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Trading Paper in Early Modern Europe

On distribution logistics, traders, and trade volumes between Amsterdam and Hamburg in the mid-late eighteenth century

The trade of paper was part and basis of both the printing and publishing culture and the book trade of early modern Europe.¹ During the entire epoch, the 'book trade' was a diverse trade in all kinds, forms and shapes of printed books and manuscripts, and above all this trade was rooted in the trading of paper. As Mark Bland reminded us recently, printed books were not always the main objects of the contemporary book trade - but paper was.² Not only was paper essential to produce manuscripts and prints, but the 'commodity' paper was one of the most expensive elements of book production. This made dealing in paper lucrative: trading the commodity paper was a business of high profits.³ During the hand-press era of early modern book produc-

1 Research for this article was made possible by the German Research Association (DFG) as part of my research project on markets, spaces and networks of the early modern book trade ('Publizistik als Handelsware. Transregionale Märkte, Räume und Netzwerke im frühneuzeitlichen Europa').

2 Mark Bland developed his argument looking at the London book trade of the year 1600. See his 'The London book-trade in 1600', in: D.S. Kasten (ed.), A companion to Shakespeare. Oxford 1999, 450-463.

3 Significantly, paper is the topic of the first chapter of the careermaking study by L. Febvre, H.J. Martin, L'apparition du livre. Paris 1958/59. Regarding the profitability of selling paper, see the printer-publishers accounts in M. Ould, Printing at the University Press, Oxford 1660-1780, 4 vols. Oxford 2013; L. Sporhan-Krempel, 'Die

tion, on average paper represented about 40-75 percent of the total production cost.4 This proportion might rise or fall due to the use of better quality paper, smaller editions, or a purchase discount when buying large amounts of paper. Regardless, paper accounted significantly in the cost of production – far ahead of other production expenses, such as typesetting, presswork, illustration, payments to the authors, advertisements, etc.

But what do we know of the historic paper trade? Every attempt to answer this question sheds light both on the state of paper history and on its position within the interdisciplinary field of book history. In a single sentence: paper historians have not paid much attention to the trade of the material; economic

Papierrechnungen von Johann Friedrich Cotta 1788-1806', in: Archiv für Geschichte des Buchwesens 5 (1964), 1370-1471.

4 See for example the calculations for German speaking Europe, the Netherlands, France, and England by R. Siegert, Aufklärung und Volkslektüre. Exemplarisch dargestellt an Rudolph Zacharias Becker und seinem 'Noth- und Hülfsbüchlein'. Frankfurt am Main 1978; I.H. van Eeghen, 'De boekhandel van de Republick 1572-1795', in: idem, De Amsterdamse Boekhandel, vol. 5. Amsterdam 1978, 11-128, esp. 34-36; J. Bidwell, 'The industrialization of the paper trade', in: M.F. Suarez, M.L. Turner (eds.), The Cambridge History of the Book in Britain, vol. v: 1695-1830. Cambridge 2009, 200-217, esp. 214-215; R. Darnton, 'What is the history of books? Revisited', in: Modern Intellectual History 4 (2007), 495-508, 497.

and trade historians have not been interested in paper at all; and book historians sometimes mention the connection of paper production and its selling to the world of printing, but tend to eschew the details linking trade activities.⁵ Significantly, the chapter on paper-trade in the recent Guide to Early Printed Books and Manuscripts is only three pages long and opens with: 'Much archival work on the early paper trade remains to be done'.6 In 1998 John Bidwell pointed out that the contemporary mass commodity paper has yet not been positioned within the early modern 'world of commerce'.7 Bidwell's critical assessment on the status quo of paper history was echoed prominently by Franz Irsigler, when he labelled his intended research review on the medieval and early modern paper trade a documentation of research gaps.8 The manufacture of paper, however, has a long history of documentation and generations of historians tended to focus more or less exclusively on this aspect of production. The result is that the craft of making sheets of paper from Ancient to Modern times

5 To mention the most important exceptions that are fruitfully connecting the production and trading of paper: F. Irsigler, 'La carta: il commercio', in: S. Cavaciocchi (ed.). Produzione e commercio della carta e del libro secc. XIII-XVIII. Firenze 1992, 143-199; R. Graziaplena, 'Paper Trade as a Medium and Diffusion in Late Medieval Europe. A First Approach', in: ibid. (ed.), Paper as a Medium of Cultural Heritage: Archaeology and Conservation. Rome 2004, 343-356; N.J. Lindberg, Paper comes to the North. Sources and Trade Routes of Paper in the Baltic Sea Region 1350-1700. Vantaa 1998; V. Thiel, 'Papiererzeugung und Papierhandel vornehmlich in den deutschen Landen von den ältesten Zeiten bis zum Beginn des 19. Jahrhunderts', in: Archivalische Zeitschrift 41 (1932), 106-151; C. Coleman, The British Paper Industry 1495-1860. A Study in Industrial Growth. Oxford 1958; Bidwell, 'The industrialization of the paper trade'; I.H. van Eeghen, De Amsterdamse Boekhandel, vol. 4. Amsterdam 1967, 195-271; F.H. Meyer, 'Papierfabrikation und Papierhandel. Beiträge zu ihrer Geschichte, besonders in Sachsen', in: Archiv für Geschichte des deutschen Buchhandels 11 (1888), 283-357.

6 M. Bland, A Guide of Early Printed Books and Manuscripts. Chichester 2010, 29. has been highlighted in complex ways, especially concerning the changing techniques of production.⁹ Studies that extended beyond this cosmos of paper mills, watermarks, and paper sizes concentrate mainly on production management in specific local and national settings.¹⁰ We still know too little about the distribution networks and logistics, and about traders and trade volumes of the paper trade. In most cases the route that paper took from the mill to the merchant to the printing and trading places still remains a mystery. Case studies may provide a good way to investigating this mostly unknown area of book history.

The case study described in this article investigates the nature of the paper trade in early modern Northern Europe: its people and practices, and its trading volumes and scales. In the following lines the paper trade (both of white paper, i.e. yet unprinted printing paper, and 'blank' writing paper) from Amsterdam to Hamburg in the mid-late eighteenth century will be addressed. Contemporarily, the paper trade activities between these two port cities

7 J. Bidwell: 'The Study Of Paper as Evidence, Artefact, and Commodity', in: P. Davison (ed.), The Book Encompassed. New Castle 1998, 69-82.

8 Irsigler, 'La carta: il commercio', 143.

9 See for example D. Hunter, Papermaking. The History and Technique of an Ancient Craft. New York 1947; P.F. Tschudin, Grundzüge der Papiergeschichte. 2nd edition Stuttgart 2012; L.X. Polastron, Le papier: 2000 ans d'histoire et de savoire-faire. Paris 1999. See for the historic approaches of bibliography into paper history Bland, A Guide of Early Printed Books and Manuscripts, 22-48; Bidwell, 'The Study of Paper as Evidence, Artefact, and Commodity', 69-82.

10 Instead of dozens of exemplary studies see: Die Deutsche Bibliothek (ed.): Internationale Bibliographie zur Papiergeschichte, 4 vols. Munich 2003 [for studies printed after 1996 see the onlineedition: www.memoryofpaper.eu/, and the periodical of the International Association of Paper Historians IPH Paper History. were of high economic relevance.¹¹ Due to Hamburg being at that time one of the main centres of publishing in the Holy Roman Empire, and one of Europe's most important points of print production and distribution, the city was constantly in need of paper. It was common practice amongst the interested of Hamburg to read imported European newspapers and journals - including the Amsterdammer Courant, the London Chronicle, or le Publiciste.¹² The prints produced in Hamburg ranged from daily newspapers (in German), to weekly and monthly journals (partly in French), to the non-stop stream of almanacs, chapbooks, prayer-books, sermons, pamphlets, etc.¹³ The most famous, successful, and widely read prints within contemporary regions of German-speaking Europe were newspapers like Hamburger Relations-Courier and Staats- und gelehrte Zeitung des Hamburgischen unpartheyischen Correspondenten. Through an effective combination of well-established economic, postal, and trade networks, the port city was at the heart of the European distribution of printed (periodical and non-periodical) news. Moreover, its local publishing industry, spurred on by competition with the nearby Danish-protected city of Altona (until 1864),

11 F. Röhlk, Schiffahrt und Handel zwischen Hamburg und den Niederlanden in der zweiten Hälfte des achtzehnten und zu Beginn des neunzehnten Jahrhunderts. Wiesbaden 1973, 123-126.

12 See for example: F. Kopitzsch, Grundzüge einer Sozialgeschichte der Aufklärung in Hamburg und Altona. 2nd edition Hamburg 1990, 645-646; K. Aaslestad, Place and politics: local identity, civic culture, and German nationalism in North Germany during the revolutionary era. Leiden 2005, 88; P. Korshin, The widening circle. Essays on the circulation of literature in eighteenth-century Europe. Philadelphia 1976, 8-9.

13 For the best overview of printed periodicals of early modern Hamburg, see H. Böning, Welteroberung durch ein neues Publikum. Die deutsche Presse und der Weg zur Aufklärung, Hamburg und Altona als Beispiel. Bremen 2002; idem, Periodische Presse. Kommunikation und Aufklärung. Hamburg und Altona als Beispiel. Bremen 2002. For the lively world of the local pamphlet culture, see D. Bellingradt, Flugpublizistik und Öffentlichkeit um 1700. Dynami-

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produced more than just periodical-news. Novels, science-books, medical writings, prognostications, didactic literature etc. – the 'regular' printed books of all variations – made up an important portion of Hamburg's annual printed output. From the seventeenth century onward, Hamburg was considered by contemporaries to be the German Amsterdam, or florentissimum Emporium totius Germaniae (the most greatly flourishing German city).¹⁴ And, as in Amsterdam, Hamburg's conglomeration of printers and bookshop owners were in constant need of paper.

How much paper was needed in Hamburg? As we have proof for the years 1785-1790 from the official registers for the total volumes of importation into Hamburg – the so called 'General Einfuhr Tabellen aller Waaren und Güter zu Wasser und zu Lande in Hamburg' – the import of paper sheets was during these years on average 179 million.¹⁵ Holger Böning, the expert on Hamburg's eighteenth century newspapers, estimates that a total of 100,000,000 sheets of printing paper were used annually for the local production of newspapers and news-journals during the second half of the century.¹⁶ It is clear that an additional several dozen million paper sheets were

ken, Akteure und Strukturen im urbanen Raum des Alten Reiches. Stuttgart 2011, 131-258; idem, 'The early modern city as a resonating box: media, the public sphere and the urban space of the Holy Roman Empire, Cologne and Hamburg c. 1700', in: Journal of Early Modern History 16 (2012) 3, 201-240.

14 M. Lindemann, Patriots and Paupers: Hamburg 1712-1830. Oxford 1990, 33-47.

15 These 'General Einfuhr Tabellen' are registers set up as early as 1785 (State Archive of the Free and Hanseatic City of Hamburg (SAH), 371-2 Admiralitätskollegium, F11). Unfortunately they do not give more details on the origin of the imports. The calculation of the average amount of paper annually imported is based on following figures: 284 million sheets (1785), 136 million sheets (1786), 180 million sheets (1787), 140 million sheets (1788), 176 million sheets (1789), and 157 million sheets (1790). **16** Correspondence of the author with H. Böning dating 22 May 2013.

needed at the same time for all other forms of prints (including clean and press proofs, clean sheets, as well as the usual waste of paper during the printing and editorial processes). We may, preliminarily, estimate a total volume of about 150,000,000 to 200,000,000 sheets of printing paper used annually in production by the extraordinary lively Hamburg publishing industry.¹⁷

Methodology

How to approach the historic paper trade? It is no easy task for historians to reconstruct the business of paper trading in early modern Hamburg. To illustrate, in the contemporary weekly announcement of commodity prices in Hamburg (Preis Courant der Wahren in Partheyen), paper is not mentioned once during the second half of the eighteenth century.¹⁸ Moreover, goods coming into Hamburg from Amsterdam were free of taxation (Admiralitätszoll).19 This means that even though paper was generally a taxed good in Hamburg the paper imported from Amsterdam was tax free and therefore unmentioned in contemporary tax accounts. Tax imposts on paper imported from elsewhere were measured by

17 At the moment, exact calculations on the annual number of printed sheets in eighteenth-century Hamburg cannot be done seriously, and remain a challenging task for historians to come. Given time, online databases like the VD18 (Verzeichnis der im deutschen Sprachraum erschienenen Drucke des 18. Jahrhunderts) may one day help to collate every printed text and graphic that survived. From that point in the future on, we may additionally add into calculation all contemporary produced periodicals in Hamburg and Altona, and further consider known lost books and other lost titles (street literature, Flugpublizistik, pamphlets in general, etc.). Due to missing details on overall print runs and re-runs it will still be a calculation lacking in sufficient proof. Due to my own research on the pamphlet culture of early eighteenth-century Hamburg/Altona, it is even possible to estimate a minimum total volume of 200,000,000 sheets used in Hamburg's publishing industry.

value of the paper and were around about 1-5 percent in the mid-late eighteenth century.²⁰ As in other historic analyses, the contemporary smuggling trade and other semi-clandestine exchanges in paper, the so-called 'dishonest trade' activities, cannot be measured and will therefore remain mostly unknown. False declarations of paper transports seems to have been standard practice in the eighteenth century paper trade, even though this kind of 'moonlight business' was conducted relatively openly at the time. The result is that now only a few revealing traces of illicit activities remain.²¹

Nevertheless, it is possible to find remnants of the historic paper trade in Hamburg. I have analysed all surviving official records for the importation of paper into Hamburg's port – the so-called Contentbücher of the Admiralitätskollegium.²² These record-books begin in July 1777, so this analysis will start in that year. To gain relevant insights into the details of the paper importation of Hamburg, a time span of 10 years has been chosen: 1777-1787 (the record-book of 1785 is unfortunately missing, so we have data from 10 years for an 11 year span). Content-wise, the Contentbücher provide detailed (though occasionally somewhat cryptically-coded) information on imported com-

18 Preis Courant der Wahren in Partheyen, Commerzbibliothek Hamburg, S-49.

19 O.E. Krawehl, 'Die Admiralitätszoll- und Convoygeld-Einnahmebücher als handelsstatistische Quelle', in: J. Schneider et al. (eds.), Statistik des Hamburger Seewärtigen Einfuhrhandels im 18. Jahrhundert. St. Katharinen 2001, 9-13.

20 E. Pitz, Die Zolltarife der Stadt Hamburg. Wiesbaden 1961, esp. 248. See Hamburg's registers of tax imports for papet in Schneider [e.a.], Statistik des Hamburger Seewärtigen Einfuhrhandels, 473-475.

21 See on the contemporary argument of 'dishonest trade' of paper in eighteenth-century England: L.N. Rosenband, 'Making the fair trader. Papermaking, the excise, and the English state, 1700-1815', in: C. Walton (ed.), Into print: Limits and legacies of Enlightenment: Essays in honor of Robert Darnton. Philadelphia 2011, 71-81.

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Figure 1. Example of a page of the Contentbücher of the Admiralitätskollegium where all 'zu Wasser und Lande angekommenen Waren mit Angabe der Kaufleute sowie Herkunft und der Menge der Ware' were registered. Shown is a part of the registered importation of 27 March 1781: The Amsterdam shipper Gerd Arens imported, among other products, different units of paper that were bought in parts by H.I.A. Meyer (322 'Riemen'), N. Brilon (61 'Riemen'), C.C. Görtz (73 'Packen' and 39 'Riemen'), J.C. Behr (111 'Packen'), Christian Nordhoff (2 'Ries'). SAH 371-2 Admiralitätskollegium, F12, vol. 5 (Contentbuch 1781), unfol. [p. 41]

traders, brokers, and merchants involved in the trade actions (see figure 1). For several reasons it is beneficial to concentrate exclusively on the details of Hamburg's paper importation from Amsterdam. As we know, Dutch paper mills were one of the main sources of paper within continental Europe during the seventeenth and eighteenth centuries (see

22 The Admiralitätskollegium was responsible for the notification of all imports and exports of the sea trade of Hamburg. Its annual registers (SAH), 371-2 Admiralitätskollegium, F12) start in 1777 and were designed to note all 'zu Wasser und Lande angekommenen Waren mit Angabe der Kaufleute sowie Herkunft und der Menge der Ware'. A semi-private contemporary register on imports and exports of the sea trade of Hamburg (for the years 1783-1801) also survives, but does not contain any

modities, export cities, and often on the figure 2).²³ Secondly, Amsterdam's merchants organized substantial importation of paper and rags into the city from almost all over Europe.²⁴ So, Amsterdam was the main European export city of this paper, or, in the words of Isabella Henrietta van Eeghen, 'het middelpunt van de papierhandel'.²⁵ Even though almost every European port city sailed units of paper into Hamburg in the mid-late eigh-

> details on paper. See M.S. Wiechers, Specification aller im Jahr ... in Hamburg angelangten See-Schiffen nebst deren Ladungen (SAH 371-2 Admiralitätskollegium, F9, and F10).

> 23 H. Voorn, De Geschiedenis der Nederlandse Papierindustrie, 3 vols., Haarlem 1960-1985; Van Eeghen, 'De boekhandel van de Republiek 1572-1795'.

> 24 Van Eeghen, De Amsterdamse Boekhandel, vol. 4, 195-271. 25 Van Eeghen, 'De boekhandel van de Republiek 1572-1795', 35.

Figure 2. Eighteenth-century image of a Dutch paper mill owner and producer selling his products to a paper merchant. Credits: Copperplate print by Cornelis van Noorden (1767) [Jan Luyken, Het overvloeiend Herte, 1767, 98]



teenth century, these amounts were not as large as the Amsterdam imports. This holds just as true for imports from nearby German port cities including Bremen, Lübeck, Kiel, Lüneburg, Emden, and Rostock, as well as for international port cities from further afield such as Groningen, Rotterdam, Bordeaux, Genua, Antwerp, and London. Using data from the so-called Contentbücher Frauke Röhlk stated that about 80-90 percent of the total paper imports of the 1780s and 1790s to Ham-

26 Röhlk, Schiffahrt und Handel, 124. I will deal with the data provided by Röhlk in my conclusion. The question of the existence of a substantial 'domestic' paper import into Hamburg from local and regional paper mills remains open. This potential domestic import is hard to figure out, but seems to be a marginal factor in comparison to the Dutch imports. A history of the German paper mills or of the Hamburg paper mills burg port came from the Netherlands, and that Amsterdam's share of these imports was around 70-90 percent.²⁶

Units used in paper trade

Calculating the early modern paper trade has been a tricky business for the contemporaries, and still is a tricky business for historians. Due to the locally, regionally, nationally and

remains to be written. Up till now, we have proof of only two local paper mills in and around Hamburg that were active from 1766 onwards. See on the paper mills in Uhlenhorst and Fuhlsbüttel: F. von Hößle, 'Alte Papiermühlen der deutschen Küstenländer', in: Der Papier-Fabrikant 1923 [Fest- und Auslandsheft 1923, 39-42]. often even temporally differing terms and scales of trade units, the exchange of paper between two cities could be a challenging task.²⁷ This certainly holds true for the 10 years of trade analysed here between Amsterdam and Hamburg. For example, in the eighteenth century, a 'Riem' of paper in Hamburg consisted of roughly 5000 sheets of printing paper, while a 'Riem' comprised 500 sheets of printing paper in Amsterdam, Paris or London.²⁸ In addition, even locally used terms and scales could differ radically within a few years: for example, the proportion between a 'Ballen' (bale) and a 'Riem' (ream) changed in Hamburg from 1:1 to 1:5 between 1782 and 1808 this was a difference of 20,000 sheets. More generally, during the sixteenth and seventeenth centuries the definition of a German 'Ballen' within the Holy Roman Empire could easily differ by 1000 sheets depending on the place of trade.²⁹ To come to terms with the actual volumes of paper that was traded between Hamburg and Amsterdam from 1777-1787, it is necessary to know the exact scales of the trading units used during the years in question. Generally during the mid-late eighteenth century, European paper trade units were organized around quantity, i.e. the number of sheets. A change to units of weight did

27 See for an overview of the European variations of this trade: E.J. Labarre, Dictionary and Encyclopedia of Paper and Paper-Making. 2nd edition Amsterdam 1952. Regarding variations of early modern trade units and measures used in Hamburg, see: H.J. Gerhard, A. Engel, Preisgeschichte der vorindustriellen Zeit. Ein Kompendium auf Basis ausgewählter Hamburger Materialien. Stuttgart 2006.

28 See for the Dutch and English ream: P. Gaskell, A new introduction to bibliography. Oxford 1974², 59-60; C.T. Jacobi, The Printers' Vocabulary. A Collection of some 2500 technical terms, phrases, abbreviations and other expressions. London 1888 (repr. Detroit 1969), 111.

29 Thiel, 'Papiererzeugung und Papierhandel', 128.

30 The shift between units of quantity and weight can be seen in the German market around 1800 in L. Sporhan-Krempel, Die Papierrechnungen.

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not begin before the early nineteenth century.³⁰ We have proof from the record-books of the Admiralitätskollegium that the paper trade in eighteenth-century Hamburg utilized a variety of units including Partie, Pack(en), Ballen, Kiste, Riem(en), Bund, Stuck, Ries, Kiste, Faβ, Koffer, Parcel, Bündel, Buch and Sack.³¹

Nevertheless, only a couple of these terms were of importance and in regular use during the years 1777-1787: 'Partie', 'Pack(en)', 'Ballen', 'Riem(en)' and 'Ries'. As a side note, 'Packen' and 'Riemen' are the plural form of 'Pack' and 'Riem'. A 'Partie' of paper originating in Amsterdam consisted of 8000-9000 Dutch 'Riemen' (of about 500 sheets each), i.e. 4,000,000 to 4,500,000 sheets of printing paper or 3,840,000 to 4,320,000 sheets of writing paper.³² Due to the fact that we lack information about the type and mixture of the paper traded (either writing or printing paper), it seems better to work with estimates with certain margins of error. In the following calculations, one 'Partie' is considered to be 4,000,000 sheets of paper. Both the German 'Riem' and 'Ballen' were made up of 10 'Ries', one 'Pack' was made up of 15 'Ries', each 'Ries' having 20 'Buch', and each 'Buch' having 25 sheets of printing paper (or 24 pages of writing paper). So, each German 'Riem' and 'Ballen' consisted of about 5000

31 Due to confusing terms and scales on a European level, I decided to use the historical terms in German.

32 The abbreviation for 'Partie' in the record-books of the Admiralitätskollegium is 'pr'. The paper traders in Hamburg's port used this term only for Dutch imports, therefore a 'Partie' was measured with Dutch 'Riemen'. See for the ratio of 1 'Partie' meaning 8000-9000 Dutch 'Riemen': Haerlemse Courant, 11.10.1768 (advertisement of a paper producers offering 'Een Party van 8 à 9000 Riemen'). Generally, as references in contemporary literature indicate, in early eighteenth-century German lands, the paper trade unit 'Partie' seemed to have been quite common in the paper trade. See for example G.P. Hönn, Betrugs-Lexicon, worinnen die meisten Betrügeryen in allen Ständen nebst denen darwider guten Theils dienenden Mitteln entdecket. Coburg 1724, article 'Ballen-Meister', 31-32.

sheets, and each 'Packen' about 7500 sheets of printing paper.³³ In short this ratio, calculated in sheets for printing paper, can be stated as follows for the years 1777-1787:

- 1 'Buch' has 25 sheets
- 1 'Ries' has 20 'Buch', i.e. 500 sheets
- 1 'Riem' or 'Ballen' has 10 'Ries', i.e. 5000 sheets
- 1 'Pack' has 15 'Ries', i.e. 7.500 sheets
- 1 'Partie' has 8000 (Dutch) 'Riemen', i.e. 4,000,000 sheets

The sociality and materiality of the trade

The aspects of sociality and materiality are structuring this analysis of the paper trade activities. Using the term 'sociality' I refer to the historical concept of analysing collective actions of a specific group (within time and space).³⁴ Here, the starting and leading question is: who were the primary protagonists of the observable paper trade in Hamburg's port during the decade in question? Almost inextricably linked with the sociality is the materiality of the trade. What exact amounts of paper were traded (in minimum and maximum) and in what units? How large was the total volume of paper traded per annum from Amsterdam to Hamburg?

33 J.E. Kruse, Allgemeiner und besonders Hamburgischer Contorist, welcher sowohl von den vornehmsten in und ausser Europa gelegenen Städten und Ländern, ihren Währungen, Münzen, Wechsel=Arten und Usancen, umständliche Nachricht ertheilet, und derselben beschriebene Gewichte und Maassen, gegen die, so zu Hamburg, und an anderen Orten gebräuchlich sind, genau vergleichet; als auch die Wechsel=Vorfälle, welche sich zu Hamburg, und vielen andern berühmten Plätzen begeben, in richtiger Ordnung des Alphabets vorstellet, und die sämmtlichen Frag=Stücke der Wechsel=Rechnung nach der neuesten und bequemsten Methode aufzulösen anweiset, 2nd edition. Hamburg 1766, 170 ([†]IBall oder Riem Papier hat 10 Ries, oder 200 Bücher. I. Ries hat 20 Bücher. I Buch Druck=Papier hat 25 Bogen; I Buch Schreib=Papier aber hat 24 Bogen[†]). Further: O. Münchhausen, Der Hausvater, 4th edition. Hanover 1782, 662; J.

Roughly speaking, we have to differentiate between two sorts of main players involved in the paper trade with Amsterdam: the importers coming via ships from Amsterdam, mainly skippers who acted as traders; and the local brokers and buyers in Hamburg's port. Basically, the importers were responsible for the transportation (i.e. shipping) into the port of Hamburg, and interested in selling their transported commodities. As can be seen in the statistics for the years 1777 to 1787 (charts 1-10 on www.boekgeschiedenis.nl), the group of importers was relatively small (15 in 1777, 21 in 1778, 28 in 1779, 34 in 1780, 22 in 1781, 31 in 1782, 44 in 1783, 40 in 1784, 43 in 1786, 29 in 1787). There is no year in which more than 44 different people were active in importing paper into Hamburg from Amsterdam. If we exclude both the lowest and highest number – 15 importers in 1777 (nota bene: from July to December), and 44 in 1783 – we are left with an average of about 31 individual people that were (exclusively or partially) concerned with annually shipping paper from Amsterdam to Hamburg.

Due to the total volumes of trade acts registered, it is possible to distinguish further between the entrepreneurial importers in terms of status, and it seems that there were only a few big players amongst the paper importers – those who were trading in vol-

Rademann, Hamburgischer Wechsel=Baum / Von allerhand Einund Ausländischen Wechsel=Bluhmen / Deren sich nicht so wohl Hohe Königl. Chur= und Fürstl. Höfe / als insonderheit alle und jede Kauff= und Handel=Städte / nach Belieben / mit Nutzen bedienen können. Nach dem itzigen Cours der Gelder und Müntzen / wie auch Usancen der Ausländischen Wechseln und nöthigen Nachricht von alten und schweren Geldern vermehrt und auffgelegt / sammt der höchst nützlichen Interesse= und Rabatt=Rechnung. Hamburg 1717, 13.

34 See on the usage of 'sociality'/'sociability' in historical approaches: M. Agulhon, 'Introduction. La sociabilité est-elle objet d'histoire?', in: F. Étienne (ed.), Sociabilité et société bourgeoise en France, en Allemagne et en Suisse 1750–1850. Geselligkeit, Vereinswesen und bürgerliche Gesellschaft in Frankreich, Deutschland und der Schweiz 1750–1850. Paris 1986, 13-23. umes extending to 4 million sheets on annual basis. During the decade analysed, 37 traders (among them for example Harm Elders, Jacob Elders, Roland Jansz. de Boer) were dealing at that level, most only once or twice. The three biggest importations registered by single traders belonged to Allewin Allewins when in 1780 he shipped 20 million sheets of paper into Hamburg; Christian Mahncke in 1783 with 16,9 million sheets; and D. Ocken in 1787 with 10,7 million sheets. The next largest importations by single traders were around 9-7 million sheets (Allewin Allewins in 1778 and 1779, Harm Elders in 1779, Jan Janscher in 1780, Rolf Thiescher in 1780, Age Ocken in 1780, Gerd Teunis in 1780, Jacob Elders in 1780, Cornel Thiescher in 1781, Christian Mahncke in 1784, Ocke Olfers in 1787, and Jacob Davids in 1787). Between the few big players and the average small entrepreneur dealing in lesser units of reams and packs, we find a number of agents that were still dealing with millions of sheets of printing paper each. The likes of Jan Christians (1777), Roland Jacobs (1782), and Geerd Jun. de Witt (1783), taken together, made up for several dozen million sheets of imported paper.

One last word on the majority of small traders seems necessary: these skipper-merchants did not specialize in trading big volumes of paper. They usually transported some reams or packs of paper next to other commodities such as barrels of oil, grain, packages of wood, salted herrings, almonds, etc. For example, on July 23, 1777 the Amster-

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dam based merchant Rolf Teunis imported several squares of cloth next to 62 'Packen', 25 'Ballen' and 15 'Ries' of paper into Hamburg.³⁵ About a month later, even the big paper-player, Christian Mahncke, imported several packages of wood and iron next to 500 'Packen' of paper on August 15, 1777.³⁶

As a whole, the importers of paper from Amsterdam to Hamburg were a heterogeneous group of traders: some were merchants based in Hamburg (like Harm Elders), others were skippers based in Altona (for example Peter Breckwoldt), or regular citizens of the city of Hamburg (like Gerd Teunis). My own research indicates that a substantial contingent of paper importers were deeply connected to the regular trading exchange between Amsterdam and Hamburg, the so-called 'Börtfahrt'.37 All of these, as mentioned before, were either part- or fulltime skippers (usually Börtfahrer) including several appointed brokers of Hamburg such as Hinrich Berend Classen, Johann Heinrich Wichers, David Hinrich Möller, and Johan Jan Hüttman. Others, like Jacob Kettman, Jacob Duncker, H.J. Küster, and Jacob B. Rusch, proved their commercial activity both as importers of paper and as buyers in Hamburg. Even though this analysis of the trade's sociality is still preliminary, it brings to light one striking, but not very surprising, feature: the importers of paper were connected to the Amsterdam world of bookproduction and bookselling by family as well as by business ties.38

38 For example, Age Ocken, Jan Jansz., J.J. Tick(er), or C. Jansch had relational ties to boekverkopers, boekdrukkers and boekbinders from Amsterdam. As part of my recent research project ('Publizistik als Handelsware', see note 1), I am collecting such information for Amsterdam in a database. Further discussion and data on these networks of the book trade will be provided soon in further articles or a monograph.

³⁵ SAH 371-2 Admiralitätskollegium, F12, vol.1 (Contentbuch 1777), fol. 24.

³⁶ SAH 371-2 Admiralitätskollegium, F12, vol.1 (Contentbuch 1777), fol. 49.

³⁷ In the seventeenth and eighteenth centuries the organized merchant shipping (with fixed schedule) between Hamburg and Amsterdam was called 'Börtfahrt'. See for further details E. Baasch, Die Börtfahrt zwischen Hamburg, Bremen und Holland. Hamburg 1898; Röhlk, Schiffahrt und Handel, 52-3.

Who were the buyers of imported paper? The zens of Hamburg or Altona, four both im-Bürgerbuch of Hamburg tells us that between 1777 and 1787 only five citizens were registered as paper merchants (Papierkrämer) or traders (Papierhändler). These were Christoph Andreas Buck on the one hand, and Johann Wilhelm Teetz, Christian Nordhoff, Hinrich Haupt, and Christoph Carl Görtz on the other hand. In Danish-controlled Altona only two citizens were officially active as paper merchants: Nicolaus von Maseijk and Salomon Moses Waarburg.³⁹ As can be seen in the statistics for the years 1777 to 1787 (chart 11), the group of people buying paper in Hamburg was relatively small: only 46 individuals bought paper over the course of 10 years. Nevertheless, the size of this group exceeds the supplying-potential of the 5 to 7 recorded local paper merchants. An examination of the professions and citizenships of these buyers as far as is ascertainable - indicates that 21 were citizens of Hamburg, 2 of Altona, and 23 lacked citizenship in either of the two cities.40 Among the businessmen who were not citi-

39 H. Brandenburg (ed.), Bürgerbuch der Stadt Altona nach den Sondersteuerregistern von 1789. Hamburg 1990.

40 No citizenship either in Hamburg or Altona had Johann Christian Reimers, G. Geismer, B. Schultz, Jacob Kettman, C.C. Moddeman, M. Schröder, Jacob Duncker, Jacob B. Rusch, L. Berger, I.A. Dunckman, A.W. Dienier, H.J. Küster, H. Glaser, D.P. Lohman, J. Borgman, N.H. Boode, [missing first name] Behmer, J.C. Gerbers, Christian Diederich Glashof, H. Rühl, Hinrich Christoph Lienau.

41 See for Hamburg: Christoph Carl Görtz (profession: paper merchant), Daniel Philip Schepeler (profession unknown), Niclas Gottlieb Lütgens [Lüttckens], (profession: merchant), Johan Bernhard Cotius (profession: merchant), Johan Hinrich Rücker (profession: merchant), A. Schröder (profession unknown), Hermann Wiegbers (profession: merchant), Daniel Schrader (profession unknown), Johan Hinrich Rücker (profession: merchant), Nicolaus Brilon (profession: merchant), Johan Christian Maltz (profession unknown), Christian Nordhoff (profession: broker), Christian Friedemann Niefeldt (profession: merchant), Benedict Jacob Hümpel (profession unknown), Hans Münster (profession: merchant), Johan

ported paper from Amsterdam and bought additional quantities of paper in Hamburg: Jacob Kettman, Jacob Duncker, H.J. Küster, and Jacob B. Rusch. As might be expected of the 24 Hamburg citizens active in buying paper, the majority were registered as merchants.41 Strikingly, the paper merchant Christoph Andreas Buck's name never appeared in the records of the purchasing business of Hamburg's port between 1777 and 1787 – as didn't his two colleagues from Altona, Nicolaus von Maseijk and Salomon Moses Waarburg. It is also remarkable that only about one-tenth of the paper-buyers in Hamburg's port - 6 out of 46 - were appointed brokers by the city.42 Legally, only appointed brokers were allowed to negotiate imports in the port of Hamburg on the behalf of third parties.43 Evidently many import-activities, especially from the 1770s onwards, were conducted semi-illegally, i.e. by unappointed brokers (so-called Beyläufer).44 But the extremely low involvement of appointed bro-

August Brauer (profession: tobacconist), Joachim Herman Kruse (profession: merchant), Romke van der Schmissen (profession: merchant), Johan Wilhelm Teetz (profession: paper merchant), Hinrich Haupt (profession: paper merchant), H.I.A. Meyer (profession unknown). See for Altona: Jacob Christian Behrens (profession unknown) and Johann Wilhelm Niemeier (profession: merchant). The data has been taken from the Bürgerbücher of the two cities, and partially and additionally from protocols of the Altona's municipal court (SAH 424-2, IIa).

42 Nicolaus Brilon, Johann Christian Reimers, Christian Diederich Glashof, Hinrich Christoph Lienau, Niclas Gottlieb Lütgens [Lüttckens], Christian Nordhoff.

43 Protocolls of the 'Makler-Deputation' of 1750-1800 (SAH 375-1 Makler-Deputation, Nr. 1 vol. 5, and vol. 6). Following a law from the conjoint convention ('Konvent') of the Senate, i.e. the City Council, and the Bürgerschaft, dating July 29th 1756, no more than 50 'Mäckler' (brokers) were allowed in Hamburg. Nevertheless, it was common (but forbidden) practice that more brokers were active.

44 Protocolls of the 'Makler-Deputation' of 1750-1800 (SAH 375-1 Makler-Deputation, Nr. 1 vol.5, Nr.1 vol. 6).

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- 1777: Christoph Carl Görtz, Daniel Philip Schepeler, Niclas Gottlieb Lütgens [Lüttckens], Johan Bernhard Cotius (2x), Johann Christian Reimers, G. Geismer, Johan Hinrich Rücker; B. Schultz; Jacob Kettman (2x), H.I.A. Meyer.
- 1778: Johann Christian Reimers, H.I.A. Meyer (3x), C.C. Moddeman, A. Schröder, Christoph Carl Görtz (2x); Niclas Gottlieb Lütgens [Lüttckens], Jacob Kettman, Hermann Wiegbers (2x), Johan Bernhard Cotius (2x), Christian Friedemann Niefeldt.

1779: D. Schrader, H.I.A. Meyer (2x), Jacob Kettman (4x), Hermann Wiegbers, M. Schröder (2x), Jacob Duncker, Christoph Carl Görtz (2x), Jacob B. Rusch, Johan Hinrich Rücker, Nicolaus Brilon, Daniel Philip Schepeler.

- 1780: Christoph Carl Görtz (3x), Daniel Philip Schepeler, Nicolaus Brilon, L. Berger, Jacob Kettman (4x), H.I.A. Meyer (4x), Jacob Duncker, Johan Christian Maltz, Johan Bernhard Cotius, Hermann Wiegbers.
- 1781: Jacob Kettmann (4x), H.I.A. Meyer (9x), Christoph Carl Görtz (5x), Jacob Christian Behrens, Christian Nordhoff (3x), Hermann Wiegbers (2x), Christian Friedemann Niefeldt (11x), Benedict Jacob Hümpel, Jacob Duncker, I.A. Dunckman (2x), A.W. Dienier, Nicolaus Brilon (6x), Hans Münster (2x), Johan Bernhard Cotius, H.J. Küster (3x), Johan August Brauer

1782: Christoph Carl Görtz (15x), I.A. Dunckman (2x), Christian Friedemann Niefeldt (5x), H.I.A. Meyer (13x), G. Geismer, Nicolaus Brilon (7x), Niclas Gottlieb Lütgens [Lüttckens] (3x), Daniel Philip Schepeler, Jacob Kettmann (6x), H.J. Küster (4x), Hermann Wiegbers (2x), Johan Bernhard Cotius (4x), Jacob Duncker.

1783: Christian Friedemann Niefeldt (15x), Johan Bernhard Cotius (13x), Christoph Carl Görtz (17x), Jacob Kettman (9x), Joachim Herman Kruse, H.I.A. Meyer (27x), Romke van der Schmissen (10x), Christian Nordhoff (2x), H.J. Küster (7x), Daniel Philip Schepeler, H. Glaser, D.P. Lohman, Nicolaus Brilon (10x), Hermann Wiegbers, Niclas Gottlieb Lütgens [Lüttckens], Johan Wilhelm Teetz.

1784: Christian Friedemann Niefeldt (17x), Nicolaus Brilon (15x), Christoph Carl Görtz (17x), H.I.A. Meyer (18x), Johan Wilhelm Teetz (7x), Johan Bernhard Cotius (7x), H.J. Küster (8x), Romke van der Schmissen (7x), Jacob Kettman (5x), Niclas Gottlieb Lütgens [Lüttckens] (6x), Hinrich Haupt (7x). 1785: [no records]

- 1786: Christoph Carl Görtz (17x), Johan Bernhard Cotius (5x), Niclas Gottlieb Lütgens [Lüttckens] (4x), Johann Wilhelm Teetz (9x), Jacob Kettman (6x), Romke van der Schmissen (6x), Nicolaus Brilon (8x), Christian Friedemann Niefeldt (14x), J. Borgman, H.J. Küster (4x), Haupt (3x), H.I.A. Meyer (10x), Johann Wilhelm Niemeier (Niemeyer), Hermann Wiegbers, Johann Gottfried Sievers, N.H. Boode.
- 1787: H.I.A. Meyer (14x), Jacob Kettman (3x), Christoph Carl Görtz (17x), H.J. Küster (8x), Nicolaus Brilon (7x), Romke van der Schmissen (5x), Johann Wilhelm Teetz (9x), [missing first name] Behmer, Haupt (6x), Johan Wilhelm Niemeier, Niclas Gottlieb Lütgens [Lüttckens] (2x), Christian Friedemann Niefeldt (5x), J.C. Gerbers (2x), Christian Diederich Glashof, Johan Bernhard Cotius (3x), Hinrich Christoph Lienau, H. Rühl.

Chart 11. Buyers of paper from Amsterdam in Hamburg, 1777-178745 (in brackets: the frequency of purchase per annum)

port, points to only one conclusion: most of Christoph Carl Görtz, Christian Friedemann the paper-buyers were buying for their own Niefeldt, H.I.A. Meyer, Niclas Gottlieb Lütgens business, and not for third parties.

Furthermore, during the decade analysed, close to nine-tenths of the millions of sheets Hamburg (see chart 11). Next to those buying bought in Hamburg's port were purchased by

45 SAH 371-2 Admiralitätskollegium, F12, vols. 1-10 (Contentbücher 1777-1787).

kers within the paper buying activities in the only a small group of paper-buyers: the likes of [Lüttckens], or Johan Wilhelm Teetz were dominating the buyout of imported paper in reams and packs of paper strategically in very

high numbers, we can see many businessmen, usually merchants, who were buying small to medium amounts of paper on occasion – always alongside other commodities. Among them, only Nicolaus Brilon seems to have been specialized in procuring high class and selected paper; Brilon never purchased more than 10 reams, but he did so on a regular basis. This may indicate his specialization in trading rare or expensive paper (for example drawing papers).

Regarding the trade as a whole, very little can be said about the quality and sorts of paper traded; the sources used (Contentbücher) do not provide details on this aspect. Neither the general distinction between printing and writing paper (although both could be used for book printing) nor any details on types, sizes, and their values are possible. In terms of trade units the picture is clear: the practice of paper trading between Amsterdam and Hamburg was dominated by the use of only a few trade units: most of the time the contemporary common and rather big units like 'Partie', 'Packen', 'Ballen', 'Ries', and 'Riemen' were used. Unusual and rather small units were only used three times in 10 years, in 1777 'Batzen', in 1778 barrels (Faß), and in 1786 boxes (Korb). The biggest unit of all, the Partie, consisting of 4,000,000 sheets of paper, was only used between 1777-1781. From 1782 onwards, all paper transactions into the port of Hamburg were recorded in units of Pack, Ries, and Riem. All of the trade units used for paper were units of quantity, not yet of weight as became common from the beginning of the nineteenth century onwards.

The total volume of paper traded per annum between Amsterdam and Hamburg

was astonishingly high (see chart 12). During the analysed decade-long trade cycle in the mid-late eighteenth century we see a slight ebb and flow in the business activity. The high figures of the late 1770s - ranging from roughly 70 million sheets (1779) to 124 million sheets (1780) - alternate with a significantly lower average volume per annum in 1781 (44 million) and 1782 (42 million), and an increase of around 63 million in 1786/1787. As comparative figures from other big publishing centres with substantial paper imports from abroad, such as London, suggest,46 wild fluctuations in the volumes of the contemporary European paper trade seem to have been quite common. Nevertheless, the decline seen in 1781/1782 was caused primarily by contemporary turbulences in production and transport in the Netherlands - the so-called fourth Anglo-Dutch War (1780-1784) troubled the (paper) trade from Amsterdam.

Concluding remarks and open questions

In highlighting the distribution logistics, traders, and trade volumes of the paper trade from Amsterdam to Hamburg, it became apparent how crucial and significant further research on the paper trade is for the interdisciplinary field of book history. It is more than just a truism that trading paper kept the whole 'business of books' (James Raven) running. Above all, the figures indicate both a very high demand for paper in Hamburg, and substantial importation of sheets from Amsterdam. As we know, the contemporary Dutch shipping industry was capable of

46 See the imports of paper into London, 1560-1720, shown by import volume between Coleman, The British Paper Industry, 13. For example, the annual sheets of printing paper.

import volume between 1702 and 1703 differed by 55 million sheets of printing paper.

1777: 801 'Packen', 132 'Ballen', 65 'Ries', 783 'Riemen', and 5 'Partie', i.e. an equivalent of 30,583,000 sheets of printing paper

- 1778: 1805 'Packen', 9 'Partie', 481 'Riemen', 15 'Ballen', and 20 'Faß', i.e. an equivalent of 52,017,500 sheets of printing paper
- 1779: 841 'Riemen', 1377 'Packen', and 14 'Partie', i.e. an equivalent of 70,532,500 sheets of printing paper 1780: 517 'Packen', 50 'Ries', 1695 'Riemen', and 28 'Partie', i.e. an equivalent of 124,377,500 sheets of printing paper
- 1781: 2866 'Packen', 502 'Ries', 2109 'Riemen', and 3 'Partie', i.e. an equivalent of 44,291,000 sheets of printing paper

1782: 3686 'Packen', 1500 'Ries', and 2779 'Riemen', i.e. an equivalent of 42,290,000 sheets of printing paper 1783: 7924 'Packen', 4 'Ries', and 3838 'Riemen', i.e. an equivalent of 78,622,000 sheets of printing paper 1784: 8713 'Packen', and 2881 'Riemen', i.e. an equivalent of 79,752,500 sheets of printing paper 1785: no records

- 1786: 6657 'Packen', 32 'Ballen', 2877 'Riemen', and 50 'Korb', i.e. an equivalent of 64,472,500 sheets of printing paper
- 1787: 7960 'Packen', and 490 'Riemen', i.e. an equivalent of 62,150,000 sheets of printing paper

Chart 12. Total volume of traded paper from Amsterdam to Hamburg, 1777-178747

transporting such enormous weights from port to port.⁴⁸ The evidence of several millions of sheets being annually transported and traded from Amsterdam to Hamburg gives way to an economic interpretation of contem-Europe. During the decade analysed, we can clearly sense the economic importance and high profitability of the paper trade in the argument of economic importance can be applied a little more expansively into the general habits of trading paper in Northern Europe between the sixteenth, seventeenth, and early nineteenth-century. Of course, the that other factors (social, commercial, materi-

47 SAH 371-2 Admiralitätskollegium, F12, vol.1-10 (Contentbuch 1777-1787].

- including the more laborious and time-consuming processes of producing large volumes of paper during the sixteenth and seventeenth centuries, as well as the advances of steam-powered production in the early-mid porary paper trade activities in Northern nineteenth century, which significantly changed the ways paper was produced and distributed.49

As my calculations indicate for the timemid-late eighteenth-century. With care, the span analysed (1777-1787) Hamburg's constant need for paper was met by importation of very large amounts of the commodity from Amsterdam. From the estimated about 150 million sheets that were annually required and used for printing and writing purposes in further one strays, the more likely it will be Hamburg and Altona, about 50-75 percent came by ship from Amsterdam to Hamburg's al, mechanical) need to be taken into account port. So, the percentage of the total paper

⁴⁸ M. van Tielhoff & J. van Zanden, 'Productivity Changes in Shipping in the Dutch Republic: The Evidence from Freight Rates, 1550-1800', in: R.W. Unger (ed.), Shipping and Economic Growth 1350-1850. Leiden/Boston 2011, 47-80; R.W. Unger, 'The Industry, 179-314; R. Hills, Papermaking in Britain, 1488-1988: A Tonnage of Europe's Merchant Fleets 1300-1800', in: The Ameri- Short History. London 1988.

can Neptune 52 (1992), 247-261. See on the contemporary used ships between Hamburg and Amsterdam (Hulke, Kravele, Rahsegel etc.): B. Hagedorn, Die Entwicklung der wichtigsten Schiffstypen bis ins 19. Jahrhundert. Berlin 1914.

⁴⁹ See for example for England: Coleman, The British Paper

Figure 3. Image of a German bookshop, where employees are preparing the transport of bound and unbound books in sheets by filling a wooden barrel. In the front and back piles of differently sized paper are visible that was sold in bookshops as well. 'Der Buchhändler', in: Christoph Weigel, Abbildung Der Gemein-Nützlichen Haupt-Stände Von denen Regenten Und ihren [...] Bedienten an, biß auf alle Künstler Und Handwercker. Regensburg 1698



imports from Amsterdam to Hamburg in these days were actually a little bit lower than calculated by Frauke Röhlk.⁵⁰ How many of the imported sheets were annually used in Hamburg for trading purposes ('re-selling') with other publishing centres in continental Europe remains an open question. The question if Hamburg was also an important hub of the continental paper trade cannot be answered sufficiently yet. Clearly, the question of re-selling the millions of sheets within Hamburg's and Altona's bookish networks or to other regional, national or international

50 As mentioned in footnote 26, Röhlk, Schiffahrt und Handel, 124, estimated that about 80-90 percent of the total paper imports of the 1780s and 1790s to Hamburg port came from the Netherlands, and that Amsterdam's share of these imports was around 70-90 percent. Nota bene: The data presented by Röhlk on the paper import from Amsterdam to Hamburg for the years 1777-1787 does not match with my own research. Röhlk's data, given in detail in part 2 of her study ('Anlage XI', pp. 126publishing centres is central to any future valuation of the paper trade.

It remains within the limits of this case study of Hamburg's paper importation that we cannot yet connect the analysed trade activities to both the paper merchants and paper producers (and their daily practices and used spaces) in Amsterdam and the Republic of the United Netherlands.⁵¹ As we are informed by Isabella Henrietta van Eeghen, the dozens of big and small 'papierkopers' of mid-eighteenth-century Amsterdam were in constant need of additional warehouse spaces for

^{128),} differs strikingly from the data I found and presented in this article. Due to missing trade unit calculations for 'Packen', 'Ballen', and 'Partie' in Röhlk's study, it is hard to compare the data at all.

⁵¹ These aspects will be dealt with in my ongoing research project ('Publizistik als Handelsware', see note 1).

paper.⁵² Besides, the origins of the exported paper from Amsterdam, and the European 'recycling cycle' of the paper trade itself remain unclear. In other words, not all paper exported from Amsterdam was necessarily produced by a Dutch paper mill; plus the fundamental trade of rags for paper production purposes within Europe has yet to be highlighted in further detail.53 In this study the focus is laid upon the involved importers, traders, merchants and brokers acting in the port of Hamburg. More research on the usual practices of their dealings is necessary. Regarding the sociality of the paper trade as portrayed in this article, it is obvious that more people were actually involved in the organisation and execution of trading paper between Amsterdam and Hamburg as mentioned in this article. The yet 'unknown' group of people involved in the trade ranges from the ship personnel to the people working in the ports of Hamburg and Amsterdam, to the ones working in the storage warehouses, to the distributors on the local level (Hamburg/Altona) that physically moved the paper to the booksellers' shops and stalls, and on the regional level (trade connections via land and water), into both the heart of continental Europe, and for example to England, and the Baltic Regions.54

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Connected to the materiality of the trade are fundamental questions on the volumes of paper used locally for either printing or trading activities. We need to take into account that paper was used as well for packing purposes in the trade of other commodities, especially in the contemporary mass trade of sugar, spices and even paper itself.55 Furthermore, it is still an open question as to how much of the imported paper both from Amsterdam and in general was actually not used for printing or trading purposes. Here, we have to consider the percentage of the contemporary growth in paper use that was connected to the usages of paper on private (diaries, correspondence), business (commercial records), educational (schools, universities), ecclesiastical (parish churches and Geistliches Ministerium of Hamburg), official and secretarial (i.e. political administration of the city council, law courts and legal system) level. The calculation of the ratio of printed and unprinted sheets being in circulation in the early modern trade in general remains an open but challenging task for future research activities. Above all, it is obvious that future research on paper (trade) history is both a significant interdisciplinary playground of book history, and a productive field of future investigations.56

52 Van Eeghen, De Amsterdamse Boekhandel, vol. 4, esp. 9, and 195-271; van Eeghen, 'De boekhandel van de Republiek 1572-1795'.

53 Evidence both of Hamburg-based warehouses for rags, and of a substantial rag exchange between Hamburg and Amsterdam is mentioned by Thiel 'Papiererzeugung und Papierhandel', 146. As we know from the case of Nürnberg in late eighteenth-century even the selling of waste paper out of the city was strictly forbidden. Lore Sporhan-Krempel suggested that these bans on paper selling were connected to the contemporary regulations on exporting rags. Therefore, rags and waste paper have to be considered as significant for the production of (recycled) paper. See ibid., 'Papiererzeugung und Papierhandel in der Reichsstadt Nürnberg und ihrem Territorium', in: Stadtarchiv Nürnberg (ed.), Beiträge zur Wirtschaftsgeschichte Nürnbergs, vol. 2. Nürnberg 1967, 726-750, esp. 743. **54** Nils Lindberg has stated (without further details) for the seventeenth century that Hamburg played a central role in the export of (earlier) imported paper to the Baltic and England. See Lindberg, Paper Comes To the North, 55. Viktor Thiel stresses as well that Hamburg in the sixteenth and seventeenth centuries played a strategic role in the paper trade between France, Germany, the Netherlands and the Baltic Regions, and Russia. See Thiel 'Papiererzeugung und Papierhandel', 130-131.

55 For example, 'Ries' could be wrapped separately in strong paper, the so-called 'Reißpapier' or 'Riespapier', and reams were after packed using 'ream wrappers' that offered information on the paper.

56 A version of this article with full appendices may be found at www.boekgeschiedenis.nl/content_assets/2014_bellingradt. pdf. Appendices

Age Ocken – 23 'Packen' and 49 'Ballen' and 14 'Ries' (each) Jan Reimers – 15 'Packen' Rolf Teunis – 10 'Packen' and 25 'Ballen' and 15 'Ries' and 51 'Packen' (each) Lud. Burger – 50 'Packen' Cornel Dreewes – 128 'Packen' Peter Meeve – 24 'Packen' and 29 'Ballen' and 36 'Ries' (each) Jan Christians – 500 'Packen' [= 3.75 million sheets] Peter Richemeis – 20 'Batzen' Jacob P. Ackermann – 365 'Riemen' Harm Elders – 1 'Partie' [= 4 million sheets] Roland Jansz. de Boer – 1 'Partie' [= 4 million sheets] Peter Breckwoldt – 1 'Partie' [= 4 million sheets] Jan Janscher – 418 'Riemen' T. Rienckes – 1 'Partie' [= 4 million sheets] Cornel Thiescher – 1 'Partie' [= 4 million sheets]

Chart 1: Importers of paper from Amsterdam to Hamburg, 1777 (and their volumes of paper imported)

Harm Elders - 302 'Packen' T.J. Staghauser – 1 'Partie' [= 4 million sheets] Peter Reinders - 184 'Riemen' H. Marten -1 'Partie' [= 4 million sheets] Gerd Iben – 1 'Partie' [= 4 million sheets] P. Meeser – 1 'Partie' [= 4 million sheets] Jan Bruhs – 1 'Partie' [= 4 million sheets] Jan Hinen – 20 'Faß' Christian Mahncke – 1 'Partie' [= 4 million sheets] Allewin Allewins – 1 'Partie' and 609 'Packen' (each) [= c. 8.5 million sheets] Jocke Geels - 34 'Packen' Rolf Geerds - 15 'Ballen' Jan Jansz [Jan Janscher?] – 15 'Packen' and 6 'Riemen' (each) Jurian Jurians – 1 'Partie' [= 4 million sheets] Paul Jacobs – 181 'Packen' and 403 'Packen' (each) Peter Meewes - 30 'Packen' Cornel Dreewes – 1 'Partie' [= 4 million sheets] Wilhelm Wilckens - 21 'Packen' J.J. Tick(er) – 156 'Riemen' Ernst Trenck - 210 'Packen' Tim Behrens - 135 'Riemen'

Chart 2: Importers of paper from Amsterdam to Hamburg, 1778 (and their volumes of paper imported)

Peter Behrens - 59 'Riemen' Jacob B. Rusch – 1 'Partie' [= 4 million sheets] H.P. Amels - 155 'Packen' Papier Jan Harm Vischer - 34 'Packen' Peter Meefe [Meewes] – 42 'Packen' Christian Mahn Dreewes – 1 'Partie' [= 4 million sheets] J. Arends - 1 'Partie' Jacob Kettman - 260 'Packen' Geerd Teunis - 69 'Riemen' Jacob Elders -1 'Partie' [= 4 million sheets] Jacob Duncker - 48 'Packen' Allewin Allewins – 2 'Partie' (each time 1 'Partie') [= 8 million sheets] C. Camp – 1 'Partie' [= 4 million sheets] Peter Mahncke - 273 'Packen' Christian Mahncke – 1 'Partie' [= 4 million sheets] J.M. Voss – 1 'Partie' [= 4 million sheets] J.J. Hancke - 81 'Riemen' Jacob Duncker – 1 'Partie' [= 4 million sheets] Jol Jacobs - 350 'Packen' J. Harms - 422 'Riemen' Harm Elders – 2 'Partie' (each time 1 'Partie') [= 8 million sheets] Rolf Thiescher – 1 'Partie' [= 4 million sheets] C. Jansch – 1 'Partie' [= 4 million sheets] Jan Huges - 139 'Riemen' J.E. Sleevoigt - 26 'Packen', 40 'Riemen' Cornel Reents [Remts] - 97 'Packen' [missing first name] Ocken – 31 'Riemen' J.J. Geerds - 92 'Packen'

Chart 3: Importers of paper from Amsterdam to Hamburg, 1779 (and their volumes of paper imported)

T.J. Staghauser - 350 'Packen' Jan Janscher – 12 'Packen' and 1 'Partie' and 1 'Partie' (each) [= c. 8 million sheets] Rolf Thiescher – 2 'Partie' (each time 1 'Partie') [= 8 million sheets] Tobias Hein Waacker - 10 'Riemen' Clas Jacob Heitman [Hittman] – 1 'Partie' [= 4 million sheets] J. Quedeni - 40 'Riemen' Hinrich Gouckes - 234 'Riemen' Booy Garrels - 21 'Packen' Cornel Reents [Remts] – 1 'Partie' [= 4 million sheets] Age Ocken – 2 'Partie' (each time 1 'Partie') [= 8 million sheets] Gerd Teunis – 2 'Partie' (each time 1 'Partie') [= 8 million sheets] L. Trenck – 1 'Partie' [= 4 million sheets] Rolf Janscher – 448 'Riemen' and 48 'Packen' (each) Reicke Jansch - 146 'Riemen' J.L. Jonckes - 12 'Packen' 19 'Riemen' J. Geels – 1 'Partie' [= 4 million sheets] Allewin Allewins 5 'Partie' (each time 1 'Partie') [= 20 million sheets] Martin Treyes - 50 'Riemen' Dirk Thomsen - 45 'Packen' Ocke Olfers – 1 'Partie' [= 4 million sheets] Hinrich Berend Classen – 1 'Partie' [= 4 million sheets] Jan Ehmen - 29 'Packen' Christian Mahncke – 1 'Partie' [= 4 million sheets] Jan Renckes – 1 'Partie' [= 4 million sheets] Johann Arens - 50 'Ries' J.H. Matthies – 1 'Partie' [= 4 million sheets] Jan Harms -1 'Partie' [= 4 million sheets] Johann Heinrich Wichers -1 'Partie' [= 4 million sheets] Jacob Elders – 2 'Partie' (each time 1 'Partie') [= 8 million sheets] Lud. Burger - 195 'Riemen' J. Arend – 400 'Riemen' Jacob P. Ackermann – 1 'Partie' [= 4 million sheets] H. Harms – 153 'Riemen' Jacob B. Rusch – 1 'Partie' [= 4 million sheets]

Chart 4: Importers of paper from Amsterdam to Hamburg, 1780 (and their volumes of paper imported)

Rolf Teunis – 1 'Partie' [= 4 million sheets] Harm Elders – 1 'Partie' [= 4 million sheets] Ocke Olfers – 1 'Partie' [= 4 million sheets] Arend Janscher - 246 'Riemen' Gerd Arens - 383 'Riemen' and 184 'Packen' and 2 'Ries' (each) A. Köster - 260 'Riemen' H.I. Köster – 55 'Packen' P. Amels - 65 'Packen' A. Altman – 441 'Riemen' Wilhelm Wilkens - 150 'Riemen' H.G. Vischer – 232 'Packen' Jan Jansz Bulle – 500 Ries Jan Reimers - 100 'Riemen' P. Rickmers - 91 'Packen' Jurgen Hiescher – 16 'Riemen' D. Rusch - 120 'Packen' Cornel Reents [Remts] – 315 'Packen' Roland Jacobs - 560 'Packen' Cornel Thiescher - 635 'Packen', 100 'Packen', 312 'Riemen' and 333 'Riemen' (each) [= c. 8.7 million sheets] W. Wilckens - 439 'Packen' J.H. Voss - 70 'Packen' Jacob Duncker - 180 'Riemen'

Chart 5: Importers of paper from Amsterdam to Hamburg, 1781 (and their volumes of paper imported)

I.C. Kwackenbrod - 226 'Riemen' Jan Heinrich Kocher - 100 'Packen' J. Joncker - 93 'Packen' P.H. de Boer - 200 'Ries' P. Vischer - 165 'Riemen' and 145 'Riemen' (each) Jan Ehmend - 231 'Packen' Johan Voss - 200 'Packen' Rol Gerts – 187 'Riemen' Clas Jacob Heitman [Hittman] - 119 'Packen' C. Campen – 371 'Packen' H.P. Mollers - 190 'Packen' Peter Hoiles – 214 'Riemen' H. Hildrich – 40 'Packen' Jacob P. Ackerman - 253 'Riemen' Ocke Olfers - 225 'Packen' Roland Jacobs – 483 'Packen' [= c. 3.2 million sheets] Jan Ehmen - 300 'Packen' G. Berend - 310 'Riemen' Peter Dirckes - 29 'Packen' Cl. Hinrichs - 522 'Packen' Jan Huger - 110 'Riemen' L. Behrens - 97 'Riemen' and 1300 'Ries' (each) Jan Janscher - 70 'Riemen' and 124 'Packen' (each) H.J. Ras - 110 'Packen' G. Arends - 103 'Riemen' Christian Mahncke - 269 'Packen' Jan Wiegbers - 182 'Riemen' B. Eilecks - 245 'Packen' L. Gerrits - 360 'Riemen' Peter Breckwoldt - 502 'Riemen' Jan Jochen Brusche – 35 'Packen'

Chart 6: Importers of paper from Amsterdam to Hamburg, 1782 (and their volumes of paper imported)

Jan Christians - 49 'Packen' Dan Pieters - 150 'Packen' J.H. Marckes - 127 'Riemen' Hinrich Riebeling - 75 'Packen' Geerd Jun. de Witt – 99 'Packen', 95 'Riemen' and 357 'Packen' (each) [= c. 3.5 million sheets] David Hinrich Möller - 170 'Packen' Clas Jacob Heitman [Hittman] – 63 'Packen', and 150 'Packen', 100 'Riemen' (each) Jan Janscher – 18 'Riemen' and 71 'Packen' and 257 'Riemen' (each) [Martin or Paul] Gerrits – 216 'Riemen' R. Reies – 112 'Riemen' D. Ocken – 51 'Packen' Christian Mahncke – 340 'Packen', 609 'Packen', 1305 'Packen' (each) [= 16.9 million sheets] [missing first name] Gock – 730 'Packen' [= c. 5.5 million sheets] Paul Gerrits - 20 'Packen' J. Ehmen - 169 'Packen' Jan Rems - 175 'Packen' Jim Aden – 70 'Packen' and 105 'Packen' (each) Cornel Reents [Remts] - 385 'Packen' and 125 'Packen' (each) D. Möller - 25 'Packen', 4 'Ries' Jan Huger - 361 'Riemen' and 110 'Riemen' (each) W. Wiebes - 150 'Riemen' and 80 'Packen' (each) J. Harms - 52 'Riemen' Jacob P. Ackerman - 144 'Packen' Roland Jacobs - 199 'Packen' and 20 'Packen' (each) N. Hinrichs - 110 'Packen' 33 'Riemen' A. Wilbers – 20 'Packen' and 185 'Packen' (each) Piet Jansen – 258 'Packen' and 150 'Packen' (each) H.J. Küster - 12 'Packen' Jürgen Hiescher – 70 'Riemen' R.G. Hevman – 615 'Packen' N. Hein – 180 'Packen' J. Tiescher – 25 'Riemen' M. Gerrits - 172 'Riemen' Albrecht Sietsen - 540 'Riemen' J.J. Kiwitt - 289 'Packen' W. Koch - 217 'Riemen' J. Hinrichs - 573 'Riemen' A.J. Durer – 10 'Packen' J.H. Raas - 57 'Packen' Jan Hügers - 35 'Packen' J.J. Eileis - 185 'Packen' P.H. Doors - 150 'Riemen' Martin Gerrits - 24 'Packen' A. Ackermann - 25 'Packen' C.A. Wiebes - 33 'Packen' Jürgen Heinrich Detgens - 460 'Riemen'

Chart 7: Importers of paper from Amsterdam to Hamburg, 1783 (and their volumes of paper imported)

A. Ackerman – 2 'Packen' and 21 'Riemen' (each) D. Ocken – 350 'Packen' [= c. 2.6 million sheets] H.B. Elffering - 210 'Riemen' T. Geelts - 40 'Packen' H.J. Raas - 41 'Packen' J. Arends - 10 'Packen' Christian Mahncke - 574 'Packen' M. Janscher - 150 'Riemen' Ocke Olfers – 300 'Packen' and 210 'Packen' (each) [= c. 3.8 million sheets] Johan Brüze – 300 'Packen' Jan Janscher - 350 'Riemen' Joh. Hinrichs - 60 'Packen' Johan Jan Hüttman – 75 'Riemen', 15 'Packen' Dreewe Dane - 51 'Packen' C. Hettin - 110 'Packen' B. Behrens - 33 'Packen' Jürgen Arens – 45 'Riemen' Jan Hüger – 25 'Riemen' Junior Rolofs – 170 'Packen' and 567 'Packen' [= c. 5.5 million sheets] Peter Janscher - 868 'Riemen' R. Ahlem - 50 'Packen' H. Jansch - 127 'Packen' and 45 'Packen' (each) Rolf Thiescher - 553 'Packen' and 472 'Packen' (each) J.J. Raas - 73 'Riemen' Rolf Janscher – 732 'Packen' [= c. 5.5 million sheets] A. Wiebes - 190 'Packen' J. Martens - 590 'Riemen' Christian Mahncke – 951 'Packen' [=c. 7.1 million sheets] H.J. Rentes - 98 'Packen' J.A. Ibden - 17 'Packen' J.S. Wouters – 280 'Packen' Peter Reinders – 36 'Riemen' Roland Jacobs - 50 'Riemen' G. Meewes - 360 'Packen' H.G. Kampen - 618 'Packen' J. Martens - 393 'Riemen' J.J. Kiwitt - 52 'Packen' T.J. Staghauser - 106 'Packen' J. Larman - 320 'Packen' G. Witt - 319 'Packen'

Chart 8: Importers of paper from Amsterdam to Hamburg, 1784 (and their volumes of paper imported)

Johan Holst - 54 'Packen' H. Gerrits - 85 'Packen' G. Meewes - 103 'Packen' J.P. Wouters - 50 'Packen', and 125 'Packen', 75 'Riemen' (each) L.W. Scholl - 234 'Packen' T. David - 153 'Packen' J.J. Meyer – 500 'Packen' [= 3.75 million sheets] [J.J. or R.H.] Kiwitt – 36 'Packen' R.C. Hoymann - 200 'Packen' and 210 'Packen' (each) F.J. Witt - 280 'Packen' W. Bonner - 300 'Packen' R. Tedders - 86 'Riemen' Jan Hüger – 60 'Riemen' L. Janscher - 90 'Packen' Ocke Olfers – 200 'Packen' and 232 'Packen' (each) [= c. 1.8 million sheets] D. Ocken - 103 'Packen' and 95 'Packen' (each) R. Reents [Remts] - 150 'Packen', 58 'Riemen' J. Reinders - 471 'Riemen', 35 'Packen' Christian Mahncke – 190 'Packen' and 335 'Packen' (each) [= c. 3.9 million sheets] Rolf Thiescher - 50 'Packen' J.J. Meyer - 97 'Packen' J.H. Marke - 62 'Riemen' Cornel Thiescher - 50 'Packen' C. Classen - 50 'Korb' A.J. Backer - 49 'Packen', 52 'Riemen' J. Jochimz - 120 'Packen' Jacob Davids – 638 'Packen' [= c. 4.8 million sheets] J. Janssen - 263 'Riemen' G.J. de Witt - 50 'Packen' [missing first name] Ahrens – 68 'Packen' Cornel Reents [Remts] – 402 'Packen' Clas Jacob Heitman [Hittman] – 450 'Packen' [= c. 3.4 million sheets] N. Staghauer [Staghauser?] - 94 'Packen', 506 'Riemen' [missing first name] Ackerman - 12 'Packen' J.T. Meyer - 77 'Packen' J. Remts - 10 'Packen', 32 'Ballen' Roland Jacobs - 242 'Packen' D.J. Ritzman - 135 'Packen' R.J. Packler - 393 'Riemen' G.J. Mellema - 546 'Riemen' Jacob Davids - 124 'Riemen' S. Janschen - 100 'Riemen' J. Teunis - 330 'Packen' H. Breckwoldt - 23 'Packen', 81 'Riemen'

Chart 9: Importers of paper from Amsterdam to Hamburg, 1786 (and their volumes of paper imported)

R. Tedders - 216 'Packen' J.H. Vischer - 51 'Packen' Jan Hüger – 95 'Packen' and 31 'Packen' (each) D. Ocken – 730 'Packen' 77 'Riemen' and 670 'Packen' (each) [= c. 10.7 million sheets] J. Vasmer – 529 'Packen' [= c. 3.9 million sheets] Jan Janscher - 340 'Packen' Jan Harms - 20 'Packen', 170 'Riemen' Caspar Hinrichs - 40 'Packen' Clas Jacob Heitman [Hittman] – 110 'Packen' and 364 'Packen' (each) T.J. Staghauser – 586 'Packen' [= c. 4.4 million sheets] Peter Reinders – 99 'Packen' and 80 'Riemen' (each) Ocke Olfers – 462 'Packen' and 578 'Packen' (each) [= 7.8 million sheets] R.H. Kiwitt – 92 'Packen' and 420 'Packen' (each) [= c. 3.8 million sheets] M. Geerds - 141 'Packen' A. Reemts – 104 'Packen' W. Wilckens - 104 'Packen' H. Janscher - 19 'Packen' R.H. Melleman - 32 'Packen' J.T. Meyer - 131 'Packen' Jacob Davids – 492 'Packen' and 414 'Packen' (each) [= c. 6.8 million sheets] J.F. Kloeck - 100 'Packen' H. Albers - 11 'Packen' J. Remts - 30 'Packen' Christian Mahncke - 372 'Packen' Johann Joachim Breckwoldt - 20 'Packen' P.J. Pieters - 163 'Riemen' R.C. Hoyman - 167 'Packen' J. Ahrens - 13 'Packen' H.J. Möller - 377 'Packen'

Chart 10: Importers of paper from Amsterdam to Hamburg, 1787 (and their volumes of paper imported)