Dutch sellers depended on imports through Antwerp. Type was ordered abroad, and the local artistic community was too small to provide substantial numbers of new illustrations. When it came to copy, however, local competitive advantages were emerging which further encouraged patterns of specialization.

The Revolt thus triggered a series of events that changed industrial trajectories in the northern and southern provinces, while specific local conditions shaped and strengthened the effects of this external shock. The fall of Antwerp in particular presented opportunities for other centres of book production to emerge, and Dutch towns were particularly well positioned to take up this challenge. Although the number of towns harbouring publishers expanded across the Republic, several towns showed above average growth rates. Leiden, The Hague, and Amsterdam possessed distinct competitive advantages that made for a stronger pull on publishers. These advantages were linked to specific urban specializations: Leiden as a university town, The Hague as a government town, and Amsterdam as a centre of commerce. At this local level, within the mutual dependence between producers, customers, related industries, and favourable trading conditions, publishers such as Claesz could capitalize on the window of opportunity created by chance.

Notes

1. Martin and Sunley, 'The Place of Path Dependence'.
2. Most notably Frenken, Van Oort, and Verburg, 'Related Variety'; Martin and Sunley, 'Path Dependence'.
3. On the Dutch Revolt see for example Parker, *Dutch Revolt*.
4. Israel, *Dutch Primacy*; Briels, 'Zuidnederlandse immigratie'; Fruin, *Tien jaren*.
5. Braudel, *Civilization*, vol. III; Van Dillen, 'Amsterdam'; Van Dillen, *Rijkdom en regenten*.
6. De Vries and Van der Woude, *The First Modern Economy*. See also Van Bavel and Van Zanden, 'The Jump-Start'; Israel, *Dutch Primacy*.

7. On the impact of the Revolt on the merchant community see Gelderblom, *Zuid-Nederlandse kooplieden*, pp. 15-22 and the conclusion,, and Lesger, *The Rise*, chapter 4.
8. Waterschoot, 'Antwerp', p. 233.
9. Van der Laan, *Het Groninger boekbedrijf*, pp. 31-32. On Christophe Plantin's exports to the northern provinces during the period 1566-1589 see Van Oord, *Twee eeuwen Bosch' boekbedrijf*, pp. 215 -269 .
10. The seminal work on the *Officina Plantiniana* is Voet, *Golden Compasses*. The following section is based on vol. I, pp. 84-113.
11. *Ibid.*, pp. 81-82.
12. *Ibid.*, p. 117; Denucé, ed., *Correspondence*, vol. VII, pp. 261, 262, 347, 351; Briels, *Zuidnederlandse boekverkopers*, p. 21; Van Oord, *Twee eeuwen Bosch' boekbedrijf*, pp. 256-257.
13. *Thesaurus 1473-1800*. Cf. Lesger, *The Rise*, pp. 235-236.
14. Briels, *Zuidnederlandse boekverkopers*, pp. 3-6.
15. Cf. *Ibid.* Especially before 1594, the immigrants were independent masters and shopkeepers. 1570-1600: N=93; 1600-1630: N=75.
16. Prosopography 1585. Hendrick Pietersz, Adriaan Barentsz and possibly Barent Adriaensz were born in Amsterdam. See appendix I.
17. Prosopography 1600. Amsterdam's share is probably underestimated in Briels's figures, due to the fact that he only considered first place of settlement. See appendix I.
18. Briels, *Zuidnederlandse boekverkopers*, p. 25.
19. Lucassen, 'Immigranten in Holland 1600-1800', p. 3. On immigrants and the Antwerp and London book trades see Waterschoot, 'Antwerp', p. 234; Raven, *The Business of Books*, p. 205.
20. Waterschoot, 'Antwerp', p. 241; Limberger, "No town in the world", p. 69.
21. Consider the attempts by Moretus to find appropriate apprentices for his printshop and bookshop in, for instance, Den Bosch at the end of the sixteenth century. Van Oord, *Twee eeuwen Bosch' boekbedrijf*, pp. 266-268.
22. De Vries and Van der Woude, *The First Modern Economy*, pp. 693-710.
23. Urbanization rates from *ibid.*, pp. 52-71.
24. Van Bavel and Van Zanden, 'The Jump-Start', p. 503; Van Bavel, 'Rural Wage Labour'; Van Zanden, 'The 'Revolt of the Early Modernists' '.
25. On the Dutch trading position, see Lesger, *The Rise*.
26. See for example: Parker, *Dutch Revolt*, p. 21; Van Zanden, *The Long Road*, pp. 190-194; Kuijpers, 'Lezen en schrijven'; Stephens, 'Literacy', p. 511; Harline, *Pamphlets, Printing, and Political Culture*.
27. See Van Zanden, *The Long Road*, pp. 155-164, 190-194 on skill premium and literacy. On sources and measures of literacy see Houston, *Literacy*.
28. Van Zanden, *The Long Road*, p. 241; Angeles, 'GDP Per Capita or Real Wages?'. Real wages from Allen, 'Great Divergence'. Real wages equal the nominal wage divided by the consumer price index (CPI).

29. Faber et al., 'Population Changes', p. 110. They estimate the population of the Netherlands within its modern borders.
30. De Vries and Van der Woude, *The First Modern Economy*, pp. 51-53.
31. Keblusek, *Boeken in de hofstad*, pp. 305-306.
32. Hoftijzer, 'Metropolis'; Bouwman et al., eds., *Stad van boeken*; Cruz, *Paradox of Prosperity*.
33. On the emergence of The Hague as a centre of printed works: Keblusek, *Boeken in de hofstad*; Kossmann, *De boekhandel*.
34. Keblusek, *Boeken in de hofstad*, p. 66.
35. *Ibid.*, pp. 73-74.
36. Kossmann, *De boekverkoopers*, p. vviii.
37. Keblusek, *Boeken in de hofstad*, p. 26.
38. On the role of Amsterdam in the spatial economy of the Low Countries see Lesger, *The Rise*.
39. *Ibid.*, pp. 214-257.
40. Cf. Dahl, *Amsterdam, Cradle of English Newspapers*; Dahl, 'Amsterdam. Earliest Newspaper Centre of Western Europe'; Stolp, *De eerste couranten*.
41. STCN, accessed 14-03-2009.
42. STCN, accessed February 2009. Note that titles can fit in multiple genres.
43. Breugelmans, 'Quaeris'.
44. Porteman and Smits-Veldt, *Nieuw vaderland*, p. 180; Verkruijsse, 'P.C. Hoofst'; De Wilde, 'Meer dan vorm'.
45. Grootes, 'Jeugdige publiek'; Grijp, 'Voer voor zanggrage kropjes'.
46. On songbooks see Veldhorst, *Zingend door het leven*; Veldhorst, 'Pharmacy for the Body and Soul'. On the new type of songbook in particular see Keersmaekers, *Wandelend*; Keersmaekers, 'Drie Amsterdamse liedboeken'.
47. Sutton, 'Economics', pp. 112-119.
48. A series of diagrams on the size of books can be found in Gaskell, *A New Introduction to Bibliography*, pp. 87-107.
49. Sutton, 'Economics', pp. 123-128.
50. Schilder, *Cornelis Claesz*, p. 283; Dijstelberge, 'De Cost en de Baet'; Van Selm, *Een menighe treffelijcke boecken*, p. 174.
51. Dijstelberge, 'De vorm: typografie in de Renaissance', p. 119.
52. Voet, *Golden Compasses*, vol. II, p. 124.
53. *Ibid.*, pp. 82-89, 126. Plantin's accounts, for instance, point to fairly conservative amounts per set, depending on the size and the type, but a total investment of as much as *f*20,000.
54. Middendorp, *Dutch type*, p. 18; Voet, *Golden Compasses*, vol. II, pp. 65-75.
55. Voet, *Golden Compasses*, vol. II, p. 80.
56. The request by Antwerp printers can be found in Briels, *Zuidnederlandse boekverkopers*, pp. 565-566.
57. Voet, *Golden Compasses*, vol. II, p. 76.
58. *Ibid.*, p. 77.
59. Vervliet, *Sixteenth-Century Printing Types*, pp. 11-12.

60. Veldhorst, *Zingend door het leven*, p. 140.
61. Kolfin distinguishes between several types of print publishers: painter-engravers, publisher-engravers, engraver-publishers, and publishers without a background in engraving. Kolfin, 'Amsterdam, stad van prenten', pp. 15-18.
62. The following is based on Orenstein et al., 'Print Publishers'. On print publishing, including book illustration see also Orenstein, *Hendrick Hondius*, p. 96.
63. Orenstein et al., 'Print Publishers', p. 171.
64. *Ibid.*, pp. 182-183; Orenstein, *Hendrick Hondius*, p. 96; Orenstein, 'Marketing Prints'.
65. Voorn, *De papiermolens*, vol. I, p. 6.
66. On domestic paper production see *ibid.*; Voorn, *De papiermolens*, vol. II; De Vries and Van der Woude, *The First Modern Economy*, pp. 311-315.
67. Brugmans, *Statistiek*; Enschedé, 'Papier', p. 85.
68. Voorn, 'Lombards', p. 317; Voet, 'Het Plantijnse Huis te Leiden', p. 29.
69. Cf. Laurentius, 'Paper'; Laurentius and Laurentius, *Watermarks 1650-1700*.
70. The following is based largely on Voorn, *Uit de oudste geschiedenis*. Part of the firm's archive can be found in Utrechts Archief (UA), inv. 76, Archief van het Huis Zuilen 1385-1951. See also Van Dillen, *Bronnen tot de geschiedenis*, n.1160. A concept of the 1613 revised deed can be found in *ibid.*, n. 714, 'Akte van oprichting van een handelscompagnie [etc]'.
71. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 38-39.
72. Cf. Van Delft and Bots, *Bibliopolis*, 1585-1725, section: 'Relationship between publisher and author'.
73. Cf. Lesger, *The Rise*, chapter 6.
74. Davids, *Zeewezen en wetenschap*, pp. 43-44.
75. Lesger, *The Rise*, p. 228; Van Groesen, 'De Bry Collection of Voyages', pp. 23-49.
76. On Amsterdam as a centre of information exchange consult Lesger, *The Rise*.
77. A good discussion can be found in Porteman and Smits-Veldt, *Nieuw vaderland*. For an English language discussion of Dutch literature see Meijer, *Literature*; Frijhoff and Spies, *Dutch Culture*, pp. 531-594.
78. Michiel Vlack's exact words were: '*Matthys zoons Hans mijn vriend, 'k en kond u niet afslaan / 't Verzouck an my gedaen, dies zend' door u begheren, / Eens lied'ren tien en vier, wilt dees uyt jonst ontfaen*'. Veldhorst, 'Pharmacy for the Body and Soul', p. 242. See also: Keersmaekers, *Wandelend*, p. 24.
79. The recurrence of names is higher than the number of editions used for the count, which can be explained by the fact that on some imprints, two or more names appear. This is the case, for example, when a book is sold or published in Amsterdam, but printed in Haarlem or Leiden.
80. The others produced 47, 14, 12, 5 and 1 title, respectively. Median production in 1585 was 30.5 titles including Cornelis Claesz and 14 titles excluding Claesz (average 69 and 36).
81. Willem Jansz Blaeu is listed with 326 titles, but around 1600 he was working as an instrument maker and not as a publisher. He only features in the STCN from 1608 onwards and is therefore excluded here.

82. In the Imposition, 2939 people were taxed: this is 40 per cent of all households, assuming an average household size of four. Van Dillen, *Amsterdam*. For a discussion see Dudok van Heel, 'Waar waren de katholieken'. Jan Commelin is also listed with the high sum of *f*36, but is not included in this table as he only started publishing in 1594 (in 1585, he was active as a merchant). Van Dillen, *Amsterdam*: Cornelis Claesz: *f*12, Willem Buys *f*5, Jacob Pietersz Paets *f*4, Gerrit Claesz *f*4, Adriaen Barentsz *f*3, Harmen Jansz Muller *f*2, Barent Adriaensz (binder) *f*2.
83. The four individuals making up the Amsterdam-born sample in 1600 belonged to two families: Muller and Hartoghvelt.
84. Most notably Van Selm, *Een menighte treffelijcke boecken*, pp. 174-319; Schilder, *Cornelis Claesz*; Zandvliet, *Mapping for Money*; Lesger, *The Rise*, pp. 236-238. On Claesz's role in book illustration see Sutton, 'Economics', pp. 106-170. Claesz has also been the subject of a popular historical work: Van Tussenbroek, *Amsterdam in 1597*.
85. In 1582, Claesz's first dated publication year, he published nine works, among which we find copies of letters exchanged between foreign rulers, such as a letter by the Turkish emperor to the German emperor, and other 'period documents'.
86. Schilder, *Cornelis Claesz*.
87. Van Selm has provided an analysis of 269 editions by Claesz, based on an older bibliography. Van Selm, *Een menighte treffelijcke boecken*, pp. 179-182, 246-252.
88. Dijstelberge, 'De Cost en de Baet', p. 231.
89. Cf. Van Selm, *Een menighte treffelijcke boecken*, p. 174.
90. *Ibid.*, pp. 180-182, 246-252. Claesz's publishing list shows that 83 per cent was in Dutch, whereas of the titles in the stock catalogues between 1608 and 1610, 58 per cent was in Latin, 14 in Dutch, 30 in French, and 12 in German.
91. *Ibid.*, pp. 182-184, 246-252.
92. *Ibid.*, pp. 182-183, note 179 in particular; Voet, *Golden Compasses*, vol. II, pp. 482-490. For more on Claesz's relations with the Officina Plantiniana see Schilder, *Cornelis Claesz*.
93. Cf. Van Selm, *Een menighte treffelijcke boecken*, pp. 198-211, 214-217. Data from Schwetschke, *Codex*. The Frankfurt ledgers show that Claesz was represented with one book in 1598, two in 1602, 18 in 1603, and 26 in 1605.
94. Van Selm, *Een menighte treffelijcke boecken*, pp. 198-211, 214-217. He bought a lot from the Commelin firm in Heidelberg, Raphelengius in Leiden, Plantin-Moretus in Antwerp, and Wilhelm Anton in Hanau.
95. *Ibid.*, p. 217.
96. *Ibid.*, p. 253.
97. This section is based on Sutton, 'Economics', pp. 106-171, and Sutton, 'To Inform and Delight'.
98. Sutton, 'Economics', p. 164.

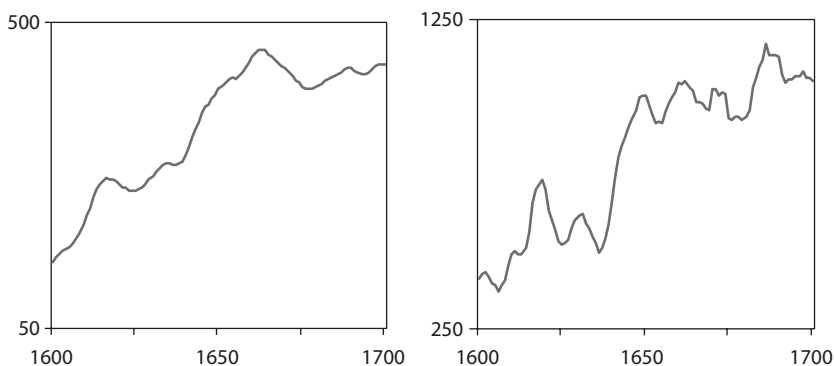
99. On Claesz's collaboration with author Lucas Jansz Waghenaer see Bos-Rietdijk, 'Werk'. On his collaboration with Jan Huygen van Linschoten see Van Dillen, *Bronnen tot de geschiedenis*, n. 1160.
100. Sutton, 'Economics', pp. 133-143.
101. *Ibid.*, pp. 143-154.
102. Based on Dijstelberge, *De beer is los*, appendix 2; STCN, accessed 10-03-2010.
103. *Ibid.*
104. STCN, accessed 10-03-2010. He collaborated with Amsterdam colleagues Johannes Hondius, Laurens Jacobsz and Desiderius de la Tombe; with Abraham Canin in Dordrecht; Jan van Waesberghe in Rotterdam; Franciscus Raphelengius in Leiden; Gilles Elzevier in The Hague; Jacob Jansz in Leeuwarden; and Johannes Janssonius in Arnhem.
105. Van Selm, *Een menigthe treffelijcke boecken*, pp. 251-252 cites collaborative activities by Claesz.
106. Muller, on the other hand, who was a printer and engraver, printed 57 titles in his own name and only had one work printed by others (Raphelengius in Leiden).
107. Antwerpen, Alkmaar, Arnhem, Calais, Delft, Dordrecht, Edinburgh, Enkhui-zen, Franeker, Den Haag, Haarlem, Harlingen, Leeuwarden, Leiden, Mid- delburg, Rotterdam, Woerden.
108. Prak, *The Dutch Republic*, p. 130.
109. Dijstelberge, *De beer is los*, pp. 31-32. Dijstelberge has observed that the differences in quality of printwork of printers from different areas were not very large, but that the quality of printing was somewhat better in univer- sity towns.
110. Nicolaas III Biestkens, Herman de Buck, Barent Adriaensz, W.J. van Campen, Peeter Geevaerts, Aert Meuris, Ewout Cornelisz Muller, and Jacob Pietersz Paets.

3. 1610-1650: Unlocking Potential

The market for books around 1650 was very different from the one Cornelis Claesz knew around 1600. Population had increased dramatically, testifying to the tremendous growth the Dutch economy experienced during this time. By the middle of the seventeenth century, the number of booksellers active in the Dutch Republic had increased almost fourfold, and Dutch publishers had become top players in the international book trade.¹ The Republic was not the largest producer in Europe, nor was it the only country in which volume of production increased. What set the book trade in the Republic apart were its growth rates, its scale and scope relative to population size, and the quality of its printing.² Dutch books, neither particularly costly nor luxurious, became renowned for their high-quality paper, simple and neat printing, and attractive typography.³

Explanations for the expansion and improvement of Dutch printing and publishing are not hard to come by. All accounts of Dutch book production have stressed the combination of economic expansion, trade infrastructure, relative tolerance, high and sophisticated domestic demand, plus adverse circumstances in other countries.⁴ Thirty years ago, for instance, book historian Herman de la Fontaine Verwey offered the following account: '[...] Being the centre of international trade, the tolerant climate due to the absence of a strong central government and church, and publishers' courage and energy.'⁵ More recently, book historian Paul Hoftijzer underscored the importance of favourable economic and cultural circumstances, whilst also emphasizing the skills of individual entrepreneurs.⁶

These explanations neatly sum up a set of necessary conditions for healthy book production and trade, but cluster theory suggests that there may have been more to the rapid expansion and high quality of Dutch book production. Clustering of related economic activities can boost growth rates and innovative capacities and thereby strengthen an industry's competitive position. Did this also happen to book production in the Dutch Republic? Were local specializations reinforced, routines and skills reproduced, and relationships between the pillars of Michael Porter's diamond intensified? These questions are answered in two stages. In this chapter, the development of the demand side and of related and supporting industries are discussed in order to explain increasing product differentiation and innovation. The next chapter zooms in on the organization of Amsterdam book production in order to establish how it evolved from a loose set of firms clustered around Cornelis Claesz into the most important book production centre of Europe.

Fig. 3.1 Number of publishers (left) and titles (right), 1600-1700

Source: Thesaurus; STCN, accessed 12-02-2010 (5-year moving average; semi-log scale)

Differentiation of demand

The expansion of book production during the Golden Age is often presented as a continuous trend, but Figure 3.1 shows that growth rates were not static throughout the period 1610-1650. Following the initial rise during the emergence phase, the number of active publishers in the Republic stagnated, and the number of titles produced annually actually declined. From c.1630 onwards, and especially after 1640, growth resumed. This raises questions about the relative importance of variables on the demand and supply sides. Did demand for books stagnate and then re-establish itself, or was the new growth a consequence of successful responses to stagnating demand and therefore essentially supply driven?

Demand for books is influenced by a number of factors including price, purchasing power, literacy rates, and socio-cultural preferences, as well as supply and distribution factors that invariably affect the availability of books.⁷ As with today's market, changes in both price and income were of crucial importance to the size of the early modern book market. Comparisons between early modern probate inventories and wealth estimates based on, for example, tax or burial registers, have also shown that there is a significant relationship between the consumption of books and the economic situations of households.⁸ Furthermore, Engel's Law predicts that as disposable income rises, the proportion of that income spent on essentials such as food tends to drop, leaving more room for non-essentials such as books and other cultural products.⁹

Unfortunately, due to limitations of source material, it is difficult to establish whether or not an increasing number of people bought books or if existing readers started buying more books. Consumption history of the early modern period is largely based on probate inventories, which can provide a detailed insight into material possessions of the deceased but which come with their limitations.¹⁰ Many households did not possess enough valuables to warrant any administration of their estates. And even if they did, clerks drawing up the inventories usually only recorded books that were considered valuable, and they often did not describe the exact type of the listed books.¹¹

With this caveat in mind, it should be noted that more general inventory research for the Dutch Republic does suggest that the share of households possessing books and the number of books per household did increase during the seventeenth century.¹² Moreover, tentative comparisons between the Republic and England based on inventory research also suggest that the share of Dutch households in which books were recorded was relatively high.¹³ In the Frisian town of Leeuwarden the number of households owning books increased significantly between 1584 and 1655.¹⁴ For rural Frisia, Jan de Vries observed far-reaching penetration of urban culture between 1550 and 1750, which was, in his opinion, most evident in the possession of books.¹⁵ In the area of Krimpenerwaard, just east of Rotterdam, between 1630 and 1670, c.45 per cent of the sample population listed books in their inventories.¹⁶ Around the same time, 55 per cent of the rich urban class, 38 per cent of the middle class, and 25 per cent of farmers owned books in the town of Weesp in the province of Holland.¹⁷

Still, while relatively large segments of Dutch society appear to have owned books, and there were no dramatic differences between rural and urban areas, the number of books per household seems to have been relatively low. Even for relatively prosperous eighteenth-century The Hague, José de Kruif found that almost 40 per cent of the population did not have a single book in the house, apart from pamphlets, and that only a quarter of the population owned more than ten books.¹⁸ In order to estimate the expansion in the publishing industry in relation to the demand side in more detail, we will take a closer look at production data rather than consumption data.

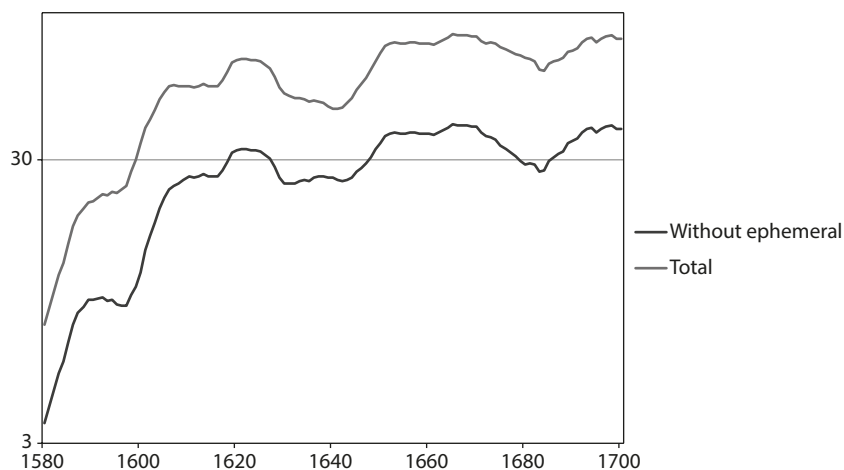
Per capita production

Calculations on production figures by Eltjo Buringh and Jan Luiten van Zanden suggest that after 1600 the Dutch Republic had the highest per capita consumption of books throughout Europe.¹⁹ These figures can be further adjusted for

age, language, and literacy rates in order to arrive at estimates of per capita title production in the vernacular language per literate adult. No corrections are made for purchasing power, but by taking literacy rates into account, the segment of the population that could not afford books is to a large extent also excluded. It is further assumed that all Dutch language titles were primarily intended for the domestic market. Although Dutch was read in the Southern Netherlands and was also widely known in Germany and Scandinavia, this is not a significant problem, because even if these books were also exported, it is likely that Dutch consumers would still have read these titles.

According to these variables, an average of 35 per cent of the total number of titles produced in the seventeenth-century Republic was directed towards the international market.²⁰ This is certainly too high an estimate, as Latin titles – the bulk of this share – also found a ready market in the Republic. If anything, these are conservative estimates. The calculations also distinguish between ephemeral and non-ephemeral titles in order to account for changes in the composition of the corpus of printed works. After all, not all titles were of comparable size and form. Estimates of print runs could not be included because too little is known about their development during this period. Conservative estimates for the early modern period are 500 to 600, but print runs could range from a few dozen in the case of academic works to thousands of copies per run for bestsellers.²¹

Fig. 3.2 Title production in Dutch per 100,000 literate adults, 1580-1700



Source: STCN, accessed 21-09-2010 (5-year moving average; semi-log scale)

Figure 3.2 presents the number of Dutch language titles produced in the Republic per literate adult. Accordingly, the estimates in Figure 3.2 are based on three assumptions: of the titles published per year in the Republic, 70 per cent until 1620, and 60 per cent between 1620 and 1690 were in Dutch and therefore intended for the Dutch market; literacy rates increased from 45 per cent in 1585 to 61 per cent in 1700; and 40 per cent of the population comprised children who presumably did not buy books.

The trend in Figure 3.2 differs from the one in Figure 3.1 demonstrating as it does how the growth in Dutch titles per literate adult surged after 1580 but more or less stagnated after 1620. This suggests that there had been much to gain for book producers in the first thirty years after the Revolt, and especially in the 1600s. For the most part, the early growth was the result of a process of catching up. In view of the Republic's pre-Revolt demand conditions discussed in the previous chapter, domestic book production had been surprisingly underdeveloped. During the emergence phase, the simultaneous changes on the supply and demand sides stimulated the development of a local publishing and printing industry. By 1620 the effects of these changes seem to have diminished. Production figures, at least in terms of the number of different Dutch language titles per literate adult, had stabilized and, possibly in the absence of new stimuli in the demand for books, further growth potential was relatively limited compared to the first tumultuous decades of growth. Although real wages continued to increase up to at least 1650 and were relatively high compared to those in other countries, most of the growth had already occurred in the period 1580-1620.

Dutch publishers reacted to these changing market conditions by unlocking new market segments. In the previous phase, publishers targeted a new group of customers with, for example, lavishly illustrated travelogues and songbooks. During the growth phase they once again changed their strategies to include other segments of demand. The share of cheap books entering the market increased significantly, bringing down the average price of books in general, thereby opening up new markets.

Book sizes and prices

Demand for books was not only income-sensitive but price-sensitive. It has been estimated that during the early modern period, book prices in other countries were on average 50 per cent higher than in the Republic.²² In this calculation, prices for the Republic were derived from a register of books on offer in the Dutch Republic between 1760 and 1788 drawn up by

Dutch bookseller Johannes van Abkoude and extended and revised by his colleague Reinier Arrenberg.²³ The median price of books on sale during the last quarter of the eighteenth century – at least in the shops of booksellers who sent their information to Abkoude – was around *f*1.20; the average was *f*1.60. The list includes books published between 1643 and 1783, but by and large most of these were issued in the eighteenth century. As such they neither reflect what was for sale in a seventeenth-century bookshop nor how the average price of books developed throughout the century.

Fortunately, a number of booksellers' stock inventories and publishers' lists have survived to provide us with more estimates of book prices for this period. Bert van Selm has, for instance, published printed prices recorded in a 1628 publishers' list by Amsterdam publisher Hendrick Laurensz.²⁴ At the time, Laurensz was among the top five publishers active in Amsterdam. Excluding the production of ephemeral titles, he was even the second-largest producer (after the Blaeu firm), surpassing Jan Evertsz Cloppenburg and Paulus Aertsz van Ravesteyn.²⁵ His publisher's list from 1628 contains 506 priced entries for a little under 500 titles. Almost three quarters of the books featured in the 1628 catalogue cost less than 33 *stuivers*, and as many as half cost 11 *stuivers* or less. Van Selm has identified 139 of the 506 titles and used these to calculate the price per sheet. This calculation shows that, in 1628, the average price per sheet was 0.6 *stuivers*.²⁶ Because more expensive books had better chances of survival than cheaper books, the average price is probably biased in favour of a higher figure. Later sources also indicate that books on offer in Dutch shops varied from very expensive to very cheap.²⁷ The *Lexicon Arabico-Latinum in folio* (1653) by Jacob van Gool cost as much as *f*25, an illustrated emblem book by Johan de Brunes cost no more than *f*3, whereas a *Reynaert de Vos in octavo* was priced at just 2 *stuivers*.²⁸ In 1647, P.C. Hooft's *Neederlandsche Histoorien* (1642) cost about *f*10.²⁹ A translation of the *Amadis de Gaule*, a 21-volume Spanish knight-errant tale – often viewed as the first European bestseller – was priced at 8 or 9 *stuivers* per volume.³⁰

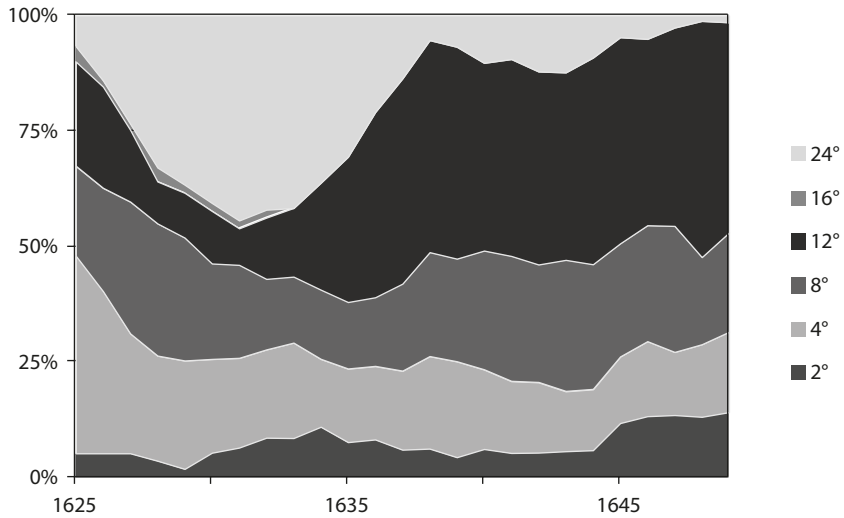
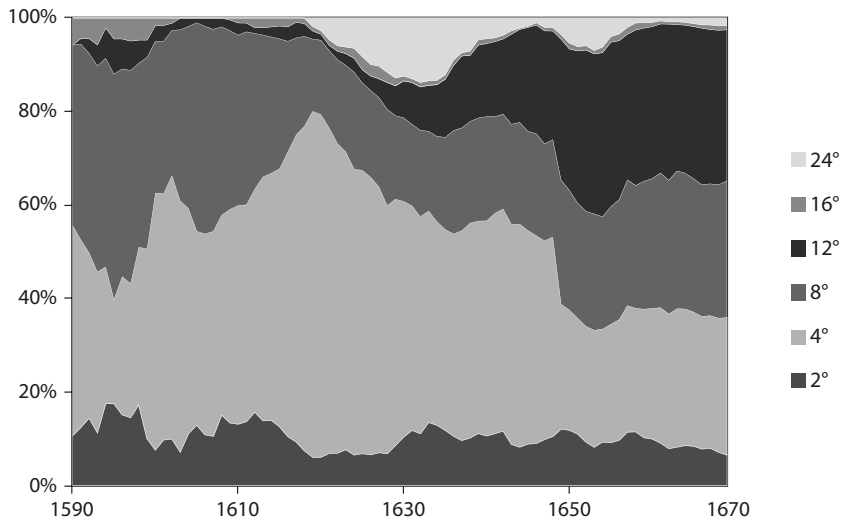
Although prices varied and costly books were not within the grasp of the average journeyman earning a guilder a day, printed titles seem to have been generally affordable. But did they also become more affordable? The price of an early modern book depended mainly on the amount of paper used, the quality of the paper, and the amount of labour required, for example, in composition and engraving. According to Van Selm, the price of books when calculated per sheet more than doubled during the seventeenth century, from *c.f*0.60 to *f*1.25.³¹ But even if the price per sheet increased, this does not necessarily mean that the average price of books also increased, as the following discussion of book sizes will show.

Size and format: From deluxe editions to carry-ons

The seventeenth century has been portrayed as the century of the quarto: 'a strong book with pages wide enough to offer enough space for the somewhat plump, Baroque book decoration which was so characteristic of Dutch book production in the Golden Age'.³² A characterization as the century of the pocket-sized book, however, seems just as valid. During the second quarter of the seventeenth century, smaller editions began replacing the 'deluxe' versions of songbooks.³³ New sizes, even smaller than octavo or duodecimo, were introduced that could be taken everywhere and even carried in girls' aprons. Sedecimo oblong (16°) and the so-called *mopsjes* (an even smaller 32° format) were advertised as easy to carry, easy to hide, and difficult to read for one's visually impaired mother or grandmother.³⁴

These pocket songbooks gained immense popularity, as did another pocket subgenre, the *Republieken*, sized 24°. This series *Republieken* included surveys of topography, history, politics, and courts of various countries and regions, published by the Leiden Elzeviers between 1625 and 1649.³⁵ The *Republieken* achieved European-wide fame and the books became collector's items, not only at European courts, but also among the lesser-endowed local Leiden students.³⁶ The 24° size was by no means new, but the Elzeviers were the first to print these books in such a way that buyers could actually read them without the need of a magnifying glass.³⁷ Figure 3.3 clearly shows how the Leiden Elzeviers first shifted from the production of books in quarto and duodecimo, to producing the 24° size, and then back to the octavo and duodecimo.³⁸ In the publishers' list of the Amsterdam branch, run by Louis II Elzevier, small-sized books also dominated: over 65 per cent of the 235 titles published between 1638 and 1655 were printed in 12° or smaller.³⁹

The shift to small-sized editions was not limited to songbooks, or the genres the Elzeviers specialized in, but can be observed industry wide. Figure 3.4 presents titles produced in Amsterdam between 1590 and 1670, showing that in quantitative terms, the share of the traditionally common quarto format indeed increased at first, only to decrease over the course of the seventeenth century. In the 1630s there is a significant increase in duodecimo (12°), and by the end of the growth phase this made up the largest category. In absolute terms, these smaller formats did not replace their larger counterparts: the number of titles in 4° or 8° increased along the same trajectory as those in 12°. If anything, they formed an additional category within existing genres. Even though we cannot conclusively show that the average book price declined, these findings suggest that, as new categories of relatively affordable books entered the market, a variety of

Fig. 3.3 Distribution of titles according to size, Abraham I Elzevier, 1625-1650**Fig. 3.4** Distribution of titles produced in Amsterdam according to size, 1590-1670

Source: STCN, accessed 4 October 2011. N=10,014

genres came within reach of a relatively untapped market – even if the price per sheet increased.

Publishers also developed a distinct tactic of product differentiation within single titles, starting with expensive first editions and then gradually issuing cheaper versions. For instance, in a 1647 stock catalogue of Amsterdam publisher Hendrick Laurensz featuring printed prices, *Houwelijck* by the popular author Jacob Cats was listed in the luxurious quarto format for *f*5, but also in duodecimo for *f*1.20.⁴⁰ The early editions were often more luxurious. Cheaper reissues or pirated editions in smaller formats and with fewer illustrations entered the market later. For example, Cats's bestselling debut *Sinne- en minnebeelden* (1618) was first published using high-quality paper, different fonts, and many beautiful engravings. As Cats recounts in his *Ad lectorum*, booksellers complained to him that buyers were put off by the high price and so a new cheaper version was published in the same year omitting the repetitive use of engravings.⁴¹ Later still, versions published between about 1630 and 1650 were even cheaper and often of lesser quality.⁴²

The fact that Dutch publishers intensified strategies of differentiation and scaled down the format of their products is not an entirely new observation, but book-historical literature does not explicitly address why this happened. In the introductory pages of a songbook published in 1654, the bookseller explicitly states that the small format was not chosen to save on printing costs but to facilitate the readers in carrying the book in their pockets.⁴³ However, a statement by Leiden/Amsterdam-based Louis Elzevier leaves little doubt that the use of smaller formats was a business strategy devised to reduce production costs. In 1635, three years before Elzevier's departure for Amsterdam, he explained how the use of small-sized editions had saved the firm, by reducing its paper expenditure by as much as 75 per cent.⁴⁴ A few decades later, a letter by the famous Amsterdam publishing house Wetstein to French scholar Giles Ménage on the subject of the preparation of the second edition of the latter's *Diogenes Laertius* also neatly summarizes the advantages of choosing a smaller format: the book would be cheaper to produce and would generate higher sales.⁴⁵ Quantitative data also confirm that the Elzeviers used less paper. Even though they issued more titles, they used fewer sheets.⁴⁶

Why did publishers like Elzevier feel the need to cut costs by limiting the format of their books? We can find a possible explanation in the supposed increase in the price per paper sheet as a consequence of rising paper prices, and it is conceivable that, had a strong increase in paper prices indeed occurred, this may have prompted reductions in the use of paper.⁴⁷ How much paper was needed depended on the format, the number of pages, and the number of copies.⁴⁸ In early modern book production, costs were determined

by labour and paper and on average, paper accounted for about half of the production costs of books.⁴⁹ A steady supply of affordable paper was crucial to booksellers' businesses, and a closer look at developments in the supply of paper is necessary to ascertain if the observed cutbacks on paper and the accompanying changes in the size of books may have been a response to paper scarcity.⁵⁰ Not only would rising paper prices have increased the production cost and thereby selling price of books, but they would have also amplified the already high upfront investments required of book producers.

Considering the timing of the widespread use of smaller book formats and the developments in paper prices, it is conceivable that downsizing the format of books, and thereby cutting down on paper costs, was a response to problems stemming from the supply of paper in the 1610s. Still, this may not have been the only factor in changing publishers' business strategies. Art-historical literature provided us with an additional hypothesis. In recent decades, the stylistic changes in Dutch painting in the 1620s have been increasingly interpreted as a response to changing market conditions rather than to changes in taste. The use of a limited palette, simplified forms, and smaller formats reduced the amount of time needed to finish a painting and, because labour was the largest part of the cost, production costs could drop significantly.⁵¹ Moreover, these innovations in both product and process did not result in a loss of quality. Likewise, the introduction of small-sized books can be interpreted as an innovative market strategy that broadened and democratized the Dutch book market by lowering the cost of the finished product. This suggests that there may have been more structural factors involved in encouraging Dutch publishers to adapt the form and content of books than only cutting back on the price of paper.⁵²

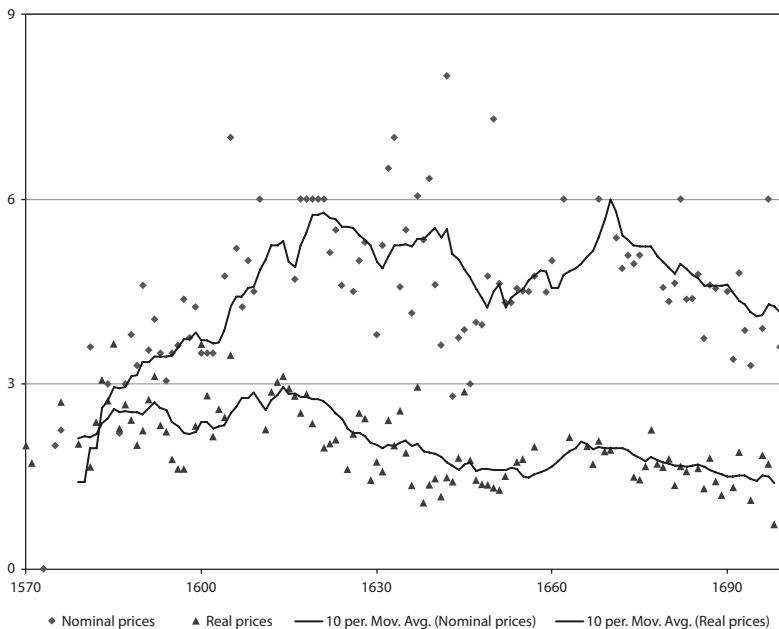
Related and supporting industries

While the perceived image of Dutch books may be one of great beauty, exceptional works such as the Blaeu atlases are not representative of the average quality.⁵³ Most books were no works of art, and even Blaeu's early editions of Pieter Cornelisz Hooft were published with a fairly simple and even unattractive layout, lacking in decoration.⁵⁴ It was only in the growth phase that the aesthetics of Dutch books improved significantly and that Dutch books became renowned for beautiful typography, decorations, and the high quality of the paper. Each aspect of the process of book production could be a means of competitive differentiation in an increasingly maturing market, be it by novel use of paper, copy, book illustrations, or type.

Paper prices and supply

Henk Voorn, expert on Dutch paper production, suspected that paper prices increased between 1654 and 1671 and declined thereafter.⁵⁵ Let us put his suggestion to the test and extend the time frame. Figure 3.5 presents estimates of Dutch paper prices, recorded by N.W. Posthumus.⁵⁶ Paper quantity was expressed in reams (one ream was c.500 sheets), subdivided into 20 'mains' (quires) of 25 sheets each.⁵⁷ We see that paper prices tripled between about 1580 and 1620, but thereafter they remained relatively stable. When these are deflated with the Consumer Price Index (CPI) which measures developments in the value of an overall basket of goods, a somewhat different trend is revealed.⁵⁸ Real prices of paper seem to have been relatively stable throughout the seventeenth century, and even declined after c.1615, to rise only slightly in the third quarter of the century.⁵⁹ These figures do not readily confirm the assumption that the rise in price per sheet or the cutbacks on production costs can be explained by soaring paper prices.

Fig. 3.5 Paper prices per ream in guilders in Amsterdam, 1570-1699



Source: Posthumus, *Nederlandsche prijsgeschiedenis*, no. 133, 330, 314, 227. Prices in n. 314 and n. 227 were given per quire, estimated at 20 quire per ream.

In the previous chapter we saw how demand for paper increased rapidly around the turn of the century. At a time when traditional trade routes were inaccessible and new ones yet to be firmly established, merchants like Cornelis van Lockhorst appreciated the opportunity. Yet by the early 1610s, there were already problems between Van Lockhorst's partnership and paper producers, as the paper they delivered proved hard to sell.⁶⁰ The quality of the German paper was relatively low and with the onset of the Thirty Years War (1618-1648), fought in Central Europe, more problems were inevitable. Transport options became limited, and there were issues about exchange rates.

The competitive pressure of paper imports from France intensified the problems of the *Compagnie*, leaving Van Lockhorst with an immovable stock of expensive yet inferior paper. Following these difficulties, the partnership was suspended, but Van Lockhorst immediately managed to revive it by attracting new investors. As before, most new financiers were merchants, but the widow van Wouw, printer of States General and one of the largest clients of the *Compagnie*, also contributed as much as *f*100,000. Even so, the new company did not fare well, and it collapsed after van Lockhorst's death in 1629 when it became clear that the individual associates had been dealing on their own. A fierce court case between Van Lockhorst's widow and the associates heralded the end of the partnership.⁶¹

The problems encountered by Van Lockhorst's companies are recalled here because of their suggestion of initial difficulties in the successful administration of a paper supply. This changed from the 1620s onwards, right around the time the real prices for paper started to decline (Figure 3.5). From around 1620, other merchants started to take control of paper production in France. Around the same time, paper prices stagnated and even fell, whereas the quality of the paper improved. Coinciding with the decline of German imports, Dutch merchants came to control a large amount of French paper production by financing or even buying mills. Dutch watermarks, bearing the shield with the arms of Amsterdam, first began to appear on paper produced in the mills of the Angoumois region. One of the key players was Amsterdam merchant Christoffel van Gangelt whose imports were sold to Dutch and foreign booksellers through the ports of Amsterdam and Rotterdam.⁶² Presumably, this new structure of supply was a significant improvement on the previous mode of paper supply, as is evident by the success of Dutch paper merchants in the international paper trade.

The Republic was not the only country to lack a domestic paper industry and depend on imports.⁶³ After Dutch merchants increased their involvement in French mills, and the Peace of Westphalia improved trade

between France and the Republic, Amsterdam arose as an international paper distribution centre. According to documents in the Amsterdam guild archive, popular destinations included Muscovy, Denmark, Sweden, the Baltic regions, and, particularly after the middle of the century, England.⁶⁴ Booksellers in other parts of the Republic, as well as Antwerp, also came to obtain most of their paper from Amsterdam.⁶⁵ Correspondence from the Antwerp publishing house Verdussen, for instance, shows how the Verdussen brothers obtained price and quality information from several of the most important Amsterdam paper traders.⁶⁶ The involvement of a number of Dutch merchants in the production of French paper bolstered the position of Amsterdam in the international paper trade and coincided with the stabilization or even decline of paper prices and improved paper quality. It also stimulated the involvement of merchants in financing other export products that were distributed along Dutch trade routes, a development that will be addressed later in this chapter.

Type

By the end of the growth phase, Dutch typographers had acquired international fame, and their type was exported throughout Europe.⁶⁷ In 1683, Joseph Moxon wrote: 'Since the late made Dutch Letters are so generally, and indeed most deservedly, accounted the best, as for their Shape, consisting so exactly of Mathematical Regular Figures [...] I think we may account the Rules they were made by, to be the Rules of true shap'd Letters.'⁶⁸ As an English printer, publisher, maker of globes and mathematical instruments, and author of the famous handbook of printing *Mechanic Exercises on the Whole Art of Printing* (London 1683), Moxon had an intimate knowledge of Dutch printing practices. His father, a Puritan refugee, had worked as a printer in Delft and Rotterdam, and Moxon himself had visited the Republic on several occasions.⁶⁹

In hindsight, it may not come as a surprise that Dutch typography was foremost in European printing given the important role Dutch printers came to play in the European book trade, but in 1610 this was not self-evident. It was only from the 1620s onwards that the quality of Dutch typography improved as printing and composition became neater, new types were ordered, and typographic design became standardized.⁷⁰ A style emerged that was to be eventually known as the 'Dutch taste'; not radically innovative, but of high quality and with a distinct look.⁷¹ Series of roman type were developed that would determine the appearance of publications from many important seventeenth-century Dutch publishers, not least those by

Willem Jansz Blaeu and Paulus Aertsz van Ravesteyn, and new Hebrew type would change the look of Hebrew books. The improvements in type design and typesetting reached great heights in the 1650s, not least in the work of Christoffel van Dijck, a German-born journeyman-goldsmith who set up a type foundry in Amsterdam in the later 1640s.⁷²

According to book historian Paul Dijstelberge, the reason the quality of printing improved in the 1620s is unknown.⁷³ He suggests that it may have been driven by the increasing internationalization of Dutch book production, but, as he readily admits, this is not compatible with the apparent overall decline in quality throughout the rest of Europe.⁷⁴ He also puts forward that competition amongst printers or publishers may have played a role. In other words, it may not have been international rivalry that fuelled Dutch typographic innovation but domestic competition. During the expansion of Dutch book production, the number of printers indeed increased, fuelling a need for more type. But this alone cannot explain the observed changes in typography. During the phase of emergence, Dutch printers had relied on Flemish type and typemakers. Matrices and punches were durable tools and, as long as there was a sufficient pool of available type, there was little need to order new ones.⁷⁵ During the growth phase, increased demand could still have been met by type cast from existing matrices. The observed expansion into the production of smaller-sized books may also have encouraged demand for newly produced smaller type, but there was more to it than that. So, if it were not strictly necessary to have new matrices made, why would Dutch printers order their own typefaces? To obtain a better understanding of why improvements were made in the 1620s, it is worth considering the consequences of ordering new type and new matrices, and having a closer look at how the typefounding and punchcutting industries were organized.

Typefounding and punchcutting

The timing and the early documentation on orders for new type are particularly enlightening. The tipping point in the production of new type came with the arrival of typecutter Nicolaes Briot. Originally from the Southern Netherlands, Briot was trained as a silversmith in the Dutch town of Gouda and active in Amsterdam from the 1620s onwards.⁷⁶ He supplied important printing firms such as Willem Jansz Blaeu and the leading Hebrew printer, Menasseh ben Israel. The Blaeus had their own type foundry, but they ordered their matrices from Briot and later from the famous Luther foundry in Frankfurt. The first evidence of cutting new common type dates from

1615, when Amsterdam bookseller Dirck Pietersz Voskuyl ordered type from Briot, presumably for Paulus Aertsz van Ravestejn.⁷⁷ The notarized contract between Voskuyl and Briot stipulated that the latter was not allowed to cut similar type for any other printer. In an argument between Blaeu and Briot's widow, Blaeu accused her late husband of having cast type for others from matrices he had made exclusively for Blaeu.⁷⁸ Such exclusivity seems to have been an important issue for Blaeu. English scholar Thomas Marshall even complained to his patron, the dean of Christ Church College in Oxford, about Blaeu's refusal to sell type to other printers or typefounders.⁷⁹

The ordering and purchase of new material appear to have been largely undertaken to secure a monopoly on certain typefaces, and even though the investment in new matrices was not very large, its returns were strongly valued. Typeface exclusivity was important, as it produced a unique look on the printed page. The initiative for the development of new type came from Dutch printers, in particular those active in Amsterdam. Lettercutting only developed in areas with a critical mass of firms that had something to gain from ordering new matrices. In the early years, Amsterdam had relatively few print shops of significance.⁸⁰ According to J.W. Enschedé, the 1632 establishment of the *Athenaeum Illustre* in Amsterdam served as a stimulant to printing, and in turn to punchcutting and typefounding, in much the same way the university had a few decades earlier in Leiden.⁸¹ The overall expansion of printing in Amsterdam, in which the establishment of the *Athenaeum* was of course but one factor, may have indeed fostered a critical mass of printers, not only in terms of quantity but also in terms of competitive pressure. The development of unique type by Dutch printers can therefore be interpreted as one of the tools available for product differentiation.

In this light, it is interesting that not everyone appreciated Dutch letters. Whilst the artistic skills of Dutch typecutters were widely acknowledged, their designs were also associated with commercial motives. Dutch fonts, even Elzevier's, have been described as dull and unoriginally derived from the French, yet more practical, and lacking the artistic qualities of earlier typecutters.⁸² For the same reason, not everyone appreciated the small format of Dutch books. In 1651 Dutch classical scholar Nicolaas Heinsius wrote to fellow scholar Jan Frederik Gronovius that the French brothers Jacques and Pierre Dupuy wished that Gronovius' *Livy* would have been printed in a larger format, the small types being a recurring subject of complaint for Paris scholars.⁸³ Gronovius responded: 'I have already received a similar opinion [...] but try to make men listen to reason who have nothing in their heads but the love of gain.'⁸⁴ Eighteenth-century typecutter Pierre-Simon

Fournier, moreover, claimed that Dutch printers deliberately used 'types of a cramped, starved look, so that they may get more words to the line and more lines to the page. They are not troubled by their ugliness, provided they are profitable.'⁸⁵

A recurring theme in the criticism is the commercial outlook of the book producers. According to one historian of typography, 'printing fell into the hands of a class of masters and men less able, enterprising, and socially important, who looked at it solely from the commercial side'.⁸⁶ The businesslike attitude of Dutch printers may have resulted in a reputation as profit seekers but, more importantly, it stimulated the cutting of new type, elevating the diversity, quality, and recognizability of Dutch books. A similar development took place in a third important element of book production: illustrations.

Book illustrations

During the first decades of the seventeenth century, the number of illustrated publications expanded rapidly.⁸⁷ After 1610 especially, new and original book illustrations flourished on the pages of atlases, travelogues, emblem books, and songbooks, and also in (natural) histories and pamphlets. How can we explain this 'Golden Age of book illustration'? Since the profusion of novel designs coincided with the Golden Age of engraving and painting, it is reasonable to search for clues in the expanding art market. A distinction should be made between the design and engraving or etching of plates, and the use of plates to print illustrated sheets.

As in painting and text publishing, the rapid increase in demand for images was met largely by immigrant engravers and artists. David Vinckboons, for instance, also known for his paintings and drawings, was one of the most popular designers, especially in the phase of emergence, but, compared to his successors, he was no radical innovator. In the first quarter of the seventeenth century, there were more and more prints of original designs by, and in the style of, artists who had been trained in the Dutch Republic, most notably Willem Buytewech, Jan II van de Velde, and especially Adriaen van de Venne. Haarlem in particular was a centre of engraving, with Hendrick Goltzius's son-in-law Jacob Matham, an important print-publisher, at its centre. Not coincidentally, Haarlem was also the first town to take off artistically. Increasingly, Dutch publishers could take their pick from a significant number of engravers, and the number of artists was increasing rapidly.⁸⁸ As with the artistic novelties in paintings and the changes in book formats, there may have been commercial motives behind the development

of new prints and new book illustrations. Tellingly, in 1613, Jacob Matham's pupil Jan II van de Velde received a concerned letter from his father, who urged him to work as much as possible from his own designs, for this would bring him greater financial rewards.⁸⁹

As demand for plates increased, so did competition for them. Second-hand plates were mainly acquired through auctions. The first significant auction of books and plates was that of Cornelis Claesz in 1610, and many publishers, most notably Blaeu, Hondius, and Janssonius seized this opportunity.⁹⁰ Fierce competition could indeed arise over plates. After the auction of map decorator and seller David de Meyne in 1620, a dispute arose between the group of Jan Evertsz Cloppenburgh, Pieter van den Keere, Frans van den Hoeve, and Johannes Janssonius on the one hand, and Willem Jansz Blaeu on the other. The former had bought two thirds of the copperplates for a large world globe, but Blaeu possessed the remaining plates. Soon Blaeu tried to obtain the plates from the others, for example, by having publisher Dirck Pietersz Pers and platecutters Josua van den Ende, Robbert de Baudous, and Claes Jansz Visscher act as witnesses.⁹¹ Cloppenburgh and his associates do not appear to have been very impressed, and they declared that they could easily have the plates that were in Blaeu's possession reproduced in France, and that, seeing as they were the owners, it would always be possible for them to take an axe to the plates that Blaeu had set his sights on.

Within such a competitive market, ordering new illustrations was an effective means of differentiation. As a result of increased competitive pressure, Dutch publishers and printers started to invest in new print designs, and as a result an increasing number of original plates were ordered and designed in the first quarter of the seventeenth century.⁹²

Copy production

Around the turn of the seventeenth century, the mainstays of copy production in the early modern Dutch Republic (science and scholarship, commerce, religious and political involvement, and literature) expanded significantly. As the infrastructure for higher learning expanded dramatically after the Dutch Revolt, the number of academic authors swelled.⁹³ An academic infrastructure developed from scratch, competitive and unburdened by tradition. By 1650, the grid of higher learning consisted of five provincial universities – Leiden (1575), Franeker (1585), Groningen (1614), Utrecht (1636), and Harderwijk (1648) – and so-called 'illustrious schools', established mainly in the 1630s in a number of towns including Amsterdam, Middelburg, Deventer, Dordrecht, and Rotterdam. These schools

were municipal rather than provincial enterprises that provided a form of undergraduate education.⁹⁴

Dutch universities and scholars soon acquired international reputations, attracting large numbers of foreign students and professors.⁹⁵ Records show that in 1649 almost half of all students enrolled in Dutch universities came from abroad, with more than a quarter from German lands alone.⁹⁶ The influx of foreign students reflects the high quality of academic teaching in the Republic and the excellent reputation the universities had abroad. The position of Dutch scholarly publications was strengthened by relative freedom of the press which attracted important dissidents of the seventeenth century.⁹⁷ René Descartes and Baruch Spinoza lived in the Republic, and although Dutch jurist Hugo Grotius was himself exiled, his writings were also published in the Dutch Republic.

Academics were not the only ones interested in science. Information also came pouring in through port towns, as the booming economy drove the increasing demand for applied and descriptive knowledge. In his famous 1632 speech at the opening of the Amsterdam *Athenaeum Illustre*, Dutch humanist Caspar Barlaeus presented his vision of the learned merchant: the *mercator sapiens*.⁹⁸ Even though this concept was more of an ideal than a reality, the link between commerce and science was indeed omnipresent.⁹⁹ Moreover, in the Dutch Republic scholarly, religious, and political debates were not limited to intellectual circles. The Dutch Republic's so-called 'discussion culture' is a recognized marker of its modernity, and it is often repeated that even philosophical debates reached those lacking an academic background.¹⁰⁰ Relative freedom of press and mind, a broad-based reading culture, and an efficient distribution network allowed news and events, as well as political and religious stances, to be discussed throughout the country and society.¹⁰¹ These characteristics also increased the scale of copy production because the public debate involved large segments of society and took place through prints and pamphlets – new media *avant la lettre*.

The Golden Age of Dutch literature truly gained momentum under the influence of the generation of writers that began publishing in the 1610s: Joost van den Vondel, Pieter Corneliszoon Hooft, Gerbrand Adriaensz Bredero, Constantijn Huygens, Anna and Maria Tesselschade Visscher, and Jacob Cats.¹⁰² In the same decade, a group of prominent members, led by Samuel Coster, Bredero, and Hooft, broke with the Amsterdam Chamber *d'Eglentier*, organizing themselves into the *Nederduytsche Academie* for sciences and arts, with Dutch as the official language. This demonstrates how the literary field was in flux, and although the conflict in the chamber was partly the

result of personality clashes, it was essentially a parting of ways between the old and the new literary guard. The *Athenaeum Illustre* was established in 1632, and six years later the first municipal theatre in the Republic replaced the two Amsterdam chambers.¹⁰³ The group of outstanding poetry and prose writers who made their debut in these years was surrounded by an abundance of amateur poets. An expanding well-educated middle class, with time for leisurely activities, was writing poems. From 1625, students of the Latin schools were formally required to produce a variety of occasional poems.¹⁰⁴

During the growth phase, Dutch literature developed through a combination of local and foreign stimuli. The STCN shows that in the 1630s, there were only 300 translations from Latin and French to Dutch, half as many as in the 1610s and 1650s.¹⁰⁵ This indicates a significant decline in the share of translations in the total number of Dutch titles published between 1610s and 1630s, and an expansion of novel Dutch titles. New and original work was produced in a variety of genres, as a glimpse into the work of the most famous poets demonstrates. While producing numerous original works, Vondel, amongst others, also translated from other languages as a source of inspiration.¹⁰⁶ Conversely, due to the language barrier, Dutch literature had little international impact.¹⁰⁷ For those who used Latin, more international recognition was possible as was the case for neo-Latinists Daniel Heinsius, professor of Greek and History at the University of Leiden, and Hugo Grotius, lawyer, poet, and dramatist.

The increase in potential copy, whether in the form of news, knowledge, or cultural expressions, did not have direct consequences only on the scale of book production, but it also reinforced its geographic distribution. The Hague became synonymous with political news, Amsterdam with commerce and literary life, and Leiden with academic printing. More scholars and students resulted in more copy, while the university occasionally also commissioned large and costly projects.¹⁰⁸ Consequently, scholarly work published in Leiden increased from just over 400 titles between 1575 and 1600 to around 1,000 between 1626 and 1650. Likewise, the flourishing Chambers of Rhetoric boosted the number of literary publications, especially in Amsterdam, and the presence of government institutions supported printers in The Hague such as the widow van Wouw, who alone had thousands of titles to her name. Still, these strong pulls from the demand side and pushes from the supply side alone cannot account for the variety, scale, and quality of Dutch Golden Age book production. Potential copy was increasing rapidly, and while publishers certainly drew on these sources of copy, they also reinforced their production.

From potential to real copy

The extensive and varied Dutch book production was not only the result of artistic, literary, or scholarly talent, but also of strong commercial propulsion. The songbook can once again illustrate this point. Poets wrote the songs, but often it was the publishers 'who decided when the market was ripe [...]', not only with regards to anthologies, but also concerning individual songbooks.¹⁰⁹ As publishers started vying for copy, they turned authors into marketing assets, and from the 1610s the names of individual authors began appearing more frequently on title pages. Prior to this, collections of poems distributed in private networks were often published without authors' names or consent. When in 1599 Leiden publisher Jan Orlers published eighty-seven poems by Roemer Visscher, he almost certainly did so without Visscher's knowledge. Thirteen years later, Jan Jacobsz Paets published Visscher's poems in a deluxe version, still without explicitly printing his name, but by then the origins should have been evident to all and the preface suggests the author's involvement. In 1614, Willem Jansz Blaeu published Visscher's new collection *Sinnepoppen* in a deluxe version and in a cheaper duodecimo, together with a revised and authorized sextodecimo version of the collection published by Paets two years earlier. The title page held the phrase 'revised by Visscher himself and enlarged by half as much again', as well as a reference to the 'incorrect Leiden copy'.¹¹⁰

While the original creative impulse for copy production may have come from the authors, from the moment a manuscript was picked up by publishers, it was fair game. Reprints, adaptations, and piracy were the order of the day, as complaints by authors and printed warnings show: 'Book printers who so hastily gather this and that together [...] Do not touch my songbook'.¹¹¹ Famous author Gerbrand Adriaensz Bredero was particularly offended because the publisher had printed his work without consent and added a number of songs written by another poet.¹¹² When in 1636 P.C. Hooft wanted to have his collection of poems and songs published in the style of the lavishly illustrated songbooks from the first quarter of the century, his publisher, Jacob van der Burgh, rejected the idea, arguing for a cheaper variant. Apparently Hooft allowed himself to be persuaded, as the anthology was published without illustrations and musical notation.¹¹³ Publishers also selected the content, and in the prefaces the publisher sometimes made a direct appeal to the public to send in anything of interest for possible inclusion in future editions.¹¹⁴

Like songbooks, other genres such as political texts could also be the subject of fierce competition between publishers. Research on the dynamic

between publishers, authors, and the government suggests that during the seventeenth century, pamphlets were also increasingly appropriated as commercial products.¹¹⁵ Although it is hard to make a general statement on the relationship between authors and publishers in a period without formal copyrights, the available evidence suggests that relations were reciprocal and reinforcing. With the expansion of scholarly, cultural, and commercial life, more and more knowledge, information, and texts were created (and desired), and Dutch publishers were ideally positioned to convert this pool of potential copy into commercial profit. In turn, publications by booksellers and the presence of bookshops also functioned as stimuli for cultural and intellectual life.

Conclusion

In view of the Republic's economic and demographic boom, it may not be very surprising that the Dutch book trade expanded during the Golden Age, nor that the quality of the produced books increased. Conditions were favourable, related and supporting industries flourished, and the number of publishers increased. Unfavourable circumstances in other countries such as war, economic difficulties, and censorship hampered the development of serious foreign competition and boosted local production. Yet, with the advantage of hindsight, it is easy to mistake the eventual success of the Republic as a European publishing centre as inevitable. The necessary seeds had been planted in the early years of the Dutch book trade, but growth needed to be sustained and improved upon. By the 1620s, the volume of book production was still relatively modest, the quality of books was not very impressive, and growth rates even started to drop.¹¹⁶

Around the same time, significant changes in format, content, and quality of books took place. Developments in related and supporting industries such as typefounding and copy production alone cannot fully account for the observed qualitative shifts. The introduction of smaller formats can, for instance, also be interpreted as part of a package of publishers' strategies that developed in response to stagnating domestic demand and increasing competition. The package further included investment in new type, improvements in the quality of printing, and cost-cutting in the use of engravings. Changing market conditions thus shaped the form and content of the books as publishers turned copy, illustrations, type, and paper into commercial assets. Through this series of process and process innovations, high potential demand was converted into real consumption.

Publishers were able to both trigger and exploit opportunities in related and supporting industries, which resulted in significant changes in, as well as improvements to, the appearance and character of Dutch books. In the following chapter the analysis of the spatial distribution of Dutch book production and the organization of the Amsterdam production system further supports this argument.

Notes

1. Laeven, 'Frankfurt and Leipzig Book Fairs', p. 190.
2. Buringh and Van Zanden, 'Charting the "Rise of the West"'.
3. Clair, *A History of European Printing*, pp. 272-273; De la Fontaine Verwey, 'Het Hollandse wonder', p. 49.
4. As summarized in Hoftijzer, 'Metropolis'.
5. De la Fontaine Verwey, 'Het Hollandse wonder', p. 49.
6. Hoftijzer, 'Metropolis', p. 256.
7. De Kruiif, *Liefhebbers*, pp. 102-107; Ringstad and Løyland, 'Demand for Books', pp. 148-149.
8. See for example De Kruiif, *Liefhebbers*, pp. 102-104.
9. Hesmondhalgh, *The Cultural Industries*, p. 97; Chai, 'Retrospectives'.
10. On probate inventories as a historical source see Wijsenbeek-Olthuis, 'Boedelinventarissen'; De Vries, 'Between purchasing power'; *ibid.*; Van der Woude and Schuurman, eds., *Probate Inventories*. On the use of probate inventories for research on book consumption: Van Ottegem, 'Omweg of dwaalspoor'; Gijzen, *Boekbezit in boedelinventarissen*.
11. Koblusek, *Boeken in de hofstad*, pp. 139-149.
12. Dibbits, 'Vertrouwd bezit'; Kamermans, *Materiële cultuur*; Nijboer, 'Fatsoenering van het bestaan'; Van Koolbergen, 'Materiële cultuur'; De Vries, 'Peasant Demand Patterns'; De Vries, 'Between Purchasing Power'.
13. Kamermans, *Materiële cultuur*, p. 309
14. Nijboer, 'Fatsoenering van het bestaan', pp. 51-53.
15. De Vries, 'Peasant Demand Patterns', pp. 34-236.
16. Van Koolbergen, 'Materiële cultuur', pp. 135, 148-149.
17. Kamermans, *Materiële cultuur*.
18. De Kruiif, *Liefhebbers*, p. 111; See also De Kruiif, 'Classes of Readers'.
19. Buringh and Van Zanden, 'Charting the "Rise of the West"', p. 434. Note that they estimated book consumption, not title consumption.
20. STCN, accessed 21-09-2010.
21. Febvre and Martin, *The Coming of the Book*, pp. 216-222.
22. Van Zanden, 'Common Workmen'. Except in England, where average book prices were 35 per cent higher than in the Republic.

23. Van Abkoude and Arrenberg, *Naamregister*. Van Zanden sampled all book prices for the seventeenth century, and from every page the first price from a book published in the eighteenth century, excluding multiple volumes. N= 782.
24. Van Selm, 'De Nederlandse boekprijis', pp. 99-100; Van Selm, *Een menighe treffelijcke boecken*, pp. 344-349.
25. STCN, accessed 19-11-2010.
26. Van Selm, 'De Nederlandse boekprijis', p. 105. When the engraved books in Laurensz' catalogue are omitted, the average price per sheet is 0.492 *stuiver*.
27. Van Selm, *Een menighe treffelijcke boecken*, pp. 344-352.
28. The following prices are derived from the 1647 catalogue of Laurensz, as cited in Van Selm, 'De Nederlandse boekprijis', pp. 99-100.
29. Strenghold and Leerintveld, 'Pers in arbeid'.
30. Van Selm, *Een menighe treffelijcke boecken*, pp. 348-349, 352; Van Selm, *Amadis van Gaule-romans*, p. 67.
31. Van Selm, 'De Nederlandse boekprijis', p. 108.
32. Van Delft and Bots, *Bibliopolis 1585-1725*, section: 'Formats'.
33. This is confirmed by a quick search in the STCN. The share of 12° or smaller sized songbooks published in the Republic, increased from 16 per cent in the 1610s (N=125) to 53 per cent in the 1660s (N=179). Accessed 18-04-2011.
34. Veldhorst, *Zingend door het leven*, pp. 65-67. Take for example this advertisement by Haarlem printer and bookseller M. Segerman: '*Dan soo steeckt men in syn sackje, met ghemackje, wel een boeckje, 't is niet groot [...]*'.
35. Gruys, 'De reeks 'Republieken'', p. 78.
36. Hoftijzer, 'Leidse studentenbibliotheken', pp. 147, note 136.
37. STCN, accessed 04-10-2011. Dijstelberge, 'De vorm: typografie in de Renaissance', p. 284. On the *Republieken* see Gruys, 'De reeks 'Republieken''. In the Southern Netherlands Plantin had also printed in 24°. Several years before Abraham and Boneventura introduced their *Republieken*, Raphelengius in Leiden had annually published one or a few pocketbooks and in 1619 Willem Jansz Blaeu was the first in Amsterdam to take up this niche.
38. STCN, accessed 04-10-2011; Under Boneventura and Abraham I Elzevier the Leiden firm produced 20 titles per year on average between 1625 and 1650, excluding academic texts and 35 including academic texts.
39. Kingma, 'Uitgaven met verstrekkende gevolgen', p. 108.
40. Van Selm, 'De Nederlandse boekprijis', p. 98.
41. http://emblems.let.uu.nl/c1627_introduction.html?lang=dut, accessed 21-12-2011.
42. *Ibid.*, note 279, accessed 21-12-2011. '*Meteen na de uitgave van dit werkje, welwillende lezer, kwamen de boekhandelaren bij mij klagen dat de kosten van de boeken door het driemaal afdrukken van de afbeeldingen in de drie afdelingen, buiten proportie stegen en dat de kopers de onnodig hoge prijs bezwaarlijk vonden [...]*'.
43. Cited in Porteman and Welkenhuysen, *P.C. Hooft, Emblemata amatoria*, p. 8. The book is *Scoperos Satyra ofte Thyrsis Minne-wit* (s.l. 1654) and the original text: '*Welcke niet ghedaen is om dat de kosten des Druckers mochten zijn*

- gespaert; maer achtende het selve het bequaemst ende het ghevoeghlyckst te wesen om in de sack hier en daer mede te draghen'.*
44. Bots, 'De Elzeviers', p. 16.
 45. Maber, *Publishing*, pp. 16-17, 101-102. Letter from Wetstein to Ménage, December 12 1686.
 46. Schaep, 'Boeken met prenten', p. 294.
 47. Van Selm, 'De Nederlandse boekprijs', pp. 108-109.
 48. Examples in Voet, *Golden Compasses*, vol. II, pp. 20-21.
 49. Based on *ibid.*, p. 380. Van Zanden based book prices on the following cost distribution: 60 per cent paper costs and 40 per cent wages of craftsmen: Van Zanden, *The Long Road*, p. 182.
 50. This has been suggested by De la Fontaine Verwey in 'Het Hollandse wonder', p. 55.
 51. Cf. Montias, 'Cost and Value'; Montias, 'The Influence of Economic Factors'; Sluijter, 'On Brabant Rubbish'; Israel, 'Adjusting to Hard Times'.
 52. See for a summary De la Fontaine Verwey, 'Het Hollandse wonder', pp. 55-58.
 53. *Ibid.*, pp. 49-50.
 54. Dijstelberge, 'De lof der onleesbaarheid', p. 287.
 55. Voorn, *De papiermolens*, vol. III, pp. 164-166; Van Selm, 'De Nederlandse boekprijs', pp. 106-107.
 56. Posthumus, *Nederlandsche prijsgeschiedenis*, no. 133, 330, 314, 227. Prices in n. 314 and n. 227 were given per quire, estimated at 20 quire per ream. Van Zanden used the same source and noted a general increase in paper prices between 1550 and 1650. Van Zanden, 'What Happened to the Standard of Living?'. Data available at: <http://www.iisg.nl/hpw/brenv.php>. My dataset differs slightly from Van Zanden's as he did not include n. 314 and n. 227 and provided references for pepper instead of paper.
 57. There were minor differences between countries.
 58. CPI from Van Zanden, 'What Happened to the Standard of Living?'
 59. Van Selm, 'De Nederlandse boekprijs', p. 106.
 60. The following is based on Voorn, *Uit de oudste geschiedenis* and Voorn, 'Lombards'. Van Eeghen, *De Amsterdamse boekhandel*, vol. IV, pp. 195-272 deals with paperdealers, factors, and sellers, but she only starts around 1680.
 61. Voorn, *Uit de oudste geschiedenis*, pp. 23-26; Nationaal Archief (NA); Hof van Holland: Civiele Sententies, inv. 704, sententie 137/1633, 29/7/1633. In 1633 the court ruled in favour of the widow, ordering the associates to pay her the colossal sum of *f*227,000. In a tentative list of debtors, dated 1635, some 80 names are recorded, including almost every important Amsterdam bookseller, some printers in the rest of the Republic, and in foreign towns, such as Hamburg, Danzig and London.
 62. Van Eeghen, *De Amsterdamse boekhandel*, vol. IV, pp. 210-224; Voorn, 'Lombards', p. 318.
 63. On England: Coleman, *British Paper Industry*, p. 19.

64. SA, Archief van de Gilden, inv. 56, behind n. 22 and behind 32. Examples from notarial archives in Van Eeghen, *De Amsterdamse boekhandel*, vol. IV, p. 210.
65. The correspondence of the Nijmegen bookseller Abraham Leyniers shows that almost all Leyniers paper came from Amsterdam: Begheyn, *Abraham Leyniers*; Between 1673 and 1700 Plantin-Moretus bought paper for *f*20,000 to *f*40,000 from the Amsterdam merchants Ysbrant and Levinus Vincent. The second most important bookshop in Antwerp, Verdussen, almost exclusively bought its paper in the Republic and only sporadically directly from mills close to Liege or Namur: Sabbe, ed., *Briefwisseling*.
66. Sabbe, ed., *Briefwisseling*, Letters IX and X.
67. Publications on type and typefoundries include Carter and Mosley, *A View of Early Typography*; Vervliet, *French Renaissance Printing Types*; Updike, *Printing Types*, vol. II. On Dutch type see Middendorp, *Dutch Type*; Vervliet, *Sixteenth-century Printing Types*; Lane, Lommen, and De Zoete, *Dutch Typefounders' Specimens*. There is no comprehensive work on early modern Dutch type production.
68. Moxon, *Mechanick Exercises*, pp. 22-23.
69. See for a discussion of Moxon, Janssen, *Zetten en drukken*, pp. 12-14.
70. Dijstelberge, 'De vorm: typografie in de Renaissance', p. 120.
71. McKitterick, *A History of Cambridge University Press*, p. 13. First mentioned as *goût hollandois* in 1766 by in a manual by French punchcutter Simon Pierre-Fournier. Fournier and Carter, *Fournier on Typefounding*.
72. John A. Lane, a specialist in the history of printing types and typefounding, is working on a study of Christoffel van Dijck. See also Caflisch, 'Christoffel van Dijck', p. 7.
73. Dijstelberge, 'De vorm: typografie in de Renaissance'.
74. Jennett, *Pioneers in Printing*, p. 47.
75. Fuks and Fuks-Mansfeld, *Hebrew Typography*, vol. II, p. 235.
76. On Briot see Lane, 'Nicolaes Briot'; Enschedé, 'Nicolaes Briot'.
77. Enschedé, 'Nicolaes Briot', p. 153.
78. *Ibid.*, pp. 153-154.
79. *Ibid.*, p. 153.
80. Dijstelberge, 'De vorm: typografie in de Renaissance', p. 121.
81. Enschedé, 'Nicolaes Briot', p. 171.
82. Updike, *Printing Types*, vol. II, p. 22; Morison, *Four Centuries of Fine Printing*, p. 37.
83. They refer to the edition of Livy (*Historiarum Librii*) by J.F. Gronovius, published first by Louis and Daniel Elzevier in 1644-1645 in 12°. It was reprinted in 1653-1654, and a new edition (in 8°) was published in 1664-1665. Delatour, 'Le cabinet des frères Dupuy', pp. 287-328.
84. Cited in Davies, *The World of the Elseviers*, pp. 147-148.
85. Cited in Kinross, *Modern Typography*, p. 30.
86. Updike, *Printing Types*, vol. II, p. 93.

87. De la Fontaine Verwey, 'Gouden Eeuw' provides an introductory discussion. Recently Elmer and Jaap van Veen have organized an exhibition on Amsterdam print publishing. Kolfin and Van Veen, *Gedrukt tot Amsterdam*. On Dutch print publishing see Orenstein, 'Marketing Prints'; Orenstein et al., 'Print Publishers'. On cartographic engraving and publishing in Amsterdam see for example Van den Brink and Werner, eds., *Gesneden*. On Plantin and engravings consider Bowen, *Christopher Plantin*. On illustrations for works of individual authors see Landwehr, *Romeyn de Hooghe*; Stuiveling et al., eds., *Groot lied-boeck*, vol. II, pp 89-91; Lijten, *Sinne- en minnebeelden*. And on one specific genre, see for instance Kolfin, 'Portretten'.
88. Stuiveling et al., eds., *Groot lied-boeck*, vol. II, pp. 95-96.
89. Orenstein et al., 'Print Publishers', p. 183; Obreen, ed., *Archief*, vol. II, pp. 100-101.
90. On this auction, see Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 266-274; Van Selm, *Een menighe treffelijcke boecken*, pp. 225-233.
91. Van Dillen, *Bronnen tot de geschiedenis*, pp. 290, 354-355; Van Eeghen, 'De familie van de plaatsnijder C.J. Visscher', pp. 80-81.
92. De la Fontaine Verwey, 'Gouden Eeuw'. The 'Golden Age' of Dutch book illustration would not last; there was a hiatus between ca. 1635 and the 1670s/1680s, the era of prolific and innovative illustrators Romeyn de Hooghe and Jan Luyken.
93. Davids, 'Amsterdam as a Centre of Learning', p. 305; Frijhoff and Spies, *Dutch Culture*, pp. 246-256. A peak in the number of prominent Dutch scholars been observed by Gascoigne, 'Historical Demography', pp. 559-561.
94. See Van Miert, *Humanism in an Age of Science*, pp. 21-43; Van Miert, 'Where Centres of Learning and Centres of Culture meet' on a discussion of the definition of illustrious schools. In legal terms, the illustrious school can be distinguished from a university in its inability to grant doctorates.
95. Davids, 'Amsterdam as a Centre of Learning', p. 313.
96. Frijhoff and Spies, *Dutch Culture*, p. 255.
97. On this see for instance Groenveld, 'Mecca of Authors?'
98. See for example Van Berkel, 'Rediscovering Clusius'.
99. See Margócsy, *Commercial Visions*; Cook, *Matters of Exchange*; Huigen, De Jong, and Kolfin, eds., *Dutch Trading Companies*; Smith and Findlen, eds., *Merchants and Marvels*.
100. Frijhoff and Spies, *Dutch Culture*, pp. 220-226 on discussion culture.
101. On pamphlets and politics in the Dutch Republic see for example Harms, *Pamfletten en publieke opinie*; Deen, Onnekink, and Reinders, eds., *Pamphlets and Politics*; Harline, *Pamphlets, Printing, and Political Culture*.
102. Frijhoff and Spies, *Dutch Culture*, p. 545.
103. Schenkeveld-van der Dussen, *Dutch Literature*, pp. 11-14.
104. Frijhoff and Spies, *Dutch Culture*, p. 532. The definition of literature is problematic, see *ibid.*, p. 538.

105. The number of translations from English and Greek in the Republic remained the same in the 1610s, 1630s, and 1650s (circa 75 and 17 respectively). STCN, accessed 14-10-2011.
106. Schenkeveld-van der Dussen, *Dutch Literature*, pp. 142-147; Grootes, 'Dutch Literature and Language', accessed 04-11-2011.
107. Few Dutch-language literary works were translated, although publishers issued books bilingually or trilingually, for example some of Jacob Cats emblems at the end of the 1620s.
108. Bouwman et al., eds., *Stad van boeken*, p 191.
109. Veldhorst, 'Pharmacy for the Body and Soul', p. 241.
110. Van Vaeck, 'Moral Emblems Adorned with Rhymes', p. 206.
111. Veldhorst, 'Pharmacy for the Body and Soul', pp. 234-244. *Cupidoos lusthof* (1605): 'Boekdruckers die soo haest wat by malcander scraept ... Myn lietboek tast niet aen.' Translation by Veldhorst.
112. Ibid., p. 243.
113. Ibid., p. 241.
114. Ibid., p. 242.
115. Cf. Harms, *Pamfletten en publieke opinie*.
116. Cf. Dijstelberge, 'De vorm: typografie in de Renaissance'; Dijstelberge, 'De lof der onleesbaarheid'.

4. 1610-1650: Buzz and Pipelines

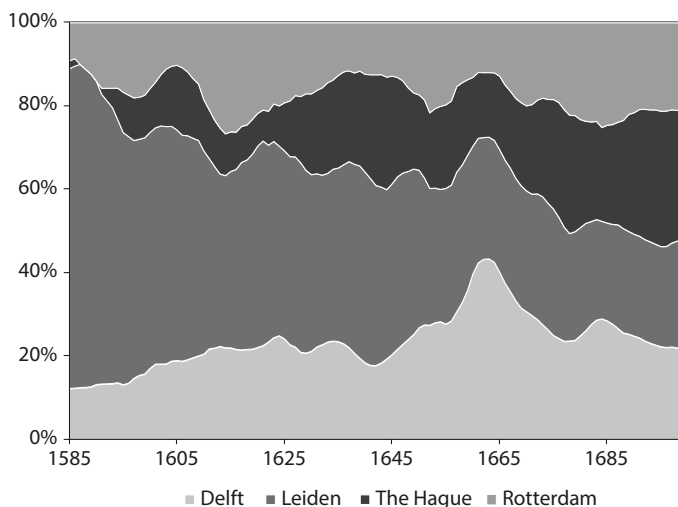
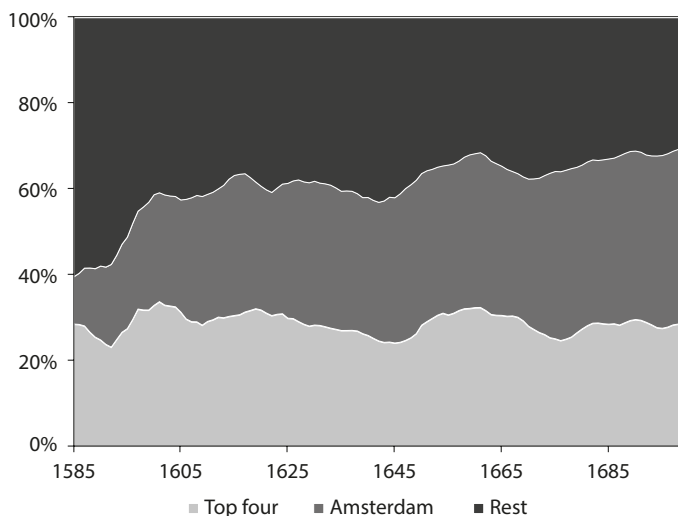
By 1660, the population and the physical space of Amsterdam, the third-largest town in Europe after London and Paris, had expanded dramatically. The city's population had increased from some 30,000 in 1580 to around 170,000 in 1650.¹ In the early stages of growth, book production in the largest publishing centres had been dominated by just a handful of firms, but by the middle of the seventeenth century the number of publishers had increased significantly. As a result, the competitive context differed greatly from that in 1578, when Cornelis Claesz had first come to town. What did this mean for the Dutch book trade in general and Amsterdam's in particular? And how did the organization of production, especially geographic concentration and local specialization, facilitate or hamper its development?

In the previous chapter the qualitative improvements in Dutch book production have been interpreted as strategic responses to limitations on the demand side. New markets were reached as well as created through a series of process and product innovations that resulted in expansion of scale and scope of Dutch book production as well as quality improvement. The implicit assumption has been that the intensification of competition stimulated publishers to act quickly, provide up-to-date information, and to differentiate products through typographical changes and improvements.² In this chapter I argue that competition indeed increased, but that there was more to the rise of Dutch book production than mere competitive pressure. Dutch publishers managed to reap the benefits of co-location while maintaining a sufficient distance from one another to allow for competition.

A polycentric urban structure

As illustrated in Figures 4.1 and 4.2, no single Dutch town had a monopoly position in book production. Amsterdam was by far the largest book centre, with Leiden a distant second. But with only one third of the total number of publishers in the Dutch Republic, Amsterdam was not a monopolist on the scale of London or Paris, or even sixteenth-century Antwerp. Estimates are that in seventeenth-century England, 75 per cent of the total number of people involved in book production worked in London.³ In France, book production was more dispersed, but increasingly Paris became the hub, housing 60 per cent of the country's printers

Fig. 4.1 Local shares of book production, measured in number of people active per decade (%), 1585-1699



between 1600 and 1640, a share that only further increased over the course of the century.⁴ Even Amsterdam's predecessor Antwerp housed an estimated 60 per cent of publishers in the Northern and Southern Netherlands during the sixteenth century.⁵ The polycentric structure of Dutch book production can also be found in the spatial patterns of production of specific genres, such as almanacs.⁶ In other countries the

Table 4.1 Distribution of booksellers, titles, and non-ephemeral titles, 1610-1619 and 1650-1659

1610-1619	Total booksellers**	Total titles	Non-eph.	% booksellers	% Titles	% Non-eph.
Amsterdam	45	956	674	31.7	21.9	32.0
Leiden	20	712	442*	14.1	16.3	21.0
The Hague	4	321	58	2.8	7.4	2.8
Rotterdam	11	198	132	7.7	4.5	6.3
Utrecht	6	86	31	4.2	2.0	1.5
Haarlem	5	105	76	3.5	2.4	3.6
Delft	7	127	78	4.9	2.9	3.7
Dordrecht	8	117	71	5.6	2.7	3.4
Middelburg	4	112	64	2.8	2.6	3.0
Groningen	2	96	19*	1.4	2.2	0.9
Franeker	4	154	61*	2.8	3.5	2.9
Alkmaar	1	15	6	0.7	0.3	0.3
Zwolle	1	3	3	0.7	0.1	0.1
s.n., s.l.	-	836	211	-	19.2	10.0
Rest	24	518	179	16.9	11.9	8.5
Total	144	4356	2105	100	100	100

1650-1659	Total booksellers**	Total titles	Non-eph.	% booksellers	% Titles	% Non-eph.
Amsterdam	116	2219	1950	34.9	28.6	49.5
Leiden	33	1240	520*	9.9	16	13.2
The Hague	19	741	216	5.7	9.6	5.5
Rotterdam	17	251	145	5.1	3.2	3.7
Utrecht	21	671	235*	6	8.7	6
Haarlem	10	93	61	3	1.2	1.5
Delft	10	79	45	3	1	1.1
Dordrecht	14	194	150	4.2	2.5	3.8
Middelburg	11	123	49	3.3	1.6	1.2
Groningen	8	295	99*	2.4	3.8	2.5
Franeker	3	141	86*	0.9	1.8	2.2
Alkmaar	4	28	22	1.2	0.4	0.6
Zwolle	1	7	2	0.3	0.1	0.1
s.n., s.l.	-	1133	236	-	14.6	6.0
Rest	73	532	124	22	6.9	3.1
Total	340	7747	3940	100	100	100

Source: Thesaurus; STCN accessed 4 August 2011; * excluding academic texts; ** average number of booksellers per year in decade.

production and selling of almanacs was never limited to just one centre, but nowhere was it as decentralized as in the Dutch Republic.

Even when a distinction is made between production and distribution, the position of Amsterdam does not come close to that of its foreign counterparts during the first decades of the seventeenth century. Here, all publishers are assumed to be booksellers, and therefore their number can serve as a proxy for distribution, whereas title count is a proxy for production (Table 4.1). Although the relative importance of Amsterdam increases when we consider title production instead of the number of booksellers, production was still relatively dispersed. Over time, though, production became increasingly concentrated in Amsterdam, and the differences between patterns in production and distribution amplified. To assess the importance of different towns in terms of the weight of local book production, a second distinction is made between ephemeral prints and books, by counting the categories of period documents, state publications, academic texts, and occasional publications as examples of the former. This shows that during the first half of the seventeenth century, Amsterdam's share in non-ephemeral titles in particular increased substantially, up to half of total production.

Although production was relatively dispersed, connections between colleagues and competitors from different towns were prolific. In the words of Michael Montias, 'The scope of the printing, binding, and book distribution business clearly transcended the boundaries of individual cities.'⁷ In fact, during the growth phase of Dutch book production, relations between printers and publishers in different towns only intensified. Fragmented evidence from the STCN and data in the form of lists of debtors and collaborations indicate many connections between booksellers and colleagues in different towns. For example, the network of Broer Jansz in Amsterdam, one of the most important almanac publishers, included a network of nineteen booksellers in Amsterdam, three in The Hague, one in Leiden, and one in Haarlem. The geographic network of his successors, Gillis Joosten Saeghman and Jan Jacobsz Bouman, was much more extensive, as it included not just three, but as many as eleven towns.⁸

Booksellers in more peripheral towns like Leeuwarden and Groningen often functioned as distributors. Leeuwarden bookseller Tjerck Claesz, for instance, received many books and pamphlets, especially from Amsterdam, on a regular and rapid basis.⁹ Within these distribution networks, information flows played a crucial role. Newspaper advertisements functioned as devices to inform booksellers and customers about the books on offer from other locations. In the newspaper published by Amsterdam-based Jan van Hilten,

for instance, colleagues from Delft, The Hague, Utrecht, Haarlem, Leeuwarden, Leiden, Middelburg, Dordrecht, and Arnhem advertised their work. Eventually the *Opregte Haerlemse Courant* would become the most significant place for advertisements. A survey of 887 advertisements for new books and 431 advertisements for book auctions published in this newspaper between 1658 and 1675 shows that half of all advertisements related to the book trade and 15 per cent of book trade advertisements related specifically to book auctions.¹⁰

Another method of exchanging information between booksellers was through catalogues, especially the *Catalogus Universalis*. This catalogue, essentially a publishers' biannual (later annual) compiled by Broer Jansz, was first published in 1639 under the subtitle *Een Vertoogh van de meeste Boecken in dese Vereenighde Nederlanden, ofte gantsch nieuw, ofte verbeterd ende vermeerderd, ghedruckt ende uytgegeven zijn* ('Account of the majority of new, improved, or augmented books printed and published in the Dutch Republic').¹¹ Its purpose was to present a list of all new titles published in the Dutch Republic. In collecting his records, Jansz was dependent on the publishers themselves to supply him with the correct information. Although the *Catalogus Universalis* may not be complete, it provides a relatively good representation of what was published throughout the Republic.¹² Through the annual catalogue, we encounter works originating from 41 towns, 32 of which were located in the Dutch Republic. Of the 243 named printers and booksellers based in the Republic, 47 per cent (115) were located in Amsterdam, 10 per cent in Leiden (25), and c.5 per cent in the towns of Utrecht (11), Dordrecht (14), and The Hague (9).

The geographic dispersal of production and the advanced opportunities for book distribution should be understood within the framework of the country's urban structure.¹³ Dutch towns were not very large, Amsterdam being the exception with 200,000 inhabitants around the middle of the seventeenth century, but they were numerous. As the Dutch Republic was fairly small, this resulted in a high population density, even in rural areas. The Dutch Republic had the highest urbanization rates in Europe. Early in the sixteenth century, Holland already had a remarkable 45 per cent urbanization rate, and by 1650 this stood even higher, at around 60 per cent.¹⁴ In other provinces of the Dutch Republic, the rate lingered at around 25 per cent. Still, one was never far from the next town, and during the seventeenth century the urban network only became further integrated due to innovations in transport infrastructure.¹⁵

The development of the barges (*trekschuiten*) network in particular was a major feature of the Dutch economy as it led to significant improvements in transportation compared to the existing alternative mode, the horse-drawn

Fig. 4.2 Distribution of publishers in 1610 (left) and 1650 (right)

Source: Thesaurus

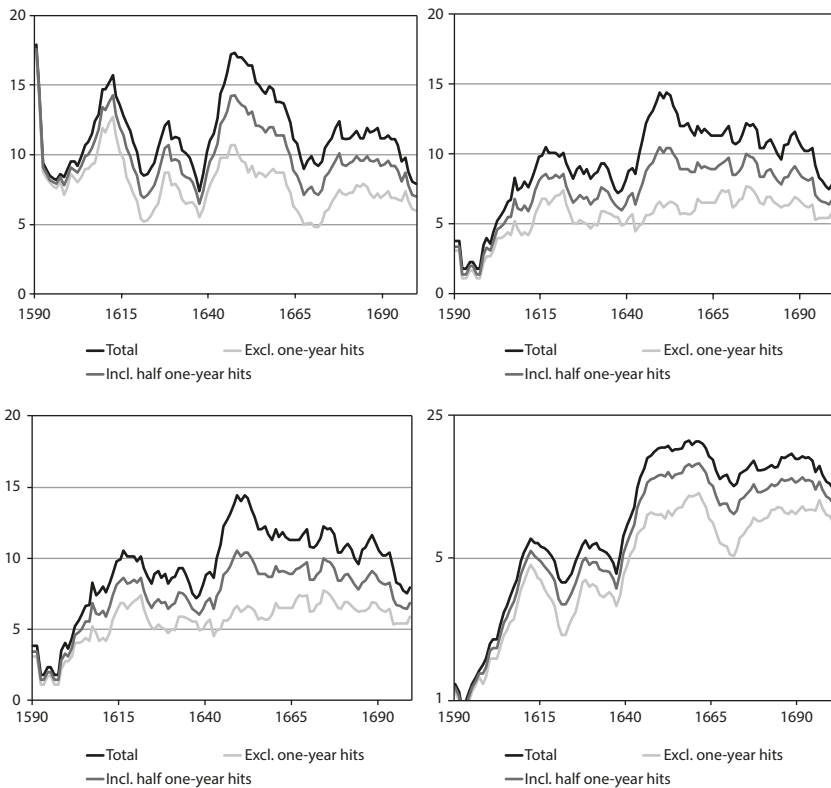
coach.¹⁶ In comparison, stagecoaches were much more expensive, less comfortable, and their schedules were more difficult to maintain. Between 1632 and 1667, a system of passenger transportation by horse-towed barges was developed along a network of canals. Regular passenger services were maintained on routes in Holland, and later in Friesland and Groningen. By the middle of the century there were four networks, not yet fully integrated, but between 1656 and 1665 these merged into two – Holland-Utrecht and Groningen-Friesland – which connected some thirty towns. The barges generally ran either hourly or at least nine times per day and were relatively fast. One could travel, for instance, from Rotterdam to Delft in under two hours and from Rotterdam to Leiden in three hours.

Due to high levels of urbanization, the polycentric urban structure, and the well-developed transport options, the domestic market for books and the organization of book production and distribution were well integrated. Improvements in the field of book distribution further strengthened this integration, and consequently market growth. Even though production was concentrated in specific towns, in terms of distribution the Dutch book sector was certainly strongly polycentric. At the same time, the specializations and geographic concentrations revealed in the previous chapters were reinforced over time, with Amsterdam as a permanent and increasingly strong magnet for publishers. This strengthened competitive pressure in the book market.

Local competition

In many seminal works on printing, the lack of competition in French and English book production is considered an important cause of the overall low quality of printing in Europe during the seventeenth century.¹⁷ If lack of competition checked quality in these countries, could the reverse have been true for the Dutch Republic? Anecdotal examples of rivalry and competition between Amsterdam publishers are not difficult to come by. In the case of maps and globes production, for instance, the continuous product and process improvements can at least partly be ascribed to the famous rivalry between the Blaeu firm and the Janssonius-Hondius tandem.¹⁸ Publishers such as Blaeu and contemporaries all copied and adapted novel successful concepts introduced by others, and this surely increased the scale of production and

Fig. 4.3 Entry rates, exit rates, turbulence rates, and number of newcomers (semi-log scale), per year in Amsterdam, 1580-1700 (clockwise)



Source: Thesaurus

intensified product differentiation and perhaps also quality of the printing. But such examples can be found for all places and periods. In order to more systematically map and analyse changes in the levels of competition, measures developed in empirical studies in the field of economics will be used.

Survival rates and the threat of new entrants

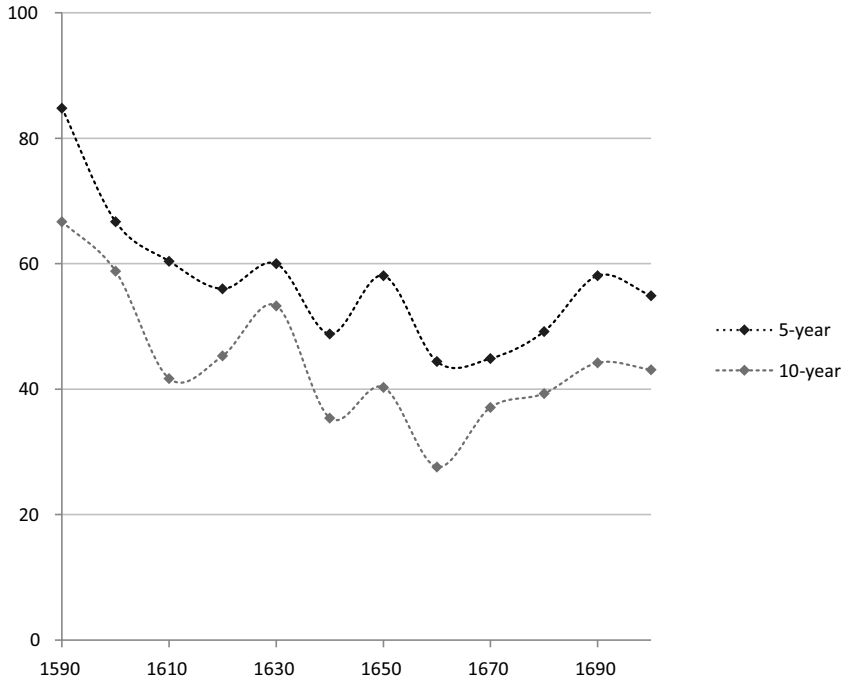
In this section, the measures of entry and exit rates are employed to assess changes in the structure of the Amsterdam book industry. Economic studies have shown that entry and exit rates can differ significantly across industries, and that they also change during the course of an industry's life cycle.¹⁹ Higher levels of entry and exit rates tend to occur in emerging or growing industries, or in industries undergoing rapid structural change. Upon entering a market, new competitors may challenge market shares and profitability of incumbents if consumer demand does not increase concomitantly. In general, an attractive industry is characterized not only by high entry rates but also by high exit rates and accordingly also a relatively high turbulence rate. Waves of new entrants – whether they are bringing innovative and more competitive products to the market or simply trying their luck – tend to lead to large waves of exits, mainly of competitors whose abilities lie at the fringe of their industry.

Figure 4.3 presents the number of newcomers as well as entry, exit, and turbulence rates between 1580 and 1700. Between c.1610 and c.1640 the number of newcomers in Amsterdam was relatively stable, at only a handful a year. Hereafter the trend intensifies, but the rapid increase in the number of publishers in the 1640s can be partly explained by a large number of publishers who were only listed as active in a single year (so-called one-year hits).²⁰ To illustrate this, the figure shows results for three samples: a sample including the one-year hits, one excluding them, and another one including only half of them. Even when the category of one-year hits is omitted in its entirety, the number of entrants still doubled, pointing to a dynamic industry.

However, to interpret the impact of the number of newcomers, the size of the industry also needs to be taken into account. Here the measure of entry rates can be applied: the share of newcomers in a certain year divided by the total number of active firms active in that year. The exit rate is the share of firms that ceased production in a certain year, divided by the total number of firms active in that year. The turbulence rate is the sum of entry and exit rates. The surges in these rates suggest that the level of competition increased, especially by the middle of the century.

Another measure of competitive pressure is that of survival rates of firms. In Figure 4.4 the probability of new firms, starting in specific decades, surviving for more than five or ten years is charted. Until c.1660, survival chances declined significantly. Because these survival rates are strongly influenced by the occurrence of firms that fail in their first year, the survival chances of new firms starting by decade were again estimated in several ways: including all one-year hits, including half, including a quarter, excluding none, and excluding all firms that did not make it past four years. For the sake of clarity only the samples with half of the one-year hits are included in Figure 4.4, but in all the above-mentioned samples the trend declined over time. This suggests that the impact of competition not only affected fortune-seekers attracted by a booming industry, but that Amsterdam publishers who managed to establish a company also found it more difficult to build a career. However, in order to interpret the impact and mechanisms of these more general changes in industrial structure, more specific measures such as firm size and specialization

Fig. 4.4 Five and ten year survival chances of new Amsterdam-based firms in their commencement decade, 1590-1700



Source: Thesaurus

should also be considered. Competitive pressure could, for instance, have also increased due to the similarities between the firms in terms of size and specialization.

Firm size

Obviously, there were large differences in the number of publications attributed to individual firms. Some firms were very large while others were minor players, and some were active in the international book trade whereas others focused on local markets. The performance of individual firms in terms of economic or cultural impact is difficult to assess in the absence of business archives and book-historical rankings such as the ones that exist in the field of art history.²¹ Though some names are world-renowned, such as Blaeu or Elsevier, and their oeuvres well charted, the number of existing studies on individual publishers is insufficient to develop measures of book-historical appreciation.

Instead, an alternative measure will be used: firm productivity as defined by number and type of book titles per firm according to the STCN. The measure is estimated by linking names of publishers to the number of titles they produced. In order to get a sense of how the size of Amsterdam publishing firms developed over time, we look at the output per firm for four benchmark years (Table 4.2). Admittedly, this does not allow for measuring market impact or cultural importance. Large firms are not by definition more innovative or differentiated, and therefore the quantitative studies will be accompanied by more detailed qualitative analyses. Between 1600 and 1674, the median number of titles produced per Amsterdam publisher doubled despite the rapid increase in the number of competitors. The average, although higher in absolute terms, shows a more modest growth pattern.

Table 4.2 Output per firm active in Amsterdam 1585, 1600, 1630, 1674

Year	1585	1600	1630	1674
N-titles	556	1060	3759	7761
N-publisher	8	22	57	114
Maximum N titles per publisher	303	303	498	617
Average N titles per publisher	70	49	66	68
Median N titles per publisher	30	16	21	33

Source: Thesaurus; STCN, accessed accessed 20 June 2011

Table 4.3 Distribution of Amsterdam publishers according to size, 1585, 1600, 1630, 1674

%	1585	1600	1630	1674
Major (>99 titles)	12.1	9.1	15.8	17.5
Large (50-99 titles)	25	18.2	17.5	16.7
Intermediate (20-49 titles)	12.5	18.2	19.3	35.1
Minor (6-19 titles)	25	22.7	26.3	17.5
Occasional (1-5 titles)	25	31.8	19.3	13.2
Total (N)	8	22	57	114

Source: STCN; Thesaurus.

In Table 4.3 the structure of the Amsterdam book industry is further analysed according to firm size as measured by the number of titles published throughout a publisher's career. A distinction is made between major (≥ 100 titles), large (50-99 titles), medium (20-49 titles), small (6-19 titles), and occasional publishers (1-5 titles). This chart reveals several changes in composition over the years. Around 1600, the share of publishers in each category was relatively equally distributed, but the major firms grew increasingly large, doubling their share. The occasional publishers' share decreased significantly, first to the benefit of minor firms, and then, after 1631, to the advantage of intermediate firms. This trend suggests that the playing field in book publishing became increasingly level throughout the century, an observation that can be further examined by means of another measure designed to estimate competition levels within local industries: the industry concentration ratio.²²

Industry concentration

The industry concentration ratio refers to the market share of the leading firms within an industry, generally the four or eight largest in the industry. If the concentration ratio of the top four firms is smaller than 40 per cent, the industry is considered to be very competitive because no one firm controls a majority share of the market. This measure, however, does not show the distribution of firm size or the changes in the market share between firms. For example, a 60 per cent concentration ratio may denote that one firm held 50 per cent and two others 5 per cent each, but it could also indicate that all three firms held a market share of 20 per cent each. To account for this, a second measure, the Herfindahl-Hirschman Index (HHI), is added. The HHI reflects the market shares of all firms, squared to place more

weight on larger firms, and it ranges from zero (perfect competition) to one (monopoly).

Table 4.4 Concentration indices Amsterdam 1585, 1600, 1630, 1674

Year	1585	1600	1630	1674
N-titles	556	1079	3759	7761
N-publishers	8	22	57	114
Total C_4	523	711	1394	1974
Total C_8	556	934	2290	3137
Share C_4	0.94	0.66	0.37	0.25
Share C_8	1.00	0.87	0.61	0.40
HHI	0.35	0.15	0.06	0.03

Source: Thesaurus; STCN, accessed 20 June 2011. Estimates based on number of titles produced during the publisher's career.

In order to estimate the concentration ratio, data from the STCN (number of titles produced per year) and the *Thesaurus* (number of active publishers per year) was used. The figures are based on the number of titles produced by Amsterdam publishers active in a certain year, throughout their entire career. Table 4.4 shows market concentration ratios for the largest four and eight producers (C_4 , C_8) for the years 1585, 1600, 1630, and 1674.²³ The increase in the number of active producers went hand in hand with a decreasing industrial concentration. The HHI for the Amsterdam book trade further confirms that the competitive pressure increased significantly during the seventeenth century. It is also possible to estimate concentration in production in any given year. Viewing all Amsterdam publications over three benchmark years – 1610, 1630, and 1674 –, the C_4 declined from 53 per cent in 1610 to 32 per cent in 1674 and the C_8 from 74 to 47 per cent over the same period. These figures confirm the increase in competitive pressure during the seventeenth century while at the same time showing how the Amsterdam book industry was characterized by an increasingly polycentric structure.

Financial status

The observed changes in the industrial structure are corroborated by another source: tax registers. Estimates of wealth can be derived from tax registers; in our case, the 200th penny tax, charged in 1631 and 1674, which had a minimum wealth requirement of *f*1,000. About half of the publishers active in Amsterdam in 1631 and 1674 were identified in the

ledgers.²⁴ Between these sample years, booksellers' median wealth decreased from *f*6,000 to *f*4,000, and their average wealth from *f*9,350 to *f*7,016.²⁵ A contemporary wealth classification allows us to compare the relative importance of different wealth groups in the book trade during the seventeenth century.

In Dutch tax collection in the seventeenth century, a distinction was made between 'capitalists', with more than *f*3,000 of taxable wealth, and 'half-capitalists', who held between *f*1,000 and *f*3,000 of taxable wealth. In 1641, the State considered, but did not pass, the motion for a third group: 'super-capitalists', who were estimated to be worth more than *f*10,000. When the 1631 and 1674 taxes are compared, it becomes apparent that the share of half-capitalist booksellers increased from 15 to almost 40 per cent. Of the twenty publishers identified in 1631, nine had an estimated wealth of *f*10,000 or more, and only three were taxed as half-capitalists. For 1674, estimates were found for 94 publishers. Twenty had an estimated income of *f*10,000 or more, and 35 publishers were assessed as half-capitalists. Although the number of super-capitalist publishers increased, their share diminished, whereas the share of capitalist publishers remained roughly the same.

If these wealth estimates are any indication of the income publishers derived from publishing, they corroborate the increasing importance of a sizable group of middle-sized producers during the seventeenth century. The existence of this large middle group of firms, of roughly equal size, may have added to the already high competitive pressure. It also testifies to a relatively open production system with room for small, large, and middle-sized firms. Still, the observed increase in competitive pressure according to both the HHI and concentration indices does not necessarily mean that rivalry between publishers intensified.

Rivalry

In theory, all publishers were competitors, but not all of them were rivals. For example, a producer of Bibles had little to fear from publishers of pamphlets and ordinances. Although they are often used interchangeably, competition and rivalry are not synonymous. The term competition refers to firms that depend on the same resources, in this case any book producer. Rivalry can be defined as direct competition, as an individual firm's conscious behaviour towards other firms operating within the same market.²⁶ In the book-historical literature we find many references to such direct competition between publishers, the most renowned example being the rivalry of neighbours Willem Jansz Blaeu and the Hondius-Janssonius dynasty.

The Hondius-Janssonius tandem was, however, not the only one challenging Blaeu. In 1632, Jacob Aertsz Colom published his own nautical manual *De Vyerige Colom* in which he proceeded to demonstrate and correct the perceived mistakes in the previous (i.e. Blaeu's) manual.²⁷ In other genres too, the scale, scope, and quality of illustrations rapidly evolved through competition.²⁸ In 1615, Blaeu had, for instance, published all of Heinsius's emblems, including some poems in a smaller format, for which the Van der Passe firm had adapted the plates to scale. When, in 1617, the latter decided to publish a similar work in the same size and format, Blaeu in turn responded quickly. Within a year, he published two books in the same format, with new plates by Michel Le Blon. In that same year, the Van der Passe firm published an adapted and expanded version of *Tronus Cupidinis*, increasing the number of emblems from thirty-one to eighty.²⁹

Table 4.5 Concentration indices Amsterdam per genre 1600-1609, 1650-1659

Period	1600-1609	1650-1659	1600-1609	1650-1659
Genre	Dutch language and literature		Geography	
N-titles	31	311	46	143
N-publishers	15	70	6	28
Total C_3	13	99	44	68
Total C_8	23	147	-	92
Share C_4	0.42	0.32	0.96	0.48
Share C_8	0.74	0.47	-	0.64
HHI	0.08	0.04	0.66	0.08

Source: Thesaurus; STCN accessed 20 June 2011. Estimates based on number of titles produced in Amsterdam per decade, per genre.

In order to get a better sense of the levels of direct competition beyond anecdotal evidence, concentration ratios were calculated for specific genres on the basis of the STCN and the *Thesaurus*. Table 4.5 lists the results for the number of titles published in Amsterdam in the genres of poetry (Dutch language and literature) and geography (including maps, charts, atlases, and travel journals) during the end of the emergence phase (1600-1609) and the end of the growth phase (1650-1659). Both general trends and the available examples leave little doubt regarding the increase in competitive pressure in Amsterdam publishing between 1585 and 1674.³⁰ The decline in concentration is significant for both genres but especially for geographical publications. These measures do not pretend to capture the full extent

of rivalry, as not all publishers active in these genres catered to the same demand groups. They could differentiate their products and niches, for example, by price or by language.³¹ Research on political pamphlets for instance has shown how competitive pressure increased in the market for that subgenre throughout the century. There were still major players that dominated production, but the cumulative impact of their smaller competitors was impressive.³²

Guild regulations

Finally, we turn to a more qualitative indicator of competition and rivalry. Analysis of local guild regulations suggests that levels of competition increased during the first half of the seventeenth century. In general, the rapid expansion of the industry fuelled the need for regulation that was tailored specifically to book production, but the timing and content of such regulations suggest that they came especially in response to increasing competition. In most Dutch towns, booksellers were originally members of craft guilds that encompassed a whole range of related economic activities, such as saddlers' guilds, or the more artistically oriented Guilds of St. Luke. Where booksellers were not organized in their own guild, they remained in the local Guild of St. Luke or, as in Utrecht, in the saddlers' guild.³³

During the seventeenth century, independent booksellers' guilds were established.³⁴ On closer inspection, the dates upon which independent booksellers' guilds were established reveal that distinct phases in the life cycle of the Dutch book trade coincided with the establishment of booksellers' guilds. We can discern two phases. The first phase took place around the turn of the seventeenth century, when guilds were established in Middelburg in 1590, Utrecht in 1599, and Haarlem in 1616. The second phase set in when growth rates were already declining and was marked by the establishment of independent booksellers' guilds in the larger book production centres of Leiden in 1651, Amsterdam in 1662, Rotterdam in 1699, and The Hague in 1702. These will be discussed in chapters on the next phase in the life cycle of Dutch book production. Interestingly, a comparable phase of independent guild establishment around 1600 has also been observed for painters and interpreted as a reaction to the threat of imports from the Southern Netherlands following The Twelve Years Truce.³⁵ Although the chronology of the first round of booksellers' guilds does not bear a clear relationship link to the protection of local traders against the import of Southern Netherlandish products, a comparable motive can be identified. Local entrepreneurs pushing for independent guilds aimed to restrict

Image 4.1 View on Dam Square in Amsterdam, 1654, Jacob van der Ulf

Source: Rijksmuseum, Amsterdam

competition, particularly from non-booksellers and non-local booksellers. This can be illustrated by a closer look at the concerns of Amsterdam printers active in the 1610s.

In 1579 in Amsterdam, the Guild of St. Luke separated from other trades to deal exclusively with the visual arts. The members included painters, tapestry makers, embroiderers, and engravers. Booksellers and binders were also included because it was considered that they too worked with brushes (*penseel en quast*).³⁶ Printers, on the other hand, were not full members, and until the establishment of the booksellers' guild in 1662, they were neither restricted nor protected. In 1616, a group of Amsterdam printers requested guild status, stressing the need for regulation in their trade. The printers, probably inspired by recent developments in Haarlem, attempted to organize themselves, along with booksellers and binders, into one guild. In the end, the request was turned down. Booksellers and binders remained within the Guild of St. Luke, and printers operated largely outside the corporate structure. The draft regulations of ten articles, addressed to the Amsterdam magistrate, however, still provide insight into the motives behind the request and the practices of the Amsterdam book trade.³⁷

The first proposed article was aimed at prohibiting booksellers from having their books printed outside Amsterdam without first consulting Amsterdam printers. Only if the books in question could not be printed to

the same standard for a reasonable price in Amsterdam would booksellers be allowed to outsource printing to printers in other towns. In that case they would not be permitted to use 'Amsterdam' on the title page. Articles 2 to 5 suggest that booksellers and printers were, up to this point, also competing with one another: booksellers took printing jobs, and printers were paid in books that they, in turn, had to sell. An attempt to make a more clear-cut distinction between booksellers and printers can be detected in article 4, which stipulates that master printers were not allowed to receive payment for their work in the form of books. Booksellers and binders would be fined if they took printing jobs (article 2), and non-printers would not be allowed to print (article 3). Article 5 stated that printers should not print any more copies than the client had ordered.

The conditions for becoming a member were specified in articles 6, 7, 8, and 10. Printers from outside Amsterdam would not be allowed to set up a print shop within the town's limits, unless they had already worked in an Amsterdam print shop for two consecutive years. Apprentices could not establish their own shop either, unless they trained with an Amsterdam master for four years and completed a master test. Master printers would not be permitted to employ more than two apprentices at any one time. Article 9 proposed that two booksellers or bookbinders and one printer would be elected as deans. The draft regulations suggest that Amsterdam printers were experiencing competitive pressure from varying sides. They were fixed on strengthening their position vis-à-vis booksellers, outsiders, and non-printers. Experiencing competition from both outside and inside their market, they attempted to increase the entry restrictions and gain a monopoly on local print jobs. In the end, however, they failed, and as we will see below, printing and bookselling in Amsterdam, as well as in the other book centres of Leiden and The Hague, remained relatively unregulated during the growth phase, up until the middle of the seventeenth century.

Openness and embeddedness

The competitive structure of the Dutch book industry on both country and city level suggests a relatively open production system. But how open was local industrial organization and did this change over time? And what were the consequences for patterns of specialization and concentration? In the case of early modern cultural industries like book publishing, restrictions on entry were mainly imposed by local guilds. Guilds could, moreover,

influence the intensity of competition in several ways. They could limit the number of producers allowed in a local industry; they could regulate entry through the level of the entry fees and the requirements for becoming a member; and they could administer the reproduction of skills and routines through the system of apprenticeships.

In other countries, edicts and acts had a direct influence on the number of new industry entrants. The English 1662 Licensing Act, for example, restricted the number of printers, founders, and presses as well as the location in which presses could operate.³⁸ In Paris too, several edicts were issued that limited the number of master printers. As a result, during the second half of the seventeenth century, the French book trade, especially in Paris, became characterized by large printing houses and an oligarchy of masters.³⁹ In the Dutch Republic, such direct entry barriers were notably absent. There were no limitations on the number of guild members, and entry seems to have been fairly easy provided one could pay the membership fees. Entry fees ranged from *f* 4 to *f* 8, depending on the town and whether or not the applicant was a local. In Utrecht in 1599, the entry fee was *f* 5, which increased to *f* 6 in 1663.⁴⁰ In Haarlem it was *f* 6 and *f* 3 for burghers' sons, and in Amsterdam the fee was *f* 7.10 and *f* 4.10 respectively. Even at the time, these were relatively modest sums, corresponding to the earnings of a skilled labourer for a week's work. Locals were favoured over foreigners, and in all towns except Utrecht, sons and sons-in-law of masters received discounts on their fee and sometimes in the duration of their apprenticeship.

The Amsterdam magistrate, as well as the guild itself, was relatively lenient towards the participation of minorities. Catholic booksellers experienced little hindrance from their religious conviction. All known Catholic book producers were included in the Amsterdam Guild of St. Luke and later in the booksellers' guild.⁴¹ In terms of issuing privileges on conflicts, contracts, and requests, they were on a par with their Protestant colleagues, although it should be noted that no Catholic book producer was ever elected as dean. Jewish book producers had more difficulties breaking into the market. In 1632 the town council amended the 1616 terms of admission for Jews as citizens, in which the economic activities of Jews became strictly regulated: they were not allowed to sell goods in official shops, nor engage in trades and crafts which were organized in guilds. In 1640, Menasseh ben Israel's request to open a Hebrew bookstore was refused.⁴² Even though Jewish printer Joseph Athias entered the Guild of St. Luke on 24 March 1661, followed by other Jewish printers, they were not entitled to relief in

the case of illness or death, nor would their memberships pass on to future generations.⁴³

Although there were limits to guild openness and equality, printing and publishing activities in the largest book production towns were largely unregulated until the middle of the century. In Amsterdam, the relative importance of booksellers in the Guilds of St. Luke seems to have increased as the book trade expanded. Three years after the failed attempt at establishing their own guild in Amsterdam, booksellers obtained the right to elect one of the deans, and from 1633 onwards they were able to elect a second, out of a total of eight. Their influence is, however, not strongly reflected in guild regulation, as very few guild ordinances explicitly deal with bookselling or publishing. In The Hague, where booksellers were also members of the artists' guild, there was little explicit regulation concerning the book trade, or, when compared to painters, a strict administration of the fees or apprentices of binders or printers.⁴⁴ In Leiden, book production was not included in a guild at all. In most towns, aspiring booksellers had to meet certain requirements before they could enter the local book trade, but in general, these requirements were fairly relaxed. Formal entry restrictions were relatively low and scarcely constrained competition, and once established, local producers and traders encountered relatively few regulations.⁴⁵ As a result, it was relatively easy to become a master printer or bookseller in the Dutch Republic, especially in the larger centres of production.

Labour markets

A second element in explaining patterns of concentration and specialization is the reproduction of skills and knowledge. In Chapter 2, we saw how during the phase of emergence, local availability of specific printing skills and knowledge was initially limited, and how the foreign influx of skills and knowledge stimulated the development of local book industries. We also saw, though, how advanced printing skills were still relatively scarce during this first stage of Golden Age book production. Fifty years later, the number of Dutch printing firms had increased significantly, and Dutch printing in general had acquired world fame. By 1664 the German author Philipp von Zesen counted some forty large and small print shops in Amsterdam alone, and these included the best in the country.⁴⁶

In order to improve and sustain growth rates, printers and publishers had to transfer these resources across generations. The size and quality of the local labour force can be ensured or improved in two ways: by immigration (exogenous) or by reproducing skills locally (endogenous). Clearly

the expansion in book production through the first phase had relied on the former. In the growth phase, an increasing percentage of printers and publishers were born and trained within the Dutch Republic. Cornelis Claesz, at times referred to as an institution of higher learning in his own right, trained at least seven apprentices, all of whom stayed in Amsterdam and became important members of the local publishing and printing industry.⁴⁷ And whereas in 1600 the share of locally born producers active in Amsterdam was 11 per cent, in 1630 it had increased to 40 per cent, and by 1674 it had reached 55 per cent.⁴⁸ In fact, by 1674 hardly any of Amsterdam's producers were born in other countries.

This may seem in conflict with Jan Luiten van Zanden's estimate that about half the bookbinders and printers found in marriage banns between 1601 and 1700 were immigrants.⁴⁹ Erika Kuijpers has estimated that among the bookbinders and printers in Lutheran membership registers between 1626 and 1640, 60 per cent were from outside the Republic and only 13 per cent from Amsterdam.⁵⁰ The difference between the findings from the sample years and those from the marriage banns can probably be explained by the fact that the prosopography does not include data on the total workforce but only concerns independent printers and publishers. The larger workforce, including binders and typesetters, probably still depended to a large extent on immigrants, but further up the hierarchical ladder, the positions of publisher and printer were filled locally. The fact that an increasing share of active producers in Amsterdam was also born there suggests that they were trained locally and that skills and routines were reproduced locally. The exact structure of training and the way flexible labour was implemented in the Dutch book trade unfortunately remains somewhat of a mystery.

In early modern Europe, an apprenticeship was one of the most important means of acquiring occupational training.⁵¹ It could take place at home or in the shop of an established craftsman, on the basis of an oral or written contract between a master and the family of the apprentice. Such a contract generally stipulated details on the term, the payment, consequences of contractual breaches, but sometimes also on boarding, lodging, clothing, and leisure. In addition to these private arrangements, local institutions such as guilds could oversee the training process. There are no studies on apprenticeships or on the role of guilds in the training of publishers, printers, and booksellers. Since there is no evidence to suggest the use of manuals during this period, it is safe to say that the transfer of bookselling, binding, and printing skills and knowledge took place face to face on the shop floor.⁵² Although the paper trail is thin, two types of sources – guild

ordinances and notarial contracts – can provide some insight into the processes of training. Training was organized through the apprenticeship framework, and basic apprenticeship terms were laid down in local guild ordinances and in private contracts.

The role of the guild in the transfer of knowledge and skills has been subject to debate.⁵³ According to Steven Epstein, a guild's involvement could serve as a guarantee to recoup investments. Both on the side of the master craftsman and the apprentice, the expectation that they could reclaim their investments had to exist. Other scholars however, in a more critical stance towards guilds, generally view guild-regulated apprenticeships as an entry barrier, arguing that the fee paid by the newcomer was to ensure him a share of the guild's rent. Similarly, the duration of apprenticeships and the use of masterpieces, as well as the level of entry fees, have been interpreted as an instrument to control both the labour and product markets.

In the Republic, apprenticeships were generally administered within the framework of the local guild, though it should be noted that not all crafts were organized in guilds and not all guilds regulated apprenticeships.⁵⁴ On the whole, Dutch guild regulations concerning apprenticeships focused on four areas: registration, fees, duration, and the number of apprentices.⁵⁵ Although masterpieces were the exception rather than the rule in craft guilds in Europe, they were fairly common in Dutch book production.⁵⁶ Only Leiden and Amsterdam did not require former apprentices to produce masterpieces before entering the ranks of masters. In other towns, such as Middelburg, Haarlem, Utrecht, and The Hague, both binders and printers had to pass the test before they could enter the guild as masters.

As was the case in most Dutch craft guilds, none of the booksellers' ordinances referred to the content of training.⁵⁷ As a result, training was largely a private matter of which only the basic administrative framework was provided by the guild. Some indications of what printers may have learnt during apprenticeships can be found in the contracts that were kept in notarial archives. The contract between a carpenter's widow and the Amsterdam printer Riewert Dircksz van Baart, for instance, stipulated that her 13-year-old son should learn to set type and print in several languages. The apprenticeship period was to last five years, fourteen hours a day, and his wage was 8 *stuivers* in the first year, 12 in the second year, 18 in the third, 30 in the fourth, and by the final year he was to earn 40 *stuivers* per week (without room and board).⁵⁸ A contract dated 1649 states how a boy took an apprenticeship with printer Christoffel Coenradus for six years to learn typesetting, with room and board.⁵⁹ The same printer also had an apprentice for four years, without room and board, for 6 *stuivers* in the first year, 10 in

the second, 15 in the third, and 20 in the final year.⁶⁰ Apparently, the general terms set by the guild could be customized in private arrangements.

One important group has not yet been discussed: the journeymen, individuals who had completed their training as apprentices but who had not (yet) joined the ranks of masters.⁶¹ It is important to note that, by and large, masters were training future journeymen rather than direct competitors, as many apprentices would never become masters. Unfortunately we have very little information on this aspect of early modern Dutch book production. One exception is a contract signed by Amsterdam printer Joseph Athias in 1674.⁶² The contract shows how Athias hired six journeymen to print English Bibles. They were required to work five days a week, got paid per ream of paper, and were not allowed to work for others. If they would not deliver, Athias could fire them only after consulting the foreman or the oldest of the journeymen.

The absence of traces of journeymen printers and compositors in the archives is all the more unfortunate because the way they were employed may have been crucial to the competitive position of the Dutch Republic in the export of books. As with most cultural industries, demand was unstable and supply was often project-based. These characteristics called for a flexible supply of labour. It has been suggested that Dutch printers could keep the prices of mass-export products such as Bibles low by using a flexible labour strategy.⁶³ Possibly, the practice of hiring journeymen on a project-by-project basis was indeed introduced relatively early in the Dutch Republic, but not enough sources are available to support this claim.⁶⁴

Censorship and privileges

In addition to guild regulations and apprenticeships, local specializations and competitive advantages could also be reproduced over time via books themselves. Through inheritances or mergers as well as auctions or other means of acquisition, books moved from bookseller to bookseller. They were durable goods and when booksellers died or quit their businesses, the products and sometimes also the exclusive rights to print them were put up for auction or were taken over directly by sons, partners, or competitors. Moreover, the structures of censorship and such exclusive rights on issuing specific titles (*privileges*) could strongly impact levels of competition. In cultural industries, copyright is more prominent than the use of patents, since the products are primarily artistic or literary expressions rather than technological inventions. Low-level protection for intellectual rights can discourage creative work, but overly strong protection may bring its own

negative effects. A heavily guarded market structure increases restrictions at entry level and encourages the kind of rent-seeking behaviour that may result in decreased investments in new product development.

Printing presses in the Dutch Republic enjoyed a large degree of freedom compared with other countries. Preventive censorship (censorship before publication) was never successfully imposed, and repressive censorship (censorship after publication) was difficult to enforce due to the highly localized nature of government structure. This does not mean that there was absolute freedom of the press. From the late sixteenth century to the end of the eighteenth, edicts were proclaimed and resolutions passed against seditious, scandalous, and libellous books.⁶⁵ Especially in turbulent years, such as the period 1618-1621, the States General took a tighter hold of censorship.⁶⁶ In all, the number of banned books was low.⁶⁷ Fines prescribed by the States General increased throughout the seventeenth century, but different towns employed different practices.⁶⁸

Moreover, implementation of censorship proved to be a difficult issue for both secular and religious authorities, and there is ample evidence of convictions not being followed through on.⁶⁹ We know of some publishers who received harsh punishment, but they are the exception rather than the rule. In fact, local officials, called upon to execute edicts and decrees, may often have had commercial interests similar to those of the booksellers.⁷⁰ Besides, booksellers also knew how to play the game, even using convictions to their advantages. In 1642, for instance, 550 copies of the Socinian publication *De vera religion* by Johannes Volkelius and Johannes Crellius, published by Blaeu, were burned publicly in Amsterdam. A year later the publisher brought out a new edition, advertising it with the words 'Banned in Holland and burned by order of the magistrate', and this time he was not prosecuted.⁷¹

In the surrounding countries, the situation was different. In England, printing required an elaborate system of licensing: every prospective publication had to be licensed by the censor and then recorded in the registers of the local booksellers guild, the Stationers' Company.⁷² Here too, though, there were limits to the enforcement of the acts, and some scholars even stated that the Licensing Acts were largely ineffective and of little significance to the trade as a whole.⁷³ Nonetheless, many printers and booksellers were harassed, fined, and imprisoned for misdemeanours under such acts, and this must have increased entry barriers.⁷⁴ Increases in both title production and the number of printers during periods of lessened censorship suggest that the threat of censorship alone influenced the behaviour of possible entrants and existing booksellers. After the abolition of the act in 1695, neither the English government nor the Stationers' Company were able to

limit the number of printers and presses, and the number of print shops increased rapidly both within and outside London. Furthermore, provincial printing immediately began to flourish, and the book trade became less concentrated in London.⁷⁵

In most countries, monopolies further affected the structure of the book industry and accordingly also levels of competition. In England exclusive rights on the printing of almanacs, Bibles, church materials, and school-books – arguably the most lucrative works – were in the hands of the English Stock, a collaboration of the wealthiest and most powerful printers of the Stationers' Company.⁷⁶ This monopoly heightened entry barriers, and it also kept both production costs and prices high, making it difficult to compete with printers on the Continent.⁷⁷ In France, the Parisian book guild had exclusive rights to produce legal prints through royal privileges. Every published book had to be licensed before publication. At first, censors were theologians at the Sorbonne; later, secular officials took on the role; and around the middle of the seventeenth century a national 'Administration of the book trade' was organized to regulate censorship and exclusive rights throughout France.⁷⁸ In the Southern Netherlands, the government also made ample use of privileges. The major monopoly involved the production of liturgical works, which was granted to the *Officina Plantiniana*; and the second-largest firm, Verdussen, acquired monopolies on mint ordinances, liturgical works for various religious orders, schoolbooks, and the official catechism.⁷⁹

In the Dutch Republic, the issuing of privileges was much less related to issues of censorship. Notably, they were not monopolies in the true sense of the word. Government bodies such as the States General and the States of Holland could grant printers or publishers a monopoly over reprints, referred to as a *privilege*, for a specified period of time.⁸⁰ Obtaining a privilege was not considered a special favour, and it did not imply the approval of contents. Estimates are that perhaps one per cent of all books were published by means of a privilege.⁸¹ In the early seventeenth century, no standardized legislation on the procedures and criteria required to obtain privileges existed, and the fines for infringements and the duration of privileges could vary. The fact that most books were not protected by privileges can be explained by various factors: the lack of a direct need for a privilege, the costs and time-consuming procedure to obtain one, and the potential problems of enforcing it. The costs of privileges were relatively high, around *f*50 and sometimes even as high as *f*600, and the process of acquiring them was lengthy.⁸² As a result, privileges were usually only requested for books that required significant investments, for steady

sellers that could ensure the livelihood of publishers, or for recurring annual publications such as almanacs.⁸³

Exactly those types of books that were granted monopolies in other countries were subjected to the open market. Although there were many disagreements between booksellers, only few were brought to court.⁸⁴ Some large conflicts resulted in the standardization of practice, the most notable one being the 1630s court case concerning one of the largest printing endeavours in the seventeenth century, the famous *Statenbijbel*.⁸⁵ This drawn-out conflict resulted in the devaluation of privileges by the States General, which is clearly evident by the scarcity of privileges issued by them in the eighteenth century. Instead, the States of Holland, the province where most printing presses were located, became the common issuer of privileges. Durations and fines became more uniform: generally fifteen years with a fine on infringements set at *f*300. Privileges on certain profitable and widely popular genres, such as schoolbooks, were disqualified.⁸⁶

Compared to other countries, it was possible to print almost anything in the Republic, and this provided Dutch booksellers with an international competitive advantage. The relative freedom of the press attracted scholars, authors, and dissident printers whilst also opening up export markets. But there was more. In the early modern period, the issue of monopolies on books had more to do, in general, with censorship practices than with copyright. In many countries, the granting of certain privileges provided governments with a device to control publications. Such exclusive rights on all lucrative works could, in theory, create considerable entry restrictions and limit the intensity of industrial competition. The fact that the Dutch book trade in general was relatively free, and that locally imposed regulations could often be circumvented by moving actual copies or the intended publication to a different town, added to a relatively open industrial structure.

Financial administration of book production and book trade

A fourth variable shaping patterns of local specialization and concentration was the financial administration of early modern book production. During the growth phase, Dutch publishers became increasingly tied into merchant networks and credit networks. In most explanations of the growth of Dutch printing, the well-developed transportation and trade networks of Dutch merchants feature prominently.⁸⁷ The position of the Dutch Republic – in particular Amsterdam, as a centre of trade – greatly facilitated the export of books produced in the Dutch Republic, especially with the increasing involvement of local paper merchants in financing mass

production for export. Dutch port towns came to function as stable markets in the distribution of books throughout Europe.⁸⁸ Although it is impossible to measure the volume of international commerce in books, fragmented data on the distribution of English Bibles, Latin Catholic works, Hebrew religious works, and later works by controversial French authors show that these mass products, whether produced inside or outside the Netherlands, indeed followed common trade routes.⁸⁹

The local presence and practices of international merchants helped not only to widen the geographic reach of Dutch book production but also embedded it in local finance markets. In the early modern economy, not all transactions could be settled for cash, and accordingly credit was required. Between 1500 and 1800 the Dutch Republic was one of the first economies in Europe to boast large-scale public and private capital markets.⁹⁰ The existence of an advanced credit market offered benefits for all early modern entrepreneurs and was highly important for book production. Wages and paper made up the bulk of production costs, and it could take years before print runs sold out, if even then. The weight of the investments did not so much reside in the printing presses, which went for about *f*250 new and *f*150 second-hand and could easily last a career, but rather in the accumulation of type, the purchase of paper, and the built-up stock.⁹¹ In other words, publishers faced serious liquidity risks in the light of high upfront investments, slow sales, and unpredictable demand.

Early modern publishers dealt with these uncertainties in various ways, and three features of the financial structure stand out: interest rates were relatively low, merchants became increasingly involved in large publishing projects, and booksellers themselves developed payment methods tailored to the specific needs of their trade. Throughout the seventeenth century there was significant growth and flexibility in the supply of capital throughout the Dutch Republic.⁹² The surplus capital and the development of novel financial techniques allowed interest rates on debt to drop from 8 per cent around 1600 to 4 per cent by 1650.⁹³ Fragmented evidence, as well as the sizable archive of merchant Joseph Deutz (1624-1684), indicates that interest rates indeed averaged about 5 per cent.⁹⁴ The implications of this can be illustrated by a calculation Paul Dijkstra has made in order to estimate the costs of producing a relatively large-sized and therefore relatively expensive book. If a printer needed to borrow, say, 600 guilders for paper and wages, at an interest rate of 2.5 to 5 per cent, the loan would have cost him about 25 guilders per year.⁹⁵ On returns of *f*3,000, assuming a selling price per sheet of half a *stuiver*, this was in fact fairly affordable.

Merchants could also finance book production by supplying paper which was then paid for by publishers in instalments at relatively low interest rates. No administrative records of Dutch booksellers from this period have survived, but fragmented evidence provides some indication as to the importance of such merchants/paper dealers. Accounts showing the financial situations of booksellers, drawn up in the event of financial problems, deaths or otherwise, almost without exception show the involvement of paper suppliers.⁹⁶ From c.1630 onwards, paper merchants became increasingly involved in supplying the capital necessary to produce in bulk for export, most notably for English, Hebrew, and Roman Catholic religious texts.⁹⁷ At first, the financiers of export products took a personal interest in the books: English merchants and preachers financed English Bibles, and Jewish merchants and rabbis financed Hebrew religious works. By the late 1630s – by no coincidence, the same decade in which the paper trade became fully established – Dutch (paper) merchants recognized the commercial opportunities and stepped in. From this point on they became increasingly involved in the production process of mass-export products such as Bibles, which typically required very large investments.⁹⁸

A second important group of financiers can be found in the ranks of the booksellers themselves. Sometimes, large booksellers functioned as direct creditors to their smaller counterparts, though this seems to have been relatively uncommon.⁹⁹ A more widely used strategy was pooling resources to finance projects. This could take the form of joint ventures, in which a book was co-financed and the rights and risks were shared, or of agreements between publisher and booksellers to purchase a set number of copies against fixed prices.¹⁰⁰ Collaboration on specific occasions and the long-term collaboration in formal joint ventures, the latter of which only became widely used after c.1660, will be discussed in the next chapter. For now, we take a closer look at another means of financing production by turning to the issue of distribution rather than production.

To broaden the stock on offer, publishers also had to acquire books published by others. There were three forms of exchange: cash, credit, and barter. The common form of exchange was barter, or *change*, a method in which books were traded sheet for sheet. When the relationship between the booksellers was unequal, smaller booksellers bought on credit and debts were settled once or twice a year.¹⁰¹ As most print runs sold out only over a period of years, if then, most of the capital remained in type, paper, and books in storage, leaving booksellers struggling with cash flows. The only other way to broaden the stock of books on offer was through booksellers' auctions, a conduit that became increasingly important in

the seventeenth century. Auctions were an effective way for those trying to move their stock to obtain cash, and a relatively cheap way for others to purchase books. Consider, for example, Broer Jansz's and Johannes Janssonius's requests to auction portions of their stock in order to pay off creditors.¹⁰²

In most towns, auctioning stock was allowed only in the event of death, when abandoning the trade, or in the case of insolvency. With the expansion of the book trade and the increasing number of auctions following deaths of collectors and booksellers, favourable payment procedures were developed: the so-called 'booksellers' bonds' or IOUs. In trade in general, IOUs had been in use since the fifteenth century, and from the 1540s they were also employed by Dutch merchants to lend or borrow money in instalments of up to twelve months.¹⁰³ The first suggestion of IOUs in the book trade is in 1610 at the auction of Cornelis Claesz's stock. The usual payment conditions of cash or of six weeks on security, set out by Chamber of Orphans, did not apply in this auction.¹⁰⁴ Instead, IOUs were introduced. Booksellers' IOUs had a specific feature: they stipulated payment in instalments without charging interest.

This method allowed booksellers to buy more or more expensive books in bulk, as is demonstrated by a complaint filed by Willem Jansz Blaeu. According to the notarial source, he had heard rumours about changes in conditions of the Claesz's auctions and protested against this, stating that he would have purchased more expensive goods if he had known this beforehand. Documents concerning the 1612 auction of bookseller Barent Adriaensz's stock discuss the conditions in more detail. Apparently, they stated that when the buyer made a purchase of less than *f*100, payment was due within six weeks, but if he spent more, he had to sign an IOU to Adriaensz. In the case of purchases of more than *f*200, a term of three months applied; *f*100 was due at the end of each term, until the total sum was repaid. In documents from later years similar conditions can be found.¹⁰⁵

The case of Leiden

How local organization outside the guild structure could play a role in the creation and reproduction of local competitiveness can be illustrated by the case of Leiden. The establishment of the university and the hands-on stance of the local government had triggered the development of a local book industry in Leiden. Amsterdam soon overtook Leiden. Nonetheless, Leiden booksellers managed to carve out a niche for themselves in regional and even international book markets, and they sustained their competitive

advantage. They competed on the basis of trade rather than production, and more specifically on second-hand trade. The commercial development of specialized book auctions and book auction catalogues can be viewed as micro-inventions by which Leiden's publishers managed to create entire new markets for books.¹⁰⁶ Although Leiden booksellers were not the first to employ devices such as book auctions or auction catalogues, they did develop printed book sale catalogues for the auction of second-hand books. According to Bert van Selm, the rise of the book auction catalogue was paramount for Leiden to become more than just another university printing centre.¹⁰⁷

Why did such micro-inventions occur in Leiden? Van Selm suggests that this can be explained by the fact that Leiden booksellers were not organized in a guild. This gave them a certain independence that expressed itself in the development of second-hand book auctions. Even if they were not entirely free of regulations, Leiden booksellers were permitted to auction books themselves, unlike their counterparts in other towns where town secretaries or others appointed by fiat administered the auctioning. These features prevented the booksellers elsewhere, where booksellers were either included in the Guild of St. Luke or in their own guild, from also holding auctions of used books.¹⁰⁷ However, Laura Cruz has argued the opposite. Even though there was no formal guild, she recognizes the Leiden book trade as an organized industry displaying many features of guild structure. This organization, she argues, was crucial to the successful development of the book auction catalogue.¹⁰⁸ Local booksellers cooperated and defended collective rights through a protectionist policy to keep foreigners from auctioning books in their town.¹⁰⁹ For instance, Leiden booksellers requested that the auctioning of books by outsiders be prohibited. Through this and other protectionist measures, the period in which monopoly gains could accrue to the innovators would be prolonged, allowing Leiden booksellers to create a primary marketplace for second-hand books relatively early on and to sustain such dominance in this particular market segment.

In Cruz's reading, the book industry resembles a cluster-like industrial structure, even without formalization in a guild, characterized not only by competition but also by collaboration and interrelations. In order to develop scale advantages, the production system consisting of small and medium-sized firms developed a collective body that lobbied governments, facilitated information transfer, and organized public events such as auctions.¹¹⁰ As will become clear in the following chapters, most towns would eventually see a shift from book production to bookselling as their

local markets started to mature and competitive pressure increased. Leiden, which had experienced an early growth spurt, simply reached this point earlier than other towns did, and it managed to adapt to the new market situation by developing and sustaining a unique resource. Two distinct characteristics around 1610 made an early lead in this field possible. Competitive pressure, both internally and from the outside, had increased by the end of the phase of emergence, and a 'critical mass' of booksellers was in place that made the development of the auctions and the catalogues viable.

Conclusion

Competitive pressure in Dutch book production increased, especially in the 1610s and the 1640s, both within local industries and between towns. This supports the proposition that the changes in form and content that took place around this time were shaped by market forces and economic motivations. The establishment of local booksellers guilds can also be appreciated in this light, as can the development of specialized methods of distribution, marketing, and payment. Throughout the period, local industrial organizations and practices became increasingly formalized and institutionalized. These specific local organizational structures reinforced patterns of specialization and concentration. In some cases, local demand conditions, factor conditions, and the presence of related and supporting industries made for competitive advantages that can be traced back to early sources of competitiveness, as with the Leiden auctions.

On the other hand, the relative openness of Dutch book production is also apparent. Entry barriers were low, publishers experienced competition from outside their locality, and they could tap into non-local markets through extensive distribution and information networks. Though firmly rooted in local specializations and cluster-like relationships, there were multiple connections with other towns. Economic geographers ascribe great importance to the interplay between local embeddedness, or 'buzz', and linkages with other regions or towns, conceptualized as 'pipelines'. In this view, the combination of established local knowledge and skills and new or uncodified information from outside may improve the adaptive and innovative capabilities of local firms. Cluster literature, moreover, argues that it is the balance of competition and cooperation that differentiates a cluster from a loose set of firms or a hierarchical network. Too much connectivity or collaboration causes rigidity, while too much competition

offsets the positive cluster effects such as scale economies and knowledge and innovation processes. Arguably, Dutch booksellers had the best of both worlds, both at a local and regional level, at least for a little while.

Notes

1. Nusteling, *Welvaart en werkgelegenheid*, pp. 234-236.
2. Part of this argument has been published in Rasterhoff, 'Carrière en concurrentie'.
3. The STCN and *English Short Title Catalogue* (ESTC) allow for a direct comparison as they have used comparable source material: imprints of books. For people, the Dutch and English databases cannot be directly compared, because no *Thesaurus* has been connected to the ESTC. For England there is the *British Book Trade Index* (BBTI, <http://www.bbti.bham.ac.uk>), but these records have been derived from a range of sources, printed and electronic, and from forms submitted by scholars and local researchers who have contributed their findings. See also Raven, *The Business of Books*.
4. Mellot and Boyer, 'The French Printing and Publishing Network'.
5. Briels, *Zuidnederlandse boekverkopers*, pp. 5-6; Voet, *Typografische bedrijvigheid*, p. 240. When the *Short Title Catalogue Flanders* (STCV) is complete, it will be possible to make more precise calculations for the seventeenth century, as well as develop a thorough comparison between the Northern and the Southern Netherlands.
6. Salman, *Populair drukwerk*, pp. 352-353, 387-424, 350-353, appendix 3.
7. Montias, *Artists and Artisans*, p. 278 mentions as buyers at an auction of copper plates in Delft: Johannes Janssonius and Broer Jansz from Amsterdam, Jan van Waesberghe from Rotterdam, and Hendrik Hondius from The Hague.
8. Salman, *Populair drukwerk*, p. 231.
9. Borst, 'Van Hilten, Broers en Claesse'; Van der Laan, *Het Groninger boekbedrijf*.
10. Cruz, 'Secrets of Success', p. 22.
11. De Kooker, *Catalogus universalis*; See also: Gruys and Bos, *t'Gylde iaer 1650*.
12. Of the 2500 titles in the catalogues between 1640 and 1652, 48 per cent was in Dutch, 44 in Latin, 4 in French and the rest in German, Italian and Spanish.
13. Cf. Mijnhardt, 'Urbanization' for a similar argument on the role of the Dutch urban system in development of the European Enlightenment.
14. De Vries and van der Woude, *The First Modern Economy*, pp. 57-71. They use 2500 inhabitants as a threshold.
15. Cf. Verhoeven, *Anders reizen?*, pp. 317-323.
16. De Vries, *Barges and Capitalism*, pp. 187-201.
17. Clair, *A History of European Printing*, pp. 272-273.

18. Compare the argument made in Lesger, 'The Printing Press', pp. 5-6.
19. Cf. Geroski, 'Innovation'.
20. See appendix I.
21. Ibid.
22. On concentration measures see Perlof, Karp, and Golan, *Estimating Market Power*, pp. 20-24.
23. For the same calculations with and without ephemeral titles see Rasterhoff, 'Carrière en concurrentie'.
24. Prosopographies 1631 and 1674, see appendix I.
25. Frederiks and Frederiks, *Kohier van den tweehondersten penning*; SA, Archief van de Burgemeesters, 1295-1815, Stukken betreffende verscheidene onderwerpen, arch. nr. 5028, inv. 662, 'Belastingkohier van 20oste penning 1674'.
26. Scherer and Ross, *Industrial Market Structure*, pp. 15-16; Porter, *Competitive Strategy*, pp. 3-50; Hannan and Freeman, *Organizational Ecology*, pp. 139-140.
27. Schilder and Mörzer Bruyns, *Navigatie*, vol. 2, p. 175. On Blaeu, competition and possible positive consequences consult Lesger, *The Rise*, p. 229. Van Netten, *Koopman in kennis* also addresses the rivalry between Blaeu and other firms.
28. Porteman and Smits-Veldt, *Nieuw vaderland*, pp. 198-201; Veldhorst, 'Pharmacy for the Body and Soul'. On political pamphlets see Harms, *Pamfletten en publieke opinie*. On news see Van Groesen, 'A Week to Remember'. On anti-Spanish propaganda, Koopmans, 'Profijtelijke Spaanse tirannie', vol. I.
29. Porteman and Smits-Veldt, *Nieuw vaderland*, pp. 200-201.
30. In the afore-mentioned general concentration measures, the effect of groups of firms was omitted, but for the subgenres this was taken into account by viewing collaborating publishers as one publisher. For example, Daniel and Louis Elzevier, who published many titles together during the 1650s, are considered one firm.
31. In future analyses the selection could be narrowed down to specific subgenres, such as Dutch travel journals, or secular amatory songbooks.
32. Harms, *Pamfletten en publieke opinie*, pp. 45, 98, 144.
33. Van Eeghen, *Gilden*, pp. 100-130.
34. On booksellers' guilds: *ibid.*; Van Eeghen, 'Het Amsterdamse Sint Lucasgilde'; Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 17-21; SA, Archief van de Gilden, inv. 1398, 1399 and 1400.
35. Cf. Prak, 'Guilds'.
36. BKVB, Archief van het Amsterdams Boekverkopersgilde, inv. 56, in the front of the book.
37. Ibid.
38. Febvre and Martin, *The Coming of the Book*, pp. 245-246; Brewer, *Pleasures*, pp. 132-138; s.n., 'Act' online access at <http://www.british-history.ac.uk/report.asp?compid=47336> (last accessed 21 October 2015)

39. Febvre and Martin, *The Coming of the Book*, pp. 155-156; Darnton, *The Great Cat Massacre*, pp. 83-84.
40. Article 1, 1599 and article 1, 1663. Forrer, 'Drie ordonnanties', p. 98.
41. Leuven, *De boekhandel te Amsterdam*, pp. 12-13.
42. Fuks-Mansfeld, 'Hebrew Book Trade', pp. 162-163.
43. Van Eeghen, *Gilden*, pp. 111-112. Similar exceptions to the overall regulation were made in the case of surgeons and brokers.
44. Keblusek, *Boeken in de hofstad*, pp. 104-111.
45. Cruz, *Paradox of Prosperity*, p. 49.
46. Von Zesen, *Beschreibung der Stadt Amsterdam*, pp. 370-371.
47. Prosopography, see appendix I.
48. Ibid.
49. Van Zanden, *Arbeid tijdens het handelskapitalisme*, p. 8. Based on Hart, *Geschrift en getal*.
50. Kuijpers, *Migrantenstad*, p. 418.
51. On apprenticeship see De Munck, *Technologies of Learning*; De Munck, Kaplan, and Soly, eds., *Learning on the Shop Floor*.
52. Dirk de Bray, son of the Haarlem painter Salomon de Bray, offers the only account on bookbinding before the eighteenth century, but there are no signs that this quasi-manual was widely used. De Bray, *Kort onderweijts*. A later manual is David Wardenaar's, as discussed in Janssen, *Zetten en drukken*.
53. On the debate on the role of the guild in the creation and reproduction of skills in the early modern period see Epstein, 'Craft Guilds'; Epstein, 'Craft Guilds, Apprenticeship'; Ogilvie, *Can We Rehabilitate the Guilds?*; Ogilvie, 'Rehabilitating the Guilds'.
54. Davids, 'Apprenticeship and Guild Control', pp. 69-70.
55. De Munck, Kaplan, and Soly, eds., *Learning on the Shop Floor*, p 67; Van Eeghen, *Gilden*, p. 24.
56. Epstein, *Wage Labor*, p. 125.
57. For more details see Forrer, 'Drie ordonnanties'.
58. Van Dillen, *Bronnen tot de geschiedenis*, n. 769.
59. Ibid., n. 1134 and 1040.
60. See also: SA, Notarieel Archief, inv. 2044, f. 104 and inv. 2045, f. 132.
61. On journeymen in book production see Febvre and Martin, *The Coming of the Book*, pp. 129-136.
62. Mentioned in Van Eeghen, *De Amsterdamse boekhandel*, vol. IV, p. 122.
63. Beijer, 'De crisisperiode in de Haagse boekhandel'. Febvre and Martin, *The Coming of the Book*, pp. 135-136 on *alloués*, hirelings in the French book trade in the eighteenth century.
64. Darnton, *The Great Cat Massacre*, p. 80. The hiring of journeymen printers on a project-by-project basis only became common in France during the eighteenth century.

65. Weekhout, *Boekencensuur*; Groenveld, 'The Dutch Republic'; Groenveld, 'Mecca of Authors?'; Van Gelder, *Getemperde vrijheid*.
66. Van Gelder, *Getemperde vrijheid*, pp. 154-155; Groenveld, 'Mecca of Authors?', p. 68.
67. Weekhout, *Boekencensuur*, pp. 378-382.
68. Groenveld, 'Mecca of Authors?', p. 78.
69. For example in Leiden: Cruz, *Paradox of Prosperity*, pp. 72-73.
70. Van Gelder, *Getemperde vrijheid*, pp. 165-166.
71. Ibid. Original text: '*in Hollandt by schepenvonnis gedoemd en met vier verbrandt*'.
72. The Stationers' Company of London was the local booksellers' guild.
73. Summary in: Treadwell, 'Stationers and the Printing Acts'.
74. Cf. Ibid.
75. Robertson, *Censorship*, pp. 10-11.
76. Treadwell, 'Stationers and the Printing Acts', p. 769.
77. Hoftijzer, *Engelse boekverkopers*, p. 4.
78. On the French book trade: Martin, *Print, Power and People*.
79. Van Rossem, 'The Bookshop of the Counter-Reformation', pp. 307-308; Voet, *Golden Compasses*, vol. I, p. 65; Van Rossem, 'Drukkersbelangen'.
80. On privileges: Hoftijzer, 'Nederlandse boekverkopersprivileges in de zeventiende en achttiende eeuw'; Hoftijzer, 'Nederlandse boekverkopersprivileges in de achttiende eeuw'; Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 193-236.
81. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 93.
82. Hoftijzer, 'Nederlandse boekverkopersprivileges in de achttiende eeuw', p. 58. Louis Elzevier II paid *f*600 for a privilege for a special edition of the bible.
83. Hoftijzer, 'Nederlandse boekverkopersprivileges in de zeventiende en achttiende eeuw'; Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 196-201; Willem Jansz Blaeu's general privilege by States of Holland in 1608, was an exception: '*alle sijne eygen werken soo dien hij van nieuws geinventeert heeft, als degeene dien hij noch inventeren sal*'.
84. An exceptional case was the conflict between Pieter van Waesberghe and Johannes Naeranus. Van Mameren, 'De Gazophylace'; Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 230-236.
85. Van Selm, 'De Statenbijbel en de drukkers'; Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 197-200.
86. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 225-229.
87. Cf. Hoftijzer, 'Metropolis'.
88. Clemens, 'Trade in Catholic Books', p. 86. Important Antwerp printers as the Moretuses and Verdussens used Dutch harbours to distribute Catholic books.
89. See the contributions in Berckvens-Stevelinck et al., eds., *Le magasin de l'univers*.

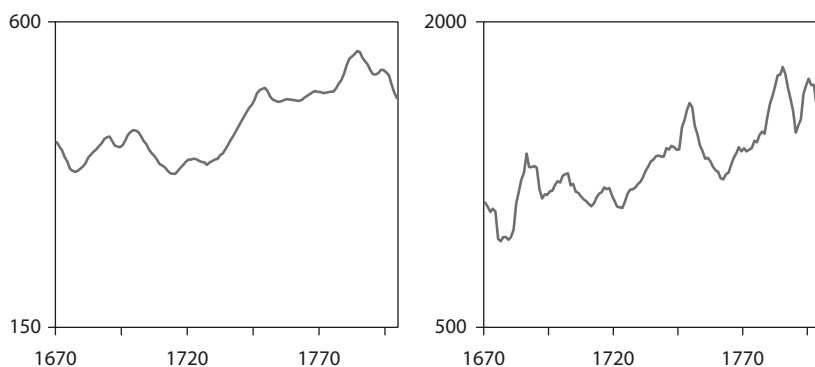
90. Gelderblom and Jonker, 'Completing a Financial Revolution'. On medieval capital markets in Holland see Zuijderduijn, *Medieval Capital Markets*.
91. Estimates on prices of presses from Janssen, *Zetten en drukken*, p. 78, and Dijstelberge, 'De Cost en de Baet', p. 222.
92. A discussion of credit instruments used in Amsterdam in the seventeenth century can be found in Spufford, 'Access to Credit and Capital', pp. 304-305.
93. Gelderblom and Jonker, 'Completing a Financial Revolution', p. 663.
94. Other examples include interest terms between Widow Schippers and Joseph Athias. Van Eeghen, *De Amsterdamse boekhandel*, vol. IV, p. 106.
95. Dijstelberge, 'De Cost en de Baet', pp. 222-223.
96. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 37-39, 62-73.
97. *Ibid.*, pp. 59-62.
98. For some examples see Fuks and Fuks-Mansfeld, *Hebrew Typography*, vol. I, pp. 150-153; Fuks-Mansfeld, 'Hebrew Book Trade', pp. 166-167.
99. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 63.
100. *Ibid.*, pp. 306-307.
101. Many examples of this practice can be found in the letters in Sabbe, ed., *Briefwisseling*. In those cases in which trading relations were unequal, cash was preferred. For instance, a letter dated 28 May 1669, from Verdussen to Utrecht bookseller Arnoldus van der Eijnden, refers to Amsterdam bookseller Joachim van Metelen, who had to buy much in cash, as he himself printed very little, which made it hard to trade by barter '*oock meeste boecken die hij heeft moet hij selfs (meest)al in gelt coopen, also hij niet veel besonders gedrukt en heeft om boecken tegen te connen mangelen*' (Letter XII, p. 17).
102. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 258-259.
103. Gelderblom and Jonker, 'Completing a Financial Revolution', p. 647.
104. The following is based on Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 256-257.
105. Conditions in Van Eeghen, 'Het Amsterdamse Sint Lucasgilde', pp. 98-99, appendix II. Further discussion in Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 258-259.
106. Cruz, 'Secrets of Success'.
107. Van Selm, *Een menigte treffelijcke boecken*, chapter 1.
108. Cruz, 'Secrets of Success', pp. 1-3; See also Cruz, *Paradox of Prosperity*, introduction.
109. Cruz, 'Secrets of Success', pp. 9-10.
110. Porter, *On Competition*, pp. 258-259.

5. 1650-1800: Mature Markets

The 1660s may well be regarded as the decade in which Dutch printing and publishing came of age. Dutch presence in foreign markets was strengthened, Christoffel van Dijck produced high-quality type, Joan Blaeu printed the spectacular *Atlas Major*, and an unprecedented number of publishers was active in the domestic market. The Dutch Republic became, in Voltaire's words, 'le magasin de l'univers'.¹ But there were also early signs of trouble. Temporary hardships such as the wars of the 1670s intensified commercial difficulties caused by stagnating domestic markets. This more structural development became particularly pressing when printing in the vernacular expanded in other countries and foreign competitors took to challenging a Dutch market presence.² Eventually, Dutch book production would lose its leading international position and become, in many respects, an innovative backwater.

When in 1700 Gregorio Leti lamented the deaths of the great printers Elzevier and Blaeu, he still acknowledged the continuity of Dutch publishing, printing, and trade efforts, particularly in the firms of the Huguetau and Leers.³ However, by the end of the century, Dutch publishers and printers were no longer praised for their craftsmanship and entrepreneurial spirit. Allegedly, the prints were sloppy and the content derivative. In his history of the Dutch book trade, nineteenth-century publisher A.C. Kruseman attributed the loss of international markets to the sluggish nature of Dutch publishers.⁴ In his view, deteriorating printing skills and lack of ambition put off foreign authors such as Voltaire, who is known to have complained about Dutch publishers.⁵ Not only Dutch printers, but authors and customers too, were blamed for the lack of original work and for the fashion for French works.⁶

In more recent book-historical literature, however, these complaints by contemporaries have been interpreted in light of the general lamentations on the loss of economic and cultural leadership that were fashionable at the time.⁷ In this view, the decline was mainly relative, as foreign countries caught up and the Dutch lost their earlier competitive advantages. In this chapter we will see that the local book trade was so advanced that there was, indeed, little more to gain. With other countries' book trades expanding rapidly, stagnation could have felt like decline.

Fig. 5.1 Number of publishers (left) and titles (right) in the Dutch Republic, 1670-1800

Source: Thesaurus; STCN, accessed 12-02-2010 (5-year moving average; semi-log scale)

Economic setbacks

Figure 5.1 shows that there was no significant industrial expansion over the period 1660-1730. With the 1670s being a relatively dramatic decade for Dutch politics and the economy, the book trade suffered accordingly. In 1672, the so-called Year of Disaster, Louis XIV's French army invaded the Republic from the south, allied with an English fleet and two German bishops attacking from the east, in the Third Anglo-Dutch War. On top of this, scores were settled in domestic politics between Grand Pensionary Johan de Witt and Prince William III of Orange. After a few years, the military threats were diverted and domestic political order was restored. Still, the economic downturn that followed the turbulence and destruction of war could not have been good for the business of books, and indeed the number of titles produced dropped by some 40 per cent.⁸ Internal political quarrels must have alleviated this setback to some extent as large numbers of pamphlets were written, printed, and distributed, but their cumulative economic value paled in comparison with that of books.⁹

Structural factors proved more significant in determining the fate of the Dutch book industry. Dutch publishers were faced with changing market conditions. Up until the middle of the seventeenth century, virtually every sector, new and existing, in the Dutch economy had witnessed significant expansion. After c.1660, growth rates started to level off, although the degree varied by region and type of industry.¹⁰ Some crafts and industries were in decline (light textiles, breweries, tapestry weaving, and painting); others stagnated (cloth, shipbuilding); and a few actually flourished (tobacco, sugar, pipe production, delftware factories, paper).¹¹ The population of the

Dutch Republic remained relatively stable, at around two million, but at the local and regional level, significant transformations took place. Amsterdam was one of the few towns that continued to expand though less rapidly than before: its population increased from about 160,000 to 175,000 around 1650, to about 230,000 to 240,000 in 1730 and well into the nineteenth century.¹²

The sluggish economic growth in the Dutch Republic after 1660 and the subsequent stagnation were both absolute and relative, and were caused by a complex interaction of factors. To mention the most important ones: the Dutch trade network was reaching its maximum scope, Dutch wage levels were relatively high, European population overall failed to expand, and foreign competitors such as England and France took over Dutch positions in international trade by means of policies of import substitution and emulation in industry and trade. Furthermore, as other countries caught up, the Dutch fell behind. In the newly developing international economy, larger countries employed economies of scale in shipping and manufacture. As the local economy experienced setbacks, consumption patterns also changed. Over the course of the eighteenth century, poverty struck as prices of foodstuffs and raw materials rose, squeezing real wages and purchasing power. But even so, the elite remained, securing demand for luxury goods. As a result, various luxury industries continued to do fairly well, as is evident in the cases of producers of musical instruments, silver and goldsmiths, luxury furniture makers, and, to some extent, book producers.¹³ Dutch publishers, moreover, recognized commercial opportunities abroad.

International markets

By 1700, Italian immigrant and historian Gregorio Leti stated that Dutch printers and booksellers had flooded the European market with books and periodicals.¹⁴ By that time, Dutch publishers had indeed developed an increasingly international focus, no longer so focused on Hebrew and English Bibles and forbidden religious or political treatises, and they shifted almost seamlessly to production in French. It has even been stated that Amsterdam, by the close of the seventeenth century, was the next largest centre of French book production after Paris.¹⁵ A quick count in the STCN shows that the production of French language titles increased from as little as 3 per cent of all titles in the 1650s, to 25 per cent in the 1770s, and even 27 per cent in 1700.¹⁶

During the first half of the seventeenth century, though, Dutch export of books still centred mainly on Bibles and religious or political treatises. Based

on a solid domestic demand for and a supply of scholarly publications, the international trade in Latin scholarly work had increasingly come into the hands of Dutch publishers.¹⁷ Although it proved difficult to set up branches in England – Adriaen Vlacq, for instance, had tried and failed – the Dutch remained key players in the distribution of scholarly titles. Most of the books imported into England had been dispatched from Amsterdam and Rotterdam.¹⁸ Not all these books were actually printed there, as distributions also included books from France, the German lands, and Italy. Dutch ports functioned as major transit locations for foreign publications, and Antwerp publishers, for instance, used Middelburg, Rotterdam, or Amsterdam for their mass export to the Iberian Peninsula.¹⁹ During the seventeenth century, foreign-language publishing became increasingly concentrated in Amsterdam, which, by no coincidence, was where most paper merchants were located.²⁰

The Dutch partly owed their dominant position in the international book trade to general favourable circumstances. They were firmly situated in an internationally oriented commercial trading infrastructure that increasingly specialized in wholesaling and distribution functions.²¹ Holland's extensive international trade networks, financial infrastructure, and relative freedom of the press equipped Dutch production and trade for international success. Another important factor was the relative lagging of other countries in the international book trade. The book trade in France, a dominant printing country up until the middle of the seventeenth century, was in crisis.²² German publishers, while recovering from the destruction that occurred during the Thirty Years War, were increasingly oriented toward their own domestic market. Moreover, England's book trade and production infrastructure were by no means equipped to sustain large-scale export. Dutch booksellers also had some unique advantages. The well-developed book industry, built on domestic markets and the mass production of titles forbidden elsewhere, offered advantages of scale and scope that were unimaginable in other countries at that time.

On top of this, the final decades of the seventeenth century brought with them a new wave of immigrants, this time from France, who boosted afresh a focus on foreign markets. Following the revocation of the Edict of Nantes by King Louis XIV in 1685 and the enforcement of increasingly strict rules of censorship, many Protestant booksellers in France relocated to other countries.²³ The Dutch Republic was particularly attractive, not only as a religious safe haven but also for its economic appeal. By then, the turmoil of the 1670s had ended, and governments and entrepreneurs were keenly encouraging commerce, industry, and finance.²⁴ In order to attract skills and capital, Dutch provincial governments and town councils proposed

inclusive terms, such as free citizenship and free entrance to local guilds, but also exceptional conditions such as interest-free loans and exemption from taxes.²⁵

Although the arrival of the Huguenots was seen as a welcome stimulus for the recovering economy, its long-term impact has been deemed of little consequence, especially in relatively established industries.²⁶ The book trade, however, was a notable exception. By the 1680s, French was replacing Latin as the *lingua franca* – the international language of the scholarly community – and the influx of French scholars and publishers greatly stimulated the position of Dutch publishing in the Republic of Letters. Dutch booksellers, especially those from Amsterdam, came to hold a major share in the production of internationally oriented French language periodicals and compilations through which they could also promote their own new books.²⁷ As with the arrival of immigrants from the Southern Netherlands a century earlier, Huguenot publishers and their offspring were not only important in terms of boosting entry rates and the scale of book production, but also in qualitative terms. They introduced and popularized new genres such as learned journals and book reviews, and they had extensive networks of correspondents abroad.²⁸ Such international and scholarly networks were especially important in view of the recent passing of several large, highly-educated international publishers, most notably Joan Blaeu in 1673 and Daniel Elzevier in 1680. Huguenot publisher Henri Desbordes from Lyon and the Huguetan brothers from Paris were among the most important new arrivals.²⁹

While acknowledging the importance of the new wave of immigration, this level of impact was only possible because of the existing infrastructure. Huguenot publishers and intellectuals were not only pushed by persecution or lured by generally favourable conditions in the Republic. They also built on previously established relationships and reputations, as French publishers had operated in networks with Dutch publishers well before they emigrated. The Huguetan brothers, for instance, who would effectively replace the firm of Daniel Elzevier, moved from Lyon to Amsterdam in 1682, but Elzevier had been doing business with the Huguetan firm well before that.³⁰ What is more, Dutch publishers also jumped on the bandwagon when it came to publishing in French, notably Rotterdam publisher Reinier Leers, the most important direct competitor of the Huguetans over these years.³¹ It was by no means a coincidence that his father, Aernout Leers, had been one of the most important publishers of Latin titles of his time. French publishers knew that Dutch towns, especially Rotterdam and Amsterdam, had the appropriate resources and that they would be welcome there. It is

telling, for instance, that only one complaint against French publishers was recorded by the Amsterdam publishers' guild.³²

Dutch producers proved remarkably skilled at tapping into foreign markets, supported by a local production system that was capable of integrating new people, new skills, and new markets in order to remain competitive. The prominence of Dutch publishers in international markets, however, did not last. The loss of export and international markets is generally placed in the 1740s. It has been argued that the abrupt slump in the import of Dutch books in the 1740s in England, for instance, was caused by disruptions of trade following the War of the Austrian Succession (1742-1748).³³ While this may have been the case, the general loss of export markets was also caused by more structural problems. In the second quarter of the eighteenth century, significant changes hit the book trade of the Republic. Throughout Europe, censorship was relaxed, economic circumstances improved and, in the second half of the eighteenth century in particular, distribution possibilities in other countries improved.³⁴ All of these factors had important consequences for the position of the Dutch international book trade, especially from the 1730s onwards. The market expansion, as well as increasing openness and competition in foreign markets, stimulated economies of scale and scope in their book trades, offsetting Dutch competitive advantages.

Another factor contributing to the loss of export markets was the rise of foreign publishers issuing titles in the vernacular. At first, when French replaced Latin as the international language of scholars and the elite, Dutch publishers were able to use this to their advantage. They published new titles in French and also had titles translated from French into English and vice versa. However, over the course of the eighteenth century, the vernacularization and nationalization of literature in European countries placed Dutch publishers at a competitive disadvantage.³⁵ Arguably, new genres such as the novel were dependent on more culturally specific resources than the humanistic and Enlightenment production had been.³⁶ The declining prominence of a pan-European publishing language such as Latin or French may have increased the need for physical proximity between publishers and consumers, thereby reducing possibilities for export-oriented production.

A reading revolution?

The size and character of domestic demand for books through the eighteenth century has received considerable attention in the book-historical literature. Historians have identified several changes in the production and consumption of printed titles in Europe during the second half of the

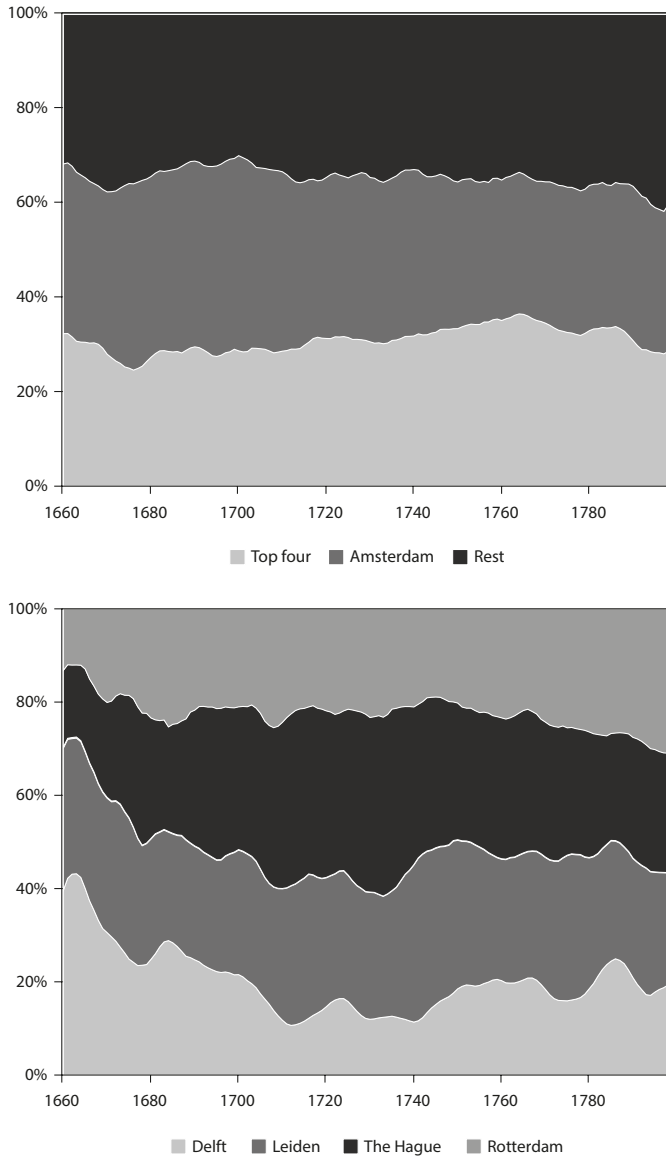
century. The main view holds that there was an expansion of the reading public following the inclusion of a new group of non-elite readers, as well as a change in reading behaviour as readers began reading more than they had done in the past. German historian Rolf Engelsing was the first to characterize these changes as revolutionary (*Leserevolution*), and despite some hesitation, this term has become widely used to denote both the shift from intensive to extensive reading and the growth of the reading public.³⁷

Taking a closer look at European consumption patterns in the eighteenth century can contextualize the suggested popularity of reading. No less than three other 'revolutions' are supposed to have preceded the Industrial Revolution between 1600 and 1800: the consumer revolution, the industrious revolution, and the retail revolution, all of which involved rapid increases in the demand for consumer goods, in England and elsewhere in Northern Europe.³⁸ The widespread interest in these changes in early modern consumer patterns, and the ubiquity of the term 'revolution' in defining their character, stems perhaps from a counter-intuitive finding: the observed rise in material possessions by and large occurred without a parallel rise in daily wages.

This apparent paradox is important in understanding the growth of title production in the absence of increasing purchasing power and population growth in the Dutch Republic during the second half of the eighteenth century. The increase in the number of titles, the development of specialized reading institutions such as libraries, and the modernization of distribution and selling during the second half of the eighteenth century were for a time interpreted as possible signs that there was also a Dutch reading revolution.³⁹ Following empirical studies on book ownership and bookselling practices, however, Dutch book historians are now finding the thesis of the reading revolution increasingly problematic, because booksellers' archives and probate inventories do not conclusively support the occurrence of a reading revolution in the eighteenth-century Dutch Republic.⁴⁰ It was not, they argue, a large expansion of the general reading public that occurred, but a rather small group of already devoted readers to whom more titles were offered. Besides, the increase in the number of titles consisted largely of traditional genres such as religious and functional reading matter. Other research even points to a decline in the reading public.⁴¹

Even so, in these views the changes and improvements in book production and distribution that took place during the eighteenth century are still attributed to developments on the demand side, in particularly the desire for up-to-date titles.⁴² Of particular interest in this context is the analysis of distribution practices in the Dutch Republic throughout the eighteenth

Fig. 5.2 Local shares of book production, measured in number of people active per decade (%), 1660-1799



Source: Thesaurus; STCN, accessed 12-02-2010

century by Hannie van Goinga.⁴³ She suggested that the increase in the number of active bookmaking firms could reflect either an increasing demand for books or changes in the composition of the book trade, for example, the development of firms operating on a smaller scale. Although she eventually concluded that the driving force for intensified distribution networks must have been expanding demand for books, an alternative theory has been proposed that might explain concurrent title growth and economic stagnation. José de Kruif has suggested that the increase in the number of titles can be explained by a strategy of differentiation in response to a satiated market.⁴⁴ It is possible, she conjectures, that a larger number of titles was produced in smaller print runs. This would have reduced the net growth of copies but not the number of titles. From this perspective, the increase in title production attests to publishers' strategies in response to a stagnating and maturing domestic market rather than an expanding one.⁴⁵

Unfortunately there is no reliable serial data on print runs for this period, but it is possible to approach the questions raised by De Kruif and Van Goinga from a slightly different angle. Closer inspection of the composition of the Dutch book trade in this chapter will show that significant changes took place in the composition of local book production systems and that these had implications for the competitive context in which publishers operated. This is true not only for the second quarter of the eighteenth century, but also for the period immediately following the middle of the seventeenth century.

Geographic distribution

The features of the maturing domestic market for books, along with the rise and fall of international dominance, coincided with some modest changes in the geographic structure of Dutch book production and trade (Figures 5.2 and 5.3). In the early decades of this stage, Amsterdam's share of the total number of publishers in the Republic increased from around 35 per cent to almost 45 per cent. This can be attributed to the immigration of Huguenot publishers as well as to the city's increasing importance in international book production and distribution. Soon Amsterdam's share returned to normal, and, with the exception of a slight decline in the 1730s, it remained stable through the rest of the century. The relative importance of Leiden, The Hague, Rotterdam, and Utrecht fluctuated between 5 and 10 per cent. As its role in international book trade grew larger, The Hague surpassed

Leiden from around 1680 onwards. However, in terms of title production, the picture looks slightly different (Table 5.1). In comparison to the 1650s, Amsterdam's share during the first decade of the eighteenth century remained the same, but some seventy years later, the city's prominence in the production of non-ephemeral work had decreased from c.50 per cent to about 40 per cent.

Table 5.1 Distribution of booksellers, titles, and non-ephemeral titles, 1700-1709 and 1770-1779

1700-1709	Total booksellers**	Total titles	Non-eph. titles	Booksellers %	Titles %	Non-eph. titles %
Amsterdam	134	2600	2279	39.2	27.1	50.7
Leiden	27	1499	568*	7.9	15.6	12.6
The Hague	33	981	345	9.6	10.2	7.7
Rotterdam	23	317	226	6.7	3.3	5.0
Utrecht	19	955	265*	5.6	10.0	5.9
Haarlem	8	109	65	2.3	1.1	1.4
Delft	3	75	42	0.9	0.8	0.9
Dordrecht	8	85	66	2.3	0.9	1.5
Middelburg	7	78	13	2.0	0.8	0.3
Groningen	7	161	43*	2.0	1.7	1.0
s.n., s.l.	-	2109	338	-	22.0	7.5
Rest	73	613	241	21.3	6.4	5.4
Total	342	9582	4491	100	100	100
1770-1779	Total booksellers**	Total titles	Non-eph. titles	Booksellers %	Titles %	Non-eph. titles %
Amsterdam	135	3672	2962	30,4	27,7	40,7
Leiden	44	1549	585*	9,9	11,7	8,0
The Hague	40	1217	738	9,0	9,2	10,1
Rotterdam	37	733	389	8,3	5,5	5,3
Utrecht	28	1291	582*	6,3	9,7	8,0
Haarlem	11	406	213	2,5	3,1	2,9
Delft	5	215	73	1,1	1,6	1,0
Dordrecht	7	377	210	1,6	2,8	2,9
Middelburg	15	373	157	3,4	2,8	2,2
Groningen	13	485	168*	2,9	3,7	2,3
s.n., s.l.	-	2277	913	-	17,2	12,5
Rest	109	665	288	24,5	5,0	4,0
Total	444	13,260	7278	100,0	0,1	100,0

Source: Thesaurus; STCN accessed 4 August 2011; * also excluding academic texts; ** average number of publishers per year in decade.

As will be discussed in more depth later in this chapter, these patterns can be explained not so much by changing demand conditions as by the fact that publishers started to emphasize improvements in the distribution of books more than the numbers produced. Interestingly, the three towns dominating the international book trade were the same ones that had already developed competitive advantages by 1600: Amsterdam, Leiden, and The Hague. This testifies not only to their general position in the Dutch urban network, but also to strong patterns of reproduction over time. The book trade in these towns had been relatively unregulated during the growth phase and it was firmly tied to specific local amenities – the academy, the government, and commerce – plus the presence of related and supporting industries. Reforms in industrial organization only further strengthened local patterns of specialization and concentration.

Related and supporting industries

In the first half of the seventeenth century, Dutch publishers had responded to large potential domestic demand for books and increasing competitive pressure by investing in related and supporting industries. After the middle of the century, copy, paper, and typography were of course still of crucial importance, but as we will see, Dutch publishers approached these in a different way. Instead of investing in new material, they limited risks by relying on existing content or typographic material. In the case of paper, hostilities with the French limited imports, but just in time, Dutch papermakers developed new technologies that made high-quality domestic paper production possible.

Paper

For the best part of the seventeenth century, Dutch printers had relied on the import of foreign paper. Problems with the distribution of paper could cause serious delays in the production of planned titles.⁴⁶ The hostilities between France and the Republic, along with the revocation of the Edict of Nantes, resulted in a decreasing involvement of Dutch paper merchants in French paper mills. In 1671 the States General also issued a ban on the import of certain French goods, including paper. This caused great distress among paper dealers and printers.⁴⁷ And as if the ban on the import and selling of French paper had not caused enough problems for Dutch printers and paper merchants, their situation was certainly worsened by an attempt to introduce new taxes on paper, especially on foreign paper and prints.⁴⁸

Fig. 5.3 Distribution of publishers in 1680, 1710, 1740, and 1780 (clockwise)

Source: Thesaurus

The archive of the Amsterdam booksellers' guild contains several requests by Dutch printers and paper dealers from various towns concerning the ban and the taxes from the years 1674 to 1691.⁴⁹ A recurring theme is the necessity of paper imports due to the low quality and insufficient quantity of domestic production, rising prices, and the declining competitive position of Dutch printing.⁵⁰ Both printers and paper dealers stressed time and time again that it would be disastrous for paper dealers and the publishing industry if foreign paper should cease to come through Amsterdam.⁵¹

Fortunately, at about the same time significant improvements were made in the domestic paper industry with wind-powered mills being adapted for the production of printing paper.⁵² Throughout the seventeenth century, the number of mills, especially in the Gelderland district of the Veluwe, had increased, but production had been focused on grey cardboard paper and also, from the 1650s onwards, on blue paper. The real growth in productivity occurred in northern parts of the province of Holland around 1670.⁵³ This had everything to do with the introduction of the so-called *Hollander* which dated from around 1673 and was arguably the most important invention in papermaking in three centuries. This technical improvement on the roll beater, a cylinder used for beating rags, made it possible to process the fibres of the rags in such a way that white paper production became viable. Moreover, it made the process of pulping rags much quicker than was possible using water-powered paper mills. The improved speed of the wind-driven Dutch mills was the main competitive advantage over their water-powered counterparts in Germany and France. Dutch papermakers could produce the best paper in the fastest manner possible at the time, allowing Dutch merchants to further expand into foreign markets.⁵⁴ They retained this competitive advantage until the end of the eighteenth century, by which time the technology had spread and paper production in other countries had caught up.⁵⁵

Typography

The last quarter of the seventeenth century heralded the end of the large independent typecutters as type foundries became annexes of large printing firms. In the early 1670s, Bishop John Fell of Oxford had sent linguist and clergyman Thomas Marshall on a journey to Amsterdam to procure type, only to discover that 'last winter had sent Van Dijke and Voskens, the two best Artists in this Country, to their graves'.⁵⁶ Elzevier acquired the famous Van Dijk material in 1673, and in 1681 his type foundry was sold to Joseph Athias, the renowned printer of Hebrew works and English Bibles. A second significant foundry, that of the Blaeu firm, was operated by Dirck Voskens after 1678 and remained in business until well into the eighteenth century. Other large printers such as Huguetan, Wetstein, Van der Putte, and De Bruyn, followed the examples of Elzevier and Blaeu and set up their own foundries.⁵⁷

Dutch type retained its demand, but the quality deteriorated as only a handful of lettercutters set up shop in Amsterdam during the first half of the eighteenth century.⁵⁸ Although some quality cutters began producing

new type at the request of large firms like Wetstein and Enschedé, the first decades saw a dearth of activity and innovation in typecutting.⁵⁹ The last Amsterdam-based punchcutter to acquire worldwide and lasting fame was the Hungarian Miklós (or Nicolaus) Kis.⁶⁰ However, Kis did not stay long in Amsterdam. In 1689, nine years after his arrival, he returned to Hungary. Hereafter, with the exception of Barthelomeus II Voskens and the Cuy family who did cut some new type, printers mainly relied on used matrices and type. Apparently, foundries were well stocked with good type and had little incentive to order new cuts and invest in new designs. Another surge came only when the Wetstein and Enschedé firms started ordering new type from Johann Michael Fleischman, who started out in 1728 as a punchcutter in the foundry of the printers Alberts and Uytwerf in The Hague. Fleischman produced many types for the Wetstein foundry, and eventually cut the bulk of his punches for the Enschedé foundry in Haarlem.⁶¹ The Enschedé printing firm invested heavily in new type and developed a prominent type foundry. They only had one main competitor: the firm of the brothers Ploos van Amstel in Amsterdam.⁶² Because Ploos van Amstel and Izaak Enschedé had been buying up the inventories of other type foundries, the number of type foundries decreased rapidly.⁶³

Book illustrations

In the first decades of the seventeenth century, Dutch book illustration and print publishing thrived. In the 1630s, however, the Golden Age of book illustrations came to an end as the production of new illustrations stalled, there being plenty of plates in circulation. Early initiators such as Blaeu and Claes Jansz Visscher had to throw together their collections, whereas publishers in the 1650s such as Clemens de Jonghe could simply buy plates in bulk.⁶⁴ The increasing use of second-hand plates is visible across genres. For instance, Gillis Joosten Saeghman – who popularized the genre of travelogues by reprinting previous versions at relatively low prices – reused many illustrations in his travelogues based on series of woodcuts and copper engravings.⁶⁵ And in the genre of songbooks, the new editions still had many illustrations and a more varied iconography than even their luxurious quarto predecessors, but these were often reprints, frequently produced with old plates.⁶⁶

The increasing use of second-hand plates was inherent in the technology, because plates were durable, even if their recycling led to repetition in illustration and to a decline in quality, due to damage caused by wear and tear. The fierce competition of the first half of the seventeenth century had inflated the number of plates in the market and therefore limited the need to

invest in new ones. This had consequences for the organization of print publishing, in both geographic and socio-economic terms. Nadine Orenstein has observed how variety and decentrality were key characteristics of Dutch print publishing during the first half of the seventeenth century. In the period that followed, this changed. Print publishing became increasingly concentrated in a few large firms, most of which were located in Amsterdam.⁶⁷ Through bulk acquisition and the growth of family businesses, a more select group of firms such as Visscher, Danckerts, De Wit, Allard, and De Jonghe amassed large collections of copperplates.⁶⁸ This enabled these entrepreneurs to gain a head start over their competitors. The Blaeu firm, for instance, was a powerhouse in the fields of modern emblem books, world atlases, and globes between 1650 and 1670, not only through its own production but also by buying up plates.

A renewed interest in book illustration, in terms of genre, competition, and techniques, can be identified from the 1670s onwards.⁶⁹ The final quarter of the seventeenth century saw the rise of a handful of extremely prolific and versatile graphic artists. Romeyn de Hooghe and Jan Luyken were by far the most prolific and important producers of original book illustrations.⁷⁰ At the same time, publishers and engravers experimented with new techniques such as colour printing and mezzotint engraving.⁷¹ Still, the resurgence of print publishing in the 1670s differed from the Golden Age of prints between c.1600 and c.1630. In contrast to the earlier period, there was no overall upgrading of the quality of Dutch printing. In fact, the gap between cheap illustrated books and expensive illustrated books even widened. This was not the time for investing in new genres and techniques, or the time for upsurges in the quality, quantity, or variety of book illustrations. In general, the images in literary works were derivative of the French style, and the quality of the songbook genre, for instance, dropped to a popular level.⁷² Not until the end of the eighteenth century would Dutch illustrators, especially Jacob Buys and Reinier Vinkeles, start to produce new original work on a significant scale.⁷³

Copy

In this later stage of the publishing life cycle, relatively few original titles by Dutch authors were published. It has been argued that the rise across Europe of vernacular literary prose put Dutch authors at a disadvantage.⁷⁴ The Dutch not only lost their relative competitive advantage over foreign publishers, but they were also placed at an absolute disadvantage. The small size of the country limited possibilities for product differentiation.⁷⁵ Specialized periodicals, for instance, proved unsustainable, with rather low circulation figures owing to the small size of the market for Dutch-language publications.⁷⁶ Other

structural conditions also hampered investments in new copy. Under these new market conditions, publishers were less inclined to gamble on new publications. Instead, Dutch publishers increasingly reassembled existing content and converted foreign texts into titles for the Dutch market.⁷⁷

In a period of market maturity, imports and translations were safer and cheaper bets. It is no coincidence that the publishing list of the Leiden publisher Pieter van der Aa, one of the largest publishers active during this period, contained many translations, pirated editions, reprints of recently published titles, classical works, and composite volumes.⁷⁸ This did not mean that Dutch publishers only followed the lead of others. They also adapted, updated, and sometimes even improved foreign editions.⁷⁹ Based on the STCN, it can be asserted that there was indeed an overall increase in the share of Dutch titles translated from French, Latin, German, or English.⁸⁰

The use of international copy is also evident in specific subgenres of the market. For instance, only about half of the contributions in *Vaderlandse letteroefeningen*, a prestigious scientific-miscellaneous cultural magazine, consisted of articles originally written in Dutch or of reviews of Dutch books. The other half comprised translated articles and reviews of translated books.⁸¹ Research on women's periodicals also suggests that the demand for texts aimed at women was in part provided by other types of periodicals, such as almanacs, or by translations.⁸² In the field of music publishing, a genre in which the Dutch excelled during the export phase, publishers mainly reprinted or adapted French or Italian titles.⁸³ And even in genres in which the Dutch had previously been leading and which were still significant such as cartography, eighteenth-century production was generally derived from seventeenth-century work or adaptations of foreign productions.⁸⁴ Apparently, this was not the time for publishers to invest en masse in radical product innovations, but to revert to safer bets. Such risk-averse behaviour is also evident in the changes in the organization of local industries that took place during this period.

From production to distribution

At the end of the growth phase, new booksellers' guilds were established in the larger production centres of Leiden (1651) and Amsterdam (1662).⁸⁵ In The Hague, publishers had to wait until 1702 before they were separated from the Guild of St. Luke, but from the 1640s onwards, they were already gaining more influence in the Guild of St. Luke.⁸⁶ After the 1656 separation of painters in the newly established association *Confrérie Pictura*, they

effectively dominated the guild. This was mirrored in the more formal post-1651 regulation of The Hague's book trade, when the statutes were expanded with articles specifically concerning booksellers and printers. The new statutes and the regulations of the newly established guilds reveal a marked shift from concerns about production to concerns about distribution. The ordinances of the first independent booksellers' guilds in Middelburg, Utrecht, and Haarlem, for instance, were more concerned with the craft of printing than the revised versions of these ordinances in the second half of the seventeenth century, or indeed, than the ordinances of guilds that were established later.⁸⁷

When comparing the 1616 draft of guild statutes drawn up by Amsterdam printers with the guild regulations that were approved in 1661, it becomes clear that hardly any of the articles in the 1616 draft made it into the eventual guild regulations. The architects of the new request argued that they did not belong in the Guild of St. Luke since they never worked with paintbrushes, the original criterion for membership in the guild. Slightly opportunistically, the booksellers also referred to the advantages of a separate guild for the local government, alluding to favourable terms of censorship enforcement. Differences in the content of the two sets of statutes reflect changes in the composition of the book trade and the concerns of key members. This time the bookseller-publishers rather than the printers had taken the initiative, and they were more successful. The Amsterdam ordinance dealt primarily with three issues: membership criteria and apprenticeships, social benefits, and auctions. Much was copied from the ordinances of St. Luke, but articles 15 to 22 regarding auctions were a new addition. The statutes of the Amsterdam booksellers' guild further stipulated that there would be five guild deans: four booksellers and one printer.⁸⁸ This was hardly a representative ratio of their own 1661 estimate of 200 booksellers and 100 printers working in Amsterdam. This suggests that, as a group, booksellers were the most powerful members of the book trade.

Van Eeghen has suggested that one of the main reasons behind the Amsterdam request to separate from the Guild of St. Luke was the frustration of large publishers regarding the illegal auctions held by smaller booksellers.⁸⁹ There are indeed some suggestions that larger and smaller publishers had different interests when it came to organizing auctions. It was strictly forbidden to auction off books without first closing up shop, but the archives of the Amsterdam booksellers' guild, as well as notarial archives, point to the regular occurrence of illegal auctions.⁹⁰ For example, article 22 of the 1663 ordinance decreed the prohibition of weekly or monthly auctions in homes or inns.⁹¹ In 1674, a conflict arose when booksellers were caught

in the middle of such an auction. In response to the objections made to the sales, sixty less wealthy printers and booksellers requested to hold privately organized auctions without the presence of an official auctioneer, the very practice that was prohibited by article 22.⁹² They explained how the article caused them serious problems, as it made it impossible to counter the 'monopoly' held by the few wealthy booksellers. They accused these wealthy booksellers of buying in bulk and artificially inflating prices. To counter this, the less wealthy had been congregating frequently, having bought up stock in bulk, and they were auctioning the books amongst themselves thus creating advantages of scale. In the end, the smaller booksellers' request was opposed by a more successful appeal made by fifty-six large booksellers who tried to maintain and even reinforce the regulations pertaining to auctions.

In Leiden, around 1650, there was a comparable conflict.⁹³ When news emerged that the most important booksellers (who were also the guild deans) were trying to prohibit sales by out-of-town booksellers, concerns arose. Over twenty of Leiden's smaller booksellers requested permission to continue the practice. For the smaller booksellers these sales were the only way to buy books at reasonable prices because, or so they complained, the large Leiden booksellers took too much profit. Increasing disquiet surrounding trade and distribution was not only evident in the newly established guilds. In Utrecht too, for instance, the concerns of guild members seem to have changed. The ordinance of printers and bookbinders dated 1599 consisted of twenty-five articles on admission fees, the mastership test, conditions affecting apprentices and journeymen, with, at the end, a few articles relating to the protection of members' interests, for example, with regard to foreigners. The 1653 ordinances had a similar structure, but ten years later, there was a change in composition: the first eleven articles referred to the protection of local interests, and also addressed auctions. The new ordinance was remodelled on the basis of the 1651 Leiden decree, which was in turn inspired mainly by concerns about auctions rather than production. In other words, the Utrecht booksellers' guild also shifted from being a traditional production-oriented guild to being a 'bookselling' guild.⁹⁴

Distribution and finance

Both the changing relations between publishers and related or supporting industries and the shifts in corporate structure can be understood as strategic responses to changing market conditions. A series of reforms in distribution and financing practices further fits this pattern in that they

were direct attempts to reduce risks.⁹⁵ Although Dutch publishers operated in a well-developed domestic communication and distribution network, they also suffered from a lack of opportunity to regularly turn over their stock. They could not freely dispose of surplus stock, nor could they easily buy large stocks in one go. Swift distribution was difficult and the effects of this became increasingly apparent during periods of stagnating or declining demand.⁹⁶ During such economically difficult times, the need for working capital became more pressing, and this triggered the development of new strategies.

Studies of the development of book production in the Southern Netherlands confirm the increasing emphasis on distributive practices in periods of commercial difficulty.⁹⁷ The economic recession of the late seventeenth century inspired large Antwerp-based firms, most notably the *Officina Plantiniana* and the Verdussen firm, to change their business strategies. They made use of jobber-printing – most notably German – used cheaper paper, and limited production, but they also reorganized their distribution and financing systems. This section discusses six areas of organization of the Dutch book trade that were reformed during the late seventeenth and eighteenth centuries as a reaction to stagnating domestic demand and the limitations of the traditional channels of distribution.⁹⁸

Booksellers' auctions

In theory, booksellers' auctions were an effective way to dispose of excess stock. However, during the second half of the seventeenth century, they became more and more regulated, a development instigated by large publishers. The stricter regulation of auctions left smaller booksellers with few alternatives to shed stock and saw them resort to illegal sales, or illicitly adding new titles to second-hand sales.⁹⁹ The situation was particularly pressing in Amsterdam. In Leiden, The Hague, Rotterdam, Delft, and Utrecht exceptions could be made and regulations were less strict.¹⁰⁰ The case of Amsterdam, however, clearly reflects the importance to eighteenth-century booksellers of unrestricted purchasing and selling through auctions, though the shift came about only after a major conflict in the late 1760s, when Amsterdam booksellers were granted an annual auction.¹⁰¹

In 1765, approximately sixty Amsterdam booksellers submitted a petition to their guild with the request to either keep a closer watch on illicit sales or discard the rules altogether. Not only were the protestors unhappy with the restrictions on sales, they also accused the large booksellers of not adhering to the rules that they themselves so desperately tried to sustain.

However, the large booksellers objected and the request was not granted.¹⁰² Supported by a group of Rotterdam booksellers, sixteen of Amsterdam's booksellers pursued the matter further, laying out their arguments in another letter.¹⁰³ Eventually they forced the issue and the case was brought to the local government. The administrators proved more liberal than the guild officials, and in 1769 they granted Amsterdam booksellers an annual auction of unbound books (books sold for the first time).¹⁰⁴ Still, this was a rather muted triumph for the smaller booksellers, as they were still denied the freedom to auction books from outside Amsterdam.¹⁰⁵

Public auctions and the second-hand trade

Another change to distribution practices took place in the form of public auctioning of second-hand books.¹⁰⁶ These were an attractive means of obtaining working capital, as customers, in contrast to fellow booksellers, were supposed to pay in cash. It was also an attractive (albeit illegal) way for booksellers to dispose of newer titles. Again, this was not a new phenomenon, but its importance increased during the maturity phase of the industry. As discussed above, booksellers in The Hague's Binnenhof, referred to as *'De Zaal'*, were not subject to local guild regulations. Thanks to this early advantage, they also secured part of the Dutch trade in second-hand books.¹⁰⁷ But the real winners were booksellers in Leiden, the birthplace of the printed auction catalogue and specialists in book auctions.¹⁰⁸

At first, Leiden's publishers followed several common strategies: they started publishing more in Dutch and decreased the size of books in order to lower prices.¹⁰⁹ However, as we saw in previous chapters, the local market had already become saturated by around 1620. To counter this, local booksellers shifted part of their focus from production to distribution, building on their particular local competitive advantage: the auctioning of academic libraries through international scholarly networks. Building up experience and skills, they quickly established a reputation for quality auctions. A market for second-hand books developed, and the Leiden publishers' early advantages, combined with a collective effort to generate profits from their innovation, yielded a solid core business. The development and reproduction of this competitive advantage firmly established Leiden as the second-hand book capital of Europe. From 1722 onwards, as a result of repeated complaints from local booksellers regarding systematic abuse in the application of public sales, Leiden's booksellers were also permitted to hold annual public auctions.¹¹⁰ In other words, the previously illegal but common practices were legalized.

Partnerships

From the 1660s onwards, although paper merchants were involved as financiers of large-scale productions, other forms of financing and risk management became increasingly important. Both merchants and publishers faced increasing difficulties in financing their products, forcing them to look for ways to reduce risks.¹¹¹ The production of English and Hebrew Bibles by Joseph Athias illustrates the complex involvement of different parties namely printers, booksellers, large publishers, paper dealers, and merchants, as well as the difficulties in getting large projects financed.¹¹² After losing his main financiers, Athias looked elsewhere for help in undertaking large printing projects, eventually forming a partnership with Susanna Veselaer, also known as the Widow Schippers, the other major producer of this particular export product.¹¹³

Such partnerships or *compagnies* were not new, but the scale and character of such joint ventures differed from previous periods, when more informal associations had prevailed. They were often local but could also cut across towns as was the case in an agreement between Pieter van der Aa of Leiden, François Halma and Willem van der Water of Utrecht, and Pierre Mortier of Amsterdam for the publication of *Le grand dictionnaire historique* in the 1690s. On the other hand, partnerships could serve to strengthen competition between publishers of different localities. Van Eeghen discusses several other partnerships, for example an Amsterdam partnership known as *compagnie de libraires* that was formed to challenge Leiden publisher Pieter van der Aa by pirating his titles.¹¹⁴

Publishers joined forces to produce single titles as well as multiple titles. Presumably, the Amsterdam publishers Johannes van Someren, Abraham Wolfganck, and the brothers Hendrik and Dirk Boom were the first, in 1675, to capture a significant market segment through such an arrangement.¹¹⁵ The partnership, later expanded by the inclusion of colleague Michiel de Groot, concentrated on Dutch church books (*nederduytsch kerckgoet*). A second partnership focusing on church books was formed in 1680 when ten smaller firms joined forces to compete with the church books published by the first *compagnie*. They were, it would seem, more successful, as the partnership lasted until well into the twentieth century though its exact composition had changed somewhat.¹¹⁶ Publishers of Catholic liturgical texts also joined forces in the 1670s with the establishment of the Latin partnership that specialized in the production of Bibles and liturgical texts. And in 1661 Joan Blaeu and Daniel and Louis Elzevier, together with

Frans Hackius, formed a partnership to publish a specific title: *Corpus juris civilis*.¹¹⁷ They agreed that they would each sell a set share of the print run. Throughout the years, the composition of the group changed, but by 1682, several members of the partnership including Blaeu, Wolfgangck, the Booms, and the Janssonius van Waesberges formed the largest *compagnie* of its kind, further collaborating on other business ventures such as buying at auctions.¹¹⁸

In addition to the increasing prominence of partnerships, this period also saw the execution of some significant mergers, deliberate or by evolution. The scale and success of Blaeu's production of atlases, sea charts, and pilot books had been due in no small part to the fierce competition between the Blaeu and Janssonius publishing houses, but eventually the stocks of the two rivals would meet. When Johannes Janssonius' estate was divided between his three heirs after his death in 1664, his son-in-law Johannes Janssonius van Waesberge continued the business until he too passed away in 1681. In 1682, his son, Johannes, joined 'The Latin Company' with fellow book dealers Van Someren, Boom, Goethals, and Abraham Wolfgangck, the owner of the Blaeu plates and stock. When Joan II Blaeu also joined two years later, the two great cartographic houses were effectively merged. That same year, the heirs of the publishing houses would produce an atlas together.

The partnership between Athias and Veselaer was effectively a merger. Both had been producing English Bibles and both had vied for certain privileges, but in 1673 they received a joint privilege from the States of Holland enabling them to print English Bibles in all sizes for fifteen years. In the notarial deed they even agreed to move their houses closer together to facilitate the collaboration.¹¹⁹ Through this partnership the duo managed to corner almost the entire export of English Bibles from Holland. Although publishers continued to rely on formal alliances into and throughout the eighteenth century, most large partnerships were formed in the final decades of the seventeenth century.¹²⁰ The timing and nature of these new large partnerships suggest that publishers pooled resources and shared risks in response to increasing difficulties across the publishing landscape.

Commissions

A fourth improvement can be found in the manner of exchange between booksellers. Around the turn of the eighteenth century, the sheet-for-sheet barter trade had been largely replaced by buying on credit, at least in the domestic trade. From the second quarter of the century onwards, commission

trade, though not in itself a new concept, became more widely used in the European book trade including that of the Dutch.¹²¹ Commission trade was a form of 'sale or return': the books were delivered to the bookseller who then had the right to return them should they fail to sell by an agreed-upon date. Booksellers did not pay up front but in annual instalments. Through this system, the risks for booksellers were reduced and partly shifted to the publisher, who in turn enjoyed the advantage of a more efficient distribution system.

The increased popularity of commission trade had significant consequences for the organization of book production as it increased turnover and stimulated the division of labour. Smaller booksellers were not required to also offer their own books in return, which reduced the necessity for them to print or publish their own titles. In addition to this division between printing and selling, the activities of publishing and selling were also separating. Some publishers began leaving the task of distribution to their business relations in Amsterdam, who evolved into so-called *hoofdcorrespondenten* or sales agents concerned with distribution rather than the production and sale of their own titles. Eventually, the gradual division between publishing and bookselling would lead to the rise of the publisher in the modern sense of the word.¹²²

Methods of payment

In part, changes in methods of payment can be attributed to the occurrence of several auctions of very large stocks within a short time frame. However, both the timing and character of the changes suggest that financial difficulties were the main motivating factor for formalizing payment agreements. During the final three decades of the seventeenth century, more formal IOUs (signed before a notary) started to replace the informal IOU. To understand how this came into being, we turn to an auction every bit as controversial and influential as Cornelis Claesz's had been in the early seventeenth century.¹²³

Following the death of Joan Blaeu in 1673, four auctions were held, one of which was exclusively for booksellers.¹²⁴ Confronted with the aftermath of Blaeu's death, Amsterdam's five largest publishers – Wolfganck, Van Waesberge, Elzevier, Van Someren, and the brothers Boom – made a secret agreement to support each other's heirs should one of those party to the agreement die. The agreement stipulated that they would all attend the auctions of the stock of the deceased and that they would all acquire at least a 1/32 share of the estimated total value of the stock. In fulfilment of this

part of the agreement, the parties would receive a discount for each guilder spent. Conversely, should they fail to reach the threshold, they would be fined *f*1,000 plus a charge levied for every guilder below the agreed-upon amount.¹²⁵

The first opportunity for the business associates to put their words into action came with the death of Daniel Elzevier. However, soon a conflict between Elzevier's associates and his heirs arose, resulting in two different sets of auction conditions, one for Dutch booksellers and a less favourable one for their foreign counterparts. The former group could apply for extended payment terms, such as the ability to postpone the first payment to the second instalment's due date. As before, no interest was due on the bonds as long as they were paid on time, but because these bonds were signed before a notary they could not be easily transferred.¹²⁶ These terms were presumably not offered in the conditions set for foreign booksellers. The auctions, with purchases payable in instalments, formed the distributional grid that supported large publishers.¹²⁷ The new sets of conditions resembled those in use throughout the growth phase of the industry, but they were reformed to address current issues and would remain the standard until a second period of crisis led to further changes in payment procedures.

By the 1730s there were new problems in the book trade. The positive impact of the Huguenots had petered out with the death in the 1720s of certain significant members of this immigrant group and because import restrictions were limiting exports to France. A group of publishers tried to release capital tied up in stock by organizing a series of auctions of a speculative nature.¹²⁸ The main instigators were members of the so-called 'group of five' from The Hague, who auctioned off unsold stock amongst themselves in exchange for bonds. Subsequently these bonds were transferred to parties outside the book trade. By trading in such bonds, the publishers created funds to satisfy creditors and effectively transferred their problems to outside investors. With no immediate rescue for the parties in view, however, this strategy turned into a bubble that was bound to burst, as it did in the 1740s, generating a wave of bankruptcies, especially in The Hague. In addition to those directly involved in the malpractice, trading partners also suffered losses.¹²⁹ Despite reforms in payment procedures, paying in instalments was relatively slow and also created obstacles for publishers in dire need of working capital. This issue became particularly pressing in periods of market stagnation or decline. Although several solutions were sought in the adaptation of distribution systems, cash flow remained a bottleneck. In 1801, Dutch

publishers would organize a meeting in which they attempted to both solve payment problems and determine ways to increase cash payments between booksellers.¹³⁰

Originally, the book trade's payment system had made for intense connections between firms and a blurred occupational distinction between publishers, booksellers, and printers. In order to offer a broad variety of books for sale, it was essential to exchange books with other booksellers. Apart from increasing mutual dependence, this had a second consequence: it strengthened entry restrictions for booksellers. Those who would not or could not publish or print books had few options available to them to facilitate trading besides purchasing at auctions.¹³¹ Moreover, smaller publishers could not always trade sheet for sheet or obtain the same discounts as larger buyers.¹³² Throughout the century, minor players started to experience more pressure from large publishers, both directly and indirectly. With the emergence of a larger group of major publishers profiting from scale advantages, exchanges became increasingly unbalanced, and this could result in irregular exchange rates. Moreover, large publishers increasingly regulated the alternate means of acquisition – auctions – through guild regulations.

Reproduction of skills and routines

The changing business strategies and organizational structure may have strengthened the local reproduction of skills and routines and consequently patterns of specialization and concentration. The changing balance of power between different occupations within the guild, as well as the increasing focus on trade, could in theory also have changed the guilds' involvement in the training process. We could, for instance, expect merchant-booksellers to have favoured relatively low restrictions on becoming a master as this would enable the formation of a large pool of printers and binders and bring down average wages. Printers, on the other hand, fearing competition, especially from cheap and low-quality products, might be expected to have increased such restrictions for masters while lowering those for journeymen and apprentices.

In general, the guilds do not appear to have been too concerned with the details of training, and this did not change throughout this period. The entrepreneurs behind the establishment of the new guilds were international publishers rather than local printers and were presumably more concerned with the book trade than with the actual production of books.

They would have reaped little benefit from heightening the entry barriers for printers by, for example, requiring them to pass a master test.¹³³ In the collection of proceedings from the Amsterdam booksellers' guild covering the period of 1674 to 1805, only a handful of complaints or requests had to do with the quality of the printwork, training, apprenticeships, or skills in general. The bulk of issues dealt with by the guild board concerned auctions and privileges.¹³⁴ The fact that issues such as conflicts and complaints about piracy and auctions have left a paper trail, whilst information on apprentices, for example, remains scarce, suggests that training was not a major concern for the principals of the guild.

As pointed out above, in most towns, booksellers were required to have been trained as binders, and some guilds had additional master tests for printers.¹³⁵ The new booksellers' guilds of Leiden and Amsterdam did not require aspiring masters to pass a test. In The Hague, on the other hand, the amendment of 1651 did refer to a binding test for bookbinders and booksellers, perhaps implying that no proof of skill had been required before that time.¹³⁶ The observed differences in the testing of skills raise questions about the purpose of master tests. It is difficult to say whether they functioned as a quality check on training and skills, as an entry barrier, or were meant only to add symbolic gravitas to the reputation of the printers' products. Although the requirement of passing a binding test would not have directly influenced the quality of the print, it did ensure that aspiring booksellers had spent at least some time working directly with books.

While power relations within the guild did indeed change, it is unclear whether this would have had any significant impact on the reproduction of skills and knowledge. The observations on the regulation of skills and tests in the third quarter of the seventeenth century do, however, appear to reflect the changing competitive structure of the book industry, in favour, as noticed several times already, of large publishers and booksellers concerned with trade rather than production.

Privileges

The increasing importance of trade and distribution resulted in a new role for formal privileges and stronger guild involvement. By the end of the seventeenth century, conflicts surrounding privileges resulted in greater uniformity of regulations respecting them: the fine for breaching a privilege was set at *f*300 and a privilege was valid for fifteen years.¹³⁷ However, there were still points of confusion and dissatisfaction, which were brought to

a head by Leiden publisher Pieter van der Aa.¹³⁸ Van der Aa was granted a privilege on as many as twenty-six occasions.¹³⁹ At first he did not infringe upon the business of others, but this changed in 1689 when he and his associates, François Halma (Utrecht) and Pierre Mortier (Amsterdam), tried to obtain a privilege on a dictionary and faced opposition by Leers (Rotterdam), who had just ordered copies of the dictionary from Paris. Van der Aa successfully defended his request by arguing that he was trying to prevent the Leers firm from gaining a monopoly on the Paris edition. In the following years, new conflicts arose.¹⁴⁰ In the end, the vague and broad formulations in privileges prompted the Amsterdam guild board to state that it would be better not to issue privileges at all than to permit such general ones.¹⁴¹

Such conflicts and confusion, often involving Van der Aa, resulted in further clarification, more standardization, and heavier regulation.¹⁴² A 1708 request by a group of two publishers from Delft and twelve large Amsterdam publishers summed up six points of discord and included a proposal to clarify and regulate the issuing of privileges. They proposed that the privilege be limited to one title; that only Dutch citizens could apply; that all applicants disclose their names and addresses; that, with regard to composite titles, no works could be used that had previously been printed with a privilege, unless the original printer gave approval; that privileges on schoolbooks and liturgical titles could only be issued if fresh commentary had been added to the original texts; and, that the fine be raised from *f*300 to *f*3,000.

The constant conflicts between Van der Aa and booksellers from different towns eventually brought about a new practice whereby all requests for privileges being submitted to the guilds of other towns required a verdict from those towns to be delivered. Guilds thereby gained more control over the issuing of privileges by the government, and the new system seems to have generally improved transparency. However, privileges did remain an issue in domestic rivalry as well as in the competition between the Republic and other countries.¹⁴³

Competition

Changing business strategies and industrial organization could have shaped and strengthened patterns of specialization but also of competition. As in the other phases of the book industry's life cycle, examples of fierce rivalry can also be found in the eighteenth century. Take, for

example, the Amsterdam music publishers Estienne Roger and Pierre Mortier.¹⁴⁴ French Huguenot Estienne Roger had put Amsterdam on the map as the centre of music publishing, not least by reprinting musical titles from other countries. However, others soon started pirating his reprints, most notably Pierre Mortier, who reprinted work from Roger's Italian composers after 1708. According to fellow publisher Jean-Louis de Lorme, Roger and Mortier were literally 'at war'.¹⁴⁵ Mortier, for instance, advertised his titles at two-thirds the price of others, forcing Roger to also lower his prices.¹⁴⁶

Table 5.2 Concentration indices Amsterdam 1674, 1710, 1742

Year	1674	1710	1742
N-titles	7761	8484	10898
N-publishers	114	110	177
Total C_4	1974	1904	2145
Total C_8	3137	3062	3380
Share C_4	0.25	0.22	0.20
Share C_8	0.40	0.36	0.31
HHI	0.03	0.03	0.02

Source: Thesaurus; STCN, accessed 20 June 2011. Estimates based on number of titles produced during the publisher's career.

The quantitative indicators of indirect competition reflect modest changes during this period (Table 5.2). The concentration ratio, referring to the market shares of the largest four and eight firms within the industry, declined over the course of the eighteenth century. The HHI, the sum of all firms' shares squared, shows little decline and points to a relatively competitive market. Overall, competition remained intense. A closer look at the size of the firms, however, reveals significant changes in the occupational distribution of Dutch publishing firms. The number of major publishers active in the Republic increased rapidly through the phase of maturity, especially in the period 1680-1740 during which Dutch book production and trade were characterized by a focus on exporting (Table 5.3). As the data also show, this was not limited to Amsterdam. Amsterdam's share within this group of producers declined, to the benefit of The Hague and Rotterdam in the export period and smaller towns in the period that followed. Not surprisingly, The Hague and Rotterdam were known for their export facilities and attracted significant numbers of Huguenots.

Table 5.3 Number and geographical distribution of major publishers, 1575-1800

%	1575-1609	1610-1649	1650-1679	1680-1739	1740-1800
Total (N)	9	16	24	64	73
Amsterdam	77.8	68.8	62.5	53.1	35.6
Leiden	11.1	18.8	25	18.8	16.4
The Hague	0	0	0	7.8	9.6
Haarlem	0	6.3	0	3.1	4.1
Rotterdam	0	6.3	0	7.8	9.6
Other	11.1	0	12.5	7.8	24.7

Source: Thesaurus; STCN, accessed accessed 20 June 2011

Table 5.4 Output per firm active in Amsterdam 1674, 1710, 1742

	1674	1710	1742
N-titles	7761	8484	10898
N-publisher	114	110	177
Maximum-titles	617	665	903
Average-titles	68	77	62
Median-titles	33	34	24

Source: Thesaurus; STCN, accessed accessed 20 June 2011

Focusing more closely on Amsterdam (Table 5.4), we find a modest increase in the average number of titles produced by firms between 1674 and 1710 and a significant increase between 1710 and 1742.¹⁴⁷ By the middle of the eighteenth century, the number of firms had also increased significantly. The average and median numbers of titles per firm further suggests that the composition of the industry changed throughout the period. Two stages can be identified: the rise of the major firm between 1674 and 1710 – the export phase – and the rise of the small firm during the following period. Table 5.5 specifies the relative importance of the different types of publishing firms. Between 1710 and 1740, there was no further increase in the share of major firms, but smaller firms gained in prominence, again at the expense of medium-sized firms. In contrast to the pattern during the growth phase, the rise in the number of firms was not matched by a concurrent increase in output per firm. That something had changed during the second quarter of the eighteenth century is confirmed by data on Catholic booksellers showing that large firms had problems sustaining their businesses and that new firms tended to be smaller in size.¹⁴⁸

Table 5.5 Distribution of Amsterdam publishers according to size, 1585, 1600, 1630, 1674, 1710, 1742

%	1585	1600	1630	1674	1710	1742
Major (>99 titles)	12.1	9.1	15.8	17.5	26.4	20.9
Large (50-99 titles)	25	18.2	17.5	16.7	15.5	10.2
Intermediate (20-49 titles)	12.5	18.2	19.3	35.1	24.5	22
Minor (6-19 titles)	25	22.7	26.3	17.5	20.9	23.7
Occasional (1-5 titles)	25	31.8	19.3	13.2	12.7	23.2
Total (N)	8	22	57	114	110	177

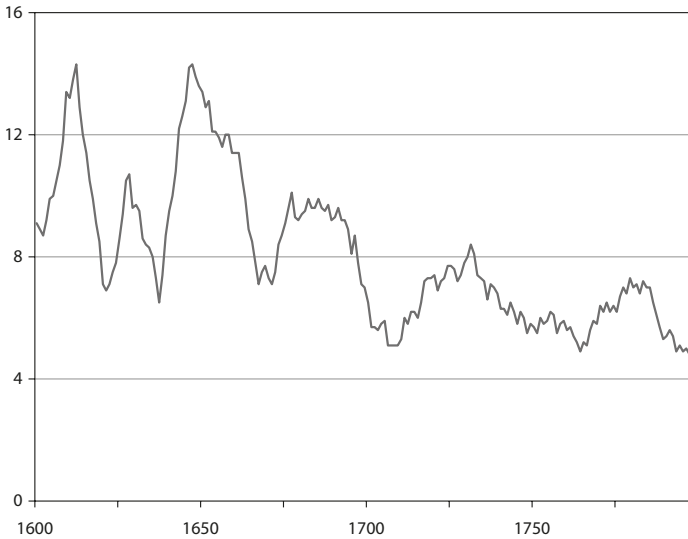
Source: STCN; *Thesaurus*

Entry barriers

Data on entry rates and reflections on entry barriers help to interpret the relative demise of the middle-sized firm from the fourth quarter of the seventeenth century onwards. By examining the records from the guild administration and the data from the *Thesaurus*, it becomes clear that the eighteenth century was characterized by a much more stable and modest entry pattern. This is exactly what can be expected in a mature market. The entry rate dropped after the 1650s, increased again from the 1680s with the arrival of Huguenot publishers, then fell once more (Figure 5.4). All the while, the number of booksellers annually registered in the guild increased gradually (Figure 5.5).

The book industry also became increasingly localized. In 1674, half of Amsterdam publishers were native to the town. By 1742 this had increased to 67 per cent, and among the remaining 34 per cent there were almost no foreigners.¹⁴⁹ Moreover, in 1630 the largest producers had been immigrants, except for Hendrick Laurensz and possibly Broer Jansz. Forty years later almost all members of this group were born in Amsterdam, except for Daniel Elzevier (b. Leiden) and Jacob Lescaille (b. Dordrecht). The international position and arrival of Huguenots broke the trend. In 1742, seven of the fifteen major Amsterdam publishers in the prosopography were native to Amsterdam, whilst four were born outside the Republic. A comparison of family relations among publishers between 1674 and 1742 shows that in the eighteenth century, family relations became even more pronounced than before. Whereas in 1674, 43 per cent of the booksellers in the dataset are known to be the son of someone who also worked in the book trade, their share had increased to almost 80 per cent by 1742.¹⁵⁰ This trend is also discernible in the administration of the booksellers' guild. Throughout

Fig. 5.4 Entry rates Amsterdam publishers (%), 1600-1800 (10-year moving average; including half of one-year hits)

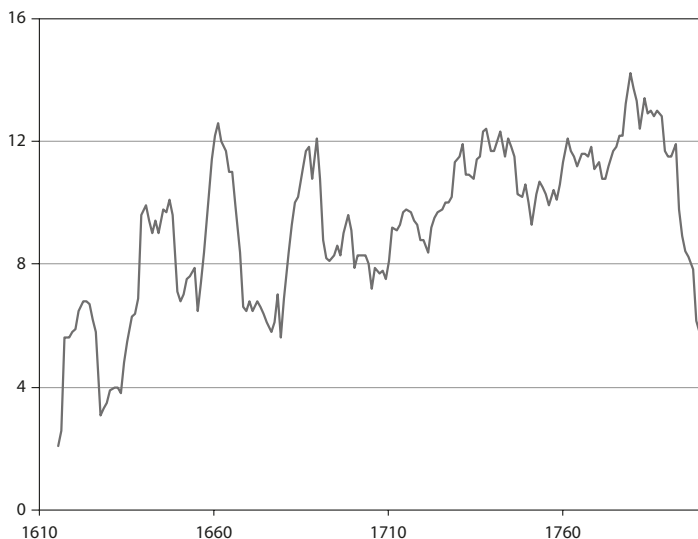


Source: Thesaurus

the eighteenth century, we find more and more members of the same few families on the board of the Amsterdam booksellers' guild.¹⁵¹

The increased local and familial entrenchment increased entry restrictions. One obvious entry barrier in book production is the level of investment necessary for starting a business. The costs of establishing a new firm can strongly influence career possibilities and, in general, the competitive environment of an industry. As book production demanded high levels of sunk capital, publishers often started out as binders, and only later, once they had saved enough to invest in printing material, did they branch out. Necessary investments included adequate premises, a printing press, type, paper, and other materials such as ink. With printing presses costing around *f.* 100, an aspiring printer would need several hundred guilders to purchase the necessary materials.

Although the level of initial investment limited the number of people able to invest in a new print shop, sunk costs did not significantly change over time. In other words, incumbents did not possess significant advantages over starters in this respect. Nevertheless, the fact that locals – family firms in particular – already had established reputations and networks should not be underestimated. Moreover, the increasing opportunities for bigger

Fig. 5.5 Number of entries in the Amsterdam booksellers' guild per year, 1600-1800

Source: BKVB, Archief van het Amsterdams Boekverkopersgilde (1662-1812)

firms, independently at first and then later as partnerships, to acquire large sets of books, plates, type, and even privileges at auctions imply that they gained significant advantages over smaller firms. Furthermore, not all firms could compete in foreign markets. Existing relationships based on trust and information as well as experience with translators and editors became indispensable assets. Not all publishers had such resources at their disposal, and they were difficult to acquire in a short period of time. In the progressively more export-oriented market of the late seventeenth century, medium-sized firms must have found it steadily more difficult to compete.

Conclusion

This chapter spanned a relatively lengthy time frame, from 1660 to 1800. Within this 140-year period, a distinction can be made between a first stage (c.1660-c.1730) focusing on exports, and a second stage (c.1730-c.1800) focusing on domestic markets.¹⁵² While 1680, the year of Daniel Elzevier's death, is often used to mark the end of the age of the great Dutch printers, we have it commencing some twenty years earlier.¹⁵³ The reason for this is that market saturation had already set in around the middle of the seventeenth century.

By c.1660, the life cycle of Dutch book production was showing signs of maturity. Factors stimulating the demand for books – including purchasing power, population growth, urbanization, levels of wage labour, and literacy rates – were already high by the middle of the seventeenth century. Moreover, book production was already characterized by a large degree of product differentiation and by relatively inclusive distribution networks. Through a series of product and process innovations, the commercial potential of a relatively large urban and professional middle class had been exhausted. In the absence of new demand stimuli, possibilities for domestic market growth were limited.

Nevertheless, Dutch book production and trade were remarkably dynamic. Despite the new market conditions, Dutch publishers managed to maintain production levels and even reinforce their position in the international book trade. They were able to adapt, mainly by tapping into previously developed skills and routines. This was not a time to invest in or compete on the basis of new and innovative aesthetics such as copy, type, and illustrations, except for those already at the higher end of the market. Instead, publishers fell back on established skills and resources, including international networks or local specializations. Their success was further facilitated by the development of domestic paper production, the immigration of Huguenot publishers, and international hostilities. In other words, with a little help from international circumstances and developments in supporting industries, Dutch publishers managed to embark on a new path. On the other hand, in the domestic market, a new growth dynamic could not be created as successfully.

Dutch publishers started reducing risks and pooling resources by forming formal partnerships, establishing guilds, and reforming payment methods. Not only did they limit investment in product innovations, they also tried to reduce risks by forming partnerships and mergers, by amending guild regulations, and by modernizing marketing and distribution processes. Business strategies relating to the trade in books gained importance over those related to production. As a result of the changes in strategies, the competitive structure of the book trade changed considerably. Informal entry restrictions increased in a variety of ways, and there was less room for the kind of medium-sized firms that had characterized Dutch publishing during its growth phase. The balance of power within the sector shifted towards large publishing firms, especially those with international contacts as they had significant scale advantages over their smaller counterparts. During the second half of the seventeenth century, further modernization of the book trade saw the gap between large and small firms increase still further. Process innovations stimulated occupational specialization, and the business of publishing became more detached from that of printing and bookselling.

At first sight, all these different developments may seem unrelated, but in the framework of the industrial life cycle they are not. The perceived strategies in distribution and marketing, as well as mergers, collaborations, and the increasing occupational differentiations, can all be interpreted as market strategies aimed at surviving in a mature market rather than in a growth market. Viewing them as coherent reactions to changing circumstances helps us to interpret the quantitative and qualitative changes that we observed in Dutch book production throughout the period 1650-1800. Dutch publishers were both aided and disadvantaged by the past. The established routines and relationships proved indispensable in catering to foreign markets at the end of the seventeenth century. However, the growth dynamic in the previous stage of the life cycle had also exhausted further potential for expansion in the domestic market. This became particularly pressing when Dutch publishers lost their standing in the international markets. The strategies chosen to deal with this alleviated some of the pressure but could not redeem or recreate international recognition.¹⁵⁴

Notes

1. On the position of the Dutch Republic in the international book trade: Berckvens-Stevelinck et al., eds., *Le magasin de l'univers*.
2. Febvre and Martin, *The Coming of the Book*, p. 195.
3. Lankhorst, 'Elzevirioomanie', p. 19; Leti, *Kort begrip der helden-deugden*, p. 9.
4. Kruseman, *Bouwstoffen*, vol. II, pp. 91-93. A clear overview is given in Baggerman, *Een lot uit de loterij*, pp. 71-74.
5. Letter from Voltaire to Frederick the Great, July 20 1740 in: Voltaire, *Briefwisseling*, pp. 355-356.
6. Luzac, *Hollands rijkdom*, vol. IV, pp. 422-427; *De Koopman* 5 (1775) pp. 114-125; Broos, 'Misdruk en mispunt', p. 220.
7. Mijnhardt, 'De geschiedschrijving', p. 173.
8. STCN, accessed 02-08-2012.
9. Reinders, 'Printed Pandemonium', p. 36; Harms, *Pamfletten en publieke opinie*, pp. 135-140.
10. Van Zanden, 'De economie van Holland'.
11. On the Dutch Republic in the eighteenth century see Jacob and Mijnhardt, eds., *The Dutch Republic* and De Vries and Van der Woude, *The First Modern Economy*.
12. Faber et al., 'Population Changes', p. 110. They estimate the population of the Netherlands within modern borders. See Nusteling, *Welvaart en werkgelegenheid*, pp. 234-236 on Amsterdam.

13. On the economy of Amsterdam between 1650 and 1800 and persistent local demand for a variety of luxury goods see Lesger, 'Vertraagde groei', vol. II-2; Lesger, 'Stagnatie en stabiliteit', vol. II-2.
14. Leti, *Kort begrip der helden-deugden*, p. 17. '... [Holland] alleen gansch Europa, met het werk der drukkerijen en boekhandel heeft bestraalt en verrijkt'.
15. Febvre and Martin, *The Coming of the Book*, p. 197.
16. STCN, accessed 18-10-2012.
17. Frijhoff and Spies, *Dutch Culture*, pp. 277-279.
18. Barber, 'Books from the Old World', pp. 245-252, table 1.
19. Imhof, 'De Officina Plantiniana en de Moretussen'; Van Rossem, 'En Amberes'.
20. Hoftijzer, *Engelse boekverkopers*, pp. 4-6.
21. Lesger, 'Vertraagde groei' discusses this point for Amsterdam trade in general.
22. Febvre and Martin, *The Coming of the Book*, p. 196.
23. Cf. Frijhoff, 'Uncertain Brotherhood'; Gibbs, 'The Role of the Dutch Republic'; Gibbs, 'Intellectual and Political Influences'; Nusteling, 'The Netherlands'; Bots, 'Refuge dans les Provinces-Unies'.
24. Frijhoff, 'Uncertain Brotherhood', p. 147.
25. *Ibid.*, pp. 143-147.
26. *Ibid.*, p. 148.
27. Israel, *Radical Enlightenment*, pp. 146-148.
28. Cf. Bots, 'Le rôle de des périodiques Néerlandais'.
29. On Henri Desbordes see Van Eeghen, *De Amsterdamse boekhandel*, vol. II, pp. 87-95. On the brothers Huguetan see Van Eeghen, 'Europese "libraires"'; Van Eeghen, *De Amsterdamse boekhandel*, vol. III, pp. 167-179. On Du Sauzet see Van Meerkerk, *Achter de schermen van het boekbedrijf*.
30. Van Eeghen, *De Amsterdamse boekhandel*, vol. III, p. 115. On the list of debtors of Elsevier: *ibid.*, pp. 118-119.
31. Van Eeghen, 'Europese "libraires"', p. 1. On Reinier Leers see Lankhorst, *Reinier Leers*.
32. Van Eeghen, *Gilden*, p. 110.
33. Barber, 'Aspects of the Booktrade', pp. 55-60.
34. Laeven, 'Frankfurt and Leipzig Book Fairs'; Brewer, *Pleasures*, pp. 132-138; Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 95; Van Goinga, *Alomte bekomen*, p. 12.
35. Also pointed out in Deinema, 'The Culture Business'.
36. Johannes, 'The Development of the Literary Field'.
37. Engelsing, *Der Bürger als Leser*. For a critical overview of the concept of reading revolution see for example Kloek, 'Reconsidering the Reading Revolution'.
38. McKendrick, 'Consumer Revolution'; Berg and Clifford, eds., *Consumers and Luxury*; Kwass, 'Ordering the World of Goods'; Fairchild, 'Production and Marketing of Populuxe Goods'; Berg and Clifford, eds., *Consumers and Luxury*; De Vries, *The Industrious Revolution*, p. 177; Blondé and Van Damme,

- 'Retail Growth and Consumer Changes'; Stobart and Hann, 'Retailing Revolution?'; Blondé and Van Damme, 'Retail Growth and Consumer Changes'.
39. Cf. Van Goinga, *Alom te bekomen*.
 40. Kloek, 'Reconsidering the Reading Revolution', p. 289-292. See also Brouwer, *Lezen en schrijven*; De Kruif, *Liefhebbers*; Van Goinga, *Alom te bekomen*; Baggerman, *Een lot uit de loterij*.
 41. De Kruif, *Liefhebbers*, pp. 108, 111-113.
 42. Baggerman, *Een lot uit de loterij*; Van Goinga, *Alom te bekomen*, pp. 307-310.
 43. Van Goinga, *Alom te bekomen*, pp. 290-291, 308-309.
 44. De Kruif, *Liefhebbers*, pp. 95-93.
 45. Cf. *Ibid.*
 46. Example in Maber, *Publishing*, p. 18.
 47. Van Eeghen, *De Amsterdamse boekhandel*, vol. IV, pp. 258-272.
 48. *Ibid.* The proposed impost on paper was 20 *stuivers* per ream for imported white writing paper, and 12 *stuivers* per ream on white printing paper; gray and blue paper was taxed with 6 *stuivers*.
 49. BKVB, Archief van het Amsterdams Boekverkopersgilde, inv. 56, behind n. 22 and behind n. 33.
 50. Van Eeghen, *De Amsterdamse boekhandel*, vol. IV, pp. 258-272.
 51. See the complaints in 1674, BKVB, Archief van het Amsterdams Boekverkopersgilde, inv. 56, behind n. 22 and behind n. 33.
 52. The seminal work on Dutch paper production is Voorn, *Geschiedenis der Nederlandse papierindustrie*.
 53. Davids, *Rise and Decline*, pp. 167-171.
 54. Coleman, *British Paper Industry*, p. 22.
 55. Davids, *Rise and Decline*, pp. 227-229.
 56. McMurtrie, *The Brothers Voskens*, p. 115.
 57. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 294.
 58. *Ibid.*, pp. 297-298.
 59. De la Fontaine Verwey, 'Het Hollandse wonder', pp. 60-64.
 60. On Kis see Haiman, *Nicholas Kis*. See also Middendorp, *Dutch Type*, p. 25, and Lane, Lommen, and De Zoete, *Dutch Typefounders' Specimens*, p. 51.
 61. Middendorp, *Dutch Type*, pp. 27-28.
 62. Cf. Janssen, 'Ploos van Amstel's description'.
 63. *Ibid.*, p. 96; Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 301.
 64. Kolfin, 'Amsterdam, stad van prenten', pp. 21-24.
 65. Verhoeven, 'De reisuigaven van Gillis Joosten Saeghman', pp. 334-335.
 66. Rikken, 'Utrechts Zang-Prieeltjen', p. 78.
 67. Orenstein, 'Marketing Prints'; Orenstein, *Hendrick Hondius*, p. 21.
 68. Kolfin, 'Amsterdam, stad van prenten', pp. 20-25. On Danckerts see Van Veen, 'Danckerts en Zonen'.
 69. Kolfin, 'Amsterdam, stad van prenten', pp. 23-31.
 70. Bots, 'Le rôle des périodiques Néerlandais'; Verkruijsse and Verhoeven, 'Verbeelding op bestelling'.

71. Kolfin, 'Amsterdam, stad van prenten', p. 24. On mezzotint engraving see Wuestman, 'The mezzotint in Holland'; Rikken, 'Vroege kleurendruk'.
72. On Picart see for example Hunt, Jacob, and Mijnhardt, eds., *The Book that Changed Europe*; Hunt, Jacob, and Mijnhardt, eds., *Bernard Picart*. See also Van Delft and Bots, *Bibliopolis*, Domestic orientation, 1725-1800 – Illustrations and decoration.
73. Cf. De la Fontaine Verwey, 'Het Hollandse wonder', pp. 60-64.
74. Kloek and Mijnhardt, *1800. Blueprints*, pp. 460-461. Cf. Kuitert, 'The professional Author'.
75. Kloek and Mijnhardt, *1800. Blueprints*, pp. 77-85.
76. Johannes, 'The Development of the Literary Field', p. 351; Van Dijk and Helmers, 'Nederlandse vrouwentijdschriften?', p. 84.
77. Kloek and Mijnhardt, *1800. Blueprints*, pp. 460-461. See Deinema 'The Culture Business' for a comparable argument regarding Dutch twentieth century publishers.
78. Hoftijzer, *Pieter van der Aa*, pp. 34-35.
79. See for instance Schmidt, 'Amsterdam Editions of Lully's Music', p. 127.
80. STCN, accessed 18-10-2012.
81. Johannes, 'The Development of the Literary Field'.
82. Van Dijk and Helmers, 'Nederlandse vrouwentijdschriften?'.
83. Schmidt, 'Amsterdam Editions of Lully's Music', p. 127.
84. Cf. the introductory chapter in Van Egmond, *Covens & Mortier*.
85. Van Eeghen, 'Het Amsterdamse Sint Lucasgilde'; Van Eeghen, *Gilden*, pp. 100-102; Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 17-21.
86. Keblusek, *Boeken in de hofstad*, pp. 104-117.
87. Noord Hollands Archief, Gildenarchieven, Keuren van het gilde, 1616-1788. Keuren en Ordonnantien (K&O) II, 74 (1616); K&O II, 77 (1616); K&O II, 78 (1619); K&O II, 216 (1709). For Utrecht: three ordinances dated 1599, 1653, and 1663. Evers, 'Het Utrechtse boekdrukkersgilde'; Hallema, 'Twee ordonnantieën'; Forrer, 'Drie ordonnantieën' Kruseman, *Aanteekeningen betreffende den boekhandel*, 468-469.
88. BKVB, Archief van het Amsterdams Boekverkopersgilde, inv. 52. Ordonnantie voor het boek- en kunstverkoopers, nevens boek- kaart-plaatdrukkers, en boekbinders gilde deser Stede Amsterdam, 1769. This document contains the 1663 ordinance and later alterations.
89. Van Eeghen, *De Amsterdamse boekhandel*, vol. IV, pp. 267-277; *ibid.*, pp. 237-274.
90. Statutes dated 17-10-1630, and 31-8-1658; Van Eeghen, 'Het Amsterdamse Sint Lucasgilde', p. 92. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 258. BKVB, Archief van het Amsterdams Boekverkopersgilde, inv. 56, in the front of the book; Kleerkooper and Van Stockum, *Boekhandel te Amsterdam*, vol. I, p. 1480; Van Dillen, *Bronnen tot de geschiedenis*, n. 1746, n. 1754; Van Eeghen, *De Amsterdamse boekhandel*, vol. III, p. 165.
91. BKVB, Archief van het Amsterdams Boekverkopersgilde, inv. 60, f. 15-16. Article 22.

92. BKVB, Archief van het Amsterdams Boekverkopersgilde, inv. 56, behind n. 26; Van Eeghen, *Gilden*, pp. 117-118.
93. Cruz, 'Secrets of Success'; Cruz, *Paradox of Prosperity*, pp. 25-58, 103-144.
94. The interpretation by Forrer is followed here: Forrer, 'Drie ordonnanties'. Cf. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 252.
95. Van Goinga, *Alom te bekomen*, p. 150.
96. *Ibid.*, p. 155.
97. Cf. Van Rossem, 'The Bookshop of the Counter-Reformation'; Verhoeven, 'Grondslagen van verandering'.
98. The following is largely based on Van Goinga, *Alom te bekomen*.
99. *Ibid.*, pp. 123-151.
100. *Ibid.*, pp. 123-125; Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 42-52.
101. Van Goinga, *Alom te bekomen*, p. 140; Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 271; BKVB, Archief van het Amsterdams Boekverkopersgilde, inv. 83, behind f. 153.
102. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 269-271; BKVB, Archief van het Amsterdams Boekverkopersgilde, inv. 57, appendix 10.
103. *Ibid.*; Oldewelt, ed., *Kohier*; BKVB, Archief van het Amsterdams Boekverkopersgilde, inv. 83, f. 153 and behind f. 138.
104. Ordinance 1769, article 4; Van Eeghen, *Gilden*, p. 119.
105. Van Goinga, *Alom te bekomen*, p. 149.
106. On auctions and catalogues: Van Selm, *Menighte treffelijke boecken*; Cruz, 'Secrets of Success'; Van Goinga, *Alom te bekomen*, pp. 185-206.
107. Keblusek, *Boeken in de hofstad*, pp. 114-116.
108. Cf. Cruz, 'Secrets of Success'.
109. *Ibid.*
110. Van Goinga, *Alom te bekomen*, pp. 188-189.
111. Van Eeghen, *De Amsterdamse boekhandel*, vol. IV, pp. 306-307.
112. *Ibid.*, p. 211; SA, Deutzenhofje, inv. 330; SA, Notarieel Archief 2766, 3-8-1663.
113. *Ibid.*, pp. 213-215.
114. *Ibid.*, pp. 181-182. On Pieter van der Aa: Hoftijzer, *Pieter van der Aa*.
115. From 1822 under the official name *Nederlandsche Bijbel Compagnie*. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 311-318; Enschedé, 'De voorgeschiedenis van de Nederlandsche Bijbelcompagnie'.
116. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 311-318.
117. *Ibid.*, pp. 307-310.
118. On the termination of the partnership see *ibid.*, pp. 319-322.
119. Fuks and Fuks-Mansfeld, *Hebrew Typography*, vol. II, p. 295.
120. Consider also examples in Kolfin, 'Amsterdam, stad van prenten', p. 35.
121. Van Goinga, *Alom te bekomen*, pp. 61-86.
122. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 54; Johannes, *Barometer van de smaak*, pp. 70-72; Van Goinga, *Alom te bekomen*, p. 299.
123. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 261.

124. Ibid., pp. 260-261; Kleerkooper and Van Stockum, *Boekhandel te Amsterdam*, vol. I, p. 44.
125. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 261.
126. Van Eeghen, *De Amsterdamse boekhandel*, vol. III, p. 120.
127. This is clearly visible in the archive of the Leiden firm *Luchtmans*. BKVB, Luchtmans archief: boekverkopers boeken, 1697-1803; BKVB, Luchtmans archief: administratie en boekhouding, 1702-1845.
128. Beijer, 'De crisisperiode in de Haagse boekhandel'.
129. On the consequences of the speculation, see also Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 94-95, 266-267.
130. Van Goinga, 'Meer dan halve bottels'.
131. Frijhoff and Spies, *Dutch Culture*, p. 268.
132. Sabbe, ed., *Briefwisseling*. In 1670 the Verdussens tried to exchange sheet by sheet with Elzevier, while Elzevier had requested the Verdussens to pay in cash (Letter LXXVII).
133. Van Delft and Bots, *Bibliopolis, 1725-1830: The book as physical object*.
134. BKVB, Archief van het Amsterdams Boekverkopersgilde, inv. 52.
135. See for example Keblusek, *Boeken in de hofstad*, p. 89.
136. Ibid., p. 109. Forrer, 'Drie ordonnanties', p. 99.
137. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, p. 201.
138. Extensive discussion in *ibid.*, pp. 179-191. Van der Aa's role is well summarized in Hoftijzer, *Pieter van der Aa*, pp. 72-74.
139. Hoftijzer, *Pieter van der Aa*, p. 72.
140. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 182-183.
141. Ibid., p. 186.
142. This section is based on Van Eeghen, *Amsterdamse boekhandel*, vol. V-1, pp. 186-187, 202-204.
143. Lesure, 'Estienne Roger et Pierre Mortier', p. 38. '*L'impression surpassera en beauté tout ce qu'on a jamais vu en musique, ayant fait de grandes dépenses pour établir une imprimerie de toutes sortes de livres en musique*'.
144. Rasch, 'Muziekoorlog'; Rasch, 'Estienne Roger en Michel-Charles le Cène'; Lesure, 'Estienne Roger et Pierre Mortier'.
145. Van Eeghen, *De Amsterdamse boekhandel*, vol. I, p. 61.
146. Ibid., p. 39.
147. In my dissertation (2012) the wrong figure was printed in this place (then numbered 6.3).
148. Leuven, *De boekhandel te Amsterdam*, pp. 45, 53.
149. Prosopography, see appendix I.
150. Estimates based on prosopographical research, see appendix I.
151. Stadsarchief Amsterdam (SA), 366: *Archief van de Gilden en het brouwerscollege*, inv. 63.
152. Van Eeghen, *De Amsterdamse boekhandel*, vol. V-1, pp. 75-104.
153. Ibid., p. 117, note 281.
154. Van Delft and Bots, *Bibliopolis, 1830-1910 – Growth of the domestic market*.

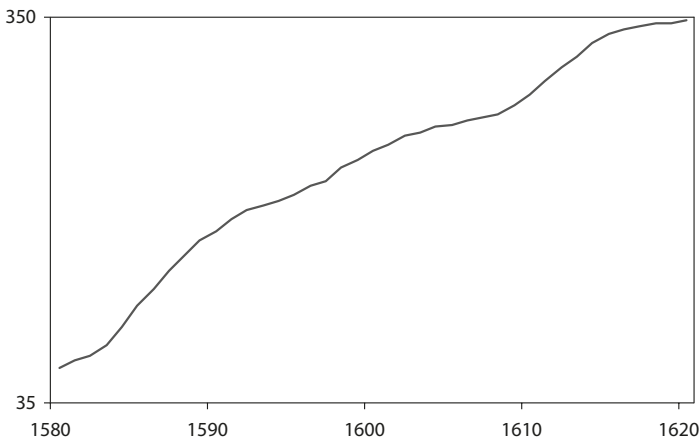
Part II
Painting

6. 1580-1610: A Period of Transition

The initial decades following the Dutch Revolt formed a decisive stage in the history of Dutch painting.¹ During the sixteenth century, Antwerp was the artistic hub of northwestern Europe, with the northern provinces little more than an artistic backwater. A handful of painters, most notably Lucas van Leyden, Maerten van Heemskerck, Jan van Scorel, and Anthonis Mor, produced noteworthy paintings, but an exogenous shock was required to trigger something more than routine existence and eventually significant growth. The Dutch Revolt served as just such a catalyst, transforming both the demand for paintings and their supply.

After about 1580, the number of producers active in Dutch towns increased dramatically, a pattern much like the one observed in the publishing trade (Figure 6.1). As with the publishing industry, the Dutch Revolt and the fall of Antwerp unlocked opportunities for other centres of artistic production, and the arrival of immigrants boosted growth rates. Owing to its relative proximity and the lack of significant language barriers, the Dutch Republic was an attractive destination for painters from the Southern Netherlands. That it offered religious refuge to non-Catholics and a large urban population of potential customers also provided ample incentive.² In this chapter the development of Dutch painting throughout the period 1580-1610 will be outlined.

Fig. 6.1 Number of painters active in the Dutch Republic 1580-1620



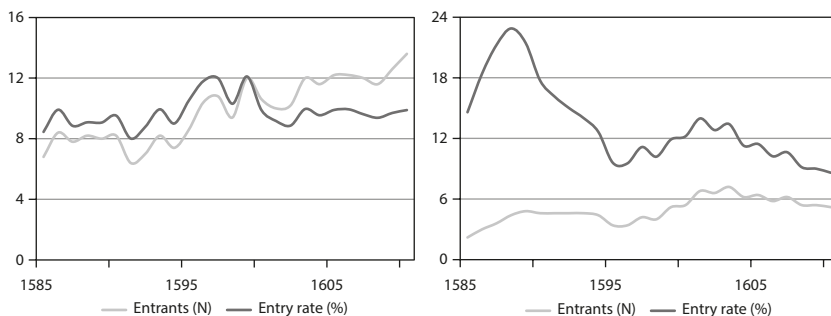
Source: Ecartico, accessed 20 November 2010 (5-year moving average; semi-log scale)

Expansion of the art market

Given the overall demographic and economic growth in the decades following the Revolt, the rapid growth in the number of painters active in the Dutch Republic is not altogether surprising. Growth rates between 1580 and 1610 were substantial, but the absolute number of painters starting each year should not be overestimated. Even in Amsterdam, soon to be the largest artistic centre in the Northern Netherlands, the number of newcomers only increased from approximately four per year in the early 1580s to a little over six per year in 1610 (Figure 6.2).³ Although upsurge was not quite as epic as sometimes implied, it did have a large cumulative impact because the artistic community grew from a very small base. Not surprisingly given the small number of painters active in the northern towns before the Revolt, overall entry rates were high. Initially Haarlem and Delft had the highest entry rates, around 20 per cent, but they soon declined to 10 per cent, and in Delft even to 5 per cent, around 1600. Entry rates in Utrecht were as low as 3 per cent in the 1580s, but increased to 10 per cent.

The influx of producers was matched by an increasingly private demand for paintings. After the Reformation, the number of paintings displayed in public spaces fell, especially following the iconoclastic turmoil of 1566 that led to the destruction of numerous works of religious art in churches, monasteries, and chapels across the Low Countries. Consumption of such public imagery was to some extent replaced by a demand for art in the home. In contrast to the southern provinces, in the Northern Netherlands this

Fig. 6.2 Entry rates and number of newcomers in the seven largest towns (left) and Amsterdam (right), 1585-1610



Source: Ecartico, accessed 7 February 2011. Seven largest towns include: Amsterdam, Haarlem, Utrecht, The Hague, Delft, Leiden, Rotterdam.

demand had not yet taken the form of standardized production for an open market. Painters still relied predominantly on commissions for portraits and religious or historical subjects.⁴ After the Revolt, under the influence of rapid economic growth and the arrival of immigrant art buyers, both the volume of paintings produced and the composition of demand altered.⁵

As noted in chapters 2 and 3, nothing less than an increase in demand for cultural products such as books and paintings is to be expected in a period of economic growth, rapid population increase, and rising purchasing power. This is confirmed by empirical research on the ownership of art. Economist Michael Montias, for instance, estimated an overall wealth elasticity of demand of 1.46 based on a random sample of Amsterdam inventories between 1620 and 1660, and one slightly lower (1.23) but still above 1.0, from a study based on Delft probate inventories of deceased citizens.⁶ Focusing just on the Delft result, the 1.23 number means that for a 1.0 per cent rise in household wealth, the value of art among the possessions of the average household rose by 1.23 per cent. These estimates of wealth elasticity, however, do not reveal how changes in Dutch income (not wealth) levels affected spending on art.

According to economic historian Jan de Vries, the rise of per capita income is both 'the most common and most dubious explanation' for the flourishing of Dutch cultural production and the large size of the art market in the first half of the seventeenth century. In his view, rising incomes did play a role but only accounted for a small part of the phenomenon.⁷ Moreover, as Eric Jan Sluijter has also pointed out, increases in purchasing power may have stimulated demand for luxury products, but that did not necessarily mean these had to be paintings.⁸ In fact, Thera Wijssenbeek's study on possession of art in the inventories of better-off families in The Hague has shown that, within the aristocracy, tapestries were the most popular acquisition, and that if the upper level households did own paintings, these were mainly portraits.⁹

De Vries's argument is, however, more about the expansion of industrial growth than its foundations. He argued that the explosive growth in the number of painters in the early decades of the seventeenth century could only have been sustained if consumers were attracted to new products and if new products caused them to change their tastes, which is exactly what happened later in the seventeenth century. If wealth estimates are any indication of income elasticity, as they were in the case of publishing, it is safe to say that potential demand increased significantly in the decades after 1580, when a rise in purchasing power can be observed. Just how important this was for later market expansion will be discussed in the

next two chapters. For now, both the increases in purchasing power and the arrival of immigrants from the Southern Netherlands – who were used to adorning their homes with relatively inexpensive pictures – stimulated the demand for paintings. It was, however, not necessarily for paintings produced in the Dutch Republic, which were then still elaborate, labour-intensive, and consequently relatively expensive.¹⁰

The fact that a large number of cheap paintings imported from the Southern Netherlands entered the market in the first decade of the seventeenth century suggests that painters in the Dutch Republic – initially at least – failed to fill a certain gap in the market.¹¹ At public auctions a wide range of pictures was offered for sale: substantial numbers of very cheap pictures priced from ten *stuivers*, copied pictures that went for less than *f*5, and inexpensive paintings, possibly originals, at *f*10–20. Both Dutch-born and immigrants from the Southern Netherlands attended these public sales of imported paintings, and their popularity is evident by complaints from local painters fearing an erosion of their market share. They labelled the imports as being of inferior quality, but presumably they were simply less expensive. This suggests that the rise in purchasing power was in itself not sufficient to trigger the development of a mass market for locally produced paintings: the prices of paintings in the more ordinary range had to drop first or their supply had to increase.¹² Dutch artists did not immediately exploit the full potential of the new market conditions. In the following phase, from the 1610s onwards, product and process innovations that significantly lowered production time and thereby the prices of paintings would unlock this potential. In addition, it seems that more and more painters were willing to supply works in the lower price ranges.¹³

Spatial clustering and the impact of immigration

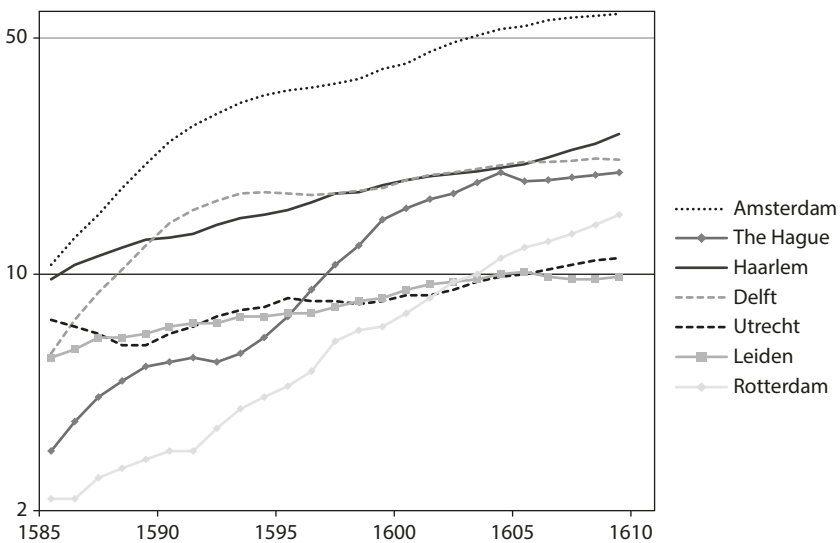
Like publishers, painters worked close to their customer base. Population size, a basic indicator of potential local demand, is an important factor in explaining whether or not painters were active in a particular town in 1610 (Table 6.1). In general, larger towns accommodated more painters than smaller towns. Nonetheless, this cannot account for the precise distribution of the number of painters. Between 1580 and 1610, the gap widened between small artistic centres and towns that had started out with a comparatively large number of painters. The number of towns in which one or more painters were located increased from nineteen in the 1580s to thirty-three in the 1600s, whereas the number of towns in which more than ten painters were active only increased from eight to ten, with the inclusion of Leeuwarden and Rotterdam.

Table 6.1 Number of painters per 10,000 inhabitants, 1570-1610

	A	H	U	TH	D	L	R	M	Do	Lee	Average
1570	2.9	3.3	3.9	2.7	2.5	3.3	0	1.7	1.5	0	2.2
1580	2.3	2.9	3.3	2.2	1.8	3.3	1.4	2.5	2.8	1.2	2.4
1590	5.6	4.4	2.5	6.0	10.0	3.9	2.0	3.6	3.2	1.1	4.2
1600	7.8	5.8	3.1	17.6	11.4	4.0	5.0	3.0	6.3	5.8	7.0
1610	7.1	7.8	4.1	15.8	11.8	3.1	11.2	2.3	4.4	9.6	7.9

Source: Ecartico, accessed 20 November 2010; Lourens and Lucassen 1997. A=Amsterdam, H=Haarlem, U=Utrecht, TH=The Hague, D=Delft, L=Leiden, R=Rotterdam, M=Middelburg, Do=Dordrecht, Lee=Leeuwarden.

All large artistic centres expanded between 1580 and 1610, but not unvaryingly so (Figure 6.3). The ranking within the top ten changed over time, largely independent of population size. For example, the number of painters in Haarlem increased gradually, meeting the levels of The Hague and Delft by around 1610, but by 1622, Haarlem's population had increased to almost three times the size of The Hague's and almost twice the size of Delft's.¹⁴ Apart from Amsterdam, the number of painters active per town varied between ten and twenty. Amsterdam's population more than doubled between 1580 and 1610, from 40,000 in 1580 to over 80,000 in 1610,

Fig. 6.3 Number of painters active per town, 1580-1610

Source: Ecartico, accessed 20 November 2010 (5-year moving average; semi-log scale)

and it soon became the largest artistic centre. As can be seen in Figure 6.4, the artistic communities centred in the western and most urbanized part of the country, with the notable exceptions of Middelburg early in the period and Leeuwarden by the beginning of the seventeenth century. To understand these location patterns, we turn to immigration and local specializations.

The importance of immigrants

The significance of immigrants in the development of Dutch Golden Age painting has often been emphasized.¹⁵ Jan Briels has estimated that, between 1580 and 1595, over 200 artists from the Southern Netherlands set up shop in the Republic.¹⁶ More recently, however, their impact has been questioned. Eric Jan Sluijter has argued that upon closer inspection, the number of painters who originated from the Southern Netherlands and were active in Dutch cities around the turn of the century was somewhat disappointing.¹⁷ In his opinion, the role of immigrants from Flanders and Brabant or, more specifically, that of their children, only gained significance around 1610. Sluijter's argument is persuasive, although he does not supply much quantitative evidence to support it.¹⁸ Table 6.2 presents the share of locally born painters active in the top ten artistic towns. There were significant differences between towns, though Amsterdam, Middelburg, Delft, Rotterdam, and Dordrecht were all heavily dependent on immigration.

Table 6.2 Origin of entrants in the top ten artistic centres, 1580-1610

1580-1609	A	H	U	TH	D	L	R	Lee	M	Do	Total
Total	136	60	19	42	46	26	39	12	19	21	420
Local	18	16	5	9	8	8	2	3	1	1	71
Immigrant	99	20	8	13	29	13	19	8	10	16	235
Unknown	19	24	6	20	9	5	18	1	8	4	114
% Local	13.2	26.7	26.3	21.4	17.4	30.8	5.1	25.0	5.3	4.8	16.9
% Local*	15.4	44.4	38.5	40.9	21.6	38.1	9.5	27.3	9.1	5.9	23.3

Ecartico, accessed 14 February 2011. A=Amsterdam, H=Haarlem, U=Utrecht, TH=The Hague, D=Delft, L=Leiden, R=Rotterdam, Lee=Leeuwarden, M=Middelburg, Do=Dordrecht.

* excluding unknown

To measure the relative importance of native Dutch versus foreign-born painters, the number of active painters is used (Table 6.3). In the top panel

the absolute figures are presented, in the middle panel the shares, and in the third only those artists whose place of origin is known. A distinction can be made between two groups of towns: one where locals played a significant role (c.40 per cent locally born), and one where growth was more dependent on the presence of foreigners, or more specifically immigrants from the Southern Netherlands (with 20 percent or less locally born). Haarlem, Utrecht, The Hague, and Leiden belong in the former category, the others in the second. Sluijter's suggestion that the relative quantitative importance of immigrants from the Southern Netherlands was not exceptionally high holds true for some towns but not for others.¹⁹

To determine the relative appeal of the various Dutch towns, all the locational choices of the non-local artists are taken into account. Amsterdam attracted almost 70 per cent of all 'foreigners other' (N=13) and 50 per cent of all Southern Netherlands painters (N=159).²⁰ In Amsterdam, Middelburg, and to a lesser extent Rotterdam and Delft, a foreign presence was most significant. The presence of related industries such as tapestry making shaped these location patterns. Painters born in Mechelen (Malines), home of the production of watercolour paintings on canvas as well as tapestry weaving, for instance, were well represented in Delft – making up a striking 41 per cent of all active painters – and in Amsterdam, Rotterdam, and Middelburg.²¹ Painters hailing from Antwerp played a role in most towns, though less significantly in Delft, Haarlem, and The Hague.

In addition to the volume of demand and the presence of related industries, the level of demand sophistication was also important in determining the size of early modern local art markets. The presence of an above-average demand for portraits, especially during the first two decades, proved a decisive factor in determining the work location of some immigrant painters. In the first decade, Delft was the fastest growing artistic centre, overtaking every other town except Amsterdam. In the 1590s, The Hague took the lead. It was no coincidence that both towns, separated by just ten kilometres, were the seats of Dutch political institutions. As The Hague had proved impossible to defend against the Spanish troops, the leader of the Revolt, William I, Prince of Orange, lived in the St. Agatha convent in Delft from 1572 onwards, later dubbed the princely court (*Prinsenhof*). From 1588, The Hague became the political centre of the Dutch Republic. Although the political role of Delft was short lived, the town remained a popular place to stay for stadtholders, ambassadors, and other high status guests of the Republic throughout much of the seventeenth century. The prominence of Haarlem and Utrecht,

Fig. 6.4 Distribution of painters in 1580 (left) and 1610 (right)

Source: Ecartico, accessed 20 November 2010

by contrast, can be explained by the fact that they were both towns with a strong artistic legacy, as will be discussed more at length in the following chapters.

All these figures, however, present a somewhat distorted view of the size of the artistic community as a whole as well as of the relative importance of some towns. The artists in the ECARTICO dataset do not form a homogeneous group. Rather, the data encompasses decorative painters, watercolour painters of whom no work has survived, as well as important artists with known surviving works. This distinction is also important for assessing the impact of the Dutch Revolt and the migration patterns that ensued. The importance of immigrant painters in the early decades of the Dutch Republic is considered not only a matter of quantity but also of quality. At the start of this time frame, relatively few top-level painters were active in the northern towns. One scholar has even spoken of artistic deadlock around 1580-1585, as the prominent painters who had dominated the third quarter of the sixteenth century either died or became less active.²² Was the artistic field around 1580 indeed a wasteland, providing easy access to new people and styles? To allow for a more accurate assessment of the expansion of the art market and its spatial composition, measures of the prominence of Dutch artists and communities are introduced.

Measuring artistic prominence

In modern economic research, scholars would employ 'input indicators' to measure investments in innovations and related processes, as well as 'output indicators' that measure the results of innovation, such as patents, in order to assess innovation intensity.²³ Needless to say, such indicators and direct methods for early modern cultural production are lacking. The ECARTICO dataset is highly useful for the assessment of patterns over time and space and for retrieving biographical information, but it does not allow for distinguishing on the basis of such more subjective properties as quality and novelty. It is not possible to estimate the number of products in order to identify prominent producers, as was done with title production in the publishing section. This is because survival rates of paintings from this period are much lower. There are many painters whose work is completely unknown, and even the known oeuvres of recognized painters are matters of debate.²⁴ Moreover, output levels do not necessarily reflect artistic prominence. Luckily art historians have used their expertise to identify the main innovations and quality improvements during the period under study. Dutch and international art-historical appreciation, as well as early modern appreciation of Dutch painters, will therefore serve as a proxy for prominence.²⁵

Historiometry, which measures (later) artistic fame, rather than contemporary market impact or commercial success, offers the most concrete methods to measure prominence in visual arts.²⁶ This technique assesses the reputation of both individuals and groups of people by counting references in expert works and often also the space allotted to each individual. The primary assumption is that when experts try to write a comprehensive and balanced account of the people in their field, they allocate space according to importance.²⁷ In theory, all painters and all paintings show elements of originality and creativity, except perhaps for straightforward copyists. If the premise that successful producers managed to secure a market for their works by distinguishing their creations from other similar products is accepted, art-historical appreciation can be used as a measure of artistic innovation and successful differentiation. In this respect, art historian Lyckle de Vries's interpretation is unambiguous: 'Art is that part of the sum total of visual production which differentiates itself from the rest by its high quality'.²⁸

As soon as valuations by art historians through art-historical reference works are measured, one enters the discussion on canon formation.²⁹ Essentially, every art-historical survey implicitly forms a canon based on art-historical and even personal *a priori* preferences or theories. Or as de Vries has put it: 'The concepts of canon, selection, quality, and art cannot be

separated'.³⁰ Canons are not static, and as a result variations in places and dates of publication of the selected reference works will influence our findings. The present-day view of Golden Age painting differs, for instance, from that of eighteenth-century biographer Arnold Houbraken but also from Wilhelm Martin's of 1935-1936.³¹ For example, Houbraken did not pay much attention to the so-called tonal painters, and Martin tended to omit Dutch Mannerist or Carravagist painters.³² Other examples of fluctuations in the appreciation of art over time can be found in recent attempts to include new groups of painters such as the late seventeenth-century and early eighteenth-century classicists.³³

Here we attempt to overcome this problem by using multiple datasets based on various selection criteria. To establish which artists survived the test of time and entered the canon of art history, different art-historical sources, such as dictionaries, surveys, and lexicons were called upon. A further distinction was made between two types of source to establish a ranking of painters based on their prominence: the approval of art historians, and the approval of contemporaries, painters, collectors, and art lovers (in Dutch: *liefhebbers*). This approach resulted in four datasets, summarized in Table 6.4 and discussed at greater length in Appendix I: international prominence (A sample), national prominence (B sample), contemporary prominence (C sample) and all artists (D sample).³⁴ Combined, these samples provide us with a catalogue of seventeenth- and eighteenth-century painters, indicative of what and who were deemed worthy of mention.³⁵ They all reflect different sources, different levels of appreciation, and by extension also different market segments.³⁶ In the next sections and chapters this catalogue will be used to measure varying levels of artistic prominence in towns or groups of painters.

Table 6.4 Samples of prominent artists based in the Dutch Republic, 1580-1800

Ranking	N	Criteria	Sources
A++	18	International prominence – very strict	Murray, Human Accomplishment
A+	56	Ibid – strict	Kelly and O'Hagan, 'Identifying the most important artists'
A	138	Ibid - general	Oxford Dictionary of Art
B	317	National prominence	The Golden Age; De Kroon op het werk; Age of Elegance
C	995	Contemporary appreciation	Schilder-boeck; Groote Schouburgh; Nieuwe Schouburgh; Geschiedenis der vaderlandse schilderkunst
D	c. 4,000	All known painters	Ecartico

Prominence in Dutch painting

As the period 1580-1610 preceded the famous Golden Age, it will be no surprise that the number of active prominent painters of this period is relatively limited compared to artists in the period 1610-1660. No painters active in this period made it into the A++ sample. In the A+ sample, nine painters active in the Republic and born before 1580 were identified: Abraham Bloemaert, Ambrosius I Bosschaert, Gillis II Coninxloo, Jacob II de Gheyn, Hendrick Goltzius, Hendrick de Keyser, Karel van Mander, Roelant Saverij, and Hans Vredeman de Vries. When this selection is expanded to include artists of the A sample, six more qualify: David Vinckboons, Cornelis Cornelisz van Haarlem, Cornelis Ketel, Michiel van Mierevelt, Jacob Isaacs van Swanenburgh, and Joachim Wtewael.³⁷ The B sample also discusses Hendrick Vroom and Hans Bol.³⁸

Despite the small size of the sample, seventeen in total, it is worth analysing where they came from and where in the Dutch Republic they were active. International architect and painter Hans Vredeman de Vries, who was constantly moving around, will be omitted. The main work location is determined by counting the number of years spent in one location. Of the sixteen painters left, seven were born in the Southern Netherlands (Bol, Vinckboons, De Gheyn, Van Coninxloo, Van Mander, Bosschaert, and Saverij) and eight in the northern provinces (Vroom, Wtewael, Ketel, Van Swanenburgh, Van Mierevelt, Cornelisz van Haarlem, De Keyser, and Bloemaert). Only Goltzius was from the village of Bracht, a German town near the Dutch border.

Five of the sixteen prominent painters in our sample were active in Amsterdam, three in Utrecht, three in Haarlem, and four in the towns of Delft, Middelburg, Leiden, and The Hague. These results more or less correspond to the spatial distribution of painting mapped in the previous section.³⁹ The Hague, Delft, and Amsterdam are underrepresented compared to the size of their artistic communities. This may be due to the presence of painters who were not strictly artists but decorative painters, and to the relatively large number of watercolour painters from Malines. Watercolour paintings were short-lived compared to oil paintings, hence relatively little is known about the makers and their products. The relatively low number of prominent painters in Delft and The Hague in the sample can also be explained by the dominance of portrait painters, who catered to a demand from government officials and whose work was hardly original.

Contemporary sources

To check our results for the Golden Age bias that developed during the nineteenth century, this sample was cross-referenced with contemporary sources such as Karel van Mander's *Schilder-boeck* (1604), town descriptions, probate inventories, and art collections. Of the 98 painters in the C sample who started their careers between 1590 and 1629, most were active in towns that also feature prominently in the overall picture of the art market that was presented in Figure 6.4. The towns of Utrecht (17), Amsterdam (13), The Hague (13), and Haarlem (10) were most prominent, with Delft (8) and Leeuwarden (6) not far behind (see also Figure 8.3).

A closer look at other contemporary sources shows that only a select group of painters was deemed worth mentioning. The first sample, based on Van Mander's *Schilder-boeck*, is limited to painters to whom he assigned their own chapter and who were active in the towns of Amsterdam, Haarlem, and Utrecht. Of the 116 painters active in Amsterdam between 1580 and 1604 according to ECARTICO, ten had their own dedicated chapter: the aforementioned Vredeman de Vries, Vinckboons, Ketel, Van Coninxloo, Bol, Abraham Bloemaert, Dirck Barendsz, Gillis Coignet, and Frans II Badens.⁴⁰ Pieter Aertsz also featured prominently, but he is excluded from the sample because he did not live past 1580.

Seven out of forty-three Haarlem painters had a chapter devoted to them: Goltzius, Cornelis Cornelisz, Vroom, as well as Cornelis Cornelisz van Wieringen, Frans Pietersz de Grebber, De Gheyn (who was there studying with Goltzius from 1585-1590), and Pieter Cornelisz van Rijck. Not surprisingly, much space was allocated to Van Mander's friends and colleagues Hendrick Goltzius and Cornelis Cornelisz. Of twenty-three painters active in Utrecht between 1580 and 1604, only Anthonie Blocklandt, Bloemaert, and Uytewael have their own chapters. The Van Mander list of prominent painters corresponds closely with the historiometrical samples. The only new additions are the Antwerp-born Coignet and Badens, and the four Dutch painters Van Blocklandt (who only lived until 1583), Van Rijck, Van Wieringen, and De Grebber. These additions do not significantly change our view on the relative importance of immigrants developed above.

Van Mander pays most attention to his friend Cornelis Ketel whom he had known for some twenty years. Excluding poems, his biography covers roughly ten pages, one of the most detailed and longest in the entire book.⁴¹ Ketel represented the kind of artist Van Mander appreciated most: he wrote poems and practised history painting, including complex allegories.⁴² Van Mander also discussed a different type of painter, the

Table 6.3 Place of origin of painters active in eight top artistic centres, 1580-1610

Absolute figures									
Town	H	U	D	A	TH	L	R	M	Total
Total active	64	26	45	146	47	30	39	22	419
Unknown	24	12	8	21	24	6	18	9	122
Local	18	6	7	22	9	9	2	2	75
Republic other	8	3	7	14	7	4	6	1	50
Foreign total	14	5	23	89	7	11	13	10	172
<i>Antwerp</i>	5	4	2	43	4	7	9	5	79
<i>Malines</i>	0	0	16	21	1	0	2	1	41
<i>Southern</i>	7	0	5	16	2	3	2	4	39
<i>Netherlands other</i>									
<i>Foreign other</i>	2	1	0	9	0	1	0	0	13
Shares based on total number of active painters (%)									
Town	H	U	D	A	TH	L	R	M	Total
Total active	64	26	45	146	47	30	39	22	419
Unknown	37.5	46.2	17.8	14.4	51.1	20.0	46.2	40.9	34.2
Local	28.1	23.1	15.6	15.1	19.1	30.0	5.1	9.1	18.1
Republic other	12.5	11.5	15.6	9.6	14.9	13.3	15.4	4.5	12.2
Foreign total	21.9	19.2	51.1	61.0	14.9	36.7	33.3	45.5	35.4
<i>Antwerp</i>	7.8	15.4	4.4	29.5	8.5	23.3	23.1	22.7	16.8
<i>Malines</i>	0.0	0.0	35.6	14.4	2.1	0.0	5.1	4.5	7.7
<i>Southern</i>	10.9	0.0	11.1	11.0	4.3	10.0	5.1	18.2	8.8
<i>Netherlands other</i>									
<i>Foreign other</i>	3.1	3.8	0.0	6.2	0.0	3.3	0.0	0.0	2.1
Shares based on total known origin (%)									
Town	H	U	D	A	TH	L	R	M	Total
Excl. unknown	40	14	37	125	23	24	21	13	297
Local	45.0	42.9	18.9	17.6	39.1	37.5	9.5	15.4	28.2
Republic other	20	21.4	18.9	11.2	30.4	16.7	28.6	7.7	19.4
Foreign total	35.0	35.7	62.2	71.2	30.4	45.8	61.9	76.9	52.4
<i>Antwerp</i>	12.5	28.6	5.4	34.4	17.4	29.2	42.9	38.5	26.1
<i>Malines</i>	0.0	0.0	43.2	16.8	4.3	0.0	9.5	7.7	10.2
<i>Southern</i>	17.5	0.0	13.5	12.8	8.7	12.5	9.5	30.8	13.2
<i>Netherlands other</i>									
<i>Foreign other</i>	5.0	7.1	0.0	7.2	0.0	4.2	0.0	0.0	2.9

Ecartico, accessed 14 February 2011. A=Amsterdam, H=Haarlem, U=Utrecht, TH=The Hague, D=Delft, L=Leiden, R=Rotterdam, M=Middelburg. Source: Ecartico.

Southern Netherlandish specialist who worked on the open market, and he emphasized how highly they were valued by art lovers.⁴³ He did not use the laudatory phrase *uytnemend* for all painters born in the Southern Netherlands, only for Dirck Barendsz, Pieter Aertsz, Cornelis Ketel, Hendrick Goltzius, Cornelis Cornelisz van Haarlem, and Abraham Bloemaert. They were all based in Amsterdam and Haarlem, except Bloemaert whose main work location was Utrecht. In fact, there is a strong spatial preference in Van Mander's selection. Amsterdam and Haarlem were more important than Utrecht, where only Bloemaert and Wytewael warranted their own chapters.

In addition to the book by Van Mander, two other source types may offer insights into the appreciation of painters in this period. First, town descriptions, which were published in the Dutch Republic from the early seventeenth century onwards, contained surveys of history, topography, politics, trade, crafts, and almost always a section on illustrious men of the town such as officeholders, artists, learned men, and occasionally a learned woman.⁴⁴ The first published description of Amsterdam was by Johannes Isacius Pontanus. It appeared in Latin in 1611 and three years later also in Dutch.⁴⁵ In the section on artists, he started with three Amsterdam-born painters who had all been dead for almost two decades: Pieter Aertsz, Dirck Jacobsz, and Dirck Barendsz, and continued with Dirck Volckertsz Coornhert and Joost Jansz Bilhamer.⁴⁶ The latter was a cartographer, master builder, military engineer, land surveyor, sculptor, and platecutter. Coornhert, also born in Amsterdam, hardly lived there and is best known as a theologian, scholar, and publicist who was also involved in engraving and music. Although Amsterdam housed many other painters by the time Pontanus drew up his town description, both locally born and immigrant, they were not mentioned.

A third source on contemporary appreciation is diary entries on painters and paintings such as the *Commentaris rerum quotidianarum* of Utrecht lawyer and scholar Arnoldus Buchelius, and more specifically his *Res Pictorae*.⁴⁷ In April 1591, Buchelius stayed in Amsterdam, where, in the company of his host, goldsmith Antonius Boonhof, he called on painter/engraver Jacob II de Gheyn.⁴⁸ He also admired the art collection *Thesaurum pictorae omnigenis* of public secretary and art lover Jacques Razet, which included paintings by Anthonie van Blocklandt, Cornelis Cornelisz van Haarlem, Dirck Barendsz, Cornelis Ketel, Abraham Bloemaert, Hans Bol, and Jacques Saverij.

In theory, attributions in probate inventories also provide clues to the prominence of certain artists in their own time. This of course does not mean that unattributed paintings were, by definition, made by non-prominent

painters, or that attributed paintings were always by renowned painters. Presumably the occurrence of artists' names in inventories reflects at least to some extent the acquaintance of former owners or those drawing up the probate inventories with the producer of the painting. Unfortunately, inventories from the period 1570-1610 seldom include attributions.⁴⁹ Even the more interesting inventories, such as the post-mortem auctions of the painters Gillis van Coninxloo and Hans van de Velde in 1607 and 1609 respectively, provide few additional attributions.

A brief look at inventories of a later date does not significantly alter the composition of the sample of prominent artists. Michael Montias has categorized the names of artists he found in Amsterdam inventories from the period 1607-1680.⁵⁰ His sample is based on over half of the inventories drawn up by notaries, 70 per cent of the inventories recorded in the books of the Chamber of Insolvent Estates between 1643 and 1680, and all the auction sales that named artists.⁵¹ In Montias's list of painters, of whom more than twenty-two are known by attributions in lots from the period 1607-1680, Pieter Aertsz ranks highest, followed by Karel van Mander and Roelant Saverij, corresponding to our list. Other 'early' names are: Hendrick Goltzius, Cornelisz van Haarlem, Vroom, Jan Nagel, Bloemaert, Van Coninxloo, and Vinckboons. In the total sample – including painters who have between five and twenty-two paintings or drawings (lots) attributed to them in private inventories – we encounter a few other members of our group: Badens, engraver Jacob Matham, Bosschaert, Wtewael, Bol, Ketel, and Hans Vredeman de Vries.⁵² This comparison of art-historical reference works with a variety of contemporary sources presents no large discrepancies. Obviously this is also due to a self-reinforcing mechanism. We simply know more about attributed paintings and painters whose biographies survived.

Styles, genres, and ties with related industries

Apart from increasing the scope of both supply and demand for art in a relatively short time, the Dutch Revolt and the subsequent large scale immigration transformed qualitative elements of the Dutch art market. The general view is that immigrant painters were not only decisive in terms of skills and quantity, but also for the extraordinary development of new genres in painting during the Dutch Golden Age. With the arrival of Flemish painters and (potential) customers, other subjects and new styles gained ground in the north, where portraiture and history painting had previously dominated.⁵³ Many of the immigrant painters were, after all, specialists in

genres in which the Dutch Republic did not have an established tradition. For example, Gillis van Coninxloo introduced landscapes, Roelant and Jacques Saverij Gillis le, Gillis Jacob Saverijthe discussed how in s, value and commerce through attitudes and valuation practices. as well as Ambrosius Bosschaert brought in still lifes, and David Vinckboons worked on merry companies and festivals in village landscapes.⁵⁴ Until the 1590s, painting in Amsterdam had been almost exclusively focused on portraiture, with Pieter Pietersz leading the trend.⁵⁵ In the 1570s, Pietersz had lived in Haarlem, a locational choice that reflects the leading position of Haarlem in Northern Netherlandish painting during the sixteenth century. After the Alteration, Pietersz shifted his attention from history to portrait painting and moved to Amsterdam where he joined a handful of other painters, among whom Van Mander's friend Cornelis Ketel. Whilst painters like Pietersz and Ketel focused on portraits in more traditional modes, more exciting things were happening in Haarlem and to a lesser extent in Utrecht.⁵⁶

Soon after Pietersz had left for Amsterdam, Karel van Mander arrived in Haarlem. There he met Cornelis Cornelisz van Haarlem, one of Pietersz' pupils, and Hendrick Goltzius, who had set up his printshop in 1577. Inspired by the Flemish painter Barthelomeus Spranger and by Italian artists – whose drawings were brought to the area by Van Mander – these three painters and draughtsmen were responsible for the development of a specific painting style, often referred to as Dutch or northern Mannerism. The term Mannerism is used to describe a movement in European visual arts that developed between the high Renaissance and the Baroque eras. The movement is generally considered to have started in Italy in the early sixteenth century, with its northern counterpart in Antwerp and later in Haarlem and Utrecht. Mannerism favoured complex composition over naturalistic representation, with dramatic compositions featuring unnatural or unrealistic anatomical postures. In Utrecht, Abraham Bloemaert and Joachim Wtewael also successfully pursued the Dutch Mannerist style. One of Cornelis Cornelisz van Haarlem's' pupils, the Amsterdam-born Gerrit Pietersz, brother of Dutch composer and organist Jan Pietersz Sweelinck, brought the Mannerist style and skills to Amsterdam after approximately 1590.

Meanwhile, genres new to the northern market, such as landscape and figure painting, were being introduced by Flemish immigrant-painters and print publishers. By 'figure painting', we refer to the (highly varied) category of paintings that depict everyday life, also known as 'genre painting'.⁵⁷ Hans Bol, Gillis van Coninxloo, David Vinckboons, and his pupil the native Claes Jansz Visscher, were paving the way for the development of the relatively new genres of landscape and figure painting in the tradition of the Flemish

painter Pieter Brueghel the Elder. The product and process innovations of the 1610s, which take centre stage in the next chapter, were built on these Southern Netherlandish genres, motifs, and styles.⁵⁸ This was true not only for landscapes, but also for other genres and motifs such as the painting of merry companies.⁵⁹

Over the course of the seventeenth century, paintings depicting groups of people at leisure, so-called 'merry companies', became increasingly popular. According to Elmer Kolfin, the formative years for such images were between 1580 and 1610.⁶⁰ The rise of the merry companies was strongly influenced by Hans Bol's designs from the period 1570-1590, and further developed by David Vinckboons, Gillis van Coninxloo, and Gillis Claesz d'Hondecoeter.⁶¹ Until around 1610, the popularity of this motif was focused in the Southern Netherlands, but it soon became increasingly popular in the north. Although by then still more motifs than subgenres, merry companies and landscapes thrived in paintings, especially in prints, and the theme eventually developed into a genre in which a significant number of well-known artists specialized.

In the period 1590-1610 there was a gradual divergence between merry companies produced in the north and those produced in the south.⁶² The genre scenes by Vinckboons proved particularly significant for the development of the genre of merry companies. Vinckboons was one of many Flemish painters who settled in the north during the final decades of the sixteenth century.⁶³ Although the young painter had many talents, including drawing designs for prints, book illustrations, and windows, his genre paintings proved the most influential, particularly his scenes of fairs and garden parties.⁶⁴ He painted landscapes featuring figure and history staffage (human and animal figures that feature in the painting but are not the main subject); scenes of fairs, peasants, and elegant gatherings; and he was a prolific designer of single-sheet prints and book illustrations. Although Vinckboons worked with conventional themes and made no dramatic innovations, he did modify these to suit the fashions of the time, for instance in the details of the costumes and the portrayed pastimes. Compared to later innovations, though, his depictions of parties were still outdoors, and his landscapes and figures always served the narrative rather than being developed into separate subject matter.

Following the examples of sixteenth-century foreign artists, the painters in our sample made incremental but important innovations in genres that would eventually see Dutch painting gain global eminence. Though their modifications were small, artists such as Vinckboons served as crucial intermediaries, as a flood of new print designs increased the number of

available scenes.⁶⁵ A comparable role can be identified for others who were active in these relatively new genres. The slightly younger Claes Jansz Visscher, a native Amsterdammer, was the most prolific print publisher of his day.⁶⁶ Visscher specialized in cityscapes and topical prints, and he was one of the first to publish a series of pure landscapes. In hindsight, he may not have been the most innovative artist – others had been publishing landscape drawings and etchings before him – and less daring than later Haarlem artists, but he became a key figure in the dissemination of landscape prints throughout Holland and Europe during the first half of the seventeenth century.

It is no coincidence that both Vinckboons and Visscher shared ties with book production, albeit in different ways. As discussed in previous chapters, books became more lavishly illustrated at the end of the sixteenth century. Cartography blossomed, and it is no accident that Claes Jansz Visscher started his career decorating cartographic material. Other dynamic genres in book production were those of emblem books and illustrated songbooks, especially those featuring the theme of courtship. Vinckboons designed a large number of book illustrations of amorous couples and of gatherings in landscapes. The more light-hearted merry companies, which Vinckboons produced in prints and paintings, bore a strong resemblance to the literary fashions of the time.⁶⁷ Such ties with the book industry were also evident in the more traditional genres and styles. Hendrick Goltzius, for instance, was a leading printmaker who created many designs and eventually took up painting, and his pupil Jacob de Gheyn II was another prominent engraver turned painter.

Conclusion

Political independence, religious transformation, and economic growth all influenced the development of the Dutch art market, but its significant expansion would have been unimaginable without the exogenous shock of the Revolt. The abrupt rise in the number of active painters was triggered by the immigration of both suppliers and customers. Whether supply side or demand side variables were the main drivers of the sudden expansion of the Dutch art market is a question that is virtually impossible to answer and perhaps even immaterial. What is clear, however, is that by 1610, the millions of paintings produced during the Dutch Golden Age were still very much in the future. The number of painters was significant, and growing, but immigration from the Southern Netherlands was not quite the invasion

it is sometimes made out to be. While growth rates in the painting industry were high, absolute growth was still relatively modest. As such, this initial period of rapid growth should be interpreted as one of catching up. Potential demand was relatively high and increasing, but it was only in the following phase that this was capitalized on by a new generation of more innovative artists.

Artistic communities, moreover, did not just develop anywhere. In the period 1580-1610 there were three locations that stood out in terms of artistic prominence: the Haarlem circle of Van Mander, Goltzius, and Cornelisz van Haarlem; the Utrecht Mannerists Bloemaert and Wtewael; and Amsterdam, with portrait artists such as Ketel and a select group of immigrants.⁶⁸ Established artistic centres such as Utrecht and Haarlem both attracted and fostered clusters of history painters, whereas in Amsterdam painting developed in response to scale and depended upon immigrants who met demand for new specializations such as the depiction of landscapes. Although immigrant artists did not drastically alter or expand the genres they introduced, their role as intermediaries was indispensable, especially in Amsterdam.

Finally, the relationships between painters and colleagues involved in other cultural activities such as publishing, cartography, graphic art, and literary life were vital in expanding the range of motifs and images available to both consumers and aspiring painters. During the transitional period from the sixteenth to the seventeenth century, innovative painters built and expanded upon graphic works, adapting existing genres and expanding the trends for certain motifs to the Northern Netherlands.⁶⁹ The numerous print series from this period include a broad range of motifs that would determine the style of landscape and figure painting for the next twenty years.⁷⁰

Notes

1. Michael Montias considers the period of 1580-1613 as a transitional era for Delft painting. Montias, *Artists and Artisans*, chapter 2. The 1993 exhibition catalogue concerning the 'dawn of the Golden Age' discussed the period 1580-1620. Luijten et al., eds., *Dawn of the Golden Age*. In his seminal outline of the Golden Age of Dutch painting, Bob Haak distinguished between the periods of iconoclasm and revolt (ca. 1566-1588) and the turn of the century (ca. 1588-1609). Haak, *The Golden Age*, pp. 162-176. Focusing on the subgenre of merry companies, Elmer Kolfin referred to the period of 1580-1610 as the formative years. Kolfin, *The Young Gentry*, pp. 37-57. Wayne Franits work on

- figure painting starts only around 1609. Franits, *Dutch Seventeenth-Century Genre Painting*.
2. See also chapter 2 of this book.
 3. This corresponds with data from the Amsterdam marriage bans during this period. Bok, 'Vraag en aanbod', pp. 213-214.
 4. Montias, 'Cost and Value', p. 459.
 5. De Vries, 'Art History', p. 265; Montias, 'Cost and Value', p. 459.
 6. Montias, 'Works of Art in a Random Sample', pp. 75-76; Montias, *Art at Auction*, p. 34.
 7. De Vries, 'Art History', p. 266.
 8. Sluijter, 'On Brabant Rubbish', p. 3.
 9. Wijsenbeek-Olthuis, *Het Lange Voorhout*, pp. 82-86.
 10. Sluijter, 'On Brabant Rubbish'.
 11. Cf. the argument in *ibid*.
 12. *Ibid.*, p. 4; De Marchi, 'The Role of Dutch Auctions'.
 13. Montias, 'The Influence of Economic Factors'.
 14. Lourens and Lucassen, *Inwonersaantallen*.
 15. Cf. Bok, 'The Rise of Amsterdam'; Montias, *Artists and Artisans*, p. 73; Bruyn, 'A Turning-Point'.
 16. Briels, *Vlaamse schilders en de dageraad*, p. 13. Also consider Briels, *Vlaamse schilders in de Noordelijke Nederlanden*.
 17. Sluijter, 'On Brabant Rubbish'.
 18. In Haarlem, the number of painters from the Southern Netherlands active between 1600 and 1605 was relatively small (four out of nineteen), especially when compared to other crafts: Boers-Goosens, 'Schilders en de markt', pp. 43-50.
 19. Sluijter, 'On Brabant Rubbish', p. 3.
 20. Note that there can be double counts, as painters often lived in several towns throughout this period.
 21. Montias, *Artists and Artisans*, pp. 286-293; Hartkamp-Jonxis, 'Flemish Tapestry Weavers'.
 22. Kloek, 'North Netherlandish Art', p. 16.
 23. Cf. Jaffe and Trajtenberg, *Patents*.
 24. Montias has estimated that not even 100 of c.40,000 to c.50,000 paintings hanging on walls in Delft in 1650 have survived. Montias, *Artists and Artisans*, p. 220; Cf. De Vries, 'Art History', pp. 256-259.
 25. Simply counting the significant figures is the unweighted measure of significance; the weighted measure is based on the space allocated to each individual.
 26. Woods, 'Historiometry as an Exact Science'.
 27. Murray, *Human Accomplishment*, p. 74.
 28. De Vries, 'Yellow Pages or Guide Bleu?', p. 214.
 29. On canon formation in the arts see the special issue of *Simiolus* vol. 26, issue 3 (1998); Vermeylen, Van Dijck, and De Laet, 'Test of Time'; Ginsburgh

- and Weyers, 'On the Formation of Canons'; Perry and Cunningham, eds., *Academies, Museums and Canons of Art*; Brown, 'Revising the Canon'; Ginsburgh and Weyers, 'Persistence and Fashion in Art'; Sluijter, 'Beelden van de Hollandse schilderkunst', vol. II; Hecht, 'Een wisselende lijst'.
30. De Vries, 'Yellow Pages or Guide Bleu?', p. 214.
 31. The discussion about canon formation in Dutch art has been mostly played out over Houbraken's *Grote Schouburgh der Nederlandsche Konstschilders en Schilderessen (The Great Theatre of Dutch painters)* with regards to the question to what extent Houbraken's lexicon influenced our present-day canon. Sluijter, 'Beelden van de Hollandse schilderkunst', vol. II, p. 394. Horn, *The Golden Age revisited*; Cornelis, 'Arnold Houbraken's "Groote Schouburgh"'; Carasso, 'Houbraken's Groote Schouburgh'. Carasso has compared an elite group of painters listed in Houbraken, 171 artists whose portraits were published in the *Great Theatre*, with the surveys of Wilhelm Martin and Bob Haak and found that the only one missing in Houbraken was Willem Dou dijns. This has been criticized by Horn, *The Golden Age revisited*, p. 582. Horn counted 107 rather than 17 artist portraits. See also Grijzenhout, 'A Myth of Decline'; Hecht, 'Browsing in Houbraken'.
 32. Martin, *Hollandsche schilderkunst*, vol. 1.
 33. Mai et al., eds., *Kroon op het werk*.
 34. Murray, *Human Accomplishment*; Kelly and O'Hagan, 'Identifying'; *Oxford Dictionary*; Haak, *The Golden Age*; Mai et al., eds., *Kroon op het werk*; Loos et al., *Age of Elegance*; Van Mander, *Schilder-boeck*; Houbraken, *Groote Schouburgh*; Van Gool, *Nieuwe Schouburg*; Van Eynden and Van der Willigen Pz., *Geschiedenis der vaderlandse schilderkunst*. Piet Bakker has differentiated between painters of whom work is known and painters of whom no work is known in an attempt to map the diversity within the large and vague group of 'painters'. Bakker, 'Crisis? Welke crisis?'. Presumably such a distinction results in a sample somewhere in between my C and D samples.
 35. De Vries, 'Gelukkige schildereeuw', p. 60.
 36. For a discussion of the samples, see appendix I.
 37. Note that De Keyser and Vredeman de Vries are better known for their sculpting and architecture, and that De Gheyn and Goltzius were not only painters, but also famous engravers.
 38. Haak, *The Golden Age*, pp. 166-176.
 39. The lack of prominent painters in Delft has also been observed by Boers-Goosens, 'Schilders en de markt', p. 34.
 40. The number of active painters is based on the ECARTICO dataset. For example, Pieter Pietersz, a prominent portraitist active in Haarlem and Amsterdam, was mentioned by Van Mander, but he did not have his own chapter. The well-known Utrecht painter Paulus Moreelse is only mentioned in passing.
 41. Van Mander, *Schilder-boeck*.

42. Nowadays, however, he is best known as a portrait painter and renowned for painting with fingers and feet, possibly due to paralysis.
43. Sluijter, 'On Brabant Rubbish'.
44. For an extensive analysis of artists in early modern Dutch town description see Marcus, "Daarvan breeder geschreven ..." and Marcus, "Stedekonst'.
45. Pontanus, *Rerum et urbis*.
46. *Ibid.*, p. 286
47. Hoogewerff and Van Regteren Altena, *Arnoldus Buchelius "Res pictoriae"*, vol. 15, I: 1590-1605.
48. On Razet see also: Bok, 'Art-lovers and Their Paintings'.
49. <http://research.frick.org/montias>. For example, in the thirteen accounts that can be found in the Getty Database inventories, we find 373 anonymous works of art and only one that was attributed, to Joos de Momper, a well-known Flemish painter.
50. Montias, 'Artists Named in Amsterdam Inventories'.
51. Montias arrived at 553 inventories and auction sales (5593 lots). Without prints, dealers' stock and copies, which he analysed separately, he used 3971 lots. He also left out the paintings and drawings by individual artists they produced themselves.
52. Montias, 'Artists Named in Amsterdam Inventories'. In another study Montias showed the results of collected samples in a later period: 1620-1649: Montias, 'Works of Art in Seventeenth-Century Amsterdam', pp. 364-365. Of course this reveals more about that time than the previous period, but still, it tells us that the name and fame of some early Golden Age artists was long-lived.
53. Haak, *The Golden Age*, p. 174; Kloek, 'North Netherlandish Art', p. 58; Bruyn, 'A Turning-Point'.
54. Haak, *The Golden Age*, pp. 173-176.
55. Based on *ibid.*, pp. 166-176 ; Kloek, 'North Netherlandish Art'. Pietersz was born in Antwerp and trained by his father, Pieter Aertsz, whom he accompanied to Amsterdam around 1556.
56. Kloek, 'North Netherlandish Art', p. 58.
57. In order to avoid confusion about 'genre' as a generic category and 'genre' used to designate a set of themes found in paintings, we use the term 'figure painting' for the latter. Cf. Haak, *The Golden Age*, p. 85.
58. Sluijter, 'On Brabant Rubbish'.
59. Bruyn, 'A Turning-Point', p. 120.
60. Kolfin, *The Young Gentry*, p. 37.
61. *Ibid.*
62. *Ibid.*
63. On Vinckboons: Franits, *Dutch Seventeenth-Century Genre Painting*, pp. 53-57; Goossens, *David Vinckboons*; Goossens, 'Nog meer over David Vinckboons'. Van Mander, *Schilder-boeck*, f. 299.
64. Franits, *Dutch Seventeenth-Century Genre Painting*, p. 53.

65. Kolfin, *The Young Gentry*, p. 37.
66. Van Eeghen, 'De familie van de plaatsnijder C.J. Visscher'.
67. Veldhorst, *Zingend door het leven*; Veldhorst, 'Pharmacy for the Body and Soul'.
68. Haak, *The Golden Age*, pp. 166-176.
69. Playter, 'Willem Duyster and Pieter Codde', p. 50.
70. Goossens, *David Vinckboons*, p. 60.

7. 1610-1650: Unlocking Potential

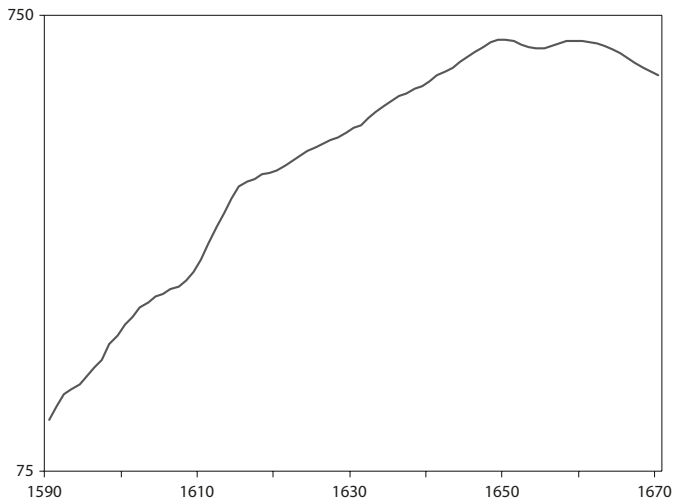
When in 1935-1936 art historian Wilhelm Martin wrote about the Dutch Republic, 'Nowhere were there in such a small area so many and such great painters', he must have been contemplating the situation around the middle of the seventeenth century.¹ Just forty years prior to that time, the great achievements and large-scale production to which Martin refers were still very much in the future. Potential demand for paintings increased under the influence of economic growth and an increased tendency to purchase paintings as decorative items to cover walls. Still, Dutch painters were not yet able to exploit this potential. Fifty years later, hundreds of thousands, possibly even millions, of paintings had been produced in a variety of genres, styles, sizes, and price categories by thousands of painters.²

How could a relatively modest painting sector develop into an art market that was highly innovative, that accommodated an abundance of highly skilled painters, and that, at the same time, was unprecedentedly large in scale and scope? This question is divided across two chapters, with the first focusing on product and process innovations and the second on the organization of the painting industry. Both chapters deal with the decades during which the Dutch art market expanded dramatically as demand for luxury goods increased and paintings became highly fashionable.³ In order to analyse the relationship between Golden Age painting and commerce, this chapter will present the main quantitative and qualitative developments of Dutch painting between 1610 and 1650.⁴ In the next chapter, I will argue that existing explanations for the rapid market expansion do not suffice. As Martin himself observed long ago, socio-economic and religious circumstances go a long way towards explaining the popularity of certain genres and the volume of production, but they cannot fully account for the major artistic accomplishments.⁵

Golden Age painting

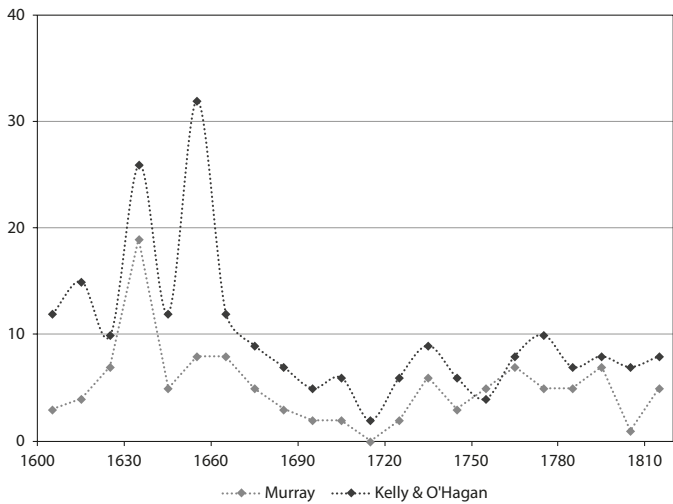
Between 1610 and 1650 the number of painters active in the Dutch Republic increased by a factor of seven (Figure 7.1). As the reputation of Dutch Golden Age painting affirms, the surge in this period was not only of a quantitative nature. The number and variety of seventeenth-century Dutch paintings displayed in museum collections as well as the number of Dutch painters included in art-historical canons are perplexing. In art-historical studies of

Fig. 7.1 Number of active painters in the Dutch Republic per year, 1590-1670



Source: Ecartico, accessed 20 November 2010 (5-year moving average; semi-log scale)

Fig. 7.2 Age cohort significant European painters, per decade, 1600-1810



Source: Table 6.4; Murray sample: N=112; Kelly & O'Hagan sample: N = 221

European painting between 1600 and 1700, the Dutch are well represented. When the distribution of the number of prominent European artists per age group is plotted (the decade in which the artists reached 40 years of age) over the period between 1600 and 1800, one or two peaks stand out, depending on the sample (Figure 7.2). And only a handful of prominent painters were active in Europe in any one decade, except for the 1630s and 1650s when the number of painters peaked.

The main cause of the disruptions in the trend was unquestionably the phenomenon that would come to be known as the Golden Age of Dutch painting. No other country in the samples of Murray and Kelly & O'Hagan, with the exception of Italy in the fifteenth century, experienced the same concentration of so many prominent artists in such a short time. In Murray's selection, sixty-four European painters were active during this period, with the Netherlands and Italy slightly ahead of France at nineteen, sixteen, and twelve painters respectively.⁶ In the Kelly & O'Hagan sample of 101 painters born and active in the seventeenth century, the Dutch Republic was also the main contributor, with forty-three painters.⁷ These figures are all the more remarkable given the small size of the country.

From large potential to real consumption

The qualitative upsurge in Dutch painting found in art-historical handbooks was underpinned by an increasing popularity of works of art during the seventeenth century. The proliferation of paintings in Dutch homes took place in a relatively short period of time.⁸ Around 1630, Constantijn Huygens, secretary to the Stadtholder, stated that during his youth the popularity of paintings had increased significantly.⁹ Almost half a century later, Samuel van Hoogstraten, painter, poet, and art critic, wrote, 'In the beginning of this century, Holland's walls were not as densely hung with paintings as they are now'.¹⁰ And if we are to believe the observations of foreign travellers on the number of paintings they encountered in Dutch towns, the popularity of paintings in Dutch society appears to have been quite extraordinary.¹¹

The observed trend in the demand for paintings has been confirmed by quantitative research of probate inventories.¹² Over the course of the seventeenth century, the number of paintings per Dutch household increased, and the segment of society that owned paintings broadened.¹³ Prior to this, only the wealthier houses had portraits adorning their walls which would have been panelled with wood, covered with tapestries, or painted with decorative patterns. The average number of paintings in Delft inventories,

for instance, doubled from 20 to 40 between the 1620s and the 1670s, and Amsterdam saw an increase from 25 to 40 paintings.¹⁴ Montias's sample of paintings found in Amsterdam inventories drawn up in the 1630s and 1640s shows that many of these collections were relatively recently formed.¹⁵ In the inventories of this period, some two-thirds of the named artists were still alive at the time of attribution.

In explaining the large number of paintings produced during the Golden Age, the buying behaviour of the middle levels of society, not just Dutch burghers but also artisans and even the more prosperous labourers and peasants, is crucial. As in other European countries, wealthy citizens collected paintings. In the Republic, however, even more modestly endowed households bought paintings to furnish their walls, developing a new standard for interior decoration. Collectors were increasingly buying fashionable works by contemporary masters. Paintings produced in the Dutch Republic by these contemporary masters entered the homes of both wealthy and less wealthy citizens, and within a relatively short period of time the quantity, quality, and scope of Dutch painting expanded significantly. Although some genres such as portraits were still commissioned, most of the newly acquired paintings must have been purchased on the open market within a remarkably short period of time.¹⁶ The increase in the number of paintings encountered in the homes of Dutch citizens should not only be attributed to increase in wealth or income. Changes on the supply side, such as the increasing interest in new genres and more specifically those introduced by immigrants from the Southern Netherlands during the phase of emergence, helped shape consumer preferences.

Artistic novelties of the 1610s and 1620s

Through research on notarized inventories it is possible to make reasonable assertions about the subjects of paintings that adorned the walls of Dutch households.¹⁷ Even though not all paintings listed in inventories were described by subject, the available data shows that landscapes became particularly popular, making up 20 per cent of the collections in the 1620s and about 35 per cent half a century later. The share of still lifes doubled from 5 per cent in the 1620s to 10 per cent in the decades that immediately followed, whilst the share of figure paintings increased from 4 per cent to 12 per cent in the 1680s.¹⁸ The growing importance of these genres came, according to Montias's research, at the expense of history paintings, including those of religious subjects, whose share declined from 40 per cent in the 1620s to

10 per cent in the 1680s. During this period, portraits, however, remained relatively popular, their share increasing from just over 11 per cent to more than 15 per cent. Importantly, though, Angela Jager has recently challenged the view that the market for history paintings in the Northern Netherlands deteriorated and comprised mostly paintings that were not cheap.¹⁹

These changes in consumption patterns were underpinned by the introduction of a whole string of artistic novelties. During the previous phase, Southern Netherlands specialists introduced incremental innovations to genres that were already relatively new to northern consumers. They differentiated their products through variation rather than through novelty value. In the 1610s and 1620s, Dutch art production entered a new phase, as a new generation of painters triggered more radical innovation. Though young painters fully applied and adapted existing subjects and techniques that had been developed in the Southern Netherlands in the sixteenth century, they also managed to break with existing traditions in terms of iconography, technique, and composition. In little more than ten years, the sixteenth-century fields of specialism from the Southern Netherlands such as still lifes, landscapes, marines, merry companies, and peasant scenes developed a new look that would become the hallmark of Dutch Golden Age painting. The defining features of this evolved 'Dutch' fashion were broader ranges of subject matters, fewer motifs, and a more rapid production technique achieved by applying thin layers of paint in a swift manner, using a restricted spectrum of colour (palette). Images that were previously only available in prints or as motifs in paintings now became subjects in their own right.²⁰

The most popular and renowned Dutch genre was the landscape. In the 1610s, Amsterdam and Haarlem print designers and artists were moving away from the Mannerist tradition of fantastical views and extreme stylization, but initially only in prints and drawings. Esaias van de Velde was the first to translate these novelties into paintings after 1614.²¹ Departing from Flemish print designs and paintings, he depicted views of familiar landscapes near Dutch towns, applied a simpler palette, lowered the horizon, reduced the number of figures, and used a composition in which all elements were linked together by oblique lines. All these interventions created a sense of space that allowed the viewer of the painting to become increasingly involved.²²

Around the same time, Jan Porcellis introduced similar innovations in the depiction of seascapes. In hindsight, these painters set the stylistic direction and conventions of what would become known as Dutch landscape painting. Artists such as Jan van Goyen, Salomon van Ruysdael, and Pieter de Molyn then further developed these styles. Under their guidance, the so-called tonal period gained momentum through the 1620s. Also known

as the monochrome phase, this approach was characterized by the use of a smaller palette, simpler motifs, the blurring of lines, and more attention to sky and water. These stylistic innovations can also be observed in Dutch still lifes of the time. In the 1620s, for instance, painters such as Pieter Claesz and Willem Claesz Heda developed the subgenre of the breakfast piece, to which they also applied monochrome characteristics.

Esaias van de Velde was paramount in the development of Dutch landscape painting, but he also initiated what would become the genre of Dutch figure painting.²³ Building on David Vinckboon's banquet pieces, he lowered the horizon, used a diagonal composition, and adjusted motifs. However, he did not break with his theme of elegant outdoor gatherings, and another painter should be credited with the invention of indoor merry companies. Rotterdam-born Willem Buytewech arrived in Haarlem in the same year as Van de Velde and tried his luck at a range of genres and techniques including print, drawing, and painting. Even if the moving of the merry company indoors had already taken place in prints designed in the late sixteenth century, applying this to paintings proved a radical break with the outdoor companies of Vinckboons and Van de Velde.

Around the same time, a series of travels to Italy inspired a very different subgenre, that of the Italianate landscape. Around 1620, Dutch and Flemish artists in Rome had established a semi-formal association, complete with initiation rules and club names, whose members were known as *Bentveughels*. With the return to the Republic of Cornelis van Poelenburch and Barthelomeus van Breenbergh, two of the leading members of the first generation of *Bentveughels*, the Italianate landscape started gaining ground in the Dutch Republic. Unlike the rapidly executed pictures of local landscapes by the likes of Van Goyen and De Molyn, Dutch Italianates produced elaborate and costly paintings depicting ruins and statuary fragments bathed in Italian sunlight. Meanwhile, others experimented with the production of the more traditional landscapes. Hercules Seghers, for instance, continued working on fantasy landscapes using original techniques. Still, according to Seymour Slive, he can be seen as 'the most inspired, experimental, and original landscapist' of his period because of his experiments in the technique of printmaking.²⁴ He experimented with printing in colour, by using horizontal formats, and by printing on dyed paper or fabric. However, the techniques Seghers developed were never really adopted by the masses, unlike those introduced by Porcellis and Van de Velde.

While new subjects and techniques were being explored in landscape and figure painting, Frans Hals was busy revolutionizing portraiture. He animated group portraits through a whole range of artistic devices:

arrangement, poses, contrast in colour, expressions and, last but not least, by applying a rough-mannered, loose, and lively painting technique. Others in his peer group were changing the face of Dutch history painting. They effected a departure from northern Mannerism as it had developed in Haarlem and Utrecht in the previous phase to achieve a more realist depiction of subjects. In Amsterdam, for instance, Pieter Lastman, influenced by his stay in Rome in the 1600s and by the German-born painter and draughtsman Adam Elsheimer, experimented with the relationship between landscape and figures. He combined medium-sized figures and landscapes without letting one or the other dominate the image. Lastman along with others in the Amsterdam history painters' circle – such as the brothers Jan and Jacob Pynas and Nicolaes Moeyaert – are often anachronistically referred to as Pre-Rembrandtists due to their influence on Rembrandt. Like the Italianate landscapists, almost all of them had spent time in Rome where they were inspired by local painting styles.

Around the same time, in Utrecht, another group of painters was also strongly influenced by Italian painting. The main representatives of the Utrecht group were Dirck van Baburen, Gerard van Honthorst, and Hendrik ter Brugghen who had all been in Rome in the 1610s and returned with new ideas about composition, colour, and subjects. The Italian painter Caravaggio was their main source of inspiration, and they became known as the Utrecht Caravaggists. These artists produced large history and figure paintings using the artistic device of *chiaroscuro*, or *clair-obscur*, meaning large contrasts between areas of bright light and dark shading. Caravaggio achieved a strong natural realism by close physical observation and the dramatic use of *chiaroscuro*. Although their style was only popular for a decade or two, the Dutch Caravaggists made a big impact. According to Seymour Slive, they 'introduced one of the main currents of Baroque art into the Netherlands. Even the greatest masters of seventeenth-century Dutch painting, who were never in Italy, Hals, Rembrandt, and later also Johannes Vermeer, took decisive impulses from the Caravaggesque style'.²⁵

Artistic innovations in the 1620s took place across all genres. Much of this happened in interaction with other countries, most notably the Southern Netherlands and Italy. Although by 1620 some of the prominent painters active during the phase of emergence had passed away, most notably Karel van Mander in 1606, Gillis van Coninxloo in 1607, and Hendrick Goltzius in 1617, the new generation of painters did not entirely replace the previous generation and their styles and subjects. In Utrecht, Abraham Bloemaert, Joachim Wtewael, and Paulus Moreelse continued their work and were later joined by Roelant Saverij and Ambrosius Bosschaert in around 1618. David

Vinckboons continued to work in Amsterdam and Cornelis Cornelisz in Haarlem. Artistic novelties developed alongside and built upon traditional conventions. These series of product and process innovations did not replace one another but collectively expanded and deepened the range of subjects and styles on offer in the Dutch art market.²⁶

Product and process innovations

Michael Montias has presented some of the inventions by artists such as Esaias van de Velde and Jan Porcellis as process innovations.²⁷ By combining a swifter painting technique with simpler compositions (fewer figures and objects) and more restricted colours, Porcellis and Van de Velde are considered to have set in motion a trend for producing cheaper paintings that could penetrate a broader market.²⁸ By using more sky, more shade, and less crowding in their pictures, painters effectively reduced the amount of labour they needed to invest in the painting. Such specialized and 'painterly' works took much less time to complete than their meticulously executed counterparts, and since labour costs were the prime determinant of production costs, this had a dramatic impact on the price of paintings.²⁹ Montias asserted that the works of the realistic 'tonal' school of landscape painting, for instance, brought substantially lower prices than those of their Mannerist predecessors (typically *f*15 to *f*30, versus *f*70 to *f*100 for the older works).³⁰

In chapter 3 we saw that Dutch publishers cut back on production costs by reducing the size of the books. It has been suggested that painters also applied this strategy, but as of yet there is no quantitative evidence to convincingly corroborate this.³¹ Fortunately, the few quantitative studies that exist on the size of Dutch paintings provide some clues.³² Ad van der Woude's analysis of the average size of paintings in the Dutch *Rijksmuseum* produced by Dutch painters indicates a gradual decline in the size of paintings over time. On average, painters born between 1550 and 1599 produced larger paintings than the groups born in 1600-1649 and 1650-1699.³³ His data, however, are not extensive enough to show exactly when this trend set in. Another clue can be found in the distribution of genres. The sizes of traditional subjects of religion, mythology, and other history paintings produced by the 1550-1649 cohort were on average significantly larger than landscapes, figure painting, or still lifes.³⁴ We can combine this finding, which is based on a limited sample of paintings, with the relative distribution of subjects in probate inventories in seventeenth-century Amsterdam and collected by Montias.³⁵ He compared inventories from the periods

1620-1649 and 1650-1679 and found that the share of landscapes, figure paintings, and still lifes increased, while the share of history paintings dropped significantly. This suggests that an increasingly large share of paintings in Amsterdam inventories were of smaller than traditional size.

Finally, the fragmented data on the oeuvres of individual artists indicates an overall tendency to produce smaller pictures from the 1620s onwards, even in traditional genres.³⁶ Jonathan Israel has pointed out that artists such as Cornelis Cornelisz and Joachim Wtewael not only reduced and simplified designs and colouring but also used smaller sizes. Likewise, mythological scenes by Cornelis van Poelenburch were smaller than those of his predecessors.³⁷ Amsterdam history painters like Lastman and Moeyaert also produced paintings of fairly modest size. Still, the high prices fetched for the smaller paintings by the aforementioned Van Poelenburch indicate that reductions in size did not necessarily mean that paintings became cheaper for the consumer. This points to a significant difference between pricing mechanisms in the publishing and painting industries. In the case of the former, the price of the finished product, the book, relates almost perfectly to the inputs in terms of labour and material costs. Though many painters also used similar price-setting strategies, also known as '*valore di fatica*', there were still many exceptions.³⁸

By offering quality paintings for reasonable prices, the new generation of painters unlocked the potential demand identified in the previous chapter. Whether the primary motives of the trendsetters were artistic or economic, the consequences were unambiguous: productivity increased and paintings could be offered for lower prices without losing out on quality or necessarily threatening painters' profits.³⁹ The middle-income groups that previously could only afford copies or prints were now able to own new and original paintings by living masters.⁴⁰ Because the artistic novelties did not replace or exclude other subjects, styles, and techniques, the range of paintings on offer expanded dramatically.

In the 1610s and 1620s, the number of paintings per household increased, the composition of the collections was transformed, the number of painters increased, and new styles, subjects, and painting techniques were introduced. In recent decades, economists and economic historians have started to interpret these developments within a single framework, generating a widely accepted consensus on the role of market forces in shaping the Dutch art market. They demonstrated how market forces could not only affect the volume of production but also stylistic developments and the quality of the produced works of art.⁴¹ At a glance, the explanatory framework of market forces seems to offer a straightforward interpretation of what occurred in

the Dutch market. A closer look, however, suggests that although the overall importance of market settings is indisputable, two areas of the existing analysis need to be redressed.

In general, Montias's interpretation of the stylistic and iconographic changes in the Dutch Republic as product and process innovations is convincing. Nevertheless, there is as yet no comprehensive explanation for the timing of such innovations. Montias did not take into account that timesaving product and process innovations were also developed around the same time in other cultural industries. Books, tiles, and tapestries became simpler in design and smaller during the growth phase, adding a whole new market segment to the persistent production of expensive large-sized products and luxurious small-sized works.⁴² The fact that the trend toward smaller and simpler products took place in several industries around the same time suggests that the product and process innovations in Dutch painting could have been a response to circumstances influencing the overall market for cultural products.

Moreover, because existing explanations largely treat paintings as mere commodities, they cannot fully account for the exceptionally high levels of production or the high levels of quality that accompanied the quantitative expansion of the Dutch art market. Montias hinted at the importance of industrial organization and, in particular spatial proximity, when he asserted that innovation thrives when information flows freely between potential innovators. He also suggested that there should be a certain number, a so-called critical mass, of active individuals competing and interacting to stimulate breakthroughs, but he did not test these assumptions empirically.⁴³ The issue of how these innovations came about will be addressed in the next chapter; first we turn to the question of why they occurred in the first place.

The invisible hand of supply and demand

A possible explanation for the parallel developments across differing cultural industries can be found in Jonathan Israel's interpretation of the development of the tonal phase.⁴⁴ In Israel's view, the different phases in the development of Dutch painting are strongly related to phases in the general restructuring of Dutch commerce, industry, and retailing. In the development of Dutch world trade primacy, he distinguished phase two (1609-1621) and phase three (1621-1647). This period in Dutch Golden Age painting – characterized by the shift towards smaller paintings with more

modest subjects, in different tones and colours, and by the development of new subject matter – was strongly related to the commercial crisis in phase three, following the end(ing) of the Twelve Years Truce in 1621.⁴⁵ Accordingly, he argues, the cutting of costs through stylistic adjustments can be interpreted as a response to the declining demand for paintings and the rising price of materials. In this view, the monochrome phase should not be seen as an example of a simple ‘market innovation’, but rather as a much wider and more complex set of artists’ responses specific to the conditions prevailing in the Dutch art market between 1621 and the mid-1640s.

Critics have argued that Israel’s account of both the extent of the crisis and the impact of rising prices of pigments is exaggerated. Economic circumstances may not have been as bleak as Israel made them out to be.⁴⁶ Moreover, the initial development of product and process innovations took place during the period identified by Israel as phase two, not in phase three. Nevertheless, we should not discard his observations. Whilst there is no evidence for a decline in demand for paintings, there is evidence for discrepancies between supply and demand. Eric Jan Sluijter, for instance, has argued that demand for cheap decorative paintings by immigrants was not met by local supply.⁴⁷ He implicitly extended and adapted Montias’s earlier point on critical mass by finding a possible explanation for timing and nature of the innovations in the concepts of economic competition and artistic rivalry. The popularity of public auctions selling cheap paintings from the Southern Netherlands, he argued, points to a gap in the art market that intensified around the time of the Twelve Years Truce. In this view, competition for market shares, triggered by imports of (cheaper) paintings from the Southern Netherlands, stimulated the new generation of painters to develop product and process innovations that cut costs and improved quality at the same time. Regardless of whether or not product and process innovations were triggered by Montias’s critical mass, by declining demand, by increasingly expensive materials, by imports from the Southern Netherlands, or by a convergence of all four, the consequences were the same. As competitive pressure intensified, so did the need for differentiation.

Competition

Eric Jan Sluijter observed increasing competitive pressure in the Dutch art market in the 1610s. Part of the argument is based on a series of artists’ complaints and guild activity dated around this time.⁴⁸ From the late Middle Ages, painters in the Low Countries were organized in guilds that

encompassed a whole range of related crafts such as the Guilds of St. Luke, saddlers' guilds, or *Onze Lieve Vrouwe Guild (Our Lady)* in Amsterdam.⁴⁹ After the Revolt, painters started to organize themselves in independent visual arts guilds. Along with painters, engravers, sculptors, glass painters, bookbinders, and producers of faience all became members of the Guilds of St. Luke. The first towns in the Northern Netherlands to take this step were Amsterdam (1579) and Middelburg (1585). In Amsterdam, as others have observed, the new corporate establishment was part of a more general revival of the guild system.⁵⁰ In Middelburg the main goal appears to have been to attract refugees from Antwerp.⁵¹

A second round of guild establishments took place around 1609, after the signing of the Twelve Years Truce. It has been argued that new corporate activity was triggered by the threat of foreign competition.⁵² Once Dutch borders opened up to imports from the Southern Netherlands, cheap paintings in styles and subjects familiar to the immigrant communities could enter local markets. Dutch painters responded to this competitive threat by voicing complaints to the town magistrates and requesting a ban on public sales of paintings by foreigners. As well as underlining the problem of such competition for local painters, they emphasized the consequences for potential buyers. After complaining about the fact that the imported paintings were 'poor copies', 'rubbish', and 'inferior apprentices' works', they added that 'the good burgers here, who, by and large, have little knowledge of painting, [are being] deceived'.⁵³ In a new request in 1613 it was again stressed that the imports were substandard and that buyers were deceived, as they often bought copies instead of originals at auctions. Sluijter has argued that the imports were simply inexpensive and not worthless, as local painters claimed them to be. He also does not support the claim that most buyers were ignorant about what they bought.⁵⁴ The import of paintings from the Southern Netherlands was not new but may have intensified after the signing of the Twelve Years Truce.

Local artists' complaints led to a tightening of existing guild privileges and the introduction of new ones, in addition to the establishment of new guilds in almost all artistically significant towns, such as Delft and Utrecht in 1611, as well as Gouda and Rotterdam in 1609.⁵⁵ Only in Leiden were painters prevented from establishing a guild, but after presenting the decisions from Amsterdam and Delft, they received regulations stating that only local citizens were allowed to sell paintings without the need for prior consent from the burgomaster. The only exceptions to this requirement were the traditional annual markets.⁵⁶ Given the absence of novel external factors stimulating demand – apart from population growth and the rising number

of painters active in Dutch towns – the suggestion that competitive pressure grew is not implausible.⁵⁷ The timing and character of guild regulation on the art market suggest that local painters were increasingly concerned with protecting their market share. They responded by strengthening local regulations concerning the sales of paintings, as well as by experimenting with artistic novelties that developed into product and process innovations as Dutch painters started to capture new segments of demand.

Levels of competition

When artists like Vinckboons, Bloemaert, and Cornelisz van Haarlem entered the Dutch art market around 1588-1590, they encountered few competitors. Almost everyone was new in town and had only recently started out. Painters who entered the market in the 1610s faced a different challenge. They had to distinguish themselves, directly or indirectly, from both the generation of their masters and from each other. Due to a lack of data on output figures, we cannot measure competition in the art market by estimating market concentration. Instead, data on entrants is used (Figure 7.3). The number of entrants in local industries has implications for the level of industrial competition. New entrants can erode the power of incumbent firms as they compete among themselves for a place in the market. Artists' entry years are determined by the year they were first mentioned in the ECARTICO database, but two adjustments were made to this data.

First of all, ECARTICO data shows a large spike in the 1610s in the number of new painters in the seven largest artistic communities in the Dutch Republic. A closer look at the underlying figures, however, reveals that this was to some extent due to biased sources. Establishment of guild-like organizations in several towns through the 1610s prompted the drawing up of membership lists. Such lists have been important sources for estimating the number of active painters in towns and, as a result, the data displays sudden leaps in the number of active painters. For example; in just a single year there were eleven new painters in Delft and seventeen in Utrecht. These figures most likely do not mirror the actual increase for that year but rather a more gradual growth in the preceding years.⁵⁸ If bias in the data for Delft and Utrecht is corrected by using the average number of painters in the years preceding 1613 and subsequent to 1616, the bump decreases significantly, although it is still visible. Second, absolute figures do not tell us much about the impact of new entries on the industry as a whole. After all, the total number of active painters was increasing rapidly. Toward more plausible counts, here entry rates are calculated

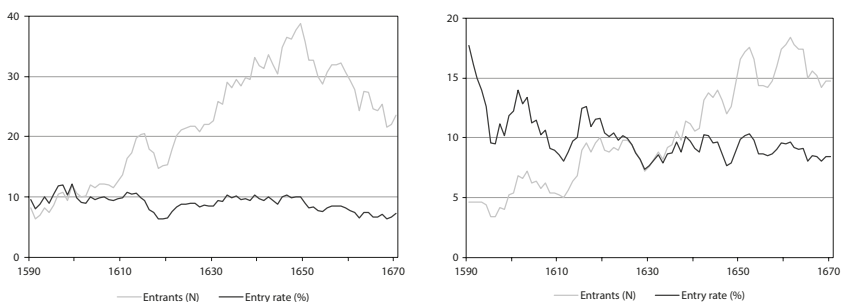
by dividing the number of new painters by the total number of painters active in that same year.

These figures show that from the second half of the 1610s, the overall number of newcomers started to decline. This is hardly surprising given the fact that entry rates were so high to begin with due to the small size of the industry and the large influx of immigrant painters. What is more interesting is that entry rates started to increase again in the 1620s, this time in the absence of any exogenous shock such as the Revolt, or other exogenous factors that significantly stimulated demand for paintings. Behind these figures we find a new cohort of painters active in an increasingly competitive market, which was not only responsible for industrial growth but also for turning potential demand into real consumption and for raising overall quality levels.

Quantity and quality

The profusion of prominent Dutch painters during the Dutch Golden Age has been interpreted as a natural consequence of the size of the art market. The relationship between quality and quantity has been made explicit by Michael Montias in his book about Delft: '[B]ecause there were many painters in town, young people had a choice of masters from whom to learn; a wide variety of ideas sprouted to fructify even the barest soil; and there were good statistical chances that an extraordinary talent such as Vermeer's would one day or another reveal itself'.⁵⁹ Assuming that talent was roughly equally distributed over time and place, the Dutch Golden Age with its expanding art market was undoubtedly a favourable environment in which to unlock artistic potential.

Fig. 7.3 Entry rates and number of newcomers in the seven largest towns (left) and Amsterdam (right), 1590-1670

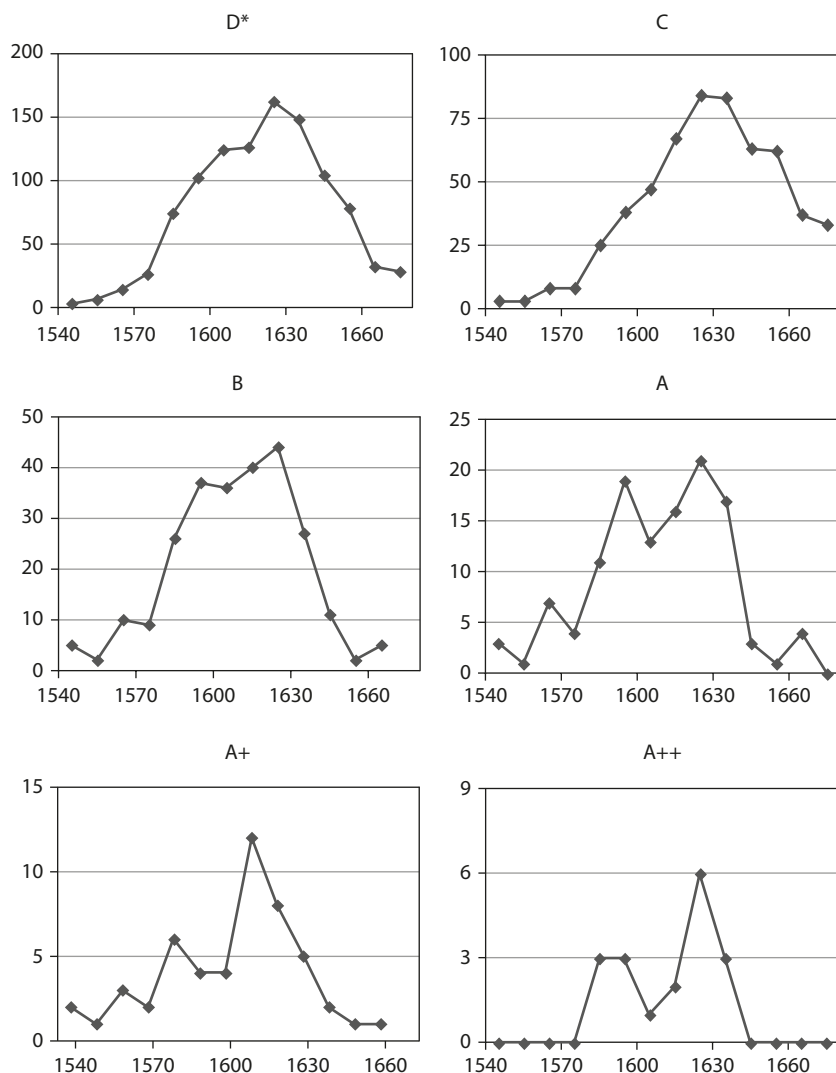


Source: Ecartico, accessed 7 February 2011

The historiometrical samples listed in the previous chapter make it possible to explore further the relationship between quality and quantity. They loosely represent different segments of the Dutch market for paintings. In Figure 7.4 six different samples are charted over time according to the number of births per decade. All samples show an inverse U-shape much like the one in Figure 7.1. Not surprisingly, this trend is comparable to the distribution of birth cohorts in Jan de Vries's sample of 1760 pre-nineteenth-century Dutch painters, based on a sample of painters represented in Dutch and American museums.⁶⁰ Overall, the more selective samples show the same trend as the mass market for paintings as represented by sample D. This suggests that the quality and quantity were indeed, as Montias suggested, closely related. However, a closer look at the similarities and differences between the samples shows two features that are worth noting and that warrant further investigation.

Painters born in the 1600s and 1610s are underrepresented in the samples. This suggests that here was a group of artists who, in art-historical hindsight, had trouble differentiating their works of art from each other as well as from their predecessors. This may be explained by the two rounds of innovation that took place in Dutch paintings. The 1610s and 1620s, as well as the 1650s, are known as innovative decades in Dutch painting. This was when the group born between 1580 and 1590, as well as those born in the 1620s and 1630s, set up shop. Arguably, the period in between these two rounds of artistic prominence, when the painters born in the 1600s and 1610s were starting out, was one of expansion in terms of scale and specialization rather than in terms of product and process innovations.

Moreover, all decades witnessed the birth of acclaimed future artists, but the peak decade of birth was the 1620s (only the A+ sample shows a high point in the 1610s).⁶¹ The 1620s birth cohort entered the market between 1640 and 1650; their work is seen as the apex of the Golden Age. They refined previous innovations and variations, which is most visible in the figure paintings of the so-called *fijnschilders* and the landscapes by Van Ruisdael. Finally, whereas most samples show a rather sudden decline in the number of births per decade, especially after the 1630s – the group of, for example, Johannes Vermeer and Meindert Hobbema – the more inclusive C and D samples show a more gradual decline. The C sample in particular still shows painters from the birth groups of the 1640s and even the 1650s, including artists such as Gerard de Lairese, Godfried Schalken, and Adriaen van der Werff. This suggests that in the eyes of contemporary observers, the 'sudden pull of the curtain' on Dutch painting was much less abrupt than museum holdings suggest.⁶²

Fig. 7.4 Number of prominent painters born per decade, 1540-1680, per sample

Source: Table 6.4. *= Sum of the number of births in the ten largest artistic centres.

Although there was an overall correlation between prominent painters and the volume of production as represented by Figure 7.4, it was not clear-cut. The observed differences between the samples can be related to the three different stages in the life cycle of early modern Dutch painting and the type of innovation connected to the different stages. Initiated by painters born in the 1580s and further developed by a group of slightly younger

painters, a series of product and process innovations was introduced in the 1610s. Thereafter, the cohorts of the 1600s and 1610s competed more on product variations than on radical novelties, depressing the chances of entering the art-historical canons. Finally, the groups of the 1620s and 1630s are associated with a period of refinement, rather than novelty, a sign that the art market was maturing. The number of painters increased steadily after the surge in the 1620s, but after 1625 no radical iconographic, compositional, or technical innovations were introduced. Market expansion took place through imitation and differentiation, which resulted in a rapid succession of new variants. These artists filled the gap between mass market (the D sample) and the high-quality samples. In other words, they represent what distinguished the Republic from other countries and the Golden Age from other periods.

Specialization and product variants

After the trendsetters had introduced new genres, styles, subjects, and compositional arrangements, demand for paintings could further expand. Painters started specializing not only in specific genres such as landscapes, still lifes, figure painting, portraits, and history paintings, but also in sub-genres such as merry companies and ice skating scenes. Still lifes, one of the mainstays of Dutch painting, also consisted of many sub-specializations, from flower pieces, *banketjes* or 'banquet pieces', *ontbijtjes* or 'breakfast pieces', to depictions of dead fish. In the following section the subgenre of figure painting, more specifically merry companies, will be highlighted in order to demonstrate how, after the introduction of product and process innovations, artistic novelties were copied, emulated, adapted, and improved upon.⁶³ The merry company had developed into an independent genre characterized by a sharp rise in production and increased variety on a limited number of motifs.⁶⁴

As we have seen in the previous chapter, Van de Velde and Buytewech had introduced important stylistic changes to the motif of merry companies. Though Buytewech may have produced his few merry companies upon his return to Rotterdam, and Van de Velde continued to produce elegant outdoor companies in The Hague, both left a legacy in Haarlem. Their departure from Haarlem gave way to the first true specialist in merry companies: Dirck Hals, brother of Frans Hals (see Image 7.1). Presumably Van de Velde or Buytewech, or both, were responsible, in part at least, for his training as there are great similarities between their works and Hals's first paintings. Hals used spatial construction and figures from Van de Velde; compositions, iconography, and technique from Buytewech; and he

Image 7.1 *Merry Company*, Dirck Hals, 1633



Source: Mauritshuis, The Hague

added stylistic, compositional, and iconographic variants. Elmer Kolfin has emphasized how Hals '[...]' was not an original artist who managed to create a new genre from little-known pictorial or literary traditions', but how he was '[...]' the one who succeeded in expanding a subject into a genre by specialising and by developing different types'.⁶⁵ When it came to indoor companies, Hals was inventive, introducing the gathering of only men, smaller single figure paintings, and the adaptation to monochrome palettes.

Soon many copies were made of his work, often anonymously. Artists in other towns picked up on the successful genre of indoor merry companies and developed their own local specializations.⁶⁶ In Amsterdam, variants on Haarlem's indoor companies were introduced, differentiated by the guardroom theme which depicted soldiers during their down time. The three most renowned representatives were Pieter Codde, Willem Duyster, and Pieter Quast. Codde produced various styles, but Duyster seems to have concentrated on firelit guardrooms. These were soon imitated in Amsterdam as well as in other towns such as Delft, Utrecht, and Dordrecht. In Utrecht, Jacob Duck started out with guardroom scenes but would go on to specialize in comical brothel scenes, while Jan van Bijlert produced brothel scenes with Caravaggist influences. In Delft Anthonie Palamedesz specialized in merry companies characterized by iconographic features related not so much to merry companies from Haarlem, Amsterdam, or Utrecht, but to the fancier ones produced in The Hague – especially those by Esaias van de Velde.

Conclusion

Referring to the period of the Twelve Years Truce, Wouter Kloek has stated ‘The surge of artistic activity [...] continued unhindered’. Bob Haak pointed out that ‘there was no renaissance in 1609, nor any decline when the truce expired in 1621’. And Lyckle de Vries even went so far as to say that the chronological division between two periods, before and after the 1610s, hinders our understanding of Dutch art because it chauvinistically overstates the artistic novelties of this period.⁶⁷ From a socio-economic perspective, choosing the 1610s as a starting point for this chapter is neither chauvinistic nor arbitrary. It was exactly in these years that the Dutch art market reached a critical juncture.

After the exogenous shock that sparked the expansion in scale and scope of the Dutch art market between 1580 and 1610, the series of innovations triggered a new growth dynamic. The timing of this famous series of product and process innovations was directly related to relative stagnation in the traditional market for cultural products. When new parties entered the market and there were no external stimuli for consumption, it became increasingly crowded. Faced with competitive pressure from Flemish competitors, from established masters in the traditional fields of history and portrait painting, from Dutch and Flemish specialists, and from each other, artists initiated various product differentiations. In the large potential market for works of art, these soon developed into the famous cost-saving product and process innovations of the 1610s and 1620s.

The more radical innovations were followed by strategies of specialization, differentiation, imitation, and emulation. Specialties were so narrow that they limited possibilities for imitation and allowed modest monopoly rents to accrue to the specialist. These specialists built on the novelties developed by the generation of the 1610s and were, in turn, imitated and emulated by other painters.⁶⁸ Alongside imitators – or quite the opposite, innovators like Jan van Goyen, Gerard Dou, and Rembrandt – worked a wide range of more or less gifted painters, specializing in one niche or another.⁶⁹ Together, they dramatically expanded the scale, scope, variety, and quality of paintings produced in the Dutch Republic.

To emphasize the importance of strategies of imitation, Montias pondered an artist of average talent and ability, asking what he would have done to succeed commercially. According to Montias, ‘One option open to him [...] was to imitate artists with a popular following. This was all the more likely when he lived in another city than the artist he wished to imitate’. In the next chapter I will show how it was indeed the urban structure and

organization of production that were responsible for the impressive expansion of the art market during the seventeenth century. On top of the large and varied demand side and artistic innovations, a combination of outward openness and local entrenchment increased the volume of production, sustained the rapid succession of product variants, and fostered the high quality that characterized Dutch Golden Age painting.

Notes

1. '[...] *geen land ter wereld ooit geweest [is] waar de behoefte om het huis te versieren met schilderkunst van eigen bodem zóó groot was en waar zóó sterk aan die behoefte werd en kon worden voldaan*' and that '*nooit ergens op een zóó klein gebied zóóvele en zóó groote kunstenaars [hebben] gewerkt als toen in Holland*'. Martin, *Hollandsche schilderkunst*, vol. 1, p. 36.
2. Van der Woude, 'The Volume'.
3. This period has also been interpreted as one of continuous crisis in the art market. Nijboer, 'Bloeitijd als crisis'.
4. De Vries, 'Art History', p. 255.
5. Martin, *Hollandsche schilderkunst*, vol. 1, p. 35.
6. Murray, *Human Accomplishment*.
7. Kelly and O'Hagan, 'Geographic Clustering'. Many thanks to the authors for sharing their dataset.
8. Van Hoogstraeten, *Inleyding*, p. 237; *ibid.* '*In 't begin deezer eeuw waeren de wanden in Holland noch zoo dicht niet met Schilderyen behangen, alsze tans wel zijn.*'
9. Huygens, *Mijn jeugd*, pp. 70-71.
10. Van Hoogstraeten, *Inleyding*, p. 237.
11. Examples are quoted in: Sluijter, *Verwondering over de schilderijenproductie*, pp. 12-13. Sorbière, *Drie brieven van Samuel Sorbière [1660]*, p. 86; Mundy, *Travels of Peter Mundy*, vol. 4, p. 70; Parival, *Les délices de la Hollande*, p. 25; Evelyn, *The Diary of John Evelyn [1641]*, p. 39; Lemaitre, *Relation de mon voyage*, p. 291; Aglionby, *Painting Illustrated in Three Dialogues*, pp. 23-24.
12. Bok, 'Vraag en aanbod', pp. 53-54; Bakker, 'Gezicht op Leeuwarden', pp. 130-142; Nijboer, 'Fatsoenering van het bestaan', pp. 49-51; Boers-Goosens, 'Schilders en de markt', pp. 325-337; Montias, 'Works of Art in a Random Sample', pp. 67-88; Loughman, 'Een stad en haar kunstconsumptie'; Montias, *Artists and Artisans*, table 8.3.
13. Montias, *Le marché de l'art*, pp. 93-100.
14. This paragraph is based on Montias, 'Works of Art in a Random Sample', 67-88; Montias, *Artists and Artisans*, table 8.3; Montias, 'Artists Named in Amsterdam Inventories'. See also De Vries, 'Art History', p. 269.
15. Montias, 'Works of Art in Seventeenth-Century Amsterdam', pp. 342-343.

16. Loughman, 'Een stad en haar kunstconsumptie'; Bok and Schwartz, 'Schilderen in opdracht', p. 192. In Amsterdam inventories, this category made up some ten to fifteen per cent of the total, while in Dordrecht inventories from the period 1620-1719, this was almost 25 per cent.
17. This paragraph is based on Montias, 'Works of Art in a Random Sample', 67-88; Montias, *Artists and Artisans*, table 8.3; Montias, 'Artists named in Amsterdam Inventories'. See also De Vries, 'Art History', p. 269.
18. Montias, 'Works of Art in Seventeenth-Century Amsterdam', pp. 332-333, 336.
19. Jager, 'Galey-schilders en dosijnwerck'.
20. For a more in depth art-historical overview consider: Haak, *The Golden Age*.
21. Cf. Gifford, 'Esaias van de Velde's technical innovations'; Keyes, *Esaias van de Velde*.
22. See Sluijter, 'Jan van Goyen als marktlieder', pp. 51-52 for a good discussion of these innovations.
23. The following is based on Kolfin, *The Young Gentry*, pp. 103-118.
24. Slive, *Dutch Painting*, p. 185. On Seghers see Rowlands, *Hercules Segers*.
25. Cf. Blankert, 'Onverdragelijk lelijk', vol. 3.
26. Montias, 'Cost and Value'.
27. Montias, 'The Influence of Economic Factors'; Montias, 'Cost and Value'.
28. On Van de Velde's innovations see Gifford, 'Esaias van de Velde's Technical Innovations'.
29. Sluijter, 'Determining Value', pp. 10-12; Bok, 'Pricing the Unpriced'; Boers-Goosens, 'Prices of Northern Netherlandish Paintings'.
30. Montias, 'The Influence of Economic Factors', p. 54.
31. Biesboer, ed., *De Gouden Eeuw begint in Haarlem*, p 10.
32. On the size of paintings see Van der Woude, 'The Volume', pp. 306-308; Miedema, 'Verder onderzoek'; Bruyn, 'Een onderzoek'; Martin, 'Een "kunsthandel"'
33. Van der Woude, 'The Volume', pp. 306-308, 316.
34. *Ibid.*, pp. 306-308, 317.
35. Montias, 'Works of Art in Seventeenth-Century Amsterdam', pp. 336.
36. Israel, 'Adjusting to Hard Times'.
37. *Ibid.*, p. 455.
38. Sluijter, 'Determining Value'.
39. Montias, 'The Influence of Economic Factors', p. 54.
40. Chong, 'The Market for Landscape Painting'. On prices of Dutch paintings see also Boers-Goosens, 'Prices of Northern Netherlandish paintings'; Bok, 'Pricing the Unpriced'; Sluijter, 'Determining Value'.
41. See the historiography in the introduction to this book.
42. Montias, 'Cost and Value', p. 462. See also chapter 3 of this book.
43. *Ibid.*, pp. 457-458.
44. Israel, 'Adjusting to Hard Times'; Israel, *The Dutch Republic*, pp. 547-564, 873-880.
45. Israel, 'Adjusting to Hard Times'.

46. Ormrod, 'Art and its Markets', p. 546.
47. Sluijter, 'On Brabant Rubbish'.
48. Ibid.; Prak, 'Painters'; Romein and Korevaar, 'Dutch Guilds'; De Marchi, 'The Role of Dutch Auctions'.
49. For the history of painters' guilds see: Hoogewerff, *Geschiedenis van de St. Lucasgilden*.
50. Prak, 'Painters', p. 152; Van Eeghen, 'Het Amsterdamse Sint Lucasgilde', p. 66; Lourens and Lucassen, 'Ambachtsgilden'.
51. Prak, 'Painters', p. 152; Haak, *The Golden Age*, pp. 204-208.
52. Haak, *The Golden Age*.
53. English translation from Sluijter, 'On Brabant Rubbish', pp. 3-4. Request published in Obreen, ed., *Archief*, vol. III, pp 164-177. Original quote: 'vodden ende slechte leerkinderen werck'; 'de goede burgerye alhier, die door den banck weynich kenisse van schilderye hebben, bedrogen [wordt]'.
54. Sluijter, 'On Brabant rubbish', pp. 4-5; Request published in Obreen, ed., *Archief*, vol. III, pp 166-167. De Marchi, 'The role of Dutch auctions', p. 205.
55. It is noteworthy that in Middelburg there were already measures against imports in 1592.
56. See for the Amsterdam complaint De Marchi, 'The role of Dutch auctions', pp. 163-164; Van Eeghen, 'Het Amsterdamse Sint Lucasgilde', p. 89; For Leiden see Romein, 'Knollen en citroenen', pp. 21-29. For statutes of Gouda and Rotterdam see Obreen, ed., *Archief*, vol. I, pp. 62-66. For Delft see Montias, *Artists and Artisans*, pp. 350-356. For Utrecht see Muller Fz., *Schildersverenigingen*, pp. 63-69; Hoogewerff, *Geschiedenis van de St. Lucasgilden*, p. 20.
57. See the discussion on stimuli on the demand side in chapter 3 of this book.
58. Cf. Montias, *Artists and Artisans*, table A.2.
59. Ibid., pp. 105-106.
60. De Vries, 'Art History', tables 1 and 3.
61. Rembrandt (1606-1669) and Jan Lievens (1607-1674) in the 1600s; Gerard Dou (1613-1675), Barthelomeus van der Helst (1613-1670), Govert Flinck (1615-1660), and Gerard Ter Borch (1617-1681) in the 1610s; and Nicolaes Pietersz. Berchem (1620-1683), Aelbert Cuyp (1620-1691), Jan Steen (c. 1626-1679), Jacob van Ruisdael (c.1628-1682), Pieter de Hooch (1629-1684), and Gabriel Metsu (1629-1667) in the 1620s.
62. De Vries, 'Art History', p. 267.
63. Based on Kolfin, *The Young Gentry*, pp. 105-118.
64. Ibid., p. 116.
65. Ibid., p. 107.
66. Based on ibid.
67. Haak, *The Golden Age*, p. 179; Kloek, 'North Netherlandish Art', p. 105; De Vries, 'The Changing Face of Realism', p. 234.
68. Montias, 'The Influence of Economic Factors', p. 50.
69. Consider for example Sluijter, 'Jan van Goyen als marktlieder'.

8. 1610-1650: Buzz and Pipelines

It has long been recognized that there were several artistic centres in the Dutch Republic.¹ Although a wide range of paintings in terms of price and genre could be purchased in most towns, several locations developed their own specializations.² These were not necessarily unique nor related to the character of the town itself, but in certain towns, specific types of paintings were produced in such quantity and quality that the two became closely associated. Haarlem acquired a reputation for landscape painters, Utrecht for Italianate works, and, around the middle of the seventeenth century, Delft for urban interior and exterior perspectives, while Leiden became known for the style of *fijnschilders*. Sometimes, though, these specializations formed around key figures and were relatively short-lived as was the case with for example Middelburg's flower paintings or Utrecht's fish still lifes, and even the famous Delft school.

The prominence of such specializations has prompted art historians to discuss developments in Golden Age painting by town. In his seminal work on Dutch Golden Age painting, Bob Haak, for instance, selected Haarlem, Amsterdam, Leiden, Delft, Utrecht, The Hague, and, to a lesser extent, Middelburg, Dordrecht, Rotterdam, and Leeuwarden.³ Other art historians have, however, argued against classifications by town.⁴ Earlier in the twentieth century, Wilhelm Martin acknowledged that certain towns became artistic centres, but he has also argued that there were no local 'schools' in the Dutch Republic in terms of genre or style.⁵ The implication is that there were no coherent local schools of artistic styles and ideas, but that there were artistic concentrations, most notably with Utrecht's history painters, with Frans Hals and his circle in Haarlem, with Leiden *fijnschilders*, and with Rembrandt and his pupils in Amsterdam.⁶ While at first sight it may appear that some subjects were linked to certain towns, Martin maintains that what characterized Dutch production was the variation within towns and unity across town borders.

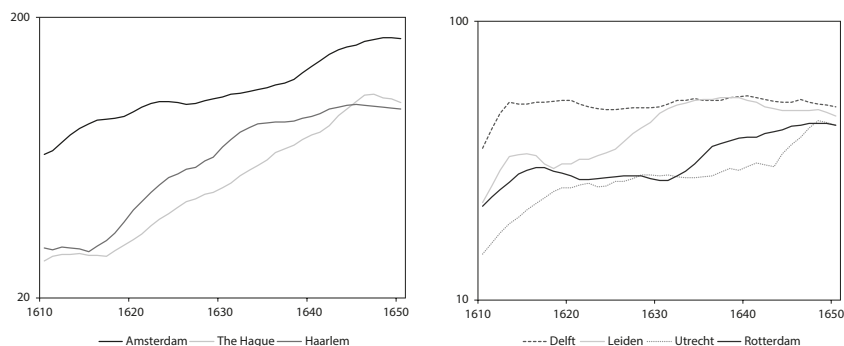
Martin's assertion reflects an ongoing ambiguity in art-historical literature on the Golden Age. Geographic classifications do not do artistic diversity justice, but at the same time it is impossible to discuss stylistic developments without referring to geography. This chapter explores this ambiguity by tracing how the local organizational structure and the economic geography of the Dutch Republic further strengthened the scale, scope, and quality of the production of paintings. Following the inventions

of the artistic front runners, new styles, compositions, and techniques were exploited by differentiation, adaptation, and imitation. Features specific to the Dutch art market reinforced this process at both a local and inter-local level, turning the painting industry into a pressure cooker of artistic imitation and emulation. On the one hand, artists could acquire and profit from skills and knowledge at a local level by being embedded in tightly knit networks. These local production systems also provided a certain degree of protection through guild regulations. On the other hand, the polycentric urban structure facilitated geographic diffusion of skills and innovations and provided access to varying sources of skills and knowledge.

Geography of production

In the period 1610-1650, the number of active painters increased rapidly, not only in absolute terms (Figure 8.1), but also relative to population growth (Table 8.1). In the previous chapter we saw how the overall trend in the number of painters active in the Dutch Republic appeared to be relatively straightforward, displaying steady growth from c.1620 to c.1650. The breakdown per town shows that growth patterns were more complex. Local artistic communities did not necessarily follow the life cycle of the overall painting industry. Certain towns exhibited above average growth rates, whereas others performed well below the overall standard. To some extent the differences between the towns are skewed by the composition

Fig. 8.1 Number of painters active in the seven largest artistic communities, 1600-1650



Source: Ecartico, accessed 20 November 2010 (5-year moving average; semi-log scale)

of the dataset. It does not differentiate between artistic painters, decorative painters, or watercolour painters, or between painters who were just passing through or those who were firmly locally embedded. As a result, the positions of Amsterdam and The Hague are amplified in these figures.

The density of painters increased in all towns but not consistently. Based on estimates for Amsterdam and Delft, Ad van der Woude has estimated that in the seventeenth century, painters made up as much as 5 per cent of the male labour force in Dutch towns.⁷ On the basis of the ECARTICO data and population data (as a proxy for the size of the local labour force), it is possible to expand the selection of towns for which data was available and more clearly distinguish between different periods (Table 8.1). Ten benchmark years for the top seven artistic centres results in an average of 3.7 per cent (median 2.7 per cent) for the seventeenth century. This expanded dataset confirms an estimate of c.5 per cent for 1650, whilst by the end of the seventeenth century this had declined to an average of around 2 per cent (median 1.6 per cent). The Hague shows a spectacular increase after 1630 and had, by far, the highest density of painters. Delft, Haarlem, and to a lesser extent Utrecht also had an above average concentration of painters. Amsterdam and Leiden, on the other hand, ranked relatively low.⁸

Table 8.1 Number of painters per 10,000 inhabitants, 1610-1640

Town	A	H	U	TH	D	L	R	M	Do	Lee	Average
1600	7.8	5.8	3.1	17.6	11.4	4.0	5.0	3.0	6.3	5.8	7
1610	7.1	7.8	4.1	15.8	11.8	3.1	11.2	2.3	4.4	9.6	7.9
1620	8.3	9.1	8.7	19.0	26.8	5.4	17.2	2.5	9.2	15.2	12.1
1630	8.2	17.2	14.0	30.1	23.3	6.1	20.0	2.2	8.5	15.6	14.5
1640	8.9	24.2	16.7	44.8	24.1	5.8	14.2	2.8	8.0	9.7	15.9

Source: Ecartico, accessed 20 November 2010; Lourens and Lucassen 1997. A=Amsterdam, H=Haarlem, U=Utrecht, TH= The Hague, D=Delft, L=Leiden, R=Rotterdam, M=Middelburg, Do=Dordrecht, Lee=Leeuwarden

In the period 1580-1610, the working location of an artist was determined largely by market conditions and artistic traditions. In the growth phase, local market conditions became a less important factor. The size of artistic communities only partially reflects the size of the local market, as indicated by the number of inhabitants. In general, artists were still strongly concentrated in the province of Holland (Figure 8.2). Presumably, producers benefited from, and added to, the benefits offered by relatively

large urbanized economies, available to all firms in the city. However, not all artists flocked to the largest market or to the towns that would offer the best chances for profiting from such urbanization economies.

Table 8.2 Number of painters active in the Dutch Republic in the fifteen largest towns, 1600-1699

Town	N	%
Amsterdam	1017	26.0
The Hague	636	16.2
Haarlem	419	10.7
Delft	271	6.9
Utrecht	246	6.3
Rotterdam	239	6.1
Leiden	232	5.9
Dordrecht	119	3.0
Leeuwarden	108	2.8
Alkmaar	106	2.7
Middelburg	101	2.6
Gouda	26	0.7
Zwolle	23	0.6
Amersfoort	22	0.6
Enkhuizen	22	0.6
Rest	328	8.4
Total	3914	100

Ecartico, accessed 20 November 2010

Medium-sized towns were also able to accommodate significant numbers of painters. Table 8.2 presents the number of painters active in the top fifteen artistic centres in the Dutch Republic between 1600 and 1699. A distinction can be made between five categories: major artistic communities with over 400 painters; large communities that housed between 230 and 270 painters; medium-sized communities with a little over 100 painters; minor painting sites with 20 to 25 painters; and a final 'other' category, which includes towns with less than 20 active painters during the seventeenth century. Amsterdam housed a large number of painters, but its share was relatively modest compared to its dominance in publishing.

The geographic distribution of painters can also be plotted according to the different samples. This makes it possible to capture duplicated counts in the dataset and to distinguish between market segments.

Table 8.3 Distribution of painters according to place of birth, born between 1540-1670

N	A++	A+	A	B	C	D	Population 1670
Amsterdam	1	10	25	41	56	312	219,000
Haarlem	2	9	20	30	35	173	38,000
The Hague	1	1	4	10	28	135	20,000
Leiden	4	8	10	19	23	105	67,000
Rotterdam	2	2	5	14	10	84	45,000
Utrecht	1	3	6	14	22	80	30,000
Delft	1	3	7	12	16	85	25,000
Dordrecht	2	3	5	12	24	55	20,000
Leeuwarden	0	0	0	4	5	45	15,500
Middelburg	0	0	0	6	1	25	27,000
Alkmaar	1	2	4	5	12	19	13,500
Gorinchem	0	0	0	6	7	27	9300
Foreign	0	9	16	33	80	-	-
Unknown	0	0	2	3	7	-	-
Other	3	8	17	46	71	-	1,370,700
Total	18	58	121	255	397	1145	1,900,000
%	A++	A+	A	B	C	D	Population 1670
Amsterdam	5.6	17.2	20.7	16.1	14.1	27.2	11.5
Haarlem	11.1	15.5	16.5	11.8	8.8	15.1	2.0
The Hague	5.6	1.7	3.3	3.9	7.1	11.8	1.1
Leiden	22.2	13.8	8.3	7.5	5.8	9.2	3.5
Rotterdam	11.1	3.4	4.1	5.5	2.5	7.3	2.4
Utrecht	5.6	5.2	5.0	5.5	5.5	7.0	1.6
Delft	5.6	5.2	5.0	4.7	4.0	7.4	1.3
Dordrecht	11.1	5.2	4.1	4.7	6.0	4.8	1.1
Leeuwarden	0	0	0	1.6	1.3	3.9	0.8
Middelburg	0	0	0	2.4	0.3	2.2	1.4
Alkmaar	5.6	3.4	3.3	2.0	3.0	1.7	0.7
Gorinchem	0	0	0	2.4	1.8	2.4	0.5
Foreign	0	15.5	13.2	12.9	20.2	-	-
Unknown	0	0	1.7	1.2	1.8	-	-
Other	16.7	13.8	14.0	18.0	17.9	-	72.1
Total	100	100	100	100	100	100	100

Source: Table 6.4; Lourens and Lucassen 1997.

Fig. 8.2 Distribution of painters in 1650 (left) and 1680 (right)

Source: Ecartico, accessed 20 November 2010

A distinction is made between the geographic distribution of painters according to place of birth and main work location; the latter being defined as the place in which at least half a career was spent (Tables 8.3 and 8.4, Figure 8.3).⁹ The towns with a relatively high artist density also feature prominently in these art-historical samples. There are, however, also some discrepancies between the samples according to place of birth and main working location. The A++ sample shows no distinct concentration in terms of birth location apart from a slight overrepresentation of Leiden, whereas the A sample, for instance, shows the dominance of Amsterdam and Haarlem. Many painters born in Leiden, for instance, ended up working in Amsterdam. In the A sample, Amsterdam, Haarlem, Utrecht, The Hague, and Delft score relatively high in terms of work location. Amsterdam, moreover, features prominently in the AA+ sample, with seven out of eighteen painters. This suggests that the chances of becoming a prominent artist depended not only on general economic or individual social circumstances but also on distinct local features. Not all towns appear to have offered comparable conditions for (prominent) painters. In order to explain why some towns, Haarlem and Utrecht, saw early success whilst other towns, Leiden and Delft, only developed into artistic hotbeds at a later stage, we turn again to the relationship between quality and quantity.

Table 8.4 Distribution of painters according to main work location, born between 1540-1670

N	A++	A+	A	B	C	D	Population 1670
Amsterdam	7	24	40	82	92	306	219,000
Haarlem	3	10	21	38	27	122	38,000
Utrecht	2	5	9	20	18	73	30,000
The Hague	1	5	9	14	35	177	20,000
Delft	2	2	8	14	13	78	25,000
Leiden	1	2	4	13	15	69	67,000
Rotterdam	0	2	4	10	9	70	45,000
Dordrecht	2	2	2	9	14	36	20,000
Middelburg	0	-	3	6	4	32	27,500
Leeuwarden	0	-	0	6	7	31	15,500
Zwolle	0	-	0	4	1	32	10,900
Alkmaar	0	-	0	2	1	7	13,500
Various	0	-	13	26	39	-	-
Unknown	0		0	2	15	-	-
Other	0	7	9	16	107	-	1368,600
Total	18	59	121	262	397	1033	1,900,000
%	A++	A+	A	B	C	D	Population 1670
Amsterdam	38.9	40.7	33.1	31.3	23.2	26.9	11.5
Haarlem	16.7	16.9	17.4	14.5	6.8	10.7	2.0
Utrecht	11.1	8.5	7.4	7.6	4.5	6.4	1.6
The Hague	5.6	8.5	7.4	5.3	8.8	15.6	1.1
Delft	11.1	3.4	6.6	5.3	3.3	6.9	1.3
Leiden	5.6	3.4	3.3	5.0	3.8	6.1	3.5
Rotterdam	0	3.4	3.3	3.8	2.3	6.2	2.4
Dordrecht	11.1	3.4	1.7	3.4	3.5	3.2	1.1
Middelburg	0	0	2.5	2.3	1.0	2.8	1.4
Leeuwarden	0	0	0	2.3	1.8	2.7	0.8
Zwolle	0	0	0	4	0.3	2.8	0.6
Alkmaar	0	0	0	2	0.3	0.6	0.7
Various	0	0	10.7	26.0	9.8	-	-
Unknown	0	0	0	2	3.8	-	-
Other	0	11.9	7.4	16.0	27.0	-	72.0
Total	100	100	100	100	100	100	100

Table 6.4; Lourens and Lucassen 1997.

Quality and quantity

The relationship between local characteristics and artistic achievements has been examined before. Frits Lugt, for instance, has asked with regard to Rembrandt's brilliance: 'But was this big town [Amsterdam], with all its advantages, a necessary condition for the artist and would he not have made the same advancements in a different setting, Leiden for instance?'¹⁰ Lugt's answer to the first question was a resounding 'no', downplaying the importance of Amsterdam as a working location for Rembrandt's artistic achievements. Economic literature on industrial clusters suggests otherwise, maintaining that the performance of individuals can be improved by being in a certain environment through both urbanization and localization economies. To some extent this simply has to do with the scale of production. Montias, for instance, has tried to capture the relationship between industrial size and artistic quality through the concept of critical mass.¹¹

The explanatory power of critical mass has only been systematically explored in studies on modern-day academic research groups in which it has been defined as the group size above which research quality per capita significantly improves.¹² Studies indicated that research quality is proportional to group size, but only up to a certain point. For instance, on average, a group of ten researchers turns out to be twice as strong (per head) as a group of five. In addition to a lower critical mass, evidence indicates the existence of an upper critical mass; that being the maximum number of people with whom researchers can interact in a meaningful way. When the research group exceeds an upper limit, it tends to fragment.

This kind of reasoning has been extended to explain the development of industrial clusters. When the number of firms in certain areas exceeds a quantitative threshold and gives rise to growth and innovation, it can be called a critical mass. Following this threshold, location-specific advantages such as the transfer of knowledge and the pooling of the labour market develop. From this point onwards, certain towns began attracting more start-ups than other regions, while companies in a cluster became more innovative than non-clustered companies through spin-offs and start-ups.¹³ Exactly how many producers are needed to reach critical mass remains unspecified and presumably varies between industries.

When applied to the Dutch art market, we may ask what the relationship between quality and quantity was, and between size and prominence on the one hand and local characteristics on the other. In 1610, there were two

Fig. 8.3 Distribution of prominent painters, according to main work location (C sample), start career between 1590-1629 (left), and between 1630-1669 (right)



Source: Table 6.4

groups of towns: towns with one to five painters, and towns with more than ten painters (Amsterdam, Delft, Haarlem, The Hague, Rotterdam, Utrecht, Leiden, Leeuwarden, and Dordrecht). The gap between the two categories became more pronounced from 1620 onwards. Only the second group would become significant in the latter part of the century (except for Leeuwarden). In 1610, Dordrecht, Leiden, and Leeuwarden lagged a little behind, but whilst all three managed to retain their place in the latter group, they never really belonged at the top. Around 1610 the largest artistic centres were roughly of the same size, with about 25 painters per town. Amsterdam and Delft were ahead, housing relatively large numbers of painters, while Leiden lagged somewhat behind. In the new growth phase, Haarlem, The Hague, and Utrecht surged ahead. In the 1630s the number of new painters in Amsterdam increased by 24, in Haarlem by 27, and in The Hague by 29. Combined, this represented 75 per cent of all growth in the seven largest towns.

In Amsterdam, although still the largest centre by far, growth rates were modest. During the phase of emergence, Amsterdam's share of the total number of painters had expanded, but during the growth phase it started to decline from about 30 per cent in the 1600s and 1610s to 24 per cent in the 1630s. Around 1635, there were approximately 50 painters active in Delft, Utrecht, and The Hague, twice as many as in Leiden and Rotterdam.

Haarlem housed approximately 75 active painters and Amsterdam some 100. Fifteen years later, Utrecht, like Delft, still housed just under 50 painters, while Leiden and Rotterdam had almost bridged the gap. The only towns to surpass the figure of *c.*50 active painters were Amsterdam, Haarlem, and The Hague.

Arguably, the group of towns with fewer than five painters at the end of the phase of emergence never reached the critical mass of an artistic community to begin with. Only towns that had already taken a lead in the previous phase would sooner or later develop into artistic concentrations. In other words, in the growth phase it was hard to make a silk purse out of what had been a sow's ear during the phase of emergence. The geographic divergence that took place during the phase of emergence strongly determined the artistic opportunities in later stages. Montias was therefore correct to highlight critical mass, but it can be defined here as the minimum number of practitioners required to sustain a proper local art market. This means that all towns that reached the critical threshold of ten active painters in 1610 were potential clusters. Generally, but not exclusively, these were all towns with a relatively large population.

Still, the 1610 size of a local artistic community does not entirely explain its early lead or lack thereof. Likewise, a large number or high density of painters was not sufficient to trigger artistic innovation. Delft, for example, had some strength in portrait painting and housed a significant number of prominent painters who managed to differentiate their work through developing variants on existing specialties such as seascapes, church interiors, and battle scenes, but it was only in the late 1640s that Delft-based painters became innovative.¹⁴ The Hague is another example. Even though the number of painters was relatively high, this did not give rise to many local virtuosi. Even the presence of the court was no guarantee. In fact, paintings were not necessarily the preferred luxury wall decoration among the nobility, and for commissions of portraits or history paintings specialists from elsewhere were called in.¹⁵ The mid-levels of society were underrepresented in the town of The Hague, and presumably the many mediocre painters in town catered to the people coming to The Hague for political or business purposes. In the case of the publishers, it was also observed that the presence of the court in The Hague did not make for a local specialization of luxurious books. To further explain the rise of local artistic hotbeds, we turn to the mechanisms of spin-offs and spillovers.

Spin-offs and spillovers

Economic-geographical studies have found that the formation of new clusters and the development of existing ones can be stimulated through spin-off processes and interactions with established local industries.¹⁶ This fits well with the trajectory of early modern painting. The fact that the observed gap between supply and demand for paintings at the end of the phase of emergence was rapidly filled by painters trained in the Dutch Republic suggests that there was no break in the transferral of skills and knowledge during the phase of emergence. Moreover, Haarlem and Utrecht, towns with a strong artistic tradition and an above average artistic performance during the growth phase, were the first to develop into clusters of painters. In other words, in the case of painting, the local reproduction of knowledge and skills over time allowed potential clusters to develop into actual ones via spin-offs and spillovers.

Spin-offs

Both immigrant specialists and the local artists of Haarlem and Utrecht played a significant role in training the generation that would instigate a series of product and process innovations destined to trigger new growth dynamics. Presumably, the quality of these so-called 'incubators' shaped later successes, as their routines were passed on through spin-offs and replication. In the cases of more formal associations such as workshops, academies, and societies, the exchange of skills and knowledge is almost tangible.¹⁷ Early large studios in the Northern Netherlands included those of Gerard van Honthorst, Abraham Bloemaert, and Paulus Moreelse.¹⁸ Haarlem Mannerists Van Mander, Goltzius, and Cornelisz van Haarlem are known to have trained at least thirty apprentices all together; in Utrecht, Paulus Moreelse and Abraham Bloemaert were the leading trainers with at least twenty-eight and fourteen pupils respectively; and in Amsterdam, the Flemish trio of Bol, Van Coninxloo, and Vinckboons took at least fifteen students under their wings.¹⁹ Gerard Honthorst in Utrecht, Gerard Dou in Leiden, Rembrandt in Amsterdam, and Frans Hals in Haarlem are other examples of artists who were crucial in the transferral of skills, knowledge, and routines.

Many of these apprentices, often second generation immigrants, would be responsible for the acceleration in specialization and innovation that characterized the growth phase in the life cycle of Dutch painting.²⁰ These so-called spin-off processes are considered the most important and visible

mechanisms for transferring knowledge and routines from incumbents to new firms.²¹ By inheriting parent firms' routines, they not only sustain certain specializations, but spin-offs can also strengthen geographical concentrations of local industries if they locate in their parent company's region. On the basis of data on master-apprentice relationships, a comparison between the location of spin-offs and parent firms is drawn. In Tables 8.5 and 8.6 the distribution of spin-offs in the A sample is mapped according to their main work location and their starting location.²² These figures display an overall tendency to pursue a career in the town of one's training, although the strength of local spin-off dynamics differed per town. For example, sixteen of the artists who were trained in Haarlem remained in the town to initiate their careers (Table 8.5). Twelve Haarlem-trained artists continued to use the town as their main working location, whilst six others moved on to Amsterdam (Table 8.6). Utrecht ranked relatively high as a training site with twenty-one artists, but only six ended up spending most of their careers there.

Table 8.5 Distribution of spin-offs according to starting location, A sample

		Starting location									Total
		A	H	TH	U	L	D	R	Do	Other	
Training location	Amsterdam	21	2	1	1	1	1	0	0	1	28
	Haarlem	1	16	0	0	1	2	1	0	2	23
	The Hague	0	0	2	0	1	0	0	0	1	4
	Utrecht	3	2	0	3	1	1	0	1	7	18
	Delft	0	0	1	0	0	2	0	0	2	5
	Rotterdam	1	0	0	0	0	0	3	0	0	4
	Dordrecht	0	0	0	0	0	0	0	0	5	5
	Leiden	0	0	0	0	5	0	0	0	2	7
	Other	4	3	0	1	0	0	1	0	10	19
	Unknown	3	11	0	0	1	2	0	0	9	26
	Total	33	34	4	5	10	8	5	1	39	139

Table 6.4; A=Amsterdam, H=Haarlem, TH=The Hague, U=Utrecht, L=Leiden, D=Delft, R=Rotterdam, Do=Dordrecht

Table 8.6 Distribution of spin-offs according to main work location, A sample

		Main work location									Total
		A	H	TH	U	L	D	R	Do	Other	
Training location	Amsterdam	24	0	3	0	0	1	0	1	8	37
	Haarlem	6	12	2	0	0	0	1	0	4	25
	The Hague	0	0	1	0	0	0	0	0	3	4
	Utrecht	7	2	0	6	0	1	0	1	4	21
	Delft	1	0	2	0	0	2	0	0	0	5
	Rotterdam	2	0	0	0	0	0	1	0	1	4
	Dordrecht	0	0	0	0	0	0	0	4	1	5
	Leiden	2	0	2	0	4	0	0	0	0	8
	Other	5	2	4	2	0	0	1	0	4	18
	Unknown	11	7	1	0	0	2	1	0	7	29
	Total	58	21	15	8	4	6	4	6	32	156

Table 6.4; A=Amsterdam, H=Haarlem, TH=The Hague, U=Utrecht, L=Leiden, D=Delft, R=Rotterdam, Do=Dordrecht

Table 8.7 presents the relationships between place of birth, training location, starting location, and main work location for the A sample. Unfortunately, training location was not documented for the whole sample (presented as N-trained). The relationships between starting location and main work location, as well as between training location and main work location, are relatively strong. The group born prior to 1580 consisted, for the most part, of immigrants, which explains the weakness of the relationship between place of birth and main work location. When the group born before 1580 is excluded, the overall correlation between place of birth and main work location is a little under 50 per cent. Only one-third of the A sample, born between 1580 and 1599, started their careers in their place of birth, whilst twice as many were trained there. Admittedly, these figures only reflect the top tiers of Dutch painting. Data on the C and D samples show a stronger relationship between place of birth and main work location. The expansion of the art market during the phase of emergence had been strongly facilitated by a wave of immigrant producers. During the growth phase, as is to be expected, the share of painters born in the Dutch Republic increased significantly. The share of foreign-born painters active in the Dutch Republic decreased from over 80 per cent in the 1590s, to 55 per cent in the 1610s, and just over 25 per cent in the 1630s.²³

Table 8.7 Relation between variables, per birth cohort, A sample

Birth cohort	<1580	1580-1599	1600-1619	1620-1639	Total
	%	%	%	%	%
Birth and starting location	20	33	62	74	47
Birth and training location	62	60	70	68	65
Birth and main work location	27	37	41	53	40
Starting and training location	46	50	78	74	62
Starting and main work location	53	43	59	55	53
Training and main work location	46	60	57	50	53
N total	15	30	29	38	112
N total (trained)	13	20	23	34	90

Table 6.4

All in all, these results leave much room for interpretation. Although there are some fluctuations over time and place, many Dutch painters stayed put, whilst just as many set up shop elsewhere. Although there were strong local configurations, for instance the many landscapists in Haarlem or the return to Utrecht of painters who had visited Italy, many painters were not tied to one particular location. On the one hand, painters were very mobile, whilst on the other hand skills were for a large part reproduced locally. And of course statistics do not reveal everything. Painters could maintain strong ties to towns even after they had left them to work elsewhere. Innovators Esaias van de Velde and Willem Buytewech for example were only in Haarlem for a few years, but they passed on a clear legacy.²⁴ Dirck Hals, for instance, picked up where Van de Velde and Buytewech had left off.²⁵ And Jan van Goyen, who had trained in Haarlem for a while, would see numerous imitators there.²⁶ These results seem to support the ambiguity regarding the local character of Dutch painting discussed in the introduction to this chapter.

Spillovers

In addition to spin-offs, which mainly describe intentional knowledge and skills transferral over time, there is also the possibility of knowledge and skills unintentionally 'spilling over' to colleagues, competitors, or business in the same or related economic activities. Such spillovers are considered to be important for cluster development because they reduce search costs, speed up learning curves, and enhance the chance for innovative activity. As

they are often unintentional, spillovers are notoriously hard to measure.²⁷ As a consequence, many cluster studies have focused on establishing increasing returns to scale rather than knowledge flows. The latter are simply assumed to exist because geographical proximity can, in theory, enhance firms' abilities to exchange ideas and to receive and process information.

Such an assumption can also be made for Dutch painting since the centres of Dutch towns were fairly small and painters were often located in close proximity to one another. Frits Lugt's *Rembrandt's Amsterdam* for instance, provides a vivid image of Amsterdam in 1647.²⁸ He takes us on a tour to the famous painter's house, passing important landmarks and calling attention to art lovers and patrons but also creditors, colleagues, inns, and the shop of the most important seller of Rembrandt's work, Clemens de Jonghe at the 'ninth house from the Dam'.²⁹ Whilst Amsterdam engravers, print publishers, and cartographers were based close to the booksellers and publishers around the Dam, a concentration of painters could be found only a couple of blocks away, in the St. Antoniesbreestraat. Throughout the seventeenth century, numerous artists, but also jewellers and other highly skilled craftsmen, lived and worked in this neighbourhood amidst shops, warehouses, and homes of affluent burghers.³⁰ Of course, spillovers are not limited to neighbouring firms, nor are they inevitable; they simply are assumed to occur more easily in geographic proximity. But even if painters did not live in the same town, relationships were fairly easy to maintain. During the early 1630s, for instance, Salomon van Ruysdael and Jan van Goyen started to paint river scenes in such a similar style that the attributions are not always clear. Despite the fact that Van Goyen had already returned to his birthplace of Leiden by the time Van Ruysdael joined the Haarlem guild in 1623, there can be no doubt that the two painters knew each other personally. And in 1634, Van Goyen was found painting in Haarlem in the house of Isaack van Ruysdael, Salomon's brother.³¹

In addition to the almost intangible personal exchanges and business relations, the traditional master-pupil relationships, and the interactions in the larger studios, there were other semi-loose associations that made for knowledge and skill exchange. An important phenomenon in this respect for instance was the emergence of group training.³² Whether or not these gatherings were formalized in drawing academies, the most important point here is that several masters in Utrecht joined forces to provide teaching.³³ Contemporaries also made mention of an academy in reference to Haarlem.³⁴ Even though the existence of a genuine academy has been refuted, the term presumably referred to gatherings organized by Van Mander, Goltzius, and Cornelisz van Haarlem to draw from live models and antique examples.

These 'academies' were more about established painters practising live drawing in groups than about teaching the new generation.³⁵

These qualitative explorations of Dutch painting do not definitively answer questions about the extent to which Dutch painters were embedded in their locales and the role that local knowledge transfers and spillovers may have played in spatial and diachronic growth patterns. Some scholars of modern-day industrial innovativeness have attempted to measure the success of spillovers by linking 'output', in the form of patents, with 'input', such as corporate expenditure on knowledge development (research and design).³⁶ Although such a method is, of course, not readily applicable in the case of early modern Dutch painting, it is possible to consider a specific 'output' – the phenomenon of local schools of painting – and compare it to a specific 'input' – local institutional organization.

Institutional organization

Several economic historians have attributed artistic concentration, and by implication the remarkable rise of Dutch Golden Age painting, to the specific organization of artistic production in the Dutch Republic.³⁷ There are three main elements in this line of reasoning: guilds, art dealers, and an efficient transport system. None of these was directly responsible for the initial artistic spark, but combined they are considered to have facilitated or even reinforced the subsequent growth in quantity and quality.

Jan de Vries has argued that the organizational changes in the Dutch art market, including the (re-)establishment of the Guilds of St. Luke, accelerated the scale and scope of Dutch art production and in turn facilitated product and process innovation. He did not explain how this might have worked, but Maarten Prak later argued that guilds managed to corner a significant part of their home markets, and at the same time they deepened those markets by warranting sufficient levels of transparency necessary to create consumer confidence.³⁸ As emphasized by scholars such as Michael Montias and Marten Jan Bok, a second mediating party was the art dealer. The Dutch art market became increasingly varied and specialized, allowing art dealers to gain in importance.³⁹ Art dealers could also contribute to the explosive growth of the art market by adding to the hype of paintings as wall decoration through branding and marketing activities.⁴⁰ Moreover, the canal network facilitated trade in paintings across town borders.⁴¹ As a result, local specializations were able to develop in towns that would have otherwise been too small to sustain them, given the size of local demand. By

implication, local artists' guilds, art dealers operating on an intra-local level, and efficient transport possibilities could provide some of the instruments necessary to exploit potential demand on the one hand while developing potential artistic talent on the other.

Without a certain degree of local protection as well as an infrastructure facilitating inter-local networks, Dutch painters would have had to work in either the largest of markets or in small local markets. In large towns, the market could have quickly become too crowded to sustain such levels of product differentiation, while in small towns painters may not have developed successful specializations to begin with. From these considerations, two new factors in explaining the high levels of quality and the volume of production are revealed: openness and protection. These two seemingly contrasting factors will be further explored through a discussion of entry barriers and local embeddedness.

Entry barriers

Between 1629 and 1631, Constantijn Huygens wrote: 'When I consider the parentage of each [Rembrandt and Lievens] I think no stronger argument can be given against nobility being a matter of blood. [...] The father of one of these young men [Lievens] is an embroiderer and a commoner; the other's [Rembrandt's] is a miller and surely not of the same grain. Who could help but marvel that two prodigies of talent and creativity could emerge from these farmers. When I look at the teachers these boys had, I discover that these men are barely above the good repute of common people. They were the sort that were available for a low fee, namely within the slender means of their [Rembrandt's and Lievens'] parents'.⁴²

With these remarks Huygens discloses several interesting features about the two promising young painters: their social background was humble, their masters were not quite worthy of the talent of their pupils, and the training they had received was inexpensive. That Rembrandt and Lievens had nothing to thank their masters for is, of course, not quite true. Huygens presumably insinuated this in order to stress the pair's innate talent and hard work rather than to suggest that their masters had been minor painters.⁴³ The other two points he makes are more interesting, as they refer to entry barriers and raise the question of whether anyone could become a master painter?

Assuming that talent is more or less evenly distributed across space and time, the logical consequence would be that the actual materialization of artistic genius is dependent on the opportunities to convert this talent into

real skill. The career of early talents started with an estimation of future demand for their specific skills, no different than for any other livelihood. In a society with little demand for works of art, few parents would send their children off on an artistic career path. Early modern artists had to make a living from painting, and the decision to send boys, and less often girls, to apprentice with master painters reflects expectations of future earnings. The large number of painters in the Dutch Republic leaves little doubt about the expected returns on training in the arts. The fact that there was an expanding commercial market for art surely stimulated the choice of painting as a profession.

Research on the socio-economic backgrounds of Dutch painters has shown that most of them were of middle-class origin whereas other groups of painters, referred to as *kladschilders* or *plateelschilders*, such as decorative or artisan-painters, and house painters were of distinctly lower socio-economic origins.⁴⁴ This dissimilarity was presumably more related to the parents' ability to finance training than to formal entry barriers or the capital intensity of a painting business. Generally, artist-painters, like printers and bookbinders, were literate and had attended school full-time for three years.⁴⁵ After this initial investment, an accumulated expense of *f*150 to *f*200, aspiring artists had to invest in an apprenticeship period. It is estimated that pupils who lived at home paid anywhere from *f*20 up to *f*50 per year, while those living with their masters were charged between *f*50 and *f*100, depending on the reputation of the master and the age and previous education of the pupil.⁴⁶ The large workshops of Rembrandt, Honthorst, or Bloemaert were the exception rather than the rule, as artistic training took place largely through the guild-based apprenticeship system. Moreover, most of Rembrandt's pupils were not beginners but had previously apprenticed with another master in or outside of Amsterdam.

A drawing manual by Willem Goeree (1668), as well as the treatise of Rembrandt's pupil Samuel van Hoogstraten (1678), provides a basic idea of what apprentices had to learn.⁴⁷ The first stage in the training included basic preparation skills: putting up a canvas, grinding colours, and washing the master's palette and brushes. Then students learned how to draw before finally learning how to paint, often by copying other paintings, engravings, or drawings.⁴⁸ Depending on the master, the apprentice would not only learn how to paint in basic terms, but he would also be taught specific styles, techniques, and specializations. Ideally, each and every mystery and secret of the master's style and skills were to be passed on.⁴⁹ On top of the standard duration of training – in Haarlem, for example, it was three

years – the route to becoming an independent master was considerably longer. This first stage of apprenticeship was usually followed by an advanced training period with a different master. As pointed out by Maarten Prak, 'It is a matter of definition whether we want to define the entire period as training, but we may plausibly assume that the formal period of apprenticeship covered merely basic skills, and that the subsequent period was needed to develop into a master painter who would be able to set up a shop on his own'.⁵⁰

When both the direct costs of training and the absence of income during the apprenticeship period are taken into account, it is safe to say that only fairly wealthy parents could afford to pay for the direct and indirect costs of having their child trained as an independent artist-painter.⁵¹ Sons of master painters had clear advantages, a fact that is illustrated by a relatively high share of father-son relations among painters of whom the social background is known. Nonetheless, the fact that many of the boys who started an apprenticeship with master painters never became independent masters suggests that entry barriers to the apprenticeship stage were not very high. Even after having started an apprenticeship, many never set up their own shops, and as a result they often disappeared from the records.⁵²

The gap between the number of apprenticeships and the number of master painters cannot be fully ascribed to high entry barriers in the form of start-up costs or heavy formal requirements. The use of training with master painters by aspiring craftsmen in other fields that required a basic or even more advanced command of drawing, such as goldsmiths and silversmiths or embroiderers, may be an additional or even alternative explanation. The training period was costly, but establishing oneself as an independent painter could be done at relatively low cost. As seen in the chapters on publishing, the Guilds of St. Luke were relatively relaxed about entry. The low entry barriers might explain why, in Delft for instance, virtually every independent painter was a member of the guild.⁵³ Fees were fairly modest, ranging between *f* 3 and *f* 12, depending on the town and whether the applicant was a local and/or a master's son.⁵⁴ Furthermore, there were no perceivable religious barriers, nor were the guilds prescriptive about artistic quality and styles.⁵⁵ Even when guilds required masters to register their apprentices, they did not always strictly enforce these rules.⁵⁶

Even though guilds offered an administrative framework for training, they were not involved in outlining the contents of the training trajectory, and they did not require a masterpiece as a proof of mastery. Apparently,

the years of apprenticing would suffice, after which it would be up to the open market or the commissioners of paintings to judge painters' skills. The absence of a formal appraisal of skills cannot be explained by an unfamiliarity with the concept of masterpieces. In several towns, for instance Delft, Amsterdam, and Rotterdam, other members of the guild, such as glass engravers or *kladschilders*, did have to produce a masterpiece.⁵⁷ The reason artist-painters were exempt from the same criteria has been explained by Michael Montias by the fact that in the Dutch art market there was no single standard of quality.⁵⁸ Whatever the motivation, the net result was that formal entry restrictions were relatively low.

Local market protection

The creation and sustainment of trade or production 'monopolies' for members are often considered to have been the main concern of local guilds, and Dutch painters' guilds seem to have been no exception. Guild regulations, various repeated requests for stricter measures, and guild minutes reveal an ongoing concern with illegal sales.⁵⁹ The exact requirements concerning the time, place, and annual number of legal sales varied depending on the town, but in general the following applied: works by non-local masters could not be sold at public sales, auctions, or lotteries, and dealers wishing to sell paintings in a certain town had to be guild members.⁶⁰ Such regulations notwithstanding, guilds were not entirely successful in controlling local markets. Not only were customers free to purchase paintings in other towns, local members of the artists' guilds were also allowed to act as dealers and sell paintings that had been produced elsewhere. Moreover, art dealers from elsewhere were free to sell at local fairs.⁶¹ Another indicator of the lack of regulatory enforcement is the intensification of public sales of both local and out-of-town paintings, by residents and non-residents, outside of annual public fairs.

Still, sources suggest that many purchases did take place locally. Analyses of paintings in local collections, for instance, have been interpreted as showing 'overrepresentation' of local artists.⁶² Montias's research has demonstrated that, depending on the town, between 40 and 80 per cent of attributed paintings in inventories were by local masters. In Delft and Haarlem, local masters were responsible for between 60 and 80 per cent of the attributed paintings, while the most popular artists in these samples were overwhelmingly local.⁶³ Data on Amsterdam, although admittedly not the most typical town in the Dutch Republic, has shown that only

35 per cent of the original paintings in inventories dating from 1620-1679 can be attributed to artists who worked exclusively in Amsterdam. This figure rises to 53 per cent when artists who worked in other towns as well as Amsterdam are included.⁶⁴ Overall, 14 per cent of the paintings came from artists working exclusively in Haarlem (24 when we count Haarlem and elsewhere), 12 per cent from Antwerp, and 8 per cent from artists who worked solely in Utrecht. Willemijn Fock's analysis of personal relationships between consumers and artists on the basis of Leiden inventories revealed that these were overwhelmingly of a local character: 25 of the 36 painters in the sample worked in Leiden.⁶⁵

Not all towns were equally well represented in local inventories. In the Delft data, for instance, Leiden and Amsterdam were strongly underrepresented, whereas Utrecht, Haarlem, and The Hague were quite dominant. In the case of Amsterdam, the Utrecht and Haarlem painters were prominent, but Leiden, The Hague, Delft, and Rotterdam only made up very small fractions of the attributed samples.⁶⁶ In Leiden, Haarlem painters were very popular, especially during the second half of the seventeenth century, whereas colleagues from Amsterdam, The Hague, Delft, and only occasionally Utrecht were much less visible.⁶⁷ Haarlem and Utrecht in particular stand out as towns that exported to collectors in other towns. The inventory research may be biased towards out-of-town painters, due to overrepresentation of attributions in collections of the upper class who would have easier access to works from other towns. On the other hand, the sources may reflect an alternative bias, as both local clerks and owners would have been more familiar with the work of local painters.⁶⁸ Still, when taking both predispositions into account, the proportion of Delft-based artists would still not fall below 40 or 50 per cent.⁶⁹ Whether or not local guilds can be considered successful in controlling local markets depends on the question of whether this percentage is deemed high or low.

Montias tentatively attributed the overrepresentation of certain towns and painters in the Delft inventories to the absence of suitable local substitutes.⁷⁰ De Marchi and Van Miegroet have suggested that the representation of certain towns 'correlates loosely' to the geographic reach of the canal network.⁷¹ While it was certainly true that Amsterdam was well connected to both Haarlem and Utrecht, this alone cannot explain the high share of painters from Haarlem who appeared in Delft's inventories, nor can it account for the relatively low share of out-of-town painters in Haarlem's inventories. Utrecht and Haarlem had been the first in which artistic clusters emerged and the first in which they subsequently stagnated. In

Haarlem and Utrecht this stagnation took root already in around 1630-1635. Presumably, just prior to this, the supply of paintings started to overtake demand, with two important consequences. Firstly, painters increasingly migrated, especially to Amsterdam, and secondly, art dealers stepped in to redistribute excess paintings.⁷² In Leiden and Amsterdam, on the other hand, the density of painters, as we have seen, was relatively low, and even later in the century there was room for expansion in the number of painters.⁷³ These diverging developments allowed for the redistribution of painters and paintings from one town to the other. It was, therefore, not simply a consequence of geography, or just a matter of substitution, that caused the painters of Utrecht and Haarlem to be relatively well represented in inventories in other towns.

And so we find that there were entry barriers for apprentices and for masters in terms of tuition and entry fees but that these barriers were relatively low. A similar observation can be made for the access to local markets. Import of paintings from outside was regulated, yet there were ample opportunities to get them in anyway. On a local level, painting was protected but not monopolized or secluded. As demand for, and supply of, paintings expanded, so did the range of entrepreneurial strategies regarding the dealing in art. Although some customers ordered or bought their paintings directly from the painter in his workshop, art dealers and other channels of distribution became increasingly important during the period of growth.⁷⁴ In addition to the traditional channels of shops, auctions, and fairs, art dealers experimented with new strategies such as lotteries and dice games (*rijfelarijen*). In Delft, art dealers even introduced paintings as prizes in shooting games.⁷⁵

Distribution

As in publishing, dealers became more important in production and distribution of paintings from the 1630s onwards.⁷⁶ They were intermediaries between supply and demand, a function discussed at length in the following chapter, but some merchants also directly influenced supply. They financed and mediated production, putting artists to work, and they marketed their products. According to Montias, the most direct way – the so-called ‘*galley*’ method – must have been popular, especially at the lower ends of the market, for copies and works-by-the-dozen. In 1625, for instance, painter Jacques de Ville decided upon delivering *f* 2,400 worth of paintings over the course of a year and a half to skipper Hans Melchiorz, who in turn

was responsible for paying all production costs.⁷⁷ Some twenty years later, Pieter van den Bosch promised art dealer and appraiser Marten Kretzer to paint for *f*1,600 guilders a year.⁷⁸ Such anecdotal traces notwithstanding, the practice and extent of this type of production is unfortunately largely unknown.⁷⁹

At the upper end of the market, there were no such *galleys* with low-paid artists, yet there was increasing interaction with merchant-dealers. The best-known example for the Republic is Hendrick Uylenburgh, Rembrandt's business agent.⁸⁰ Although little is known about the practices of Uylenburgh's workshop and the marketing of the paintings produced there, we do know that he supplied painter and art dealer Lambert Jacobsz in Leeuwarden with stock produced in Amsterdam.⁸¹ For fifty years from 1625, Hendrick Uylenburgh and his son Gerrit operated as both art dealers and as owners of an important painters' workshop.⁸² Even famous painters took this route. Jan Porcellis indentured himself to an Antwerp-based art dealer, signing a contract to paint forty panels in twenty weeks.⁸³ In 1630, Roelant Saverij, a famous landscape and animal painter living in Utrecht at the time, signed a contract to paint seven panels for Jan Thivaert.⁸⁴ However, he had a change of heart and the two had to resolve their differences before the court of Utrecht. And in 1641, art dealer Leendert Volmarijn is known to have ordered thirteen pictures from Isaac van Ostade.⁸⁵ Presumably such contracts were particularly appealing to painters who were having financial difficulties. An example is the heavily indebted Emanuel de Witte who contracted with art dealer Joris de Wijs to paint for *f*800 a year plus room and board.⁸⁶

Painting was much less capital intensive than publishing, but this does not mean it was not embedded in credit markets.⁸⁷ Investments in a painting career could run into significant figures, and for master-painters and art dealers a well-developed credit network was certainly no luxury. Painters who did not paint on commission needed to invest upfront, facing demand uncertainty. Moreover, working capital was needed to pay for pigments, panels, and canvases. Many painters acquired debts; even highly skilled and praised artists such as Jan Porcellis, Jan van Goyen, Frans Hals, Jan Steen, Hercules Seghers, Pieter de Hooch, and of course Vermeer and Rembrandt experienced cash flow problems. Some, including Rembrandt, even went bankrupt.⁸⁸ Although the causes of financial troubles could vary, ranging from failures in investments to personal problems, one thing is certain: the painters in question had acquired debts and failed to repay them.⁸⁹ Art dealers faced similar credit issues. Amsterdam art dealer Johannes de Renialme, probably Rembrandt's most privileged dealer, was the first Dutch dealer

to operate on a significant international scale. He had a large inventory of high-priced paintings, which, as we have also seen with publishers, required a great deal of capital and credit. As Montias has pointed out, marrying four prosperous wives was highly advantageous, but De Renialme still had to borrow money to keep his business afloat.⁹⁰

Overall though, painters and art dealers enjoyed the fruits of a well-developed capital market, low interest rates, and an abundance of available funds. Like many other merchants, they depended primarily on local connections, and as in other economic activities, including that of book production, borrowing, auctioning off stock, or the transferral of bonds could be used to acquire cash.⁹¹ Jan Porcellis's public sales of 1626 and 1627 and Rembrandt's similar auctions in 1655 are good examples of such public auctions.⁹² Large dealers were permanently short of capital.⁹³ In 1640, for instance, Amsterdam art dealer Hendrick Uylenburgh stated before a notary that he had borrowed 'a good sum of money to benefit and advance his occupation and commerce' from a number of artists and merchants.⁹⁴ The year before, Uylenburgh borrowed f1,600 from Gilbert de Flines and Pieter Sey at an interest rate of 6 per cent.⁹⁵ As a security, Uylenburgh pledged 'all his paintings' as well as those he might acquire, and he allowed creditors to store the paintings in their houses for further reassurance. Artists such as Rembrandt, Frederick de Moucheron, and Jan Lievens are also known to have borrowed from fervent art collector Herman Becker.

A final important function of art dealers – that of arbitrage between clients and artists – should not be underestimated. This became increasingly important when local markets became saturated and the overall art market became increasingly large and diverse. The growing attention paid to the authenticity and originality of paintings can also be seen as signs of such developments.⁹⁶ The issue of uncertainty regarding quality appears to have become increasingly critical during the growth phase, not necessarily in the case of cheap paintings used as decorations, but primarily at the high end of the market where collecting as a pastime became more established and selling prices came to be used as marketing tools.⁹⁷ Another sign can be found in the development of prices. Although data on early modern selling prices of paintings is scarce, Eric Jan Sluijter has suggested that in the 1630s, prices between first-rate and second- or third-rate painters started to diverge.⁹⁸ Some painters, most notably Rembrandt, acquired a kind of *hors-categorie* status. Art dealers could serve as intermediaries between artists and clients in different towns, saving the latter search costs, and their importance only increased as artists specialized and consumers' tastes became more variegated.⁹⁹

Conclusion

This chapter started with ambiguity concerning local entrenchment, and ends with it. In Dutch painting during the growth phase, there was never one dominant town or a dominant style or genre, nor was there one dominant master per town.¹⁰⁰ Painters and their products were fairly mobile, aided by a well-developed transport system and low formal entry barriers. This eased the diffusion of innovations and enabled flexible responses to local market issues. The demand for paintings seems to have been relatively well integrated. Several towns were able to develop export functions, specializations, or at least local versions of common genres. Consider for example the case of merry companies, with distinct variants in Haarlem, Amsterdam, Utrecht, and The Hague. Painters often lived in the same neighbourhoods and were related through family or credit relations and by means of other personal and business networks, and from the 1610s painters were also united in a formal group structure, guilds. Whether or not the regulations were always followed, painters had already become increasingly organized in independent corporations early in the growth phase, which further strengthened local entrenchment. Such local entrenchment could nourish the transfer of knowledge, encourage spin-offs, and build trust and legitimacy, which only reinforced industrial growth.

It was exactly this balance between openness and embeddedness that provided the Dutch art market with a competitive advantage. Local clusters of painters were not isolated or self-contained entities, but they did offer benefits associated with geographic and social proximity. The simultaneous existence of 'local buzz' in the form of spillovers and spin-offs and 'inter-local pipelines' in the form of mobility of artists and works of art allowed for the rapid diffusion and adaptation of innovations.¹⁰¹ It also made for the existence of a large middle group of high-quality painters. These characteristics enabled extensive specialization and high production levels, but also made for high levels of competition and short life cycles of product variants. A constant flow of paintings with new stories and designs that added to, and sometimes replaced, older versions rapidly saturated the market for affordable paintings and ended the life cycle of the new styles and genres of the 1620s. By 1650, the market for paintings had matured, making this a significant cut-off point for this chapter.¹⁰²

In the next chapter we will see that paintings were actually much more than mere commodities. The common denominator in many economic studies of the early modern Dutch art market has been the assumption that paintings were commodities and, by implication, that the production

of paintings formed an industry like any other. While this intentional simplification has greatly assisted the understanding of the quantity and quality of Dutch artistic production, it comes with a risk of economic determinism. Early modern art production was subject to the basic laws of supply and demand, but as this chapter demonstrated, this was not the whole story. Features specific to cultural industries, such as demand or quality uncertainty, can cause problems in production and distribution, such as structural overproduction and information asymmetries.¹⁰³ From the second half of the seventeenth century, these issues became particularly persistent for painters, art dealers, and customers. This had implications for the ways in which it was organized and, by extension, for its growth patterns.

Notes

1. Martin, *Hollandsche schilderkunst*, vol. 1, p. 65.
2. Haak, *The Golden Age*.
3. Ibid.
4. This issue was discussed by Eric Jan Sluijter in the lecture *Neat concepts and messy realities: local schools, tastes and identities* at the conference *City Limits: Urban Identity, Specialisation and Autonomy in Seventeenth-century Dutch Art* (24 April 2009, Dublin).
5. 'Dat hier te lande van een specialiseering naar plaatsen, scholen of ateliers geen sprake was'. Martin, *Hollandsche schilderkunst*, vol. 1, p. 64.
6. Ibid., p. 65.
7. Van der Woude, 'The Volume'. See also Montias, 'Estimates', p. 61.
8. Montias, 'Estimates', p. 61; Bakker, 'Gezicht op Leeuwarden'. The relative differences between the towns, as measured in number of painters per 10,000 inhabitants, correspond fairly closely with the estimates made by Montias for the year 1650, but the exact figures differ significantly, especially for The Hague. This is mainly due to the fact that Montias worked with guild membership lists, while the ECARTICO database also includes non-registered painters.
9. All painters born between 1540 and 1670.
10. Lugt, *Wandelingen met Rembrandt*, p. 7. 'Was die groote stad, met de voordelen die zij bood, echter een vereischte voor den kunstenaar, en zou hij in een andere omgeving, bijv. Leiden, niet tot een dergelijke ontwikkeling zijn geraakt?'
11. Montias, *Artists and Artisans*, p. 105. The relationship between quantity and quality was also raised in De Vries, 'Art History', pp. 267-268.
12. Kenna and Berche, 'Critical Mass'.
13. Cf. Arthur, *Increasing Returns*.
14. Montias, *Artists and Artisans*, p. 181.

15. See Wijnsbeek-Olthuis, *Het Lange Voorhout* on The Hague.
16. Cf. Wenting, 'Evolution of a Creative Industry'; Frenken and Boschma, 'A Theoretical Framework'; Boschma and Wenting, 'The Spatial Evolution'.
17. Bevers et al., eds., *Drawings by Rembrandt*, pp. 1-30.
18. Bok, 'Vraag en aanbod', pp. 185-186; Bok, "'Nulla dies sine linie'", appendix 1.
19. These counts are based on the ECARTICO database and Bok, 'Vraag en aanbod', p. 185.
20. Sluijter, 'On Brabant Rubbish'.
21. Cf. Wenting, 'Evolution of a Creative Industry', pp. 70-71.
22. Because some painters had two main work locations, the total figure in table 8.6 is higher than that in table 8.5.
23. ECARTICO.
24. Cf. Biesboer, ed., *De Gouden Eeuw begint in Haarlem*.
25. Kolfin, *The Young Gentry*, p. 110.
26. Montias, *Artists and Artisans*, p. 254; Sluijter, 'Jan van Goyen als marktleider'.
27. Krugman, *Geography and Trade*, p. 53.
28. Lugt, *Wandelingen met Rembrandt*, pp. 13-39. The English translation, *Rembrandt's Amsterdam*, is available as an eBook through the Gutenberg project.
29. See the image on the cover of this book.
30. To mention but a few: Barthelomeus van der Helst and the lesser known Steven Jansz van Goor at the Nieuwmarkt, Thomas de Keyser, Nicolaes Elias, Hans Rem, Nicolaes de Helt Stockade, Adriaen van Nieulant, Dirk Dircksz Santvoort, Pieter Codde, Cornelis de Bie, the Vinckboons family, Cornelis van der Voort, Roelant Saverij, Esaias Bourse, Govert Flinck, Pieter Lastman, and of course, Rembrandt and the art dealer Hendrick van Uylenburgh. Names from Ten Cate, *Dit volckje seer verwoet*, pp. 17-22, and Lugt, *Wandelingen met Rembrandt*, p. 35.
31. Haak, *The Golden Age*, p. 243.
32. On the issue of whether these were true academies see Miedema, 'Over vakonderwijs'; Miedema, 'Kunstschilder, gilde en academie'. Consider also De Klerk, "Academy-beelden".
33. See also Bok, "'Nulla dies sine linie'", p. 59.
34. Miedema, 'Kunstschilder, gilde en academie'.
35. On this development see Knolle, 'Tekenenacademie'.
36. Cf. Jaffe and Trajtenberg, *Patents*; Jaffe, Trajtenberg, and Henderson, 'Geographic Localization'.
37. Prak, 'Painters'; De Marchi and Van Miegroet, 'The History of Art Markets', p. 95; Bok, 'The Rise of Amsterdam', p. 201; De Vries, 'Art History'.
38. Prak, 'Painters', p. 170.
39. Montias, 'Art Dealers in Holland'.
40. Bok, 'Paintings for Sale', p. 12.
41. De Marchi and Van Miegroet, 'The History of Art Markets', p. 95.
42. Strauss et al., eds., *The Rembrandt Documents*, pp. 69-72.

43. Sluijter, *Rembrandt and the Female Nude*, p. 102.
44. Cf. Montias, *Artists and Artisans*, chapter 5; Boers-Goosens, 'Schilders en de markt', pp. 51-59.
45. On tuition fees see De Jager, 'Meester, leerjongen, leertijd', pp. 75-79; Boers-Goosens, 'Schilders en de markt', p. 87.
46. Montias, *Artists and Artisans*, p. 169.
47. Van Hoogstraeten, *Inleyding*; Weststeijn, *The Visible World*; Goeree, *Inleydinge tot de al-ghemeene teycken-konst*; Kwakkelstein, *W. Goeree: Inleydinge*.
48. De Jager, 'Meester, leerjongen, leertijd'; Hoogewerff, *Geschiedenis van de St. Lucasgilden*.
49. Prak, 'Painters', p. 157.
50. Ibid. Cf. Boers-Goosens, 'Schilders en de markt', p. 85.
51. Montias, *Artists and Artisans*, p. 160.
52. Cf. Boers-Goosens, 'Schilders en de markt' for examples from Haarlem.
53. Montias, 'The Guild of St. Luke', p. 95. This did not mean that every painter known to have been active in Delft became a member, but the presence of unregistered painters can be mainly explained by died before they could set up their own shop. Very few painters lived in Delft for a substantial number of years without registering.
54. Montias, 'The Influence of Economic Factors', p. 55; Prak, 'Guilds', pp. 156-157.
55. Montias, *Artists and Artisans*, p. 158.
56. For Haarlem: Boers-Goosens, 'Schilders en de markt', p. 77; Miedema, ed., *Archiefbescheiden*, vol. II, vol. II, n. 497, 514, 518, 525. This was no different in other towns: Obreen, ed., *Archief*, vol. IV, n. 45, 63, 66, 77.
57. Montias, *Artists and Artisans*, p. 90.
58. Montias, 'The Influence of Economic Factors', p. 55.
59. Prak, 'Painters', p. 158.
60. Cf. Romein and Korevaar, 'Dutch Guilds'.
61. Bok, 'Paintings for Sale', p. 19 for some examples of this.
62. Prak, 'Painters', p. 161.
63. Slokker, 'Ruggengraat', p. 68.
64. Montias, 'Works of Art in Seventeenth-Century Amsterdam', table 8.
65. Fock, 'Kunstbezit', p. 271.
66. Montias, 'Works of Art in Seventeenth-Century Amsterdam', table 8.
67. Fock, 'Kunstbezit', pp. 273-277.
68. Montias, *Artists and Artisans*, p. 249.
69. Ibid.
70. Ibid., p. 254.
71. De Marchi and Van Miegroet, 'The History of Art Markets'.
72. Ibid., p. 94; Boers-Goosens, 'Schilders en de markt'.
73. Cf. Prak, 'Painters', p. 161.
74. Bok, 'Paintings for Sale', p. 9.
75. Ibid., p. 18.

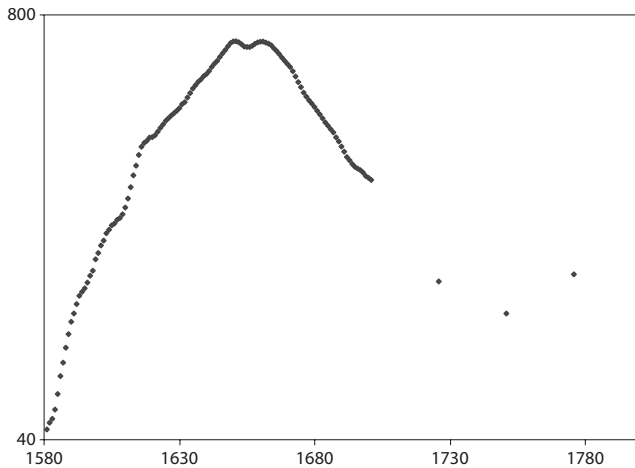
76. Montias, 'Art Dealers'.
77. Floerke, *Der Niederlandische Kunst-Handel*, p. 35. Also in Montias, 'Cost and Value', p. 65.
78. Bredius, 'De kunsthandel', pp. 56-57. Also in Montias, 'Cost and Value', p. 65.
79. Jager, 'Galey-schilders en dosijnwerck'.
80. On Uylenburgh: Lammertse and Van der Veen, *Uylenburgh & Co*; Montias, *Art at Auction*, chapter 14.
81. Montias, *Art at Auction*, p. 123.
82. Cf. Lammertse and Van der Veen, *Uylenburgh & Co*.
83. Crenshaw, *Rembrandt's Bankruptcy*, pp. 21-22
84. On Jan Thivaert see Montias, *Art at Auction*, pp. 126-129.
85. Montias, 'Art Dealers', p. 99.
86. Montias, 'Cost and Value', pp. 65-66.
87. Montias estimates the costs of paints and canvas of a portrait commission in the 1650s at no more than five per cent of the rewards. *Ibid.*, p. 65.
88. Crenshaw, *Rembrandt's Bankruptcy*, p. 17.
89. Strauss et al., eds., *The Rembrandt Documents*.
90. On De Renialme: Montias, *Art at Auction*, pp. 121-126.
91. Crenshaw, *Rembrandt's Bankruptcy*, p. 56.
92. *Ibid.*, p. 17.
93. Montias, 'Art Dealers in Holland', p. 94.
94. Montias, *Art at Auction*, p. 124.
95. *Ibid.*, p. 137.
96. Montias, 'Art Dealers', p. 245.
97. Van der Veen, 'By His Own Hand', vol. 4.
98. Sluijter, 'Determining Value', p. 21.
99. De Marchi and Van Miegroet, 'The History of Art Markets', pp. 94-95; Montias, 'Art Dealers', p. 245.
100. Martin, *Hollandsche schilderkunst*, vol. 1, pp. 64-65.
101. See for these terms Bathelt, Malmberg, and Maskell, 'Clusters and Knowledge'.
102. Haak, *The Golden Age*, p. 346.
103. See chapter 1 of this book.

9. 1650-1800: Mature Markets

By the 1660s, the expansion of the Dutch market for paintings had come to an end, and decline soon set in.¹ These trends were, moreover, accompanied by a qualitative slump. Late seventeenth- and eighteenth-century paintings have long been brushed aside as derivatives of international fashion and of Golden Age painting.² To some extent, this perception can be traced back to eighteenth-century sources in which a general criticism of the current state of affairs in the Republic became fashionable due to a perceived decline of morals and manners, and earlier artistic styles were praised over contemporary ones. The fascination for seventeenth-century art was further strengthened during the nineteenth century when the notion of typically 'Dutch art' developed.³

Following the Second World War, interest in the eighteenth century increased, but it remained somewhat apologetic. More recently, appreciation of these later works of art has become more prominent with the rehabilitation of styles and genres previously disregarded as not representative of Golden Age painting, such as the Leiden *fijnschilders* and classicist history painting.⁴ As a result, the idea that post-1670 art was symptomatic of the decline of the art market has become more nuanced. Painters such as Gerard de Lairesse, Adriaen van der Werff, Caspar Netscher, Jan Weenix, Nicolaes Verkolje, Jan van Huysum, Willem van Mieris, Rachel Ruysch, and several others are now reconsidered and associated with quality.⁵ Still, the extraordinary commercial and artistic achievements of the Golden Age have cast a shadow over the subsequent period.

This chapter should be read therefore within the framework of recent revisionist literature in which both the eighteenth century in general and its art market and artistic achievements in particular are being re-evaluated.⁶ Because this chapter covers a period of around 150 years, a broad-brush approach is inevitable. It may come as a surprise that a painter such as Johannes Vermeer is discussed in the same chapter as classicist Gerard de Lairesse, flower painter Jan van Huysum, and painter of mural canvases Jurriaen Andriessen. The reason is that they were all active during a period in which the market for newly produced easel paintings contracted. The works of these artists and their peers reflect specific strategies to adapt to maturing markets. In the following sections the business strategies that Dutch painters developed from the middle of the seventeenth century on will be discussed, as well as their consequences for the organization of artistic production and for growth rates and patterns of innovation. The

Fig. 9.1 Number of painters active in the Dutch Republic, 1580-1800

Source: Ecartico; RKDartists, accessed 20 November 2010 (5-year moving average; semi-log scale)

established explanations for the demise of Golden Age painting will be complemented by focusing on the spatial and diachronic distribution of Dutch art production.

The downturn in the art market

By the 1650s, the rapid growth of the Dutch art market was coming to an end.⁷ According to Jan de Vries, the ‘collapse [of the art market] after 1660 was much more abrupt than the surprising emergence of Dutch art early in the century’.⁸ Figure 9.1 shows that this was not entirely true, but the number of painters active in the Dutch Republic did decline considerably after about 1660.⁹ The period 1650-1674 did not witness any significant increase in the number of active painters, and throughout most of the eighteenth century the number of painters remained at its 1600-1624 level. Even if the decline did not happen overnight, these figures suggest that the mass market for newly produced easel paintings indeed disintegrated during the second half of the seventeenth century.¹⁰ This slump did not go unnoticed at the time. Contemporaries attributed falling demand to changes in taste, more specifically the new fashion for painted wall hangings and the revived interest in old masters, and to the fallout of war.¹¹ More recent interpretations of the decline of the Dutch art market point to two

additional sets of factors: a decline in purchasing power and a structural overproduction of paintings during the seventeenth century.¹²

The timing of the decline, however, suggests that trends in purchasing power are less important in explaining the declining numbers of active painters than is generally assumed. To be more precise, there was no dramatic decline in Dutch purchasing power during the period in which stagnation and decline set in; real wages in Holland continued to increase until the end of the seventeenth century, albeit more modestly than before.¹³ In fact, demand for many luxury goods increased.¹⁴ During and especially by the end of the seventeenth century, wealth distribution did become more skewed, but this alone does not explain the trends.¹⁵ While it may well be true that the absence of further increases in purchasing power could have limited potential expansion of the market, it does not fully explain the dramatic fall in the number of painters or in the number of prominent painters.¹⁶ Nor can changes in fashion in favour of other types of wall decoration fully account for the timing of decline in the art market. Although the use of paintings as decorative wall coverings did become less popular, this only really set in towards the end of the seventeenth century, whereas market stagnation and even decline can be observed earlier.¹⁷

In short, the problem in the art market was not so much a loss of interest in paintings or visual art in general, but rather a decline in demand for newly produced paintings.¹⁸ The major factor contributing to the mid-seventeenth century decline in the number of new painters seems to have been structural overproduction.¹⁹ Paintings were durable, and as a result by 1650 there was an abundant supply and range of decent and affordable products on the Dutch art market. Moreover, many Dutch consumers were using paintings as wall

Fig. 9.2 Entry rates and number of newcomers in the seven largest towns (left) and Amsterdam (right), 1650-1700

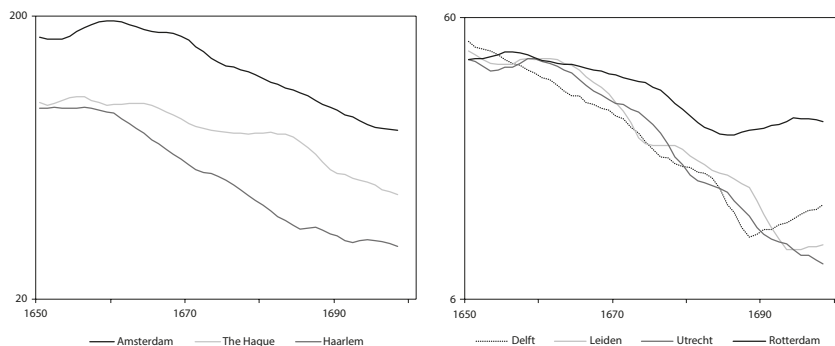


Source: Ecartico, accessed 7 February 2011

decoration, and as wall space in the typical Dutch house was quite limited, there was a hard constraint on the number of individual pieces needed for this purpose.²⁰ In other words, consumers, especially those who had fuelled the development of the mass market for paintings, lost interest in purchasing new ones. Michael Montias has demonstrated that the share of paintings that could be attributed to contemporary masters dropped to under 50 per cent after the 1650s and was less than 20 per cent after the 1670s.²¹

These explanations suggest that the rapid downfall of the art market should be attributed to a combination of a downward trend in entry rates and an upward one in exit rates. Regarding the latter, several painters and dealers were indeed experiencing financial difficulties, the most famous being Johannes Vermeer and Gerrit Uylenburgh.²² Others were leaving the country. On top of this, the number of new painters registering for marriage licences in Amsterdam also decreased significantly which suggests that there were fewer aspiring painters.²³ Entry rates can only be calculated for the period prior to 1700 because the ECARTICO database does not cover the eighteenth century and the RKD *artists&* data does not currently allow for this. The data presented in Figure 9.2 clearly shows that after the growth period, made possible by a series of innovations and by increasing returns between c.1620 and c.1640, entry rates started to decline. This suggests that the wheels of decline were set in motion well before the 1660s and that the events of the 1670s played a smaller role than commonly believed. When we focus on the local level, it becomes clear that all artistic centres witnessed a period of stagnation before the real decline set in. The years of post-war distress after 1672 mainly dealt another blow to an already struggling contemporary art market.²⁴

Fig. 9.3 Number of painters active in the seven largest artistic communities, 1650–1700



Source: Ecartico, accessed 20 November 2010 (5-year moving average; semi-log scale)

Geographic distribution

On the local level, most markets had become saturated even before mid-century (Figure 9.3). Delft had reached its quantitative limits relatively early in the century; Haarlem and Utrecht were next, followed by Leiden, Rotterdam, Amsterdam, and The Hague. Rotterdam was the least affected, followed by Amsterdam and The Hague. The size of artistic communities in Haarlem, Delft, Utrecht, Dordrecht, and Leiden shrank by 20 to 30 per cent from their 1650 size. Industry-wide factors determined the general patterns of stagnation and general decline, but local features also influenced the extent and timing. Towns such as Amsterdam and The Hague became increasingly prominent, as they provided ample opportunities for commissions for works of art. At the same time, production remained relatively dispersed (Figure 9.4).

Table 9.1 presents an overview of places of birth as well as main work locations of the combined A and B samples of prominent Dutch painters. The small number of painters for this period justifies a combination of the A and B samples. Amsterdam was still the largest among prominent artistic centres, and by far. Dordrecht comes a surprising second in terms of place of birth, but could not retain its high-quality painters. The figure of seven Dordrecht-born painters in the A and B samples is fairly high, especially considering the fact that they were not directly related by family ties. Leiden's relatively prominent position, on the other hand, is primarily due to the presence of a single dynasty (the Van Mieris), while The Hague still imported most of its talent. Table 9.2 shows the same variables for the C sample.²⁵ Here, Amsterdam features prominently. The relation between place of birth and main work location proves to be strong, with only Amsterdam functioning as an importer and Dordrecht as an exporter of talent. The virtual absence of Delft, with only six in both columns, is striking, as is the third place of Dordrecht. Clearly, the size and character of the art market of the eighteenth century, small in relation to the Golden Age and much more dependent on commissions, also changed the geography of artistic production. This may also have had consequences for the development of local specializations and levels of innovation.

Fig. 9.4 Distribution of prominent painters, according to main work location (C sample), start career between 1630-1669, 1670-1709, 1710-1749, 1750-later (clockwise)



Source: Table 6.4

Table 9.1 Place of birth and main work location, A&B samples, artists active in the eighteenth century

Place of birth			Main work location		
Town	N	%	Town	N	%
Amsterdam	19	28.4	Amsterdam	26	38.8
Dordrecht	8	11.9	The Hague	10	14.9
Leiden	7	10.4	Leiden	6	9.0
Haarlem	4	6.0	Haarlem	4	6.0
The Hague	5	7.5	Rotterdam	4	6.0
Rotterdam	4	6.0	Dordrecht	3	4.5
Antwerp	3	4.5	London	2	3.0
Utrecht	3	4.5	Rome	2	3.0
Gorinchem	1	1.5	Middelburg	2	3.0
Other	13	19.4	Other	3	4.5
Various	-	-	Various	3	4.5
Unknown	-	-	Unknown	2	3.0
Total	67	100	Total	67	100

Table 6.4; RKDArtists

Table 9.2 Place of birth and main work location, C sample, birth cohorts 1630-1790

Place of birth			Main work location		
Town	N	%	Town	N	%
Amsterdam	157	24.3	Amsterdam	201	30.5
The Hague	57	8.8	The Hague	62	9.4
Dordrecht	56	8.7	Dordrecht	39	5.9
Haarlem	42	6.5	Haarlem	35	5.3
Utrecht	32	5.0	Utrecht	29	4.4
Rotterdam	30	4.7	Rotterdam	30	4.6
Leiden	26	4.0	Leiden	25	3.8
Antwerp	20	3.1	Antwerp	(7)*	-
Nijmegen	12	1.9	Nijmegen	(8)*	-
Middelburg	10	1.6	Middelburg	11	1.7
Various	-	-	Various	34	5.2
Other	199	30.9	Other	120	18.2
Unknown	4	0.6	Unknown	73	11.1
Total	645	100	Total	659	100

Table 6.4; RKD-artists. * = counted in the category 'other'.

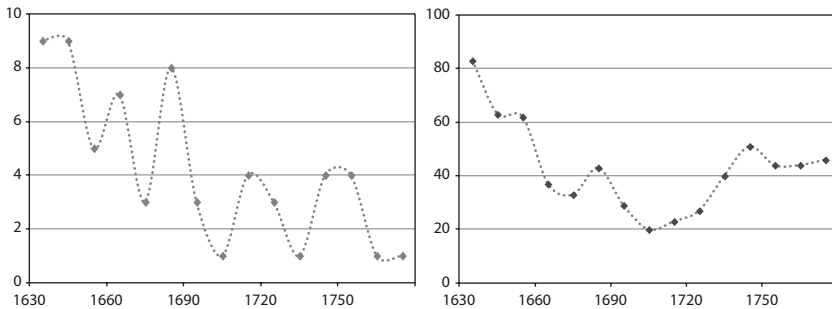
Artistic decline

Eighteenth-century art critics such as Arnold Houbraken, Johan van Gool, and Jacob Campo Weyerman acknowledged the decline in the art market after the middle of the seventeenth century, but their opinions on when this began differed somewhat.²⁶ More importantly, these early art historians were more forgiving than their later counterparts in their judgements of late seventeenth- and eighteenth-century artists. In fact, classicist painter and art theorist Gerard de Lairese held artists such as Adriaen Brouwer and Pieter van der Laer responsible for the decline of Dutch art, and he believed that his own generation restored it to its former glory.²⁷ Painter and poet Samuel van Hoogstraten observed that ‘the painting in our country, as in a new Greece, is at the peak of its florescence’, and painter-authors Arnold Houbraken and Johan van Gool likened painters such as Adriaen van der Werff to the great seventeenth-century masters.²⁸ Koenraad Jonckheere had demonstrated that this theoretical or sometimes perhaps also rhetorical approval was matched by monetary appreciation; works by contemporary painters, most notably those by Van der Werff, sold at auction for prices comparable to those of the old masters.²⁹

In order to map these historical and current evaluations, we turn to the samples of prominent painters active after approximately 1670. Art-historically, the eighteenth century, a period of late Baroque and Rococo styles, does not appear to have been a particularly successful time for European painting in general, if the studies by Kelly and O’Hagan, as well as by Murray, are any indication.³⁰ Although the authors use different sources and criteria, both datasets demonstrate a roughly 25 per cent decline in the number of prominent painters in Europe compared to the seventeenth century. In Murray’s selection, the United Kingdom, Italy, and France housed between 20 and 30 per cent of the 48 painters in total. According to Kelly and O’Hagan, France accounted for about 20 per cent and the British Isles for as much as 50 per cent.³¹ During the seventeenth century, the number of what would become art-historically prominent painters in Europe had been considerably higher than in the eighteenth century, and this had much to do with the many excellent Dutch painters in the sample. During the eighteenth century, the Dutch Republic went from an innovative and large artistic hub to being almost non-existent in the international ranking of painters.³²

The *Oxford Dictionary* mentions sixteen prominent Dutch painters who were active in the Republic at some point in the eighteenth century, thirty-nine were referenced in *Kroon op het werk*, and thirty in *Age of Elegance*.³³

Fig. 9.5 Artists in A/B (left) and C samples (right), distributed according to decade of birth, 1630-1770



Source: Table 6.4. A/B list N=67; C list N=645

Adjusting for the recurrence of names, this totals sixty-seven painters. The decline in the number of art-historically valued painters per decade is obvious, but interestingly the 1680s display a revival to Golden Age levels (Figure 9.5). This was the decade when painters such as Jan van Huysum and Frans van Mieris the Younger were born. Moreover, there is an obvious discrepancy between the number of painters included in art-historical reference works and the number discussed in contemporary accounts. The sample reflecting contemporary appreciation (the C sample) shows that a low point was reached in the birth decades of 1700 and 1710 but that the number of painters worth mentioning in contemporary reference works soon increased to the level of the 1650s. This demonstrates once more that the present-day conception of artistic decline differs from that of contemporaries. Although saturation in the market for paintings had set in significantly earlier than is usually recognized, in artistic terms the crisis in the art market was less pronounced.³⁴

Artists' strategies

Although in theory cultural products embody the potential for infinite variety, this is often not realized, nor was it feasible in the early modern Dutch Republic. As Marten Jan Bok has pointed out, 'Creative freedom was an ideal rather than a reality', and like their predecessors and their foreign peers, Dutch painters had to respect existing formats if they were to appeal to customers.³⁵ Eric Jan Sluijter commented on the popularity of certain subjects and the virtual absence of others: 'Although the tremendous wealth and diversity of subject matter and motifs in the visual arts give the

impression that literally anything and everything was depicted, we see time and again just how selective artists were, and how limited their repertoire'.³⁶

Limitations on the opportunities for product differentiation and innovation also affected the development of individual subgenres. In his study of the genre of merry companies, Elmer Kolfin observed: 'The continual variation, without the introduction of true innovations, could not keep the public interested forever, and by the mid-1640s there was no flexibility left, with the result that the merry company stagnated both in quantity and quality'.³⁷ The genre overcame this impasse around 1650, when a new generation started producing merry companies using more refined styles, themes, and techniques. Once again, these stylistic shifts can be understood as resulting from changing business strategies. By the 1640s, Dutch painters were already feeling the dual burden of stagnating demand and overproduction. The economic and political difficulties of the 1670s only aggravated structural problems long present in the Dutch cultural industries in general and in the art market in particular.

Unquestionably, existing and aspiring painters faced a very different market situation than had previous generations, and they responded to these challenges with rational strategies that targeted market segments with more potential. On the one hand, this meant catering to the demands of local and international collectors by incorporating foreign fashions and building associations with the work of Dutch predecessors. On the other hand, artists turned to the lower parts of the market, specializing in decorative painting or, in some cases, by entering the profession of 'house painters' (*kladschilders*). The sections below discuss six sets of strategies and their consequences for the development of the art market as well as for the reputation of Dutch art. When these are taken into account, the artistic collapse and commercial downturn of the art market appear less dramatic than is often made out.

Luxury and elegance

Around 1650, a new string of artistic novelties was introduced to the market. This time brighter colours, stylization, and more meticulous production methods characterized the innovations, sharply contrasting with the restrained compositions and rapid techniques of the 1610s and 1620s. The most obvious examples were the Leiden *fijnschilders*, whose style, initiated in the 1630s by Gerard Dou, found an increasing following after 1650.³⁸ Frans van Mieris, by contrast, fits well into the broader tendency toward refined techniques, smooth surfaces, and much detail. Other examples

include the interiors of Gerard ter Borch and Gabriel Metsu, the luxurious still lifes of Jan Davidsz de Heem and Willem Kalf, Italianate landscapes by Nicolaes Pietersz Berchem, and townscapes by Jan van der Heyden. At roughly the same time, in Delft, a number of painters started to produce labour-intensive interior and exterior urban perspectives.

The styles and compositions of the newly popular paintings required much more time to produce and were generally painted for a select group of rich collectors rather than for the open market. As only collectors and financially secure citizens maintained a relatively stable interest in buying newly produced paintings, painters geared their production towards precisely these market segments. In so doing, they opted for the safer route of personal relationships and commissions. As had also been the case in the previous round of product and process innovations, these stylistic adaptations and innovations were at least partly inspired by economic circumstances. When competitive pressure had increased in the 1610s, painters had responded with market strategies that included cutting labour costs, specializing, and differentiating, succeeding thereby in broadening the market for paintings. When markets became saturated during the 1640s, these strategies had already achieved all that could be expected of them. The walls of middle class homes had become crowded with pictures of all shapes and sizes, and the prices of paintings could not be further reduced. With an ample supply of good and cheap paintings on the market, demand for newly produced ones declined, especially in the middle segments of society. In response to market saturation and increasingly uncertain demand, painters experimented with more laborious painting techniques and international classicist styles and used larger sizes and more embellishment.

Interior decoration

Around the middle of the eighteenth century, artist-biographer Johan van Gool and art dealer Gerard Hoet engaged in a fierce discussion about the causes of the artistic downturn, eventually agreeing on two factors: the demise of artists' specializations and the substitution of painted mural canvas for paintings as wall decorations.³⁹ From the end of the seventeenth century, a general expansion in the variety of available decorative items reduced demand for paintings as interior decoration.⁴⁰ Moreover, and while porcelain, silver, chinaware, and mirrors were not direct substitutes for paintings, they did compete for a share of the limited money available for interior decoration. Even in households without extensive collections in every room, paintings increasingly disappeared from living rooms, bedrooms, and hallways in line

with the notion that they no longer belonged in 'modern' interiors.⁴¹ During the eighteenth century, separate cabinets, in which paintings were used for display rather than decoration, became more prominent.⁴² And mural canvases, a relatively new segment in the Dutch art market, constituted a direct competitor for easel paintings as wall decoration.⁴³

From the 1660s onwards, grand decorative wall and ceiling paintings gained in popularity in the Dutch Republic. The idea of covering a wall with a large image was not new, as the histories of tapestries, gilded leather, large Southern Netherlandish watercolour paintings, and Italian frescos all show. Tapestries and gilded leather were, however, relatively expensive, and they became popular mainly with wealthy burghers from the 1620s onwards.⁴⁴ After the middle of the century, full mural canvases were increasingly sought. Gerard de Lairesse and Daniel Marot may be regarded as crucial figures in this development.⁴⁵ At first, mural canvases were advertised as cheaper imitations of the more expensive tapestries, but soon more durable oil-on-canvas paintings, no longer mere imitations, started to replace both watercolour hangings and tapestries. Soon this gave rise to other painters experimenting with reproductive techniques in wall decoration, while producers of serial works also introduced the painting and printing of ornaments on linen, often producing a whole range of complementary items such as tablecloths.

The new fashion for painted and printed mural canvases brought increasing competition for producers of cabinet pieces, but it also offered artists a possible exit strategy from a market that was saturated. A distinction should be made between painters of commissioned grand interior scenes on ceilings, walls, and doors such as Isaac de Moucheron, Jacob de Wit, and Dirck Dalens III, and so-called 'factories' that mass-produced painted and printed wall coverings. Grand interior scenes were executed by the most prominent painters of the period and held in high regard.⁴⁶ Due to limited demand or talents, not everyone could make the move to high-end commissions. But moving downwards did not prove so easy either, as the new fashion brought with it altered organizational challenges on the production side. An increasing number of painters tried their luck at setting up their own studios, but few succeeded in building noteworthy businesses. Managing the more complex supply chain proved difficult and other entrepreneurs, familiar with the range of techniques and specialties required to deliver a finished product, stepped in. Tapestry weavers in particular were responsible for developing the wall hanging workshops (*fabrieken*) that would eventually offer employment to individual painters as structural or temporary labour. In

fact, during the second half of the eighteenth century, the Amsterdam market became dominated by a handful of large firms of which the one established by Jan Hendrik Troost van Groenendoelen was the most prominent. Eventually many painters would find both training and employment in these firms.⁴⁷

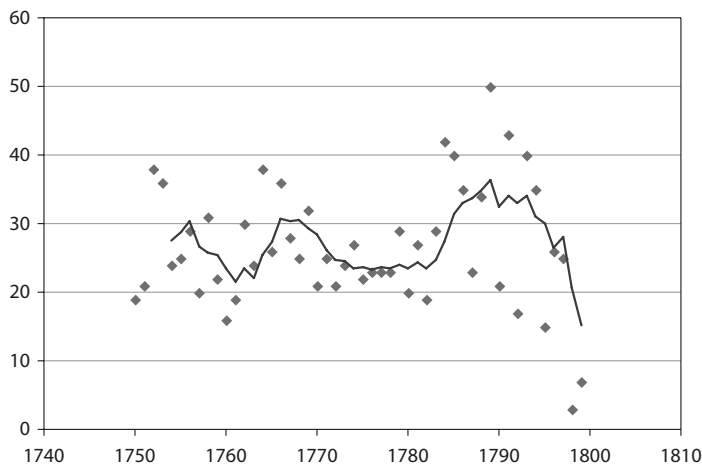
The scale, variety, and quality of Dutch interior scenes, landscapes in particular, were remarkable. Though they were not a Dutch innovation, high-quality and large-scale production developed relatively early in the Republic. Moreover, the scale and scope were exceptional; virtually all houses of the Dutch well-to-do had one or two rooms with painted murals. While they could also be found in the Southern Netherlands and German areas, they were not a widespread phenomenon in France or England.⁴⁸ It is possible that Dutch consumers were atypical in their preferences, but the profusion of this type of wall decoration may also have been supply driven. Dutch painters, faced with decreasing demand for cabinet pieces, developed a rational strategy by developing proficiency in grand interior scenes.

Decorative painting

Whilst some painters shifted their focus from easel paintings to mural paintings in the upper level of the market, and others tried their hand at developing cheaper forms of wall decoration, yet another market segment offered ample business opportunities. The art market not only included easel painters and decorative painters but also *kladschilders* who decorated furniture and carriages, plus the interiors and exteriors of buildings including walls, panelling, and mantelpieces.⁴⁹ Piet Bakker has demonstrated that when such *kladschilders* are taken into account, the Leiden art market remained relatively stable in terms of size during the later decades of the seventeenth century.⁵⁰ As yet no such study has been undertaken for the eighteenth century, and a tentative look at the Amsterdam guild registration is only marginally instructive. The annual registration of new members in the Amsterdam Guild of St. Luke between 1748 and 1809 reveals that as many as 1,564 new members were registered during the period. Unfortunately these figures cannot be compared to the earlier stages in the life cycle.

Figure 9.6 shows that the share of painters in the total number of entrants was relatively stable throughout the fifty years presented here. Around 1784 there was a peak in the number of painters who had also completed the glassmaker's master test (Figure 9.7), but this can be traced back to an ordinance from the same year on the formal requirements of painters involved in glassmaking.⁵¹ The rapid drop at the end of the century does

Fig. 9.6 Number of annual registrations in the Amsterdam Guild of St. Luke, 1750-1800



Source: SA, inv. 366 Archief van de Gilden en het Brouwerscollege, inv. 1405-1406.

not necessarily reflect changes in the art market as it was around this same time that the guilds were being abolished. Since the label 'painters' in the registration also includes the *kladschilders*, at this juncture it is impossible to differentiate between the different kinds of painters in the art market. Still, the findings of Bakker suggest that, as in publishing, market segmentation and occupational differentiation took place from the last quarter of the seventeenth century. Through the loss of middle segments of the market, the Dutch art market came to resemble other European art markets of the time. Like publishers, many artists also turned to a different and familiar 'reproductive technique', that of copying.

Creative reproduction

From the last decades of the seventeenth century onwards, collectors increasingly focused on work by 'old masters'. With consistent domestic and foreign demand for paintings by masters who had been active during the second half of the seventeenth century such as Gerard Dou and Frans van Mieris the Elder, scarcity and thereby potential market value increased. This had significant consequences for the role of copies and imitations in the art market.⁵² The prolific production of copies was in itself nothing new. It has been estimated that as many as half of all seventeenth-century

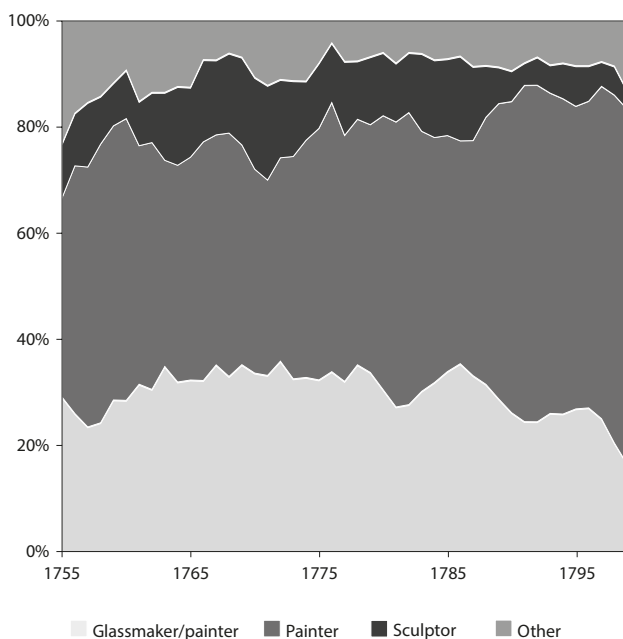
paintings were copies.⁵³ Producing imitations of existing paintings was an integral part of painters' apprenticeships, and some masters also produced autographed copies. These not only served as exercises and models within painters' workshops, but they could be and were sold.⁵⁴

Although painters who imitated and emulated are often criticized for their lack of innovation and creativity by present-day researchers and art lovers, their works reflect sensible business strategies, especially in the transforming art market of the late seventeenth century. Old master paintings were in demand among collectors, and the supply of these paintings was limited, not only because the death of the artists in question prevented expansion of the supply pool, but also because collecting became increasingly popular both in and beyond the Republic. Moreover, imitation provided an association with renowned names, which could boost the reputation of emulating artists.⁵⁵ Strategies of new design and copying could also be easily combined, with the latter adding value to the former. Certainly if one could copy well, it was proof of skill. Thus, by offering substitutes for scarce and expensive seventeenth-century paintings, painters could bolster demand.

For the genre of figure painting, Junko Aono has observed a change in the function of early eighteenth-century copies, as commercial objectives became more important and copies increasingly served as cheaper and more readily available substitutes.⁵⁶ Collectors could commission painters to make copies to substitute for unavailable originals, and copies were also produced for the open market.⁵⁷ If the copies were of high quality, they could fetch high prices while remaining cheaper than the originals. Not all figure paintings that resembled seventeenth-century originals were clear-cut copies. Aono distinguishes between different forms of imitation: outright reproductive paintings, emulation updates according to contemporary visual vocabularies, and the more innovative combination of the classicizing trend with seventeenth-century figure painting. Artists emulating seventeenth-century masters made use of established motifs, compositions, and themes but adapted them to contemporary fashions. In other words, they were recognizable but different.⁵⁸ These artists not only copied; they selected certain motifs and compositions, thereby creating new niches.

Aono rightly draws attention to our contemporary bias for uniqueness and originality. Models of innovation tend to assume (often implicitly) that innovation must be vertical – all buyers will prefer the new product to the old, at a given price, because it is inherently better than the old product. This ignores two other possibilities: horizontal innovation, which takes place when some consumers prefer the new product and others the old, even when

Fig. 9.7 Occupational distribution of entrants in the Amsterdam Guild of St. Luke, 1750-1800



Source: SA, inv. 366 Archief van de Gilden en het Brouwerscollege, inv. 1405-1406.

the new is priced similarly to the old; and product differentiation, which occurs when people desire both the new *and* the old.⁵⁹ Clearly, innovations in early modern art were incremental, horizontal rather than vertical, and characterized by sometimes very subtle differentiation.⁶⁰ This indicates an expansion rather than a replacement of the variants on offer. Inventions in painting were more about connecting with historical trends than radically departing from them. Pictorial traditions and iconographic conventions formed the visual frame of reference for both artists and consumers, and novelty and invention were not seen as 'indispensable artistic qualities'.⁶¹ For the fifteenth and sixteenth centuries, Svetlana Alpers and Michael Baxandall also observed a 'prevalence of repetition': subjects were rather standard, and often originals were trivial reworkings of borrowed ideas and compositions.⁶² This would not have been much different in the early modern Republic, where most artists were no Rembrandts or Dous. Different styles, genres, and techniques existed side by side, and in between radical innovation and outright copying lay a whole range of creative (re) production, including that of the mezzotint.

Mezzotint

Developed during the 1640s, the printmaking technique of mezzotint gained in popularity in the Dutch Republic through the 1670s, reaching its zenith in the 1680s.⁶³ Mezzotint's potential as a medium for reproductive techniques was vast, and it successfully lent itself to the depiction of materials such as cloth and to the contrast of light and dark. Gerdien Wuestman has observed that a striking number of painters attempted the technique, including well-known artists such as Michiel van Musscher, Ludolf Backhuysen, and Gerard de Lairesse. The latter explained that he preferred mezzotint to engraving, and that it could be 'a delightful diversion to painters'.⁶⁴ Given the timing and the shape of the art market, experimenting with reproductive techniques was probably more than a pastime and very much a commercial strategy. De Lairesse also stated that '[...] mezzo-tint is even more expedient than either of them [etching and engraving]; and in neatness has not had its fellow: it may even compare with a painting, how soft and fluent soever, abating for the colours. Indeed, in duration and wear it is the weakest; but, on the other hand, its expeditiousness brings in more money.'⁶⁵

Struggling painters could use the technique as a substitute for painting original work or as a means to acquire additional income from original designs. That mezzotint prints could be utilized in the same way as paintings is visible in the sizes and the mediums in which they were printed. During the 1680s, mezzotint was practised at the highest level by engravers such as Wallerant Vaillant, Petrus Schenk, and Abraham Blooteling. Nevertheless, its popularity was relatively short-lived. Although mezzotint prints remained fashionable collector's items, their popularity waned. Of the 63 artists in our 1710 prosopography, 9 were involved in mezzotint, a ratio that declined to 1 out of 35 in 1740. Of the 54 artists active in 1780, not one was characterized as a mezzotint artist.⁶⁶ After the deaths of a handful of specialists such as Vaillant and Schenk, mezzotint was simply practised alongside painting, drawing, and other graphic techniques.

One of the reasons for the declining popularity of mezzotint engraving was that the technique did not lend itself to the type of bright compositions that were fashionable during the eighteenth century. The lack of colour was a major shortcoming, and even though Jacob Christoph le Blon invented colour mezzotint, the results were disappointing and it involved a time-consuming process. Still, the technique continued to thrive in England, and Dutch engravers experienced fierce competition from the high-quality products imported from England during the eighteenth century. Although more research is required, the reason high-level mezzotint did not endure

in the Dutch Republic may perhaps be sought in the fact that the technique, although appreciated, was nonetheless deemed inferior to painting and engraving. Compared to England, both painting and engraving were firmly established traditions in the Dutch Republic. Artists already had specific skill sets, and although De Lairese referred to the technique as 'easily learned', in practice mezzotint printmaking was rather difficult; few painters who tried it became truly skilful.⁶⁷

Internationalization

Often-quoted foreign travellers were amazed at the large number of painters and paintings they encountered in the Dutch Republic, but in general, typical Dutch styles and subjects were not well received outside the Republic during the seventeenth century. Apart from the individual exception here and there, Dutch art only achieved a positive international reputation after c.1660. Dutch painters' craftsmanship, though recognized, was deemed of little value in the absence of 'great ideas'. Accusations that Dutch art lacked ideas can be traced back to sixteenth-century humanist treatises that were fairly condescending about northern styles and their depictions of realistic scenes and landscapes. In French academic circles, Northern Netherlandish art was not held in high esteem until well into the eighteenth century. The collection of the French King Louis XIV, for instance, contained hardly any paintings by Dutch masters.⁶⁸ In the treatise on painting by the French art critic Roger de Piles, Dutch seventeenth-century painting only featured marginally.⁶⁹ In de Piles's opinion, Rembrandt had a '*beau Génie et un Esprit solide*', but was unable to match the taste and ingenuity of Italian painters. To blame was his Dutch (read: misguided) origin, training, and background.⁷⁰

In England, the appreciation of Dutch art intensified after the Restoration in 1660 and after the crowning of King William III in 1689, but during the eighteenth century, art critics still poured scorn on the lack of a 'deeper meaning'.⁷¹ These judgments notwithstanding, seventeenth-century Dutch painting eventually became relatively popular in eighteenth-century England and France. During the Romantic period, 'the picturesque' works of Dutch landscapists became increasingly popular, and in (pre-) revolutionary France the artistic focus moved away from royal classicist elite styles toward a re-evaluation of simple, honest *burgerlijke* themes. As classicist ideals lost ground, Dutch masters and styles moved to the fore, and the realistic Dutch depiction of everyday life, derided during the previous century, proved particularly inspiring.⁷²

But even if foreign art theorists still marginalized Dutch painting, foreign collectors had showed interest from shortly after the middle of the seventeenth century. Leaving the exceptional case of Rembrandt aside for the moment, the interest of international collectors gained in importance with the *fijnschilder* style. This referred to the styles of Frans van Mieris and his master Gerard Dou, both of whom had specialized in figure painting and proved particularly popular with foreigners such as Cosimo de Medici and Archduke Leopold Wilhelm.⁷³ Supposedly, in 1675, Cosimo de Medici commissioned Van Mieris to paint the Holy Franciscus Xaverius, a commission Van Mieris refused, explaining that he could only depict what he was able to observe in reality.⁷⁴ In the last quarter of the seventeenth century, a combination of highly refined painting technique and classical repertoire became increasingly prominent, most notably in the work of Van der Werff and his master Eglon van der Neer. Highly skilled painter Adriaen van der Werff even made a full transition to painting within an historical and biblical repertoire.

In his *Inleyding tot de hooge schoole der schilderkonst* (1678), Samuel van Hoogstraten pointed out that a conscious pursuit of the export of painting could be lucrative for the Dutch state and its inhabitants.⁷⁵ During the seventeenth century, several Dutch painters had been active at European courts whilst others travelled around, but the export trade was not thriving.⁷⁶ Van Hoogstraten explained that, given the high level of Dutch painting, hardly any investments had to be made in order to start profiting from this resource. In Van Hoogstraten's words, painting 'as befits our fatherland, like an invaluable quarry, a pearl fishery, or a mine of precious stones, can daily produce many rich jewels of cabinet paintings, which without squandering too great costs could be turned into objects of great value through the ingenuity of only a few eaters'.⁷⁷ Van Hoogstraten advised the authorities to increase foreign demand for Dutch paintings by offering privileges to art dealers and presenting representative paintings to foreign heads of state.

As it turned out, the Dutch government had to do next to nothing to make this happen. Initially it was not just paintings but other luxury Dutch products such as garden architecture, porcelain, prints, lacquered cabinets, and books that were popular export goods.⁷⁸ Everhard Korthals Altes has pointed out that a number of foreign rulers developed galleries of paintings as well as cabinets and that in the case of the latter, smaller frames were particularly well suited.⁷⁹ The smaller Dutch paintings were a good alternative to expensive Italian art that was hard to come by due to closed circuits of art exchange in Italy, and because of the competition from other royal families. The so-called 'cabinet pieces', by contrast, were cheaper and easier

to transport and proved highly collectable.⁸⁰ In the end, though, the export market was mainly built on the market for second-hand paintings by or in the tradition of Dou, Van Ostade, and Van Mieris, and could therefore not redress waning local demand for new pictures.

Institutional organization

The strategies discussed above show different ways in which artists could deal with the problems in the early modern art market and with issues associated with cultural industries in general, such as structural overproduction, uncertainty surrounding quality, and information asymmetries. Such features were not new or exclusive to Dutch art production, but they became increasingly significant as painters and art dealers were faced with stagnating demand. In addition to developing product adaptations or producing substitutes, painters also responded to stagnating demand by implementing organizational modifications. In order to manage the dynamics of durability, uncertain quality, and demand uncertainty, Dutch producers innovated in the areas of marketing and distribution and formalized advanced education. They also attempted to reduce competition by strengthening guild regulations and by intensifying social differentiation. In the new market situation, the middle segments were saturated and the gap between lower-end and higher-end painters increased. Painting evolved from a craft into an art, as art lovers and dilettantes gained prominence and joined the ranks of professionals in artists' associations, such as societies and drawing academies.

In the previous chapters, two rounds of guild reorganization were discussed: one at the beginning of the phase of emergence, and one at the beginning of the growth phase in the 1610s. In this chapter, two more rounds are brought to the table. The third round took place around the middle of the seventeenth century and is most evident in the strengthening of guild regulations and the organization of artists' societies. The establishment of formal urban drawing academies characterizes the fourth round. Apart from the founding of artists' guilds in the early 1630s in the relatively small artistic centres Alkmaar and Amersfoort, and the reissuing of regulations concerning selling by interlopers, the Guilds of St. Luke do not appear to have been particularly active in the 1620s and 1630s. However, in the 1640s and 1650s, when the market was becoming more competitive due to saturation, Dutch painters' guilds became more pronounced. It is no coincidence that issues concerning competition and transparency first arose in the two

front-running towns of Haarlem and Utrecht, and only later in the large and more secure markets of Amsterdam and The Hague.⁸¹ The increasing activity of guild members and guild masters during the onset of the mature phase in the industrial life cycle shows that local painters were once again experiencing problems of competition and selection.

Second-hand markets

During the 1640s, guild regulations were being adapted to the changing market situation. The most frequently cited example of the concerns they had during this period stems from Haarlem and has to do with public sales.⁸² Haarlem was the first artistic hub to take off, and its market was the first to experience local market saturation. Whereas at the start of the growth phase it was outsiders and imports that threatened guild members, by this time it was local competition, rather than foreign, that needed to be controlled. Controversies about public sales are well exemplified by a serious dispute in the Haarlem guild following a 1642 ruling concerning public sales.⁸³ The main cause of friction was an attempt in 1642 by the guild to regulate public sales and lotteries of works of art. In that year the guild was asked to pass a new rule 'to forbid improper sales, as they are held at present' to which the officers of the guild responded positively. This invoked a fierce reply of twenty-eight articles, signed by established Haarlem painters Frans Pietersz de Grebber, Pieter de Molyn, Cornelis van Kittensteyn, Salomon van Ruysdael, Frans Hals, and Cornelis Vroom.⁸⁴

That group was strongly convinced that public sales held benefits for artists, both new and established, and that art dealers and retailers rather than artists would be the ones to benefit from the new requests. The supporters of sales advanced four arguments: master painters should be entitled to sell their own paintings in any way they saw fit; art lovers (*liefhebbers*) should be enabled to rid themselves of their old paintings and buy new, better ones with the profits; public sales were beneficial to young painters, both as a way to sell their work but also as a stimulus to artistic inspiration. Fourthly, they argued that public sales stimulated new markets, as they appealed to people who would not normally buy paintings using the regular channels of distribution. Evidently they rejected the idea that the market was static and actively sought to include new sorts of buyer. In their view, open public sales were considered to be one of the main venues whereby amateur buyers could develop a taste for art and become *liefhebbers*.

The increased guild activity was the consequence of an increasing use of auctions and catalogues as channels of distribution and marketing.

As with books, durability and the increasing turnover time of paintings strengthened the need for more efficient distribution methods. These could be found in a less restrictive policy towards public sales and in better regulation. Guild boards initially resisted, but within a few decades they began to adapt and even organize auctions themselves.⁸⁵ From 1664, biannual auctions were permitted in Haarlem to encourage local demand.⁸⁶ Amsterdam artists gained permission relatively late, around 1700. There, the local Guild of St. Luke altered its regulations concerning auctions three times: once in 1701, once in 1702, and then again in 1704. The new rules regarding public sales resembled those drawn up decades earlier by the booksellers' guild. Two issues stood out. First, there was a conflict between the overseers of the booksellers and the overseers of the painters as to who should examine which auctions. Second, in order to discourage the practice of including illegal works in auction sales, sales catalogues, hand-written or printed, had to be presented to representatives of the guild three days before the sale and made available to overseers who visited the auction itself.⁸⁷

Auctions had been a common feature of the art market, but now this practice was professionalized. The Dutch Republic had been the cradle of specialized book auctions early in the seventeenth century but of specialized art auctions only during the last quarter. A collection of sales catalogues from the period 1684-1752 assembled by art dealer Gerard Hoet and published in 1752 shows that specialized art sales featuring printed catalogues became more widespread during the 1690s.⁸⁸ A sample of advertisements for art sales published in the *Amsterdamsche Courant* between 1672 and 1725 confirms this and suggests that the rise in the number of catalogues found in Hoet's collection not only reflects an increase in the use of this adjunct to auctions, but also confirms the public art sale as a general method of distribution.⁸⁹ Amsterdam was the metropolis of art auctions: 70 per cent of the auctions listed by Hoet for the period 1676-1739 took place in Amsterdam compared with 7 per cent in The Hague, 6 per cent in Rotterdam, and the remainder in Haarlem, Utrecht, Leiden, Dordrecht, Leeuwarden, Antwerp, and Brussels, excluding isolated events in smaller towns such as Hoorn and Groningen.⁹⁰

The key figure in the development of specialized painting auctions and the use of catalogues and advertisements was Amsterdam dealer Jan Pietersz Zomer.⁹¹ Zomer had been trained as a glass painter, but by the time of his death in 1724, he was a key figure in the Amsterdam art market, dominating auction sales and playing a central role in the local connoisseurs' milieu.⁹² Zomer was the first broker of art, or at least the

first to register as such with the brokers' guild.⁹³ In theory, every broker could auction off paintings, but in practice, after 1690, it became Zomer's prerogative. In the first decade of the eighteenth century he organized between 60 and 90 per cent of the Amsterdam art auctions.⁹⁴ Zomer did not buy and resell exclusive works of art but lived off his commissions as intermediary.⁹⁵ He professionalized the auctioning of pictures through his pioneering use of newspaper advertisements and catalogues.⁹⁶ Although neither of the two were genuine innovations as they were already in use in the book trade, he was the first to employ them systematically for art auctions. Zomer increased the transparency of art auctions by including information on type, style, and brand (using the master's name as brand whatever the master, studio, or school).⁹⁷

The number of auctions held in the Dutch Republic, in Amsterdam in particular, and the numbers of paintings by Dutch masters in foreign collections and in French auctions testify to the development of the successful dissemination of Dutch paintings.⁹⁸ In fact, public second-hand sales proved to be crucial instruments in the development of the export trade. After the failing demand for newly produced works of art, Dutch artists and dealers transformed the art market from a primary to a secondary market, placing themselves at the centre of an integrated European art trade, much like Leiden booksellers had done a century earlier.⁹⁹ The dissemination of printed catalogues and the inclusion of information true or false, stimulated further internationalization and may even have enabled an increase in demand as less experienced buyers could gain easier access to second-hand paintings.¹⁰⁰ For this period, the only other specialized art auctions were known to be in London, but these were much less transparent and organized.¹⁰¹ The early advantage certainly paid off, as the Dutch Republic became the centre of international art auctions until Paris and later London took over in the latter part of the eighteenth century.

Quality uncertainty

Trust and transparency were crucial to the success of art markets both primary and secondary.¹⁰² By the 1640s, mediocre paintings in a wide range of genres and styles had entered the Dutch art market. The broad variety of styles, techniques, and genres put pressure on the objective notions of quality. Art historians have examined the topics of quality, authorship, and authenticity in this period.¹⁰³ Anna Tummers, for instance, demonstrated that while connoisseurs were indeed concerned with discerning the master's touch, their main objective was to assess quality rather than originality.

Image 9.1 Interior of a picture gallery, drawing 17th century, anonymous, formerly attributed to Frans Hals II



Source: The Trustees of the British Museum

Whether or not the painting was entirely by the master's own hand was not a major issue. In a general sense, these remarks apply to the whole period under study here. Nonetheless, around the middle of the century, some changes did take place.

Jaap van der Veen has observed a concentration of court cases concerning issues of authenticity in Amsterdam in the first quarter of the seventeenth century and again in the 1640s and 1650s.¹⁰⁴ The first period coincided with the threat of imports around 1610, as discussed in previous chapters, and the second with the onset of maturity in the life cycle of the Dutch painting market. Van der Veen attributes the rise in the second period to the fact that the number of art collectors increased considerably. He also discerns tensions between workshop practices and expectations of buyers around this time.¹⁰⁵ Montias also observed a growing interest in attributions and the autograph status of works of art in Delft in the same period.¹⁰⁶ Moreover, by that time, a growing number of painters who had no artistic training were trying their hand at painting.¹⁰⁷ The timing of these developments is no coincidence – they can be interpreted as consequences of declining transparency in a maturing and increasingly competitive market.

In the large and varied Dutch art market and in art markets in general, quality was arguably too subjective to be prescribed. Still, the establishment of guilds could play a role in diminishing quality uncertainty. Ed Romein has used George Akerlof's economic theory on quality uncertainty to explain tensions in the Dutch art market in the 1640s as well as guild restructuring.¹⁰⁸ This theory concentrates on the consequences when sellers of goods possess information that is inaccessible to buyers regarding the quality of their goods. Increased uncertainty as to the quality of products can create tensions in the market and eventually even drive worthy products off the market. According to Romein, the increasing size and variety of the Dutch and the Leiden art market in particular created problems in the flow of information, resulting in consumer anxiety. In the case of Leiden, this put downward pressure on price levels and pushed painters to relocate their businesses to other towns. Only the establishment of a guild-like structure in 1642, Romein suggested, could reverse such trends.

In previous times and in other sectors, guilds played a crucial role in quality control. The exclusive right of the guilds to sell certain goods in certain markets, together with quality standards written into the guild regulations, assured buyers that all goods under the guild's jurisdiction would be of a certain quality.¹⁰⁹ Quality control could take different forms: imposing regulations requiring painters be members of a guild in order to sell; having them finish an apprenticeship before becoming a member of the guild; keeping a register of all painters and apprentices; controlling material; setting up a curriculum; testing skills via masterpieces at the end of the training period; and providing facilities where local painters could display their work. As we have seen, in the case of Dutch painters, there were no stipulations to produce masterpieces, no curricula, and no quality control on materials.¹¹⁰ Still, the guilds exerted a certain quality control via different channels.

The establishment of public retail outlets and attempts at setting quality standards in art-theoretical texts and lectures may be interpreted as responses to the decreasing transparency of the art market.¹¹¹ Deans of the Guilds of St. Luke also became active in establishing commercial public retail outlets. These so-called salesrooms (*schilder-kamers*) were first established in Antwerp and Bruges in the late fifteenth century where they allowed both artists and potential buyers to compare prices and quality.¹¹² In the Northern Netherlands the first to be established was in Utrecht in 1644, followed by The Hague in 1656, while in Amsterdam it took until the end of the century.¹¹³ Amsterdam members of the Guild

of St. Luke went to the magistrates, asking for official recognition of a 'gallery' they had established and through which Amsterdam artists might sell, under the strict supervision of masters. Lovers of art, they urged, had a right to know the truth about what they bought and 'what are copies and what principals'.¹¹⁴ Guild efforts in Leiden during this period dealt primarily with public sales, but they also included attempts to define criteria as to what made a good painter, as presented by Leiden painter Philips Angel in his famous 1641 lecture 'In praise of painting'.¹¹⁵ This lecture has been interpreted as an extended plea for the establishment of a Guild of St. Luke as well as a tribute to patrons of the arts.¹¹⁶ At the end of the seventeenth century, painter and art theorist Gerard de Lairesse also gave a series of lectures about painting and drawing for fellow painters and art collectors.

During the eighteenth century, the issue of quality uncertainty raised its head once more. In this age of collecting, works by old Dutch masters had increased in value. The expansion of artistic theory and terminology and the increasingly determined establishment of artistic canons both followed from and fostered collecting habits as well as the growing need for information and transparency.¹¹⁷ This, combined with the many imitations circulating in the art market, appears to have further increased concerns surrounding authenticity.¹¹⁸ Copying may have been a practical business strategy, but contemporaries increasingly complained about its misuse. Texts by Jacob Campo Weyerman, Johan van Gool, and Gerard Hoet shed light on the practices of art dealers and the consequences for the art market.¹¹⁹ All three acknowledged that the sale of copies as originals was a problem, but they differed as to who was to blame. Van Gool and Weyerman both criticized art dealers for selling copies as originals, for commissioning copies, and for providing painters with originals to copy, all for profit. Hoet, on the other hand, being a dealer himself, argued that painters were the ones putting false signatures on the paintings.¹²⁰ Weyerman did not discard all art dealing practices, as he distinguished between knowledgeable, trustworthy art dealers and 'swindlers'.¹²¹

As emphasized by Koenraad Jonckheere and Filip Vermeylen, trust and accurate information were crucial in art dealing and '...false attributions, bogus information, and especially copies (when sold as originals) undermined the very foundations of the art market'.¹²² In the eighteenth-century art market in which very high prices were charged and paintings may even have been used as investments, these issues were paramount.¹²³ Previous studies have shown that during the eighteenth century, a new breed of

art dealer developed. For most of the seventeenth century, art dealers had functioned as merchants or facilitators, and around the turn of the century, Dutch broker-dealers such as Zomer made the art market more transparent whilst also keeping valuable information to themselves.¹²⁴ A few decades later, Paris dealers such as Gersaint further modernized the auction system by increasing market transparency and by employing both commercial expertise and artistic insight to translate value into price.¹²⁵ As in the case of the maturing book market, we see clearly an increasing importance of distribution over production, in both guild regulation and industry structure.

Occupational and social differentiation

Throughout this period, higher fees and stricter controls on guild members raised local entry barriers. With the establishment of the Utrecht *Schilder-Collegie* in 1644, for instance, annual fees were required, something new for Utrecht but common in other towns. Annual dues were set at 12 *stuivers*, which was high compared with other towns. Twenty years later entry fees were raised once more, from *f*10 to *f*20, and from *f*3 to *f*5 for masters' sons (in the 1611 ordinance, the fee had been 30 *stuivers*).¹²⁶ In Haarlem and Dordrecht, entry fees also increased significantly.¹²⁷

From the 1630s onwards, and especially in the 1640s and 1650s, changes can be observed in how painters saw themselves in relation to other sorts of artist. The so-called emancipation of the painter, as visible in the separation of painters from other craftspeople and the renaming of the guild, has, to some extent, been challenged.¹²⁸ When a group of Haarlem guild members tried to reform the Guild of St. Luke in 1640 based on a 1631 charter, this was allegedly prompted by conflicts within the guild and complaints about the lack of proper oversight.¹²⁹ In fact, however, painters at the higher end of the market were trying to set up associations to differentiate themselves from fellow members of the Guild of St. Luke.¹³⁰ Although the town magistrate did not grant the charter, this motivation was echoed in later charters and in tensions within guilds. With the reorganization of the Haarlem guild, occupational differentiation would become more compartmentalized with the most important painters at the top, then fellow artists such as engravers, followed by practitioners of accessory professions such as house painting, while in the 'inferior section' there was a group led by goldsmiths. The charter displays a continual bias in favour of the painter and his art, and it is telling that the charter states that only master painters could become deans of the guild.

Although the Haarlem charter was never accepted, similar stratification is evident in independent painters' associations such as the Dordrecht *Confrerie* in 1642; the Utrecht *Schilders-Collegie* in 1644, which included the establishment of a sales room; the Hoorn and Zwolle Brotherhoods of St. Luke in 1651 and 1652 respectively; and The Hague *confrérie* in 1656. In Amsterdam, ties between the arts of poetry and painting became increasingly pronounced as is evident in the poems on paintings and the personal relationships between poets and painters. Here the Guild of St. Luke held annual banquets; the 1653 event was organized in honour of the famous writer and playwright Joost van den Vondel and attended by poets, art lovers, and perhaps as many as a hundred painters.¹³¹ Before long, in 1654, art dealer, collector, art appraiser, and former director of the Amsterdam Theatre Marten Kretzer and former director of the Theatre Jan Meures initiated the *Brotherhood of Painting* (Broederschap der Schilderkunst) together with painters Barthelomeus van der Helst and Nicolaas de Helt-Stockade.¹³² The establishment of societies was not unique to painting and in fact became commonplace during the eighteenth century.¹³³ Still, the timing and context in which Dutch painters' societies were launched testifies to the specific aim of elevating the art of painting.

The new societies were not established as replacements for guilds but rather developed in response to the increasing popularity of amateur painting.¹³⁴ As in Italy, guilds and academy-like organizations existed side by side and served different purposes. Overall, the goal of painters was twofold: to differentiate themselves from 'lesser' crafts, and to build a rapport with art lovers. These collectors were often active as amateur painters but could not find a place in the guild structure. The increased importance of this group in the art market changed the relationship between painter and consumer.¹³⁵ The growing importance of both reputation and valuation by art lovers was well summarized in Samuel van Hoogstraten's advice to look for patrons, since 'without the help of favourable guides and helpers who talk him up loudly, he [the artist] shall have difficulty becoming known'.¹³⁶ It is no coincidence that artists' biographer Johan van Gool referred to amateur paintings alongside those of professionals in his *Nieuwe Schouwburgh*.¹³⁷ Painters' societies, unlike guilds, were open to amateurs, facilitating closer relationships between artists and clients. As was demonstrated earlier in this chapter, the increasing importance of patronage in whatever shape or form also had consequences for the geography of production. Masters active in smaller towns flocked to Amsterdam and The Hague where they would be in closer proximity to the pools of potential clients and patrons.

Academies

From the late seventeenth century, the balance of power in the art market shifted to the advantage of auctioneers, collectors, and gentlemen dealers. With new fashions, most notably classicist painting, came a need for additional training in the more intellectual and theoretical aspects of painting.¹³⁸ Collectors and art lovers such as Cornelis Ploos van Amstel were driving forces behind the academies established during the second half of the eighteenth century.¹³⁹ In the lectures given at the Amsterdam drawing academy (established in 1765), Enlightenment ideals feature prominently.¹⁴⁰ Drawing lessons could prove a valuable asset to citizens, a boost to production by creating a better-informed demand side, and they improved the skills of Dutch craftsmen and painters.¹⁴¹ By the time the Amsterdam urban drawing academy was established, the art academy was already a widespread phenomenon in Europe. In the Republic, quite late in establishing formal academies, only relatively informal gatherings had been organized in the first half of the seventeenth century.¹⁴² However, by 1631 the Haarlem charter displayed ambitions to organize meetings of members through which they could practice skills and exchange knowledge with other interested laymen and other guild members. It would take until 1688, however, for a dedicated drawing academy to be established.¹⁴³ Several years earlier, a few members of The Hague's artists' society *Pictura* had already taken steps to transform their more guild-like society into a drawing academy.¹⁴⁴

Though one may expect significant changes in educational practices with the establishment of academies, the early Dutch drawing schools offered not much more than communal live-drawing sessions with established artists. These schools did not replace apprenticeships, and formal academies with a clear educational purpose were not established in the Dutch Republic until the second half of the eighteenth century.¹⁴⁵ The academies would hold annual contests and lectures, but it would take until the nineteenth century for them to develop into institutions for higher professional education. Urban governments sometimes supported them, for example, by providing low rents or free lighting, but they were still basically private undertakings. The Dutch political structure prevented the top-down development of artistic academies, and although Dutch painters and authors paid attention to activities in other countries, they did not actively pursue a fully formalized academy. For example, Samuel van Hoogstraeten in the eighteenth century praised artistic education in France and Italy but did not call for the establishment of a similar institution in the Republic.¹⁴⁶ In fact, he observed that many painters in the Low Countries had become celebrated without such organized art education. It is possible that previously established routines restricted the modernization of education.

Conclusion

During the period 1650-1800, Dutch painters and dealers employed a variety of strategies to deal with a shrinking domestic market. Painters turned to the market segments that held more potential, which included both the upper and lower levels of society. In trying to engage with potential buyers, groups of painters affiliated themselves with amateur painters, as is evidenced by the establishment of societies for art lovers and artists. Dutch art dealers, moreover, were able to use the initially adverse issue of product durability by developing and improving secondary markets. Notwithstanding several attempts to limit public sales, specialized art auctions developed within local guild structures. Guild masters also took control of distribution channels and tried to increase the turnover rate and transparency in local markets through, for example, the establishment of public retail outlets and the education of the buying public.

The art buying public's interest in older Dutch works was not a good stimulus for the production of truly original work. This substantiates Seymour Slive's observation of 'a decline in the creative impulse of Dutch artists' from the last quarter of the seventeenth century on.¹⁴⁷ Still, this loss of creativity in a period of market saturation is not as self-evident as one might expect. In Antwerp, for example, cultural life experienced an 'Indian summer' after the severe post-Revolt crisis in the Southern Netherlandish art market at the end of the sixteenth century, with Baroque painters Peter Paul Rubens, Jacob Jordaens, and portraitist Anthony van Dyck leading the way. The town retained its status as a commercial centre within the Spanish empire as well as an artistic and cultural hub in the framework of the Catholic Counter-Reformation.¹⁴⁸ It is true that Dutch painters, when dealing with market saturation and war-based complications, did not have the court and church patronage from which their southern counterparts had benefited some fifty years earlier, but this does not mean that they were predestined to lose their edge. Antwerp painters and merchants, for instance, also managed to set up a mass production of newly produced affordable paintings for export.

Moreover, the strategies developed by Dutch painters and dealers had several consequences. The downturn in the market for new cabinet pieces was compounded by the successful development of a second-hand market, by the growing demand for imitations and emulations, and by the successful shifts towards painted interior scenes and decorative painting. The professionalization of secondary markets reinforced the already prominent local demand for old masters. It also facilitated the collection and promotion

of Dutch paintings in foreign markets. By widening potential demand for seventeenth-century originals, painters and art dealers limited the expansion of contemporary art production. The demand for older styles, compositions, and themes may have hampered the development of contemporary art, but it also created demand for newly produced copies or adaptations of seventeenth-century originals. In the long run, the widespread distribution of copies and branding hindered transparency, increasing the need for quality arbitrage by art dealers and art theorists, which further supported the formation of artists' canons.

During the growth phase, the high number of quality masters had made for a correspondingly high number of quality teachers who then transferred their skills to an even larger pool of quality painters. In the growing and varied art market, these painters could choose their niche and become extraordinarily skilled in certain specializations. During the eighteenth century this pattern was reversed. Entry barriers increased, personal relations became more important, and painters were expected to master a variety of styles. There was also less room for experimentation and, as labour-saving styles went out of fashion, painters were increasingly trained and employed in wallpaper factories. In the absence of new exogenous stimuli, Dutch painters did not prove able to break the trend. As a result, the eighteenth-century Dutch art market was not the best environment in which to unlock artistic talent as we currently value it.

Notes

1. Bok, 'Vraag en aanbod', pp. 100-102; De Vries, 'Art History', p. 273, table 2.
2. Cf. De Vries, 'The Felicitous Age of Painting'; Grijzenhout, 'A Myth of Decline'.
3. De Vries, 'The Felicitous Age of Painting'.
4. Consider two titles devoted to previously disregarded work: Loos et al., *Age of Elegance*; Mai et al., eds., *Kroon op het werk*. Pioneering work was done in 1971 with the exhibition *Dutch Masterpieces from the Eighteenth Century: Paintings and Drawings 1700-1800* and the catalogue by Mandle and Niemeijer, *Dutch masterpieces*.
5. The recent exhibitions devoted to some of these painters are testament to this rehabilitation.
6. Hecht, 'Het einde van de Gouden Eeuw'. The recent work on the Leiden art market by Piet Bakker is particularly relevant for our purposes: Bakker, 'Crisis? Welke crisis?'. Cf. Jacob and Mijnhardt, eds., *The Dutch Republic*. Cf. Aono, 'Imitation and Innovation' on art production in one particular genre.

- On art theory and contemporary appreciation see for example: De Vries, 'The Felicitous Age of Painting'; Hecht, 'Browsing in Houbraken'; Horn, *The Golden Age Revisited*. On auctions, collecting, and international art trade see Jonckheere, *The Auction of King William's Paintings*; Korthals Altes, 'De verovering'; Plomp, 'Het verzamelen van tekeningen'.
7. Bok, 'Vraag en aanbod', pp. 100-102; De Vries, 'Art History', p. 273, table 2.
 8. De Vries, 'Art History', p. 267.
 9. Cf. Bok, 'Vraag en aanbod', pp. 120-127; De Vries, 'Art History', p. 273. The estimates on the number of painters active per 25 years are based on RKD-artists&. De Vries based his estimates on attributions in probate inventories and museum collections; as a result his figures are biased towards trends in prominent painters, rather than the mass market.
 10. De Vries, 'Art History', p. 267.
 11. Bok, 'The Rise of Amsterdam'. Houbraken, *Groote Schouburgh*, pp. 130-136. Cf. De Vries, *Diamante gedenkzuilen*, pp. 87-101 on Van Gool's opinion.
 12. Bok, 'Vraag en aanbod', pp. 120-127; De Vries, 'Art History', pp. 248-282.
 13. Van Zanden, *The Long Road*, p. 247.
 14. Lesger, 'Vertraagde groei'.
 15. Van Zanden, 'Economic Growth', p. 23; Soltow and Van Zanden, *Income and Wealth Inequality*.
 16. Cf. De Vries, 'Art History'.
 17. Cf. Fock, 'Het interieur in de Republiek'.
 18. Bok, 'The Rise of Amsterdam'; Bok, 'Vraag en aanbod'; Montias, 'Works of Art'; De Vries, 'Art History'.
 19. Bok, 'Vraag en aanbod', pp. 120-127.
 20. Cf. De Vries, 'Art History', pp. 248-282.
 21. Montias, 'Works of Art in Seventeenth-Century Amsterdam', p. 363.
 22. Lammertse and Van der Veen, *Uylenburgh & Co*, pp. 105-110.
 23. Bok, 'Vraag en aanbod', pp. 104-107.
 24. Bok, 'The Rise of Amsterdam'.
 25. An artist's main work location is defined as the town in which the artist worked most years of his or her career. When an artist spent an equal amount of time in two locations, both are included. This explains the fact that the number of main work locations exceeds the total number of artists included in the sample. When an artist spent less than half of the duration of his or her career in one place, the main work location is labeled 'various'.
 26. Houbraken, *Groote Schouburgh*, pp. 130-135, vol. II; Van Gool, *Nieuwe Schouburg*, pp. 357-358, vol. I; Weyerman, *Levens-beschryvingen*, pp. 395, vol. IV. Cf. Aono, 'Imitation and Innovation', pp. 16-17; De Vries, 'The Felicitous Age of Painting'; Horn, *The Golden Age Revisited*, pp. 93-103; Hecht, 'Browsing in Houbraken'; Grijzenhout, 'A Myth of Decline'. Sluijter, Enklaar, and Nieuwenhuizen, eds., *Leidse fijnschilders* also covers an extended period of time.
 27. Cf. De Vries, 'The Felicitous Age of Painting', p. 34.

28. Van Hoogstraeten, *Inleyding*, p. 300; Houbraken, *Groote Schouburgh*, pp. 387-408, vol III; Van Gool, *Nieuwe Schouburgh*, pp. 376-410, vol II.
29. Jonckheere, *The Auction of King William's Paintings*, appendix A3.
30. Murray, *Human Accomplishment*; Kelly and O'Hagan, 'Geographic Clustering'.
31. We find a comparable discrepancy between the two samples for the seventeenth century. The Low Countries were responsible for circa 50 per cent in Kelly and O'Hagan and 30 per cent in Murray.
32. De Vries, 'Art History'.
33. Cf. table 6.4 in this book.
34. Cf. Bakker, 'Crisis? Welke crisis?'.
35. Bok, 'The Rise of Amsterdam', p. 202.
36. Sluijter, *Seductress of Sight*, p. 15.
37. Kolfin, *The Young Gentry*, p. 117.
38. Sluijter, Enklaar, and Nieuwenhuizen, eds., *Leidse fijnschilders*.
39. Cf. Van Gool, *Nieuwe Schouburgh*; De Vries, 'De kunsthandel is zoo edel als eenigen'; De Vries, *Diamante gedenkzuilen*, pp. 87-101.
40. Cf. Fock, 'Het interieur in de Republiek'. Cf. Thera Wijssenbeek's seminal work on material culture in Delft. Wijssenbeek-Olthuis, *Achter de gevels van Delft*. See also De Vries, *The Industrious Revolution* on increasing demand for luxury items.
41. Fock, 'Het interieur in de Republiek'.
42. *Ibid.*, pp. 82-84; Baarsen, 'Art for the interior'; Pijzel-Dommisse, '1700-1750'.
43. There have been few studies on Dutch mural canvases, a neglect that can be attributed to the poor reputation they acquired during the nineteenth century and to the fact that so few have survived. The dissertation on Jurriaen Andriessen by Harmanni includes the most comprehensive discussion of mural canvases. Harmanni, 'Jurriaen Andriessen', pp. 111-153. The following is based on his work, unless otherwise indicated. On the beginnings of the fashion of wall-covering paintings and the production of Ferdinand Bol in the 1650s in Van Eikema Hommes, *Art and Allegiance*. On Schweickhardt see Sluijter, 'Hendrik Willem Schweickhardt'.
44. Dudok van Heel, *Amsterdamse kamerbehangselfabrieken*, p. 13.
45. Harmanni, 'Jurriaen Andriessen', pp. 130-134. On De Lairese: De Vries, *Gerard de Lairese*; De Vries, *How to Create Beauty*. On Marot: Ottenheym, Terlouw, and Van Zoest, eds., *Daniel Marot*.
46. Painting ceilings, grisailles, and mural canvases required a more thorough knowledge of perspective.
47. Numerous mentions in Van Eynden and Van der Willigen Pz., *Geschiedenis der vaderlandse schilderkunst*.
48. Harmanni, 'Jurriaen Andriessen', pp. 166-167.
49. On the skills and activities of kladschilders: Bakker, 'Crisis? Welke crisis?', pp. 242-252.
50. *Ibid.*

51. SA Archief van de Gilden en het Brouwerscollege, inv. 1399, p. 107. 27 January 1784.
52. On copies see: Aono, 'Imitation and Innovation', chapter 2.
53. Bok and Schwartz, 'Schilderen in opdracht'.
54. Cf. Korthals Altes, 'De verovering', p. 34.
55. Aono, 'Imitation and Innovation', p. 72.
56. *Ibid.*, p. 53.
57. *Ibid.*, pp. 57-61.
58. *Ibid.*, chapter 3.
59. Stoneman, *Soft Innovation*, p. 22.
60. See also De Marchi and Van Miegroet, 'Pricing Invention', vol. 237, p. 29.
61. Wackernagel, *The World of the Florentine Renaissance Artist*, p. 366.
62. Alpers, *Tiepolo and the Pictorial Intelligence*, p. 21; De Marchi and Van Miegroet, 'Pricing Invention', vol. 237, p. 50.
63. Wuestman, 'The Mezzotint in Holland', pp. 72-73. There are few studies on mezzotint engraving in the Dutch Republic. This section is based on Wuestman's article unless otherwise indicated.
64. *Ibid.*, p. 73.
65. Translation of *Groot Schilderboek De Lairese, A Treatise*, vol. 1, p. 270.
66. RKDartists&, accessed 12-03-2011.
67. Wuestman, 'The Mezzotint in Holland', pp. 73-74.
68. Grijzenhout, 'A Myth of Decline', p. 33. He had one work by Rembrandt, one by Jan Davidsz de Heem, and three panels by Cornelis van Poelenburch.
69. De Piles, *Conversations*.
70. *Ibid.*, p. 424.
71. Beechy, *The Literary Works*, p. 358.
72. Grijzenhout, 'A Myth of Decline', p. 33.
73. Sluijter, 'Schilders van "cleyne, subtile ende curieuse dingen"', p. 15.
74. Hecht, 'Het einde van de Gouden Eeuw'.
75. Cf. Koolhaas-Grosfeld, 'The Business of Art'.
76. On the export of Dutch paintings see Korthals Altes, 'De verovering'; Gerson, *Ausbreitung and Nachwirkung*.
77. Van Hoogstraeten, *Inleyding*, p. 330; Koolhaas-Grosfeld, 'The Business of Art', p. 115.
78. Korthals Altes, 'De verovering'.
79. *Ibid.*, p. 14.
80. De Marchi and Van Miegroet, 'The Rise of the Dealer-Auctioneer', p. 151.
81. Leiden can be seen as somewhat of an anomaly, because it was the only sizable art market not under guild control until the 1640s.
82. Cf. Boers-Goosens, 'Een nieuwe markt', vol. 50; Romein and Korevaar, 'Dutch Guilds'.
83. Miedema, ed., *Archiefbescheiden*, vol. II, p. 236.
84. *Ibid.*, p. 249; *ibid.*, p. 280.
85. Cf. Romein and Korevaar, 'Dutch Guilds'.

86. Miedema, ed., *Archiefbescheiden*, vol. II, pp. 289-290; *ibid.*, p. 280. 'Sommige schilders alhier ter stede weijnigh afftreck was'.
87. SA, Archief van de Gilden en het Brouwerscollege, inv. 1398, p. 36, article 3; inv. 1399, article 7.
88. Hoet, *Catalogus of naamlyst* and Hoet and Terwesten, *Catalogus of naamlyst*. The latter is effectively the third volume of the former. See for this database: Jonckheere, 'Kunsthandel en diplomatie', pp. 208-211; Jonckheere, *The Auction of King William's Paintings*, appendix 3. The Hoet-Terwesten database is part of the *Getty Provenance Index*. www.getty.edu/research/tools/provenance.
89. Dudok van Heel, 'Honderdvijftig advertenties'; S.A.C. Dudok van Heel has published surveys of all advertisements for art auctions in the *Amsterdamse Courant* for the period 1672-1725 (N=259).
90. Jonckheere, *The Auction of King William's Paintings*, appendix 3.
91. On Zomer see: Dudok van Heel, 'Jan Pietersz. Zomer'.
92. Jonckheere, *The Auction of King William's Paintings*, p. 57.
93. Dudok van Heel, 'Jan Pietersz. Zomer', p. 101.
94. *Ibid.*, p. 102.
95. Jonckheere, *The Auction of King William's Paintings*, pp. 56-57.
96. *Ibid.*, p. 56.
97. Jonckheere and Vermeylen, 'A World of Deception and Deceit?', pp. 77-81.
98. On international art trade see Korthals Altes, 'De verovering'; Jonckheere, *The Auction of King William's Paintings*. On Dutch auctions of paintings in the eighteenth century see also Fredericksen, 'The Art Dealership of Merchant and Diplomat Jan van Beuningen'; Lyna and Vermeylen, 'Rubens for Sale'; De Marchi and Van Miegroet, 'The Rise of the Dealer-Auctioneer in Paris'; Bille, *De tempel der kunst*, vol. 2, pp. 156-159.
99. Jonckheere, *The Auction of King William's Paintings*, pp. 58-59; Jonckheere and Vermeylen, 'A World of Deception and Deceit?', p. 101.
100. Jonckheere and Vermeylen, 'A World of Deception and Deceit?', p. 108.
101. Frits Lugt's *Répertoire des catalogues de ventes publiques* covers the period 1600 to 1925, listing more than 100,000 art sales catalogues from libraries in Europe and the United States. See also: <http://asc.idcpublishers.info>. For other countries in Europe see Lyna and Vermeylen, 'Rubens for Sale'; De Marchi and Van Miegroet, 'The Rise of the Dealer-Auctioneer in Paris'; Cowan, 'Arenas of Connoisseurship'; De Marchi and Van Miegroet, 'Auctioning Paintings', vol. 260.
102. Also stressed in Jonckheere, *The Auction of King William's Paintings*, p. 108.
103. Van der Veen, 'By His Own Hand', vol. 4; Tummers, "By His Hand". See also Tummers, *The Eye of the Connoisseur*.
104. Van der Veen, 'By His Own Hand', vol. 4, pp. 6-7.
105. *Ibid.*, p. 31.
106. Montias, *Artists and Artisans*, pp. 218, 227, 247-258.

107. Van der Veen, 'By His Own Hand', vol. 4, p. 7; Van der Veen, 'De Amsterdamse kunstmarkt'.
108. Romein, 'Knollen en citroenen'. Cf. De Marchi, 'The Role of Dutch Auctions' for a similar argument regarding the Dutch art market in the 1610s.
109. Cf. Miedema, 'Over kwaliteitsvoorschriften'.
110. *Ibid.*, p. 144.
111. Cf. Prak, 'Painters', pp. 161-164; Romein, 'Knollen en citroenen'.
112. Vermeylen, *Painting for the Market*.
113. Cf. Prak, 'Painters', p. 162.
114. Bille, *De tempel der kunst*, vol. 2, pp. 155, 176.
115. Cf. Romein and Korevaar, 'Dutch Guilds', pp. 178-179; Sluijter, *De Lof der Schilderkunst*; Miedema, 'Philips Angels Lof der schilder-konst'.
116. Prak, 'Painters', p. 163; Haak, *The Golden Age*, p. 62.
117. Cf. De Vries, 'The Felicitous age of Painting', p. 30; Jonckheere and Vermeylen, 'A World of Deception and Deceit?'.
118. Korthals Altes, 'De verovering', p. 31.
119. Summaries in Aono, 'Imitation and Innovation', pp. 54-57 and Korthals Altes, 'De verovering', pp. 40-42. See on Van Gool and Hoet: De Vries, *Diamante gedenkzuilen*, pp. 87-101; De Vries, 'De kunsthandel is zoo edel als eenigen'. On Weyerman see Jonckheere and Vermeylen, 'A World of Deception and Deceit?'.
120. The discussion between Van Gool and Hoet took place in two pamphlets published as correspondence. The pamphlets are reprinted in De Vries, *Diamante gedenkzuilen*, pp. 219-241.
121. Cf. Jonckheere and Vermeylen, 'A World of Deception and Deceit?'.
122. *Ibid.*, p. 108.
123. Eighteenth-century Dutch art critic and biographer Arnold Houbraken (1660-1719), author of *Groote Schouburgh*, blamed the artistic decline on luxury and avarice and a general decline in the appreciation of art. Rather than appreciating *l'art pour l'art*, pictures, according to Houbraken, were seen merely as potential sources of profit. Houbraken, *Groote Schouburgh*.
124. Cf. Jonckheere, 'Supply and Demand'.
125. Cf. De Marchi and Van Miegroet, 'The Rise of the Dealer-Auctioneer in Paris'.
126. Muller Fz., *Schildersverenigingen*, p. 19; *ibid.*, appendix II, Ordonnantie van het St. Lucasgild 13 september 1611, pp. 63-69; *ibid.*, appendix III, Ordonnantie van het Schilders-College 24 Februari 1644.
127. Cf. Hoogewerff, *Geschiedenis van de St. Lucasgilden*, p. 187.
128. The following is based on Miedema, 'Kunstschilder, gilde en academie'.
129. Taverne, 'Salomon de Bray', p. 51.
130. The petitioners formulated the distinction as follows: differentiation '*uyt de konst*' and '*uyt de ambachten*'. Miedema, ed., *Archiefbescheiden*, vol. II, p. 139.
131. Miedema, 'Kunstschilder, gilde en academie', pp. 12-13.
132. Sluijter, 'Schilders van "cleyne, subtile ende curieuse dingen"'.

133. Cf. Mijnhardt, 'Het Nederlandse genootschap'.
134. Miedema, 'Over kwaliteitsvoorschriften'.
135. Aono, 'Imitation and Innovation', p. 33.
136. Cited from De Vries, 'The Felicitous Age of Painting', p. 36.
137. *Ibid.*, p. 42.
138. Miedema, 'Kunstschilder, gilde en academie', pp. 273-274.
139. Knolle, 'Dilettanten'; Laurentius, Niemeijer, and Amstel, *Cornelis Ploos van Amstel*.
140. Amstel, *Redenvoeringen*. Cf. Husly, *Redevoering*. Other members such as Jacobus Buys and Reinier Vinkeles also held lectures, but of many of these we only know the titles.
141. On academies see Knolle, 'De Amsterdamse stadstekenacademie'; Knolle, 'Dilettanten'; Martis, 'Voor de kunst'; Miedema, 'Kunstschilder, gilde en academie'; Miedema, 'Over vakonderwijs', vols. 5-6; Martis, Miedema, and Van Uitert, eds., *Kunstonderwijs in Nederland*; Koolhaas-Grosfeld, 'The business of art'. On Southern Netherlandish academies see De Munck, 'Le produit du talent', De Doncker, 'Hupsicheyt en hantgedaet'. Knolle, 'Dilettanten'; Ploos van Amstel, *Redenvoeringen*. The same argument can be found regarding the establishment of the Amsterdam society *Felix Meritis* in Knolle, 'Het departement der tekenkunde'.
142. Bok, "Nulla dies sine linie"; Knolle, 'Tekenacademie'.
143. Miedema, ed., *Archiefbescheiden*, vol. II, pp. 310-313.
144. Reynaerts, *De Koninklijke Akademie van Beeldende Kunsten*.
145. Cf. SA, nr. 265, Stads Teken Academie.
146. De Klerk, "Academy-beelden".
147. Slive, *Dutch Painting*, pp. 299-300.
148. On Antwerp see for example Vermeylen, *Painting for the Market*; Honig, *Painting and the Market*; Vlieghe, *Flemish Art and Architecture*.

10. Conclusion

After the establishment of the Dutch Republic, painting and publishing developed from fairly modest trades into booming industries. This study has traced the changing faces of these industries, through their emergence at the end of the sixteenth century to their extraordinary expansion during the first half of the seventeenth century, and then through their stagnation or decline, depending on the sector. Previous studies have identified a number of factors that contributed to the boom in cultural production in the Golden Age as well as to its subsequent decline, ranging from individual genius, changing market forces, the general commercial infrastructure, unique cultural preferences, and adverse conditions in other countries. I argue that the extraordinary artistic and economic outcomes described in this book were more than the sum of these factors, and that Dutch book and art producers did not simply ride the Golden Age wave. The local organization of production proved to be just as conducive to growth and innovation as the general circumstances. Creativity was organized in such a way that it generated exceptional levels of economic competitiveness throughout the cultural industries for a century at least. The findings of this research are presented here, organized around the three primary analytical elements of the theoretical model on spatial clustering outlined in the introduction: the industry life cycle, properties of cultural industries, and the diamond model.

The life cycles of painting and publishing

On the basis of new and existing quantitative and qualitative sources, I discerned different phases in the development of the early modern Dutch painting and publishing industries. Drawing on the notion of the stylized industry life cycle, I modelled these phases as distinct stages in an industry's development: emergence, growth, maturity, and decline. It should be emphasized once more that the notion of the life cycle is used here only as an analytical device. The construct of industrial life cycles itself does not offer an absolute or exact rendering of historical industrial development but is used primarily to organize the many fragmented observations on the early modern markets for books and paintings.

Emergence

The relatively sudden concentration of cultural production in the newly established Dutch Republic can be explained by the combination of 'historical accident', in the form of the Dutch Revolt and the fall of Antwerp, and the existence of a local infrastructure that was relatively favourable to immigrants and other start-ups. Prior to 1580, cultural industries in the northern provinces of the Low Countries had been relatively underdeveloped. Their size, scope, and artistic accomplishments paled in comparison with those of the Southern Netherlands, Antwerp's in particular. During the third quarter of the sixteenth century, a series of events following the Dutch Revolt shocked the system both on the demand and the supply sides. Numerous producers from the Southern Netherlands relocated to Dutch towns where they met an increasing demand for luxury products such as paintings and books driven, in turn, by rising economic prosperity.

Leiden, Amsterdam, and The Hague developed as the main centres of book production and distribution. The uneven spatial distribution of book production across the country was determined by the size of local demand and by distinct urban amenities: the university in Leiden; the presence of the court and the States General in The Hague, also briefly in Delft; and the thriving commerce of Amsterdam. These factors affected the demand conditions, the presence of related and supporting industries and, in turn, the size and character of local book production. Within each of these local clusters, certain key entrepreneurs led the way, most notably Cornelis Claesz in Amsterdam. In the case of painting, Haarlem and Utrecht took centre stage. Amsterdam also attracted a large number of painters but underperformed when it came to measures of artistic prominence. Here too, local demand conditions accounted for the initial selection of certain towns where painting emerged on a significant level. However, previous reputations and the presence of acclaimed artists provided an additional impetus. The interrelations between book production, graphic art, science, and painting were a prominent feature of Dutch cultural production during this stage.

These early decades should be seen as marking the phase of emergence in the industry life cycle and as a period in which the Republic was catching up rather than taking the lead. By the 1600s, the scale and scope of production and trade had increased significantly, but the overall size of both industries was still relatively modest. Although potential demand was already high during the phase of emergence, it had not yet developed into mass demand

for cultural products. It would take another few years before the Dutch Golden Age of painting and publishing could really establish itself.

Growth

From the 1610s onwards, a new generation of entrepreneurs introduced a string of product and process innovations that was crucial to unlocking potential demand. These newcomers had to capture their own slice of the market by differentiating their products, and they turned to the members of the middle classes, who could not afford sizeable, labour-intensive history paintings or large and lavishly illustrated books. Drawing on the groundwork of their predecessors and pushed by increasing competitive pressure in the traditional markets, these entrepreneurs recognized the potential of untapped market segments that were forming as a result of economic growth. They developed new genres, styles, and business models, and as a result the prices of paintings and of books fell, products became increasingly differentiated, and new consumers entered the cultural marketplace. The conversion of potential demand into actual demand marks the growth phase. No longer primarily driven by exogenous factors, the painting and publishing industries entered a period in which growth and innovation were also driven endogenously.

A notable feature of both industries was the relative integration of the market, as a large number of firms and workshops focused on its middle segments. This was mirrored in the spatial distribution of production. Even though cultural hubs can be easily identified, the geography of cultural production was polycentric especially compared to other countries. Producers developed intensive personal and business collaborations as well as rivalries, both within their own industries and with related or supporting industries. Local institutions and organizational structures, most notably guilds, were established in most towns. In the case of publishing in particular, local entrenchment was unmistakable, while painters were more dispersed and more mobile. Nevertheless, in painting too, local specializations developed. Simultaneously, the polycentric urban structure and the relatively open organizational arrangements allowed for the diffusion of people, products, and ideas as well as the development and reproduction of specializations. Local concentrations of painters and publishers entered positive feedback loops, reinforcing local growth and innovation over time. This resulted in an intensification of the already rapid and diverse series of product variants, further driving growth and innovation.

Maturity and decline

The artistic and commercial expansion of Dutch painting and publishing did not last. Around the middle of the seventeenth century, local markets became saturated. The dynamic of the growth phase had quickly also drained market potential, both in terms of scale and scope. Moreover, changing macro-economic circumstances curtailed further population growth and advances in purchasing power, and the absence of radical technological innovations limited the potential for further reduction of production costs. On top of this, there was little room for improvement in distributive practices due to the relatively early development of a virtually countrywide distribution network.

Once again, increasing competitive pressure heralded a phase of spatial and institutional restructuring and the development of new business strategies. Producers turned to the higher and lower ends of the domestic market. In painting, a renewed focus on painting on commission and a strengthening of relationships with consumers were evident. In publishing, markets also became increasingly segmented. Moreover, rather than investing in novelties, producers opted for caution, utilizing previously developed competences. In both sectors, practices of imitation and emulation rather than genuine innovation became more pronounced. The use of existing repertoires in the form of derivative styles and genres testifies to risk-averse behaviour. During this stage, cultural industries became increasingly concentrated, both spatially and organizationally. This resulted in the demise of mid-sized firms and the increasing importance of larger towns in cultural production. In all, local production systems became less accessible. People who could have been publishers in the growth phase now focused on bookselling or other activities, and many potential artists never advanced beyond decorative painting.

As producers were facing stagnating or declining domestic demand, painters and publishers increasingly focused on export markets, and their attempts to limit financial risks resulted in the rationalization of distribution and marketing. Publishers were particularly successful in creating new avenues of development, although painters too developed prudent business strategies. Previously acquired sources of competitiveness attracted and nurtured a new group of immigrant intellectuals and publishers, who, in hindsight, came just in time to steer Dutch book production towards an open window of opportunity in the form of new international markets. After the loss of export markets, just before the middle of the eighteenth century, Dutch painters and publishers were once again forced to adapt to

market saturation and, in the case of painting, even market contraction. The restructuring of production and trade can be interpreted as a response to the new situation. This resulted in changes in the organization of production, most visible in the gradual separation of publishing, printing, and bookselling, and the promotion of painting as art.

Although the development of novelty and quality in cultural production during the long eighteenth century pales in comparison with the previous century, the market strategies chosen by cultural producers should not be dismissed. In a saturated market, resorting to cheaper and less 'creative' inputs by lowering investment in production, as well as focusing on distribution and marketing, may certainly be considered rational strategies.

Painting and publishing as cultural industries

Thus far, parallels have been drawn between the stylized industry life cycle theory based on patterns in present-day manufacturing sectors and the evolution of early modern Dutch cultural industries. However, the fact that cultural industries can be distinguished from other economic sectors has significant implications for the way in which production and distribution are organized. Modern theory, moreover, should not be applied indiscriminately to the early modern period.

In the introduction, several general properties of cultural industries as identified by Richard Caves were discussed: demand uncertainty (nobody knows), the attitudes of artists towards their work (art for art's sake), horizontal and vertical product differentiation (infinite variety), temporal coordination (time flies), durability (*ars longa*), the coordination of different inputs (motley crew), and the vertical differentiation of artists (A-list/B-list).¹ These properties have implications for the way in which cultural industries are organized, even though the relative importance of such features may vary by industry. While these structural properties are merely descriptive in themselves, their analytical contribution lies in the manner in which they inform features of industrial organization. These, in turn, can shape how industries develop over time and across space.

Even if modern film or music production – or even modern visual arts and publishing – cannot be directly compared to early modern cultural industries, Caves's seven basic features seem to apply across the board. Demand uncertainty, a potential issue in every market, is especially significant here because of the subjective qualities of cultural goods. This was visible, for instance, in the production of paintings, for which, around the middle

of the seventeenth century, information asymmetries were becoming a serious problem. A second related feature on the demand side concerns the issue of temporal coordination and the short product life cycles of certain cultural goods. The continuous improvements observed in distribution and marketing, especially after 1650, can be interpreted as stemming from this property. Again, consider the 'motley crew' feature. Whilst principal-agent relationships exist in cultural industries, many products are based on more horizontal relationships or even joint ventures. Book production was a particularly collaborative affair, and all the inputs of contributing parties had to be available at the right cost, at the right time. Moreover, the life cycle analysis shows that the relationships between book producers, printers, and booksellers, as well as paper dealers, typesetters, and authors, were not static but changed over time.

Caves also distinguished two primary aspects of differentiation: those of products and those of skills. Cultural producers compete on the basis of differentiation rather than cost alone. The varied and competitive market of the Dutch Republic saw a massive flow of marginally different product variants introduced over a short period of time. The vast variety of books and paintings contributed to information asymmetries and an increasing differentiation between producers, especially in the case of painting. Although vertical and horizontal differentiation in cultural industries is generally labelled as 'infinite', potential variety in the early modern period turned out to be decidedly finite. Potential product and process differentiation was limited, if only because producers had to connect to existing traditions in order to convey meaningful content to consumers. Caves's fifth property, creative production, is the vertical differentiation of skills. Cultural producers are ranked according to their skills and talent, and in these industries this does not result in a winner takes all structure of competition but in a small top tier of stars on a large number of lower-ranked producers. This also took place in the early modern art market and even intensified during the period under study here, especially under the influence of demand and quality uncertainty.

Then there is the property of 'art for art's sake'. Caves has suggested that artists take satisfaction from the work itself and have less interest in (financial) rewards. This would separate art from craft or mere decoration, and it means that many more people invest in an artistic career than would be predicted by attending only to reasonable expectations of financial rewards. The notion of art for art's sake is difficult to maintain even nowadays, but it was particularly difficult for early modern cultural markets in which most painters and book producers were craftsmen rather

than artists in the modern connotation. However, in the case of painting, amateur draughtsmen and painters became increasingly important, blurring the boundaries between the craftsman, the artist, and the consumer. This particular feature can put additional pressure on competition within the sector and blurs the distinction between the production of texts and works of art as an occupation, as a talent, or as a pastime. That such features could become a point of distress is clear from information asymmetries that threatened market functioning and from the organization of painters in more exclusive societies during the phase of maturity. Furthermore, in the case of publishing, the large share of producers in the datasets whose names appear only on a handful of imprints indicates that many non-professionals were active in this cultural industry.

Finally, the issue of durability was also of great importance to the development of early modern Dutch painting and publishing. Both books and paintings were durable products, the latter especially; this could limit sustained demand for new products. Paintings were meant to decorate walls, and the space on walls was limited. This became critical in around 1670, when substitute forms of wall decoration became fashionable. Combined with the unpredictability of demand, there was a particularly strong risk of overproduction. The increasing importance of second-hand markets and the distribution channel of auctions can be appreciated in this light. Producers explored a range of solutions in order to deal with these issues, especially in times of market saturation. For example, they set out to strengthen the position of their guilds, articulate notions of product quality, establish separate painters' societies, and deploy secondary market methods such as auctions and raffles.

Market counterparts of Caves's properties are also visible in the protection of investments against copying and other forms of piracy, through privileges in the case of publishing, and the increasing role of expert art dealers concerned with the issue of 'autograph' paintings. The net result was that the complex interactions between producers, suppliers, and consumers, as well as timing in the production and distribution processes, became increasingly formalized and rationalized. As such, they clearly shaped the way painting and publishing were organized. And if this set of features influenced organization of production, it may have also influenced the speed with which the early modern Dutch painting and publishing industries moved through their life cycles. Dutch producers had catered to their markets so rapidly and in such variety that by the middle of the century there was little room for further growth and expansion. The properties associated with the production of cultural goods may therefore have

accelerated these specific industry life cycles. The high rates of innovation and the levels of output achieved by Dutch cultural industries during the period of strong endogenous reproduction meant that the growth phases would last for just a few decades.

Painting versus publishing

For the most part, painting and publishing were subject to the same exogenous factors, and they also displayed a comparable endogenous dynamic. Still, there were significant differences in spatial and diachronic trends. The publishing industry did not experience the same sharp downturn as painting, and it was much more geographically embedded. These differences can be explained, in part at least, by differences in the character of the two sectors.

In the case of publishing, specific locations were related to specific urban amenities, access to labour pools, and the presence of important suppliers. In the case of painting, the presence of certain masters or untapped demand could play an important role. For painters, therefore, the importance of place lay in the benefits they could derive from locating close to (potential) consumers and to each other, as well as in tapping into established reputations of towns as artistic centres. Compared to publishers, they were less tied to specific locations, at least in the long term, and as a result the geography of publishing was more resilient. Most publishing firms had capital invested in a printing establishment and in warehouses storing paper and stock. This limited their options regarding permanent or temporary relocation. When publishing firms were passed on to the next generation, the fixed capital and established distribution networks made it more difficult to justify moving elsewhere. This was different in the case of painters' workshops.

Another difference concerns the function of the products themselves. Many of the books produced in the early modern period were purchased for religious or occupational reasons, reducing the significance of quality and lessening the risk of demand uncertainty. This specific difference was strengthened when paintings lost their more utilitarian decorative function after the middle of the seventeenth century. Moreover, there was a significant difference between the set of skills required to become a successful publisher and those determining the potential for painters. The elusive yet crucial key word is talent. Not surprisingly, the feature of artists' ranking was much more pronounced in painting. First of all, publishing was generally a collaborative affair and therefore less dependent on a single person's skill set. More importantly, though painters and publishers were

both trained in master-apprentice relationships, publishing – printing in particular – demanded less elusive skills. The form and content of books were less determined by the publishers' creativity and originality. As a result, publishers' competences could be passed on more easily to the next generation, whereas in the case of painting it remained to be seen whether apprentices, who were often sons, possessed the necessary talent to sustain and reproduce a workshop's reputation. Because of these factors, the painting sector's reproductive capacities were less developed.

Differences in the reproductive capabilities of skills and competences also had implications for the different diachronic trends, expressing themselves in the collapse of painting versus the sustained production of book titles. From the 1660s onwards, the trajectories of Dutch painting and publishing started to diverge. Book production remained relatively stable in terms of output, whereas the number of painters and newly produced paintings fell dramatically. The most obvious explanation for the different paths of development is the difference in functionality. Book producers had a solid consumer base in the demand for utilitarian products, and they were less threatened by alternatives. Paintings were part of a spectrum of visual arts and wall decorations ranging from expensive tapestries to cheap prints. Moreover, the spaces on which new paintings could be hung were limited. To make matters worse, the last quarter of the seventeenth century witnessed the rise of other forms of wall decoration. In consequence, not only did demand for new paintings decline, but cabinet paintings went out of fashion. In publishing, there was also the issue of durability, but in contrast to paintings, books were also used as sources of information and entertainment. They therefore required updates and held the potential for added elements of novelty.

Another explanation for the diverging trends after 1660 can be found in the fact that Dutch publishers were more successful in tapping into foreign markets. Three essentially exogenous factors were of aid here: the adverse conditions in other countries, most notably in France and England, for book production, combined with increasing demand; the Huguenot stimulus; and the development of a domestic industry in superior paper. This rapid move into production and distribution for foreign markets would have been unthinkable without the firmly established and open field of domestic book production together with a developed trading infrastructure. The shift in focus to foreign markets is also discernible in the emigration of Dutch artists and the export of seventeenth-century originals, copies, and adaptations. Nonetheless, producers in the painting sector were not entirely successful at making a comparably rapid transition to satisfy foreign market demand. It could be argued that painters more than publishers required geographic

proximity to their markets. As a consequence, painting as a sector may simply have been less conducive to foreign market production. At the same time, producers in the Southern Netherlands had shown that it was possible to sustain successful export functions. It is also possible that Dutch painting was too restricted by previous successes and specializations to diversify from the bottom up without the assistance of determined merchants or institutions such as art academies. By the end of the growth phase, painting had become highly specialized, and shifting to substitutes such as wall hangings and prints, or opting for entirely new or even foreign styles and genres, required a flexibility that most painters did not possess. Besides, Dutch art dealers were able to compete in foreign markets by acquiring relatively affordable seventeenth-century works that were auctioned on a large scale within the Dutch Republic. Arguably, this could have reduced the necessity to develop a full-blown export-oriented production system.

By around 1800, the end of the period under study here, the two sectors had not yet restored the positions they acquired early on as internationally innovative market leaders. It is possible that they suffered from the same dynamic that intensified expansion during the growth phase. Patterns of growth, innovation, and specialization were reproduced over time, but so too were new eighteenth-century routines that developed in response to market saturation.

Spatial clustering as an explanatory framework

For this study, the geographic distribution of cultural production was addressed as a phenomenon that needed to be explained and as a possible explanation for the Golden Age of cultural production. It was never the objective to quantitatively measure whether clustering directly affected the performance of clustered painters and publishers. This would have required a systematic comparison of the inputs and outputs of firms in clusters compared with firms outside of clusters. Instead, the aim was to use clustering theory to understand both the spatial and diachronic development of painting and publishing. Hence, this study was also an exercise in establishing the analytical value of cluster theory for research of the early modern period.

In the case of early modern Dutch painting and publishing, patterns of co-location were relatively easy to ascertain. The geographies differed by industry but overall, cultural production was concentrated in towns covering a specific geographic area now referred to as the Randstad area, an urban

grid comprising Amsterdam, Rotterdam, The Hague, Utrecht, and several smaller towns. Possible initial causes of this industrial concentration were not hard to identify: urban amenities; large or sophisticated demand conditions; the presence of related and supporting industries; and the presence of key entrepreneurs in the industry concerned. These attractive qualities resulted in the development of 'critical masses' of producers in a limited number of towns. Moreover, the producers were often concentrated in the relatively small geographic space of early modern downtowns. But cluster theory is about more than mere co-location; it is about interactions. This is where Michael Porter's diamond model came in: the spatial distribution of production; factors on the demand side; developments in related and supporting industries; institutional development; business strategies; and the competitive structure of the industries. All these components mattered. The aim, therefore, was to identify and weigh the relationships between different elements in Porter's diamond, across place, time, and industry.

The literature on early modern Dutch publishers and painters offers an abundance of examples of producers' relationships with other producers, within and outside guild structures, with consumers, with local institutions such as governments, universities, and theatres, and with related and supporting industries. Identifying the actual cluster dynamics proved much more difficult. Concepts such as agglomeration externalities, increasing returns, and positive feedback may help to explain why industries continued to be concentrated in specific locations, but they are difficult to measure, especially for the early modern period. However, looking at the basics of the theory offered some insights.

It can be assumed that knowledge spillovers resulted, intentionally or unintentionally, from rivalry, collaborations, and shared guild membership, but also on a more personal level in the form of family ties, marriages, and friendships. Moreover, physical proximity increased the opportunities for spillovers. There can be no doubt as to the various types and intensity of formal and informal interconnections between firms in the Dutch publishing and painting industries. Instead of listing these interactions time after time, the analysis focused on continuities and discontinuities in the relationships between the components of Porter's diamond model. Accumulated expertise, specialized infrastructures, established interconnections between firms in the same and related industries, as well as local institutional grids, all suggest that painting and publishing firms could have benefited from externalities associated with agglomeration.

Just how extensive and important these organizational structures were depended on the industry in question, on the stage in the industries' life

cycles, and on the specific town in which a cluster developed. Moreover, this study showed that the self-reinforcing mechanism in the growth stage was further strengthened by the broader economic, social, and political context in which Dutch publishing and painting developed. Compared to other countries, both painting and publishing in the Dutch Republic displayed a distinct polycentric production structure and an even more dispersed distribution network. This brought to mind the concepts of local buzz and global pipelines.² Clustered painters and publishers had the best of both worlds – for a while at least – being firmly embedded in specific local industrial atmospheres (buzz) and profiting from the ensuing externalities, while also maintaining many inter-local and foreign network ties (pipelines) that provided the local production systems with continuous flows and injections of external knowledge. Such a balance enables producers in clusters to weather exogenous shocks since it reduces risks of ‘lock-in’ and enhances adaptive qualities.

Nonetheless, the claim that such external openness guarantees adaptive capabilities is difficult to test, not least because cluster studies have persistently neglected to show examples of failed cluster formation and sustenance. This study suggests that the success of Dutch cultural industries was due to more than just local dynamics, but that they benefitted also from interactions between towns within the *Randstad*. Dutch towns were well integrated through an efficient infrastructure, and local entry barriers were low. Although Dutch cultural industries benefitted from clustering, local production systems were at the same time remarkably open. In other words, the distinct urban structure of the Dutch Republic made for a second complementary competitive advantage.³ It can therefore be argued that within the Dutch Republic, the urban grid of a select number of towns constituted a cluster in its own right. The story of the early modern painting and publishing industries further suggests a unique combination of urban openness and entrenchment in local industrial production systems – at least for a while. Even if this could not guarantee sustained growth, it may have contributed to accelerated advancement during the growth phase. The downside of this cluster dynamic was that markets were soon exhausted.

Creative flames and golden ages

Early modern painting and publishing were chosen as case studies of cultural industries. However, similar features and forms of organization can be identified for other cultural industries, and even other early modern

industries in general. The implication is that the explanatory framework of spatial clustering may also be applied in other case studies, even in other countries. This would be particularly beneficial to the development of an analytical framework of spatial clustering that would be more sensitive to history and industry. A typology of industries and stages in product, cluster, or industry life cycles could be a logical follow-up based on the outline presented here. Obviously the concentration of artistic and economic achievements in the Dutch Republic, or Amsterdam in particular, is not unique either. Let us return to the large questions discussed in the introduction: 'Why [should] the creative flame burn so especially, so uniquely, in cities and not the countryside and what makes a particular city, at a particular time, suddenly become immensely creative, exceptionally innovative?' (Peter Hall) Or 'Why do recognized and celebrated achievements, across several fields of endeavour, tend to cluster within cities over relatively short periods of time?' (Patrick O'Brien, attributed to Gerry Martin).⁴

The findings of this study correspond well to O'Brien's more general discussion of conditions that help to explain early modern golden ages in Europe. First, a set of conditions predisposed certain towns to economic and artistic success: a favourable position in regional, national, and international trade; well-functioning markets and transport infrastructures; human capital accumulation; and experienced civic urban governments that enjoyed some degree of autonomy. Second, a process of societal 're-ordering' took place in these towns, possibly via political, socio-economic, or cultural restructuring.⁵ Immigration, relative tolerance, and the capacity to absorb external influences in local structures characterized initial growth, as did the variegation and the expansion of local demand. Hereafter, success lay in the fabric of the city as the conduit for familiar connections to an economic base, for competition, emulation, and the diffusion of commercial intelligence, and for easy and productive connections that can be formed across domains of expertise and among neighbours.⁶

These interactions or connections shaped urban culture, which in turn generated new achievements and sometimes periods of exceptional cultural and commercial success. Between the conditions identified by O'Brien and the mechanisms of competitiveness discussed in this study, an increasingly coherent picture emerges of the phenomena of golden ages and local explosions of creativity. The contribution of this study, therefore, lies not so much in ousting existing analyses of cultural production in the Dutch Golden Age, but in adding a firm but flexible analytical framework to the recognized histories of specific industries or cities, and to the study of golden ages in general.

Notes

1. Caves, *Creative Industries*.
2. Bathelt, Malmberg, and Maskell, 'Clusters and Knowledge'.
3. The appropriateness of the city as opposed to urban networks as a unit of analysis is also discussed in O'Brien, 'Reflections and Mediations', p. 11.
4. Hall, *Cities in Civilization*, p. 3; O'Brien, 'Reflections and Mediations', p. 5.
5. O'Brien, 'Reflections and Mediations', p. 17.
6. *Ibid.*, p. 35.

Appendix 1. Methods and Data

Early modern Dutch cultural production is extraordinarily well researched. Thanks to centuries of detailed investigations by art and book historians, there exists a wealth of data on producers and the products they made. Moreover, the general context in which paintings and books were produced has received ample attention. In recent years, important datasets have been built that allow for statistical analyses of cultural production. For many of the quantitative analyses, for instance the assessments of the size of the industries, extensive research was carried out on five datasets: *Short Title Catalogue Netherlands* (STCN); *Thesaurus 1473-1800*; *Adresboek Nederlandse drukkers en boekverkopers tot 1700*; ECARTICO; and RKDartists&. ¹ The datasets are comprehensive enough to allow for statistical analysis, but to accurately interpret the estimates of size, scope, and quality of production presented in this book, a brief discussion of the limitations of these datasets is warranted. ²

Publishing: STCN and *Thesaurus*

The STCN is the digital Dutch retrospective bibliography. This can be defined as a list of books produced in a given country or written in a certain language during a specific period, in this case the Netherlands in the period 1540-1800. ³ The STCN contains over 190,000 titles and over 500,000 copies of books published in the Netherlands (irrespective of the language) and books in Dutch published abroad (with the exception of Belgium). ⁴ The dataset is based on the collections of all major academic libraries in the Netherlands, as well as various smaller ones and important collections abroad. Therefore it only includes titles of books that have survived to the present day. Estimates suggest that around 80 per cent of the titles printed in the early modern period have survived. ⁵ Because survival chances for cheap popular works are lower, this type of book is probably underrepresented in the STCN.

Of course, not all titles required the same levels of creative and financial input. ⁶ The number of titles alone does nothing to indicate the size of print runs (total output) or the size of the work, let alone the quality or novelty of the printed books. There is no serial data on average print runs in early modern Europe, while fragmented sources have shown that edition sizes could range from a few hundred copies or, less often, dozens for specialized

works, to thousands for popular, often religious, works.⁷ Moreover, some titles are multi-volume masterpieces whereas others are ephemeral material such as ordinances and dissertations. Luckily the STCN enables searches not only by author, printer, title, year, and place of publication, but also by more advanced properties such as subject, language, size of the books, and typographical features.⁸ Distinctions can be made, for example, between ephemeral and non-ephemeral titles; Dutch and foreign; originals and copies; translations and reprints; the size of the sheets; and the use of decorative images, all of which are characteristics that influence the choices and investments publishers and printers had to make.⁹

The size of the publishing industry was estimated by using a by-product of the STCN: the *Thesaurus 1473-1800* (hereafter *Thesaurus*), which lists the names and locations as well as other relevant information found on the imprints of the books in the STCN. This dataset makes it possible to estimate how many people were involved in the publishing of books in a certain town during a particular period. The list of people working in the Dutch publishing industry includes the names of booksellers, printers, and publishers found on imprints and colophons in the editions included in the STCN. Not every title page contained such information and the dataset used in this research is comprised of 7,472 names.¹⁰ The first and last year of publishing activity and the geographic locations have been linked to the names based on the bibliographical data. Both start and end points of booksellers' careers are available, assuming he, and only occasionally she, was active in the years between. This allowed for estimating the number of people involved in book publishing, per year and location.

There are, however, some issues with the *Thesaurus*. First, not every Dutch bookseller, printer, or publisher is included. A quick look at the guild archives or at the selection of published documents pertaining to the book trade in seventeenth-century Amsterdam proves this point.¹¹ Second, only the names of those people who were credited on the imprint or colophon are listed. Basically, this means that the database comprises the names of those who invested in publications and not of the publishing, printing, and bookselling labour force at large. Because we are interested in the cultural producers rather than the journeymen, this is not a dramatic problem in terms of mapping cultural activities, but the workforce as a whole is important in observing shifts in the organization of production. Third, the group of people included in the *Thesaurus* is not homogeneous. The dataset contains aliases, and no structural distinction is made between publishers, booksellers, and printers by occupation. Because during the early modern period these activities were often combined within a single

firm, this does not have to pose a particularly big problem. Nevertheless, there was occupational specialization, and the distribution of different occupations within the book trade did change over the course of the early modern period. Finally, the data is based on what is found on the imprints of the books themselves, which can be misleading. Some publishers claimed to have been responsible for printing of the work even though they never owned a print shop.¹²

The quantitative results derived from the *Thesaurus* should be treated with caution, and any fixed conclusions based on the dataset should be checked with more qualitative sources and micro-studies. A surprisingly large share of publishers in the STCN, for instance, is only mentioned with a handful of titles. For example, almost 40 per cent of the 2,427 names listed for Amsterdam between 1580 and 1800 are only listed for one year. They may simply have been unsuccessful in publishing, causing them to go out of business, but the large share of these 'one-year-hits' suggests that they either used aliases or that they were occasional publishers with a different primary occupation. In years of political turmoil such as 1647, 1672, or 1689, the share of one-year-hits rose significantly. Their share does not significantly influence the total number and trends of active booksellers per year in a significant way, and they are therefore included in the aggregate measures. However, when turning to the number of *starting*, rather than *active*, publishers, they do start to make an impact. When this measure is used, estimates which both include and exclude one-year-hits are provided. Despite these issues, the *Thesaurus* and the STCN are currently the best available datasets for mapping the Dutch book production sector, and without doubt the most consistent in terms of selection criteria.

Painting: ECARTICO and RKDartists&

For estimates of the number of painters active in the early modern Dutch Republic, two datasets were used: ECARTICO and RKDartists&.¹³ The ECARTICO dataset has its roots in the research project *Economic and artistic competition in the Amsterdam art market c. 1630-1690: history painting in Amsterdam in Rembrandt's time*, headed by art historian Eric Jan Sluijter and economic historian Marten Jan Bok, that explored the complex fabric of artistic and economic competition in the field of history painting in Amsterdam from c.1630 through 1690. Within this project a dataset was built to collect, organize, and analyse art-historical and biographic data concerning painters, art consumers, art dealers, engravers, booksellers and

printers, gold- and silversmiths and others involved in the cultural industry of Amsterdam and the Low Countries. The database is built on a wealth of archival sources and literature, and predominantly on the data collected by Pieter Groenendijk in his lexicon *Beknopt biografisch lexicon van Zuid- en Noord-Nederlandse schilders, graveurs, etc.* (2008).¹⁴ The database contains biographical and demographic data on over 23,000 persons born between 1500 and 1690, but expansion is ongoing.¹⁵ Compared to the *Thesaurus*, the entries in the ECARTICO dataset contain much more biographical information. Unfortunately, this dataset does not include the eighteenth century. Therefore, RKD*artists&* database was used to estimate the scale of the arts sector during this period. It contains information on c.250,000 Dutch and foreign artists from the Middle Ages to the present day.¹⁶ Unfortunately, it is not easy to systematically retrieve data from the dataset because the dataset cannot be searched using the same queries as the ECARTICO database. Lists of painters could only be generated per quarter century. Because these have been used to arrive at general estimates for the eighteenth century, they stand in sharp contrast to the more precise estimates generated by the ECARTICO dataset for the seventeenth century.

Samples of artistic prominence

The datasets discussed above are highly useful for the assessment of patterns over time and space, but they do not allow for distinguishing on the more subjective properties of quality and novelty, let alone talent. Historiometry offers methods to measure reputation and valuation that suit the purposes of this study.¹⁷ Historiometry is defined as a quantitative method used for statistical analysis of retrospective data. What this comes down to is counting the number of references to famous (groups of) people in expert works and often also the space allotted to each of them.¹⁸ I developed several such historiometrical samples, which are listed in Table 6.4 and will be discussed below.

A++ sample

Charles Murray is the best-known user of historiometry, and his work provides a starting point for mapping prominent painters.¹⁹ He has quantified the accomplishments of individuals and countries across the globe in the fields of arts and sciences from ancient times to the mid-twentieth century by weighting the amount of space allocated to them in reference works. For

the period 1600-1820 he cross-referenced a selection of art-historical reference works and collected the names of 113 European painters, of whom 19 were Dutch. Dutch-born Peter Lely was also included in this group, though he should have been grouped with England where he spent his working life. The 18 remaining artists form the A++ sample.

A+ sample

Economists Elish Kelly and John O'Hagan have undertaken a similar endeavour, but they limited their research to prominent artists from the thirteenth century to the first half of the twentieth.²⁰ Their dataset is constructed from the *Oxford Dictionary of Art* but cross-referenced with *Reclams Künstlerlexicon* to adjust for the observed Anglo bias in the *Oxford Dictionary*.²¹ Their sample is considerably larger than Murray's (876 artists), but they only include those artists that occupy 0.22 column inches in the *Dictionary*. Of their selection, 66 were born in the Southern or Northern Netherlands and were active in the Dutch Republic between 1580 and 1800.²² Of these artists, 56 were based in the Republic for the majority of their work. These make up the A+ sample.²³

A sample

When the criterion of 0.22 column inches per artist is dropped, the sample expands considerably. For the A sample, all artists in the *Oxford Dictionary* who were born in the Northern or Southern Netherlands and for whom the Dutch Republic was their main work location were selected.²⁴ Those artists who were only mentioned as the brother, father, or son of another painter and were bestowed with fewer than 5 lines, 21 in total, were excluded from the sample. This resulted in a selection of 111 painters born in the Republic, with the earliest born in 1527 and the latest in 1797. In addition, 16 artists were added: they were born elsewhere, but the Republic was their main work base. The total number of artists included in the A sample is 138, almost twice the size of the A+ sample.

The length of text allotted to each individual artist's entry varies greatly from only a few lines for minor artists to long sections for acclaimed painters such as Rembrandt. This obviously also reflects the editor's personal view of the pecking order within the pantheon of Dutch artists. In some cases the choice of the painters rests not only on their fame as painters, but also on their influence as authors on art theory of their era as was the case for both Karel van Mander and Samuel van Hoogstraten. The exact ranking

of painters in the samples is not particularly relevant for the purposes of this study. It is more important that the samples do not display great inconsistencies. As many as 14 of Murray's significant artists are included in both Kelly's and O'Hagan's top 20. Almost without exception the same 30 names recur throughout the different top 20s.

B sample

All A samples are based on international reference works that cover an extensive time frame and geographic area. For the B sample, an art-historical work dealing exclusively with the Dutch Republic is used: Bob Haak's seminal overview of Dutch Golden Age painting.²⁵ Not surprisingly, this dataset is more inclusive, increasing to 266 painters, twice the size of the A sample.²⁶ However, Haak's book only deals with the seventeenth century. For the eighteenth century there was no comparable seminal work and therefore the exhibition catalogues *De kroon op het werk: Hollandse schilderkunst 1670-1750* and *The Age of Elegance: Paintings from the Rijksmuseum, 1700-1800* were used for cross-referencing.²⁷ This yielded the names of 63 painters. Excluding double counts, the total number of artists in this sample is 317.

C sample

The lack of a seminal work on Dutch painting in the eighteenth century is indicative of the Golden Age bias in art history. To compensate for this, a sample on contemporary reputation was created. The C sample encompasses references in contemporary sources. Lexicons drawn up by contemporary biographers, including Karel van Mander, Arnold Houbraken, Johan van Gool, Roeland van Eynden and Adriaan van der Willigen (1766-1841), were used to assess the status of artists and the appraisal of quality in the seventeenth and eighteenth centuries.²⁸ They published the following four well-known lexicons to establish a selection of prominent painters according to contemporaries: Van Mander's *Schilder-boeck* (1604), Houbraken *Grote Schouburgh* (1718-1721), Van Gool's *Nieuwe Schouburg* (1750-1751), and Van Eynden's and Van der Willigen's *Geschiedenis* (1816-1840). Excluding double counts, the total number of artists in this sample is 995.

Industrial organization: prosopographies and archival research

The thesis deals with the Dutch Republic and particularly with the province of Holland, the area where cultural production was concentrated. In addition to the aggregate data derived from the STCN, one town in particular takes centre stage. Amsterdam was the largest town in the Dutch Republic as well as the most important and most culturally diverse. This case study serves to take a closer look at the local production system and illustrate the findings. In order to identify common characteristics of local groups of painters and publishers, the method of prosopography is applied.²⁹ Prosopographical research aims to identify patterns of relationships and activities of a group of people through the study of their collective biography. This is done by collecting and analysing biographical data surrounding a (well-defined) individual. Individuals in a prosopographical dataset should have something in common such as region of origin, religion, or, in this case, profession. It is basically a system for organizing limited data in such a way that it can reveal connections and patterns influencing historical processes.³⁰

Names of active publishers and painters were collected for five benchmark years: 1585, 1600, 1630, 1674, and 1742 (Table A1).³¹ These years represent significant periods in the history of the Dutch Republic. The first two exemplify the early years after the Dutch Revolt; 1630 relates to the middle of the Golden Age; 1674 coincides with the years of economic and political trouble; and, finally, 1742 was in the middle of period of economic stagnation or even decline.

Table A1 Number of producers in Amsterdam prosopographies per benchmark year

	N producers, publishing	N producers, painting
1585	9 (STCN: 8)	13
1600	29 (STCN: 22)	51
1630	39 (STCN: 57)	104
1674	58 (STCN: 111)	181
1742	61 (STCN: 177)	35

Source: Publishing: cf. note 32. Painting: Ecartico; RKDartists.

The key variables in the collective biography are the places and years of birth and death, work locations, professional status, guild memberships, family ties, master-apprentice relationships, wealth estimates, addresses,

social background, and publishing activity in the STCN. Due to the fact that the *Thesaurus* dataset does not contain biographical data on producers, whereas the ECARTICO dataset does, the process of collecting information for the prosopographies of publishers required more use of micro-studies on individual producers.³² Not all known publishers are included, and this has resulted in a smaller prosopographical sample than in the case of painting, in which all Amsterdam painters listed in ECARTICO at the time of consultation have been included. A drawback of the prosopographical method is that group characteristics reveal little to nothing about day-to-day business strategies or institutional organization. Therefore the research was expanded by in-depth studies of individual firms. To some extent this could be done by consulting available studies on painters and publishers in the form of monographs, articles, or lexicon entries. This information was further complemented with a broad range of archival material, for example tax registers, guild archives, and notarial archives.

Notes

1. Many thanks to Marieke van Delft of the KB and the members of the ECARTICO project, especially Harm Nijboer, for providing access to the datasets. The dump of the *Thesaurus* was generated 13 March 2009.
2. For a discussion of the use of STCN see: Van Delft, 'Kwantitatief onderzoek'; Mathis, 'The STCN in a Global Scope', p. 44.
3. See for more details: <http://www.kb.nl/stcn/index-en.html>. The STCN is discussed at length in *Handleiding*; Vriesema, 'The STCN-fingerprint'. For Adresboek see Gruys and Bos, eds., *Adresboek*. For the nineteenth century see Dongelmans, *Van Alkmaar tot Zwijndrecht*. Foreign counterparts include the British ESTC at www.estc.bl.uk and the Flemish STCV at [www.http://www.vlaamse-erfgoedbibliotheek.be/databank/stcv](http://www.vlaamse-erfgoedbibliotheek.be/databank/stcv), and; Mathis, 'The STCN in a Global Scope', p. 37. On the STCV: Van Rossem, Proot, and Delsaerd, 'Short Title Catalogus Vlaanderen'.
4. The geographic area referred to as 'the Netherlands' was not fixed during the period covered by the STCN, which raises the issue of whether or not Flemish books should also be included. As soon as the STCV, which is set up according to the same description formulas, is completed, it will be possible to study book production in the Low Countries.
5. Van Delft, 'Kwantitatief onderzoek', pp. 77-79. On survival chances of titles see J. Bos, '1585-1725. Overlevingskansen van het boek', *Bibliopolis*, 2.4.7, www.bibliopolis.nl/handboek (accessed 20-07-2010).
6. Cf. *Ibid.*, p. 71.
7. Febvre and Martin, *The Coming of the Book*, pp. 216-222.

8. As of 2015, a new and more advanced search infrastructure was launched: SPARQL, based on Structured Query Language.
9. Cf. Gruys and Bos, *t'Gylde iaer 1650*. 'Ephemeral titles' refers to pamphlets, ordinances, academic works and occasional titles, such as marriage-poems.
10. As of September 16 2009.
11. Kleerkooper and Van Stockum, *Boekhandel te Amsterdam*, vol. I or Van Eeghen, *De Amsterdamse boekhandel*. See also chapter 6 of this book, in which this is illustrated quantitatively.
12. Examples are Dirck Pietersz Pers, who, name notwithstanding, did not print. Cornelis Claesz is another example.
13. <http://www.vondel.humanities.uva.nl/ecartico/> (last accessed 20 February 2015). Harm Nijboer and Marten Jan Bok.
14. Groenendijk, *Beknopt biografisch lexicon*.
15. <http://www.vondel.humanities.uva.nl/ecartico/> (last accessed 20 February 2015). At the time of research for this dissertation the count stood at some 12,000 entries.
16. <http://english.rkd.nl/Databases/RKDartists&> (last accessed 27 February 2012).
17. Woods, 'Historiometry as an Exact Science'. See also Rita Gerlach, who compared theatre quality in Britain and Germany: Gerlach, 'The Question of Quality'.
18. Consider for example: Murray, *Human Accomplishment*.
19. Ibid.
20. Kelly and O'Hagan, 'Geographic Clustering'; Kelly and O'Hagan, 'Identifying'. Many thanks to the authors for sharing their data.
21. *Reclams Künstlerlexikon*.
22. Although Kelly and O'Hagan include one Dutch painter for the eighteenth century, Jacob Asmus Carstens was in fact Danish.
23. Note that artists born and active only in the sixteenth century are not counted.
24. Kelly and O'Hagan, 'Identifying'.
25. Haak, *The Golden Age*.
26. This selection was cross-referenced with two other sources: *Grove's Dictionary of Art's* overview of seventeenth-century Dutch artists and the online resource *Web Gallery of Art*. With presence in all three sources as a criterion, the size of the sample decreased to circa 130 painters, roughly the same amount and composition as the A sample. Turner, *From Rembrandt to Vermeer*; Virtual museum of European painting and sculpture of the Gothic, Renaissance and Baroque periods (1100-1800), www.wga.hu, accessed 20 August 2010.
27. Mai et al., eds., *Kroon op het werk*; Loos et al., *Age of Elegance*.
28. Houbraken, *Groote Schouburgh*; Van Mander, *Schilder-boeck*; Van Gool, *Nieuwe Schouburg*; Weyerman, *Levens-beschryvingen*; Van Eynden and Van der Willigen Pz., *Geschiedenis der vaderlandse schilderkunst*. Examples of

- such lexicons from other countries include d'Argenville, *Abregé de la vie des plus fameux peintres*; Descamps, *La vie des peintres*; Smith, *Catalogue Raisonné of the Most Eminent Dutch, Flemish and French Painters*.
29. Roorda, 'Prosopografie'; Stone, 'Prosopography'.
 30. Cf. Bok, 'Vraag en aanbod' on a prosopography of Utrecht painters during the seventeenth century.
 31. The years 1674 and 1742 were not chosen at random. For these years tax registers were available.
 32. For publishing in the years 1585, 1600 and 1630 the main source was: Moes and Burger, *Amsterdamse boekdrukkers en uitgevers*, Briels, *Zuidnederlandse boekverkopers* and Leuven, *De boekhandel te Amsterdam*. For the years 1674, 1710 and 1742: Van Eeghen, *De Amsterdamse boekhandel*, Leuven, *De boekhandel te Amsterdam*. For archival documents involving Amsterdam publishers active in the seventeenth century see: Kleerkooper and Van Stockum, *Boekhandel te Amsterdam*, vol. I. These sources were checked against the *Thesaurus* and Molhuysen and Blok, eds., *NNBW*, and complemented with additional information found in articles and monographs on individual producers.

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