

## University of Groningen

### The prize of neutrality

Welling, George Maria

**IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.**

*Document Version*

Publisher's PDF, also known as Version of record

*Publication date:*

1998

[Link to publication in University of Groningen/UMCG research database](#)

*Citation for published version (APA):*

Welling, G. M. (1998). *The prize of neutrality: trade relations between Amsterdam and North America 1771-1817*. [Thesis fully internal (DIV), University of Groningen]. s.n.

**Copyright**

Other than for strictly personal use, it is not permitted to download or to forward/distribute the text or part of it without the consent of the author(s) and/or copyright holder(s), unless the work is under an open content license (like Creative Commons).

The publication may also be distributed here under the terms of Article 25fa of the Dutch Copyright Act, indicated by the "Taverne" license. More information can be found on the University of Groningen website: <https://www.rug.nl/library/open-access/self-archiving-pure/taverne-amendment>.

**Take-down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Downloaded from the University of Groningen/UMCG research database (Pure): <http://www.rug.nl/research/portal>. For technical reasons the number of authors shown on this cover page is limited to 10 maximum.

Rijksuniversiteit Groningen

# The Prize of Neutrality

Trade relations between Amsterdam and North America 1771-1817

a study in computational history

Proefschrift

ter verkrijging van het doctoraat in de  
Letteren  
aan de Rijksuniversiteit Groningen  
op gezag van de  
Rector Magnificus, dr. F. van der Woude  
in het openbaar te verdedigen op  
donderdag 25 juni 1998  
des namiddags te 2.45 uur

door

George Maria Welling  
geboren op 25 augustus 1953  
te Utrecht

Promotoren: prof. dr. ir. J. Nerbonne  
prof. dr. L. Noordegraaf

## Preface

“First things first”, my father used to say. He was right. At the start of this research project in 1984 I never thought it would take me so long to get this job done. There are good reasons for this, but still it has been a burden on our family life. So I think it is only proper that I should express my gratitude towards my wife, Nelleke, and our children, Wouter, Ella, and Sophie first.

When I started this project I worked in a regular history department of the University of Amsterdam, but in 1987 I was invited to come to the Alfa-informatica department (computing in the Humanities) of the University of Groningen. There I was able to give form to my ideas about history and computing and slowly became a *computational historian*. This transformation left its traces in this book.

There are many people who deserve to be mentioned here. I owe a lot to Wim Heeres, who has been a great teacher and fine colleague to me. He discovered the Paalgeld portbooks and has advised me many times during these years. Professor Faber convinced me that this project was made for me. John Nerbonne and Leo Noordegraaf, my promotors, have been inspirational, critical, patient, and have managed to keep the faith that I would bring this to a good end.

Jos Rooijers opened my eyes for the possibilities of the computer for historical research some time around 1980 when we fooled around with his 16 Kb computer. It changed my views and it changed my career: I owe a lot to him. I thank Clé Lesger for his sharp remarks about the general historical chapters of this book. I tested out some of my ideas in conversations with Geurt Colenteur, Annemieke Galema, Marja Roholl, and Bert Jan Flim, and their remarks have been clarifying. Bert Bos and Erik Tjong Kim Sang helped me solve some of the programming problems I encountered.

Over the years numerous students have worked on parts of this research, but I would like to mention Pim Sturm and Antonie Reichenbach, who contributed many good ideas.

Three fine musicians have helped me input all the data: Hans van Straten, Flip de Regt and Kim Middel. We now know for sure that making music is much more fun than historical research. Also I would like to thank all the musicians of the bands I played in during this period: Small Change, de Kofferband, the Bits, and Heavy Klepto. They provided the necessary counterweight to science.

I also would like to thank all the colleagues of the departments I worked in: the department of Social and Economic History, and the department of Economic History of the University of Amsterdam, and the department of Alfa-informatica of the University of Groningen. Many members of the Association for History and Computing and of the Vereniging voor Geschiedenis en Informatica have helped me shape my views on History and Computing.

I would like to thank professor Johannes Postma for sharing some of his unpublished data with me and for being on the reading committee. I also would like to thank the other members of the reading committee professor Pim Kooij and professor Jan Oldervoll.

This book is dedicated to the memory of my parents.

## Table of contents

Table of contents	I
List of tables	IV
List of figures	VII
List of appendices	IX
1 Introduction	1
1.1 A time of changes	1
1.2 History and computing	7
2 Decline after a golden age	21
2.1 The politics of the Dutch Republic in the eighteenth century	21
2.2 Neutrality	24
2.3 British enemies	29
2.4 Economic development of the Republic in the eighteenth century	30
3 The sources: the <i>Paalgeld</i> portbooks and related sources	39
3.1 The source: origins and history of the <i>Paalgeld</i>	40
3.1.1 The " <i>Observantie van den ontfang van 't Paal-gelt</i> " and the <i>Paalgeld</i> portbooks.	42
3.1.2 General provisions of the <i>Observantie</i>	42
3.1.3 Ships of the East and West India Companies	45
3.1.4 Reliability of the <i>Paalgeld</i> portbooks as a source for historical studies	47
3.1.5 The date	49
3.1.6 The name of the ship	54
3.1.7 The name of the ship master	54
3.1.8 The port of departure of the ship	55
3.1.9 A specification of the cargo	56
3.1.10 Totalisation of imposts per cargo	58
3.1.11 Monthly and yearly totals	58
3.2 The quality of data in the <i>Paalgeld</i> portbooks	61
3.2.1 Related sources	62
3.2.1.1 The <i>Convoyen en Licenten</i>	63
3.2.1.2 The <i>Buitenvuurgeld</i>	65
3.2.1.3 The <i>Galjootsgeld</i>	67
3.2.1.4 The <i>Lastgeld en Veilgeld</i>	68
3.2.2 Other sources concerning maritime trade	70
3.2.2.1 The <i>Zeetijdingen</i> in the <i>Amsterdamsche Courant</i>	71
3.2.2.2 The <i>Generale Lijsten</i>	76
3.2.2.3 The <i>Monsterrollen</i>	76
3.2.2.4 The <i>Cherteparthijen</i>	77
3.2.2.5 The <i>Vonnissen van Avery Grosse</i>	77
3.2.2.6 The Soundtol registers.	78
3.2.3 Other publicated sources	79
4 Methodology	80
4.2 The meta source	80
4.4 Considerations in making machine readable forms of historical data	83

4.4.2 Data modeling	86
4.4.4 The input-process	97
4.4.4.2 Rule-based input	101
4.4.4.4 Thesaurus-based input combined with an incremental search algorithm	103
4.4.4.6 Code-based input	105
4.4.6 What are the advantages of these methods?	106
4.4.8 From meta source to encoded source transcript	108
4.4.10 Cross-validation by nominal record linkage	109
4.6 Software used	112
5 The European trade of Amsterdam at the end of the eighteenth century	113
5.1 Periodisation	113
5.2 The trade of Amsterdam in the eighteenth century	115
5.2.1 The interpretation of the sources	115
5.2.2 The number of incoming ships in Amsterdam	118
5.2.2.1 Coding the data	123
5.2.2.2 Correcting Snapper and Oldewelt	126
5.2.3 The trade with various regions	133
5.2.3.1 The value of the trade: prices of commodities	136
5.2.4 The Baltic trade	148
5.2.5 The trade with the <i>Kleine Oost</i> and the Austrian Netherlands.	161
5.2.6 The European Atlantic trade	164
5.2.6.1 The trade with Great Britain	168
5.2.6.2 The trade with Spain	172
5.2.6.3 The trade with Portugal	174
5.2.6.4 The trade with France	175
5.2.7 The Mediterranean trade	178
5.2.7.1 The trade with Italy	181
5.2.7.2 The Black Sea trade and the trade with the African Mediterranean regions	182
5.2.7.3 The Levant trade	183
5.2.8 The intercontinental trade	184
6 Dutch trade with North America 1771 - 1817	188
6.1 Political developments 1771-1817	190
6.2 The trans-Atlantic trade	193
6.2.1 Active or passive trade	204
6.3 The trade with North America	210
6.3.1 Amsterdam's trading partners in the USA	218
6.3.1.1 New York	220
6.3.1.2 Baltimore	222
6.3.1.3 Philadelphia	223
6.3.1.4 Charleston	223
6.3.1.5 Boston	225
6.4 Conclusion	226
7 Conclusion	228
7.1 Methodology	229

7.1.1	The input process .....	230
7.1.2	Data modeling .....	232
7.2	The portbooks of the levy of the <i>Paalgeld</i> .....	233
7.3	The trans-Atlantic trade of Amsterdam .....	235
7.4	The prize of Neutrality. ....	236
8	Nederlandse samenvatting .....	239
8.1	Methodologie .....	241
8.1.1	Het invoer-proces .....	241
8.1.2	Data modeling .....	244
8.2	De havenboeken van de heffing van het Paalgeld .....	245
8.3	De trans-Atlantische handel van Amsterdam .....	247
8.4	De vruchten van neutraliteit. ....	248
9	Bibliography .....	251

## List of Tables

### Chapter 3

Table 1	Monthly total numbers of ships arriving in Amsterdam according to the <i>Paalgeld</i> portbooks.1742, 1771-1787. ....	52
Table 2	Gross and net revenue in guilders of the <i>Paalgeld</i> levy in Amsterdam, 1741, 1771-1815. ....	57
Table 3	Deviations between the revenues computed from the <i>Paalgeld</i> portbooks from the net-revenue figures published by Heeres, 1742, 1771-1816 ....	59
Table 4	Percentage of "ad valorem" imposts of all cargoes mentioned in the <i>Paalgeld</i> portbooks ....	69
Table 5	Differences between the number of ships per region as computed from W.F.H. Oldewelt (1953) and from the <i>Paalgeld</i> portbooks ....	71
Table 6	Number of trans-Atlantic ship arrivals in Amsterdam, 1797-1810, according to data in L. van Nierop (1924) and computed from the <i>Paalgeld</i> portbooks ...	74

### Chapter 4

Table 1	Frequency distribution of input-items and the gain on needed key-strokes per frequency ....	107
---------	---	-----

### Chapter 5

Table 1	Average size in lasts of ships coming from the <i>Kleine Oost</i> , 1742, 1771-1787 according to the <i>Paalgeld</i> portbooks ....	117
Table 2	Differences between the total number of ships counted from the <i>Paalgeld</i> portbooks by Snapper and computer generated ....	119
Table 3	Number of ships arriving from the Baltic in Amsterdam according to the <i>Paalgeld</i> portbooks and the accounts of the levy of the <i>Galjootsgeld</i> , 1742, 1771-1787 ....	121
Table 4	Average error per region of Oldewelts data ....	127
Table 5	Index figures based on the average revenue of the <i>Paalgeld</i> levy, 1734-1810 according to Heeres ....	128
Table 6	Average error in Snapper's data set with respect to various regions ....	129
Table 7	Total number of ships arriving in Amsterdam 1662-1810 ....	130
Table 8	Weighted averages of relative prices of 44 goods according to Posthumus, and recalculated, 1721-1745 ....	139
Table 9	Number of years for which a minimum of one price-notation is available ..	139
Table 10	Estimated value in guilder of the Rhine trade based on Van Nierop's data, 1753- 1800 ....	143
Table 11	Dutch imports according to d'Alphonse in French francs and converted to Dutch guilders compared with the estimates based on the revenue of the <i>Paalgeld</i> , 1803-1809 ....	146
Table 12	Difference between the actual arrivals in Amsterdam according to the <i>Paalgeld</i> portbooks and Sound-passages headed for Amsterdam according to Johansen's calculations from the Sound Toll Accounts. ....	149
Table 13	Total number of ships arriving in Amsterdam and the number and percentage of ships from the Baltic, 1734-1810. ....	150
Table 14	Estimated value in guilders and percentage of the total value of the Baltic trade for four Baltic regions, 1742, 1771-1787 ....	151
Table 15	Number of ships coming to Amsterdam from Baltic regions, 1734-1810. ..	152



Table 16	Estimated value of the trade with the Danish Kingdom in guilders, 1742, 1771-1787 . . . . .	153
Table 17	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with Sweden and Finland, 1742, 1771-1787 . . . . .	155
Table 18	Estimated value of the trade with various regions that were part of Russia in the Napoleonic time and their percentage of the total Russian trade . . . . .	156
Table 19	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with Russia, 1742, 1771-1787 . . . . .	157
Table 20	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with the region from Lubeck to Memel, 1742, 1771-1787 . . . . .	159
Table 21	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with the Austrian Netherlands, 1742, 1771-1787 . . . . .	161
Table 22	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with the <i>Kleine Oost</i> , 1742, 1771-1787 . . . . .	162
Table 23	Number of ships coming from the European Atlantic regions to Amsterdam, 1734-1810 . . . . .	165
Table 24	The European Atlantic trade by country. Estimated value in guilders and the percentages of the total trade. 1742, 1771-1787 . . . . .	166
Table 25	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with Scotland, 1742, 1771-1787 . . . . .	170
Table 26	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with England and Wales, 1742, 1771-1787 . . . . .	170
Table 27	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with Ireland, 1742, 1771-1787 . . . . .	171
Table 28	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with Spain, 1742, 1771-1787 . . . . .	173
Table 29	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with Portugal, 1742, 1771-1787 . . . . .	175
Table 30	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with the Atlantic coast of France, 1742, 1771-1787 . . . . .	177
Table 31	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with the Mediterranean coast of France, 1742, 1771-1787 . . . . .	178
Table 32	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with Italy, 1742, 1771-1787 . . . . .	180

Table 33	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with ports on the Black Sea, 1742, 1771-1787 . . . . .	181
Table 34	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with African Mediterranean ports, 1742, 1771-1787 . . . . .	182
Table 35	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with the Levant, 1742, 1771-1787 . . . . .	183
Table 36	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with the Far East, 1742, 1771-1787 . . . . .	185
Table 37	Estimated value, percentage of the total value of trade, number of ships and average value of the cargoes in the trade of Amsterdam with Africa outside the Mediterranean Seas, 1742, 1771-1787 . . . . .	186
<b>Chapter 6</b>		
Table 1	Number of ships arriving in Amsterdam from the Western Hemisphere according to the data in the <i>Paalgeld</i> portbooks concerning the West-Indian trade 1742, 1771-1817 . . . . .	194
Table 2	Average number of ships arriving in Amsterdam from the Western Hemisphere in 5 periods according to the <i>Paalgeld</i> portbooks . . . . .	196
Table 3	Ship arrivals in Amsterdam from St. Eustatius and the other ports in the West Indies . . . . .	196
Table 4	Estimated value in contemporary guilders of the trans-Atlantic trade based on the revenue of the levy of the <i>Paalgeld</i> in Amsterdam, 1742, 1771-1817 . .	200
Table 5	Estimated average ship cargo value based on the data from the <i>Paalgeld</i> portbooks (West-Indies) for 5 periods in Guilders . . . . .	201
Table 6	The Asian and American trade of Amsterdam compared 1742, 1771-1787. Sources: NHDA data set on Asian Trade and the <i>Paalgeld</i> portbooks . . . . .	203
Table 7	Classification of ship arrivals in Amsterdam from the United States . . . . .	210
Table 8	Total arrivals in Amsterdam from American ports in the period 1742, 1771-1817. . . . .	211
Table 9	Percentage of the estimated value of the total imports from the United States for the 10 most frequently mentioned ports of departure, and of all Southern and Northern ports, 1742, 1771-1817 . . . . .	213
Table 10	Ship arrivals from New York in Amsterdam and the estimated total and average value of the cargoes 1742, 1771-1817 . . . . .	220
Table 11	Ship arrivals from Baltimore in Amsterdam and the estimated total and average value of the cargoes 1742, 1771-1817 . . . . .	221
Table 12	Ship arrivals from Philadelphia in Amsterdam and the estimated total and average value of the cargoes 1742, 1771-1817 . . . . .	222
Table 13	Ship arrivals from Charleston in Amsterdam and the estimated total and average value of the cargoes 1742, 1771-1817 . . . . .	224
Table 14	Ship arrivals from Boston in Amsterdam and the estimated total and average value of the cargoes 1742, 1771-1817 . . . . .	225

## List of Figures

### Chapter 1

Figure 1	The process of historical research	12
Figure 2	The role of computing in the historical process	15
Figure 3	The centrality of databases in the historical process	16

### Chapter 2

Figure 1	Number of ships arriving in Amsterdam from France from the Atlantic and Mediterranean ports, 1741, 1771-1787	27
Figure 2	Number of ships arriving in Amsterdam from the USA 1741, 1771-1787.	28
Figure 3	Amsterdam's imports and exports to and from Europe and neighboring regions, 1697-1798. Index 1720=100.	30
Figure 4	Corrected index of the total Revenues of the <i>Convoyen</i> and <i>Licenten</i> . Index 1720=100.	32
Figure 5	Percentage of Amsterdam's share in the revenue of the <i>Convoyen</i> and <i>Licenten</i> in 13 year moving averages, 1698-1795.	33
Figure 6	Revenue of the <i>Convoyen</i> and <i>Licenten</i> of the "kantoren" Amsterdam and Rotterdam in 13 year moving averages, 1698-1795.	34
Figure 7	Revenue of the <i>Convoyen</i> and <i>Licenten</i> for the "kantoren" Harlingen and Delfzijl in 13 year moving averages, 1698-1795.	35
Figure 8	Revenues in guilders of the <i>Paalgeld</i> and <i>Convoyen</i> and <i>Licenten</i> 1700-1800 in 13 year moving averages semilog.	36
Figure 9	Revenues in guilders of the <i>Havengeld</i> in Rotterdam and of the <i>Paalgeld</i> in Amsterdam.	37

### Chapter 3

Figure 1	Frontpage of the printed version of the <i>Observantie van den Ontfang van 't Paalgeld</i> from 1747	39
Figure 2	First page of the printed version of the <i>Observantie van den Ontfang van 't Paalgeld</i> from 1747	43
Figure 3	Scan of a page from the Portbooks of the <i>Paalgeld</i> levy	49
Figure 4	Seasonal patterns in the number of ship arrivals in Amsterdam, 1742, 1771-1786.	51
Figure 5	Relation between the number of ships and the average amount of <i>Paalgeld</i> paid. Based on the data for 1742, 1771-1787	53
Figure 6	Revenues of the <i>Convoyen en Licenten</i> and the <i>Paalgeld</i> , 1712-1823.	64
Figure 7	Data from the <i>Paalgeld</i> portbooks compared with data from the <i>Vuurgeld</i> , 1778-1787	66
Figure 8	Revenues in guilders of the <i>Lastgeld</i> 1698-1798	68
Figure 9	Total number of ships coming to Amsterdam, according to Oldewelt (1953) and as computed from the <i>Paalgeld</i> , 1734-1793	72

### Chapter 4

Figure 1	Sample page from the <i>Paalgeld</i> portbooks, March 4, 1778	84
Figure 2	Relations in the <i>Paalgeld</i> portbooks	90
Figure 3	Normalized form for the <i>Paalgeld</i> portbook data	92
Figure 4	Example of limited carry over from the <i>Paalgeld</i> input program	101
Figure 5	Example of a recall of the last entry in the input program	102
Figure 6	Screen dump from the input program for the West Indian trade.	104

Figure 7	Screen dump from the input program showing a pick list and the codes for coded-input .....	105
<b>Chapter 5</b>		
Figure 1	Total number of ships arriving in Amsterdam 1662-1810 .....	131
Figure 2	Regional breakdown of the origin of ships arriving in Amsterdam compiled from various sources 1734-1810 .....	135
Figure 3	Amount of <i>Paalgeld</i> paid according to Heeres (1982) and the amount of <i>Paalgeld</i> computed from the Van Nierop's (1917, 1922) data 1753-1800 ..	142
Figure 4	100% chart of the estimated value of Amsterdam's overseas trade with various regions 1741-1799 .....	144
Figure 5	Number of ships coming from the Baltic area to Amsterdam, 1734-1810 ..	148
<b>Chapter 6</b>		
Figure 1	Estimated cargo value of ships arriving in Amsterdam from the Western hemisphere, 1771-1817 .....	202
Figure 2	Nationalities of ship masters arriving from the West Indies, 1742, 1771-1817 in a 100% chart .....	204
Figure 3	Nationalities of ship masters arriving from the North America, 1742, 1771-1817 in a 100% chart .....	206
Figure 4	Nationalities of ship masters arriving from the South America, 1742, 1771-1817 in a 100% chart .....	208
Figure 5	North American coast .....	211
Figure 6	Number of ships arriving in Amsterdam from Northern and Southern USA states, 1742, 1771-1817 .....	212
Figure 7	Estimated value in guilders of the trade of Amsterdam with Northern and Southern USA states, 1742, 1771-1817 .....	214

## List of Appendices

Printing out these data-sets would require several thousand pages and would not be very practical. Hence I have decided to provide the appendices in electronic form on the Internet, so that the data can be used immediately for other purposes. The URL for the index-page to the appendices is:

<http://www.let.rug.nl/~welling/paalgeld/appendix.html>

Copying for scientific and educational purposes is allowed, if proper reference is given. On demand I can make cd-rom versions of the appendices for cost-price: please contact me via e-mail: [welling@let.rug.nl](mailto:welling@let.rug.nl).

### New datasets

(in dBase format or MS-Access)

1. *Havenboeken van de heffing van het Paalgeld* (European trade) 1742, 1771-1787
2. *Havenboeken van de heffing van het Paalgeld* (West Indian trade) 1742, 1771-1817
3. Monthly Accounts and Year accounts Paalgeld 1742, 1771-1817
4. Codebook Port names
5. Codebook Products
6. *Monsterrollen en Cherte Partijen* 1778
7. *Vonnissen van Averij Grosse* 1778
8. Incoming shipping according to the Ship tidings in the *Nieuwe Amsterdamsche Courant* 1778
9. Bills of Lading 1778

(in HTML format)

1. Imports to Amsterdam 1742, 1771 - 1787 breakdown in Products. Source : Portbooks of the Levy of the Paalgeld
2. Imports to Amsterdam 1742, 1771 - 1787 Regional breakdown: estimated total value of the trade, total Paalgeld levy, and number of ships.
3. Import to Amsterdam 1742, 1771 - 1787 Product per region.

### Machine readable versions of older datasets

(in dBase format or MS-Access)

1. *Convoyen en Licenten* (De Vries)
2. Ship Tidings (Oldewelt)
3. Imports to Amsterdam (Posthumus, Van Nierop, d'Alphonse)
4. Incoming shipping (Van Nierop)
5. General Lists (*Generale Lijsten* - Snapper)
6. Veilgeld (Oldewelt)

(in HTML format)

1. Imports and exports of the Kingdom of Holland (before 1806: the Batavian Republic) from: F.J.B. d'Alphonse, Appercu sur la Hollande
2. Shipping to and from the Netherlands. source: L. van Nierop : Amsterdam's scheepvaart in den Franschen tijd in : Jaarboek Amstellodamum 21 (1924),119-139

© 1998 on all datasets by George M. Welling