



Money Matters in European Artworks and Literature, c.1400-1750



Visual and Material Culture, 1300-1700

A forum for innovative research on the role of images and objects in the late medieval and early modern periods, *Visual and Material Culture*, 1300-1700 publishes monographs and essay collections that combine rigorous investigation with critical inquiry to present new narratives on a wide range of topics, from traditional arts to seemingly ordinary things. Recognizing the fluidity of images, objects, and ideas, this series fosters cross-cultural as well as multi-disciplinary exploration. We consider proposals from across the spectrum of analytic approaches and methodologies.

Series Editor

Allison Levy is Digital Scholarship Editor at Brown University. She has authored or edited five books on early modern Italian visual and material culture.



Money Matters in European Artworks and Literature, c.1400-1750

Amsterdam University Press



Cover illustration: Jean Saint and Francois Thuret, Detail of lid of Box of the Dutch West India Company, 1749, Rijksmuseum, Amsterdam.

Cover design: Coördesign, Leiden Lay-out: Crius Group, Hulshout

ISBN 978 94 6372 607 8 e-ISBN 978 90 4855 578 9 DOI 10.5117/9789463726078

NUR 654

© The authors / Amsterdam University Press B.V., Amsterdam 2022

All rights reserved. Without limiting the rights under copyright reserved above, no part of this book may be reproduced, stored in or introduced into a retrieval system, or transmitted, in any form or by any means (electronic, mechanical, photocopying, recording or otherwise) without the written permission of both the copyright owner and the author of the book.

Every effort has been made to obtain permission to use all copyrighted illustrations reproduced in this book. Nonetheless, whosoever believes to have rights to this material is advised to contact the publisher.



Table of Contents

Lis	st of Illustrations	7
Ac	eknowledgments	13
In	troduction: Embodying Value Joanna Woodall with Natasha Seaman	15
Po	ower and Authority in the Mint	
1.	Weighing Things Up in Maarten de Vos's <i>Tribunal of the Brabant Mint</i> 1594 Joanna Woodall	- 47
2.	Scaling the World: <i>Allegory of Coinage</i> and Monetary Governance in the Dutch Republic Sebastian Felten and Jessica Stevenson Stewart	79
Cı	urrency and the Anxieties of Global Trade	
3∙	Market Stall in Batavia: Money, Value, and Uncertainty in the Age of Global Trade Angela Ho	107
4.	Beyond the Mint: Picturing Gold on the Rijksmuseum's <i>Box of the Dutch West India Company</i> Carrie Anderson	131
Co	oins and Persons	
5.	The Heft of Truth: Inwardness and Debased Coinage in Shakespeare's Plays Rana Choi	155
6.	Identity, Agency, Motion: Taylor's Twelvepence and the Poetry of Commodity Heather G.S. Johnson	179



Coins in and out of Circulation

7. Margarethe Butzbach and the Florin Extorted by Blows Coins Securing Social Bonds in Fifteenth-Century Germany Allison Stielau	203
8. Centring the Coin in Jacob Backer's <i>Woman with a Coin</i> Natasha Seaman	227
Credit and Risk	
9. Accounting Faith and Seeing 'Ghost Money' in Masaccio's <i>Tribute Money Roger J. Crum</i>	253
10. Monetary Transactions and Pictorial Gambles in Georges de La Tour Dalia Judovitz	273
Afterword	
The Work of Art: The Installations of Kelli Rae Adams Natasha Seaman	299
Index	309



List of Illustrations

I	Leonhard Beck, <i>The Young Emperor Maximilian Visiting a Mint</i> ,	
	\emph{c} . 1514–1516, woodcut, dimensions unknown, for Marx Treitzsau-	
	erwein, Der Weißkunig, privately circulated, 1526. Illustration	
	from the edition commercially published by Joseph Kurzboeck,	
	Vienna, 1775. Cleveland, The Cleveland Museum of Art.	19
II	Jost Amman (designer), Hartman Schopper (author), Monetarius,	
	1568, woodcut and letterpress, 148 \times 79 mm (print 90 \times 61), from	
	Panoplia Omnium Illiberalium Mechanicarum (The Book of	
	Trades), Frankfurt: Sigmund Feierabend, 1568.	20
III	Unknown artist, Group Portrait of Mintmaster Clemens van	
	Eembrugge and His Companions, 1581, oil on panel, dimensions	
	unknown. 's-Heerenberg, Netherlands, Huis Bergh Castle.	21
IV	Unknown Indo-Christian artist, The Virgin of Mount Potosí,	
	c. 1740, oil on canvas, dimensions unknown. Potosí, Museo de la	
	Casa Nacional de Moneda.	27
V	Jacob Jonghelinck, medal of Philip II of Spain to commemorate	
	the victory of Saint Quentin. Obverse: Philip II laureate, reverse:	
	Saint Quentin with commemorative inscription, 1557, silver, 35	
	mm diameter. Location unknown.	34
VI	Frans Francken the Younger, The Cabinet of a Collector with	
	Paintings, Shells, Coins, Fossils and Flowers, 1619, oil on panel,	
	85×56 cm. Antwerp, Koninklijk Museum voor Schone Kunsten.	35
1.1	Maarten de Vos, The Tribunal of the Brabant Mint, datable to	
	1594, oil on panel, 142.5 $ imes$ 187.5 cm. Antwerp, Museum Snijders	
	Rockoxhuis (KBC Bank).	48
1.2	List of the Officers depicted in Maarten de Vos, The Tribunal of	
	the Brabant Mint. Original lost, formatted as transcribed by the	
	antiquarian Jan Baptist van der Straelen (1761–1847).	51
1.3	Maarten de Vos, drawing for The Tribunal of the Brabant Mint,	
	datable to \emph{c} . 1594, pen and brown ink and wash over black	
	chalk within brown-ink framing lines, 29.5 \times 39.8 cm. Antwerp,	
	Museum Snijders Rockoxhuis (KBC Bank).	52
1.4	Unknown designer, real of Philip II, Mint of the Duchy of Bra-	
	bant, Antwerp, 1555–1576. Obverse and reverse, gold, dimensions	
	unknown. Amsterdam, The National Numismatic Collection,	
	managed by De Nederlandsche Bank.	54



1.5	Pieter Paul Rubens, sketch for The Arch of the Mint (front with	
	<i>Moneta</i>), datable to c. 1635, oil on panel, 104×71 cm. Antwerp,	
	Koninklijk Museum voor Schone Kunsten.	58
1.6	Pieter van der Borcht, Public Stage on the Market Place,	
	1594–1595, etching, 32.5 × 20.4 cm, from Joannes Bochius,	
	Descriptio Publicae Gratulationis, Spectaculorum et Ludorum, in	
	Adventu Sereniss. Principis Ernesti Archiducis Austriae, Antwerp:	
	Ex Officina Plantiniana, 1595. Amsterdam, Rijksmuseum.	60
1.7	Ioan Wouters, apprentice proof of competence. Obverse: Saint	
	John the Baptist, reverse: moneyer's balance, April 1614, silver, 25	
	mm diameter. Antwerp, Museum aan de Stroom.	54
1.8	Detail from Joost Amman (designer), Michael Manger (printma-	
	ker), Aigentliche Abbildung deß Gantzen Gewerbs der Löblichen	
	Kauffmanschafft und Fürnehmsten Handelstadt (Allegory of	
	Commerce, the Glory of Antwerp), 1585, woodcut and letterpress,	
	108.5×88.2 cm (complete print). London, British Museum.	64
1.9	Guillaum de Neve, boxed coin weights and hand balance	
	for weighing silver coins, c . 1644, various media, dimensions	
	unknown. Amsterdam, The National Numismatic Collection,	
	managed by De Nederlandsche Bank.	69
2.1	Romeyn de Hooghe (attributed), Allegory of Coinage, after 1681,	
	oil on canvas, 135 \times 178 \times 8.3 cm. Amsterdam, Rijksmuseum.	80
2.2	Unknown designer, <i>duit</i> , <i>c</i> . 1590–1596. Reverse, copper, 24 mm	
	diameter. Amsterdam, Rijksmuseum.	84
2.3	Unknown designer, guilder of the Dutch Republic, Mint of	
	Holland, Dordrecht, 1682. Obverse, silver, 33 mm diameter.	
	Amsterdam, Rijksmuseum.	85
2.4	Theodor de Bry, "Nigritae in Scrutandis Venis Metallicis/	
	ab Hispanis in Insulas" (Blacks Examining Metallic Veins/	
	from Spaniards on the Islands), Part 5 of Americae, Frankfurt	
	am Main, 1595, engraving, image 15.9 $ imes$ 19.5 cm (overall	
	34.5×23.5 cm). London, The Wellcome Collection.	86
2.5	Romeyn de Hooghe, "Vastgestelde Geloof" (Established Faith),	
	Chapter 36 of his Hieroglyphica oft Merkbeelden der Oude Vol-	
	keren, Amsterdam, 1735, etching, overall 26 $ imes$ 19.2 cm. Urbana,	
	The Rare Book & Manuscript Library, University of Illinois at	
	Urbana-Champaign.	88
2.6	Romeyn de Hooghe, "Van de Joodsche Stand by Christus Tyden"	
	(On the Position of the Jews at the Time of Christ), Chapter	
	30 of his Hieroglyphica oft Merkbeelden der Oude Volkeren,	



LIST OF ILLUSTRATIONS 9

	Amsterdam, 1735, etching, overall 26×19.2 cm. Urbana, The	
	Rare Book & Manuscript Library, University of Illinois at	
	Urbana-Champaign.	89
2.7	Jan Luyken, "De Munter" (The Coiner), from Casper Luyken and	
	Jan Luyken, Spiegel van het Menselyk Bedryf, Amsterdam, 1704,	
	etching, 14.3 $ imes$ 8.1 cm. Amsterdam, Rijksmuseum.	91
2.8	Romeyn de Hooghe, "Peace before the Invasion of France,"	
	Schouwburg der Nederlandse Verandering, Amsterdam, 1674,	
	etching, 23.2 \times 35 cm. London, The British Museum.	95
2.9	Simon Fokke, Willem V Neemt Zitting als Bewindhebber bij	
	de VOC (Willem V Sits as Director of the VOC), 1768, etching,	
	29.7 × 40.4 cm. Amsterdam, Rijksmuseum.	97
3.1	Andries Beeckman (attributed), A Market Stall in Batavia, c. 1650s-	
	1660s, oil on canvas, 106 \times 174.5 cm. Amsterdam, Rijksmuseum.	97
3.2	Julius Milheuser after Johannes Vinckboons, View of Batavia,	
	1619–1680, etching, 42.7 \times 95.1 cm. Amsterdam, Rijksmuseum.	112
3.3	Andries Beeckman, The Castle of Batavia, 1661, oil on canvas,	
	108 × 151.5 cm. Amsterdam, Rijksmuseum.	113
3.4	Gabriel Metsu, A Woman Selling Poultry and Fish, 1656–1658.	
	Kassel, Gemäldegalerie Alte Meister.	114
3.5	Joachim Beuckelaer, Vegetable Seller, 1563, oil on panel,	
	112.2 × 163.5 cm. Valenciennes, Musée des Beaux-Arts.	114
3.6	Gabriel Metsu, Vegetable Market in Amsterdam, c. 1660, oil on	
	canvas, 97 × 83 cm. Paris, Musée du Louvre.	115
3.7	Marinus van Reymerswaele, Moneychanger and His Wife, 1538,	
	oil on panel, 79 $ imes$ 107 cm. Madrid, Museo del Prado.	120
3.8	Quentin Metsys, Money Changer and His Wife, 1514, oil on panel,	
	74 × 68 cm. Paris, Musée du Louvre.	122
4.1	Jean Saint and François Thuret, box of the Dutch West India	
	Company, 1749, gold, tortoiseshell, velvet, $5.8 \times 18 \times 11.9$ cm	
	(h/l/w). Amsterdam, Rijksmuseum.	134
4.2	Jean Saint and François Thuret, box of the Dutch West India	
	Company (detail, lid), 1749, gold, tortoiseshell, velvet, $5.8 \times 18 \times $	
	11.9 cm (h/l/w). Amsterdam, Rijksmuseum.	135
4.3	Jean Saint and François Thuret, box of the Dutch West India	
	Company (detail, "Curaçao"), 1749, gold, tortoiseshell, velvet,	
	$5.8 \times 18 \times 11.9$ cm (h/l/w). Amsterdam, Rijksmuseum.	136
4.4	Jean Saint and François Thuret, box of the Dutch West India	
	Company (detail, "St. George Delmina"), 1749, gold, tortoiseshell,	
	velvet $z \times 18 \times 11 \text{ o.cm} (h/l/w)$ Amsterdam Rijksmuseum	126



4.5	Jean Saint and François Thuret, box of the Dutch West	
	India Company (detail, base), 1749, gold, tortoiseshell, velvet,	
	$5.8 \times 18 \times 11.9$ cm (h/l/w). Amsterdam, Rijksmuseum.	137
4.6	Pieter Jannsen Bas, 12-guilder emergency coin issued by the	
	Dutch West India Company during the Portuguese siege of	
	Pernambuco. Obverse and reverse, 1645–1646, gold, 18 × 18 mm.	
	Amsterdam, Rijksmuseum.	147
4.7	Unknown designer, medal struck by the Groningen chamber	
	of the Dutch West India Company, 1683. Obverse and reverse,	
	silver, 45 mm diameter. Amsterdam, Rijksmuseum.	148
5.1	Unknown designer, "Old Coppernose" English testoon,	
	1546–1551. Obverse, silver and copper, dimensions unknown.	
	Llantrisant, Pontyclun, The Royal Mint Museum.	159
6.1	Unknown designer, shilling of Edward VI, r. 1550–1553. Obverse	
	and reverse, silver, 31.8 mm diameter. New Haven, CT, Yale	
	University Art Museum.	185
6.2	John Taylor, A Shilling, or The Travailes of Twelve-Pence,	
	frontispiece, 1621, woodcut and print, dimensions unknown. San	
	Marino, CA, Huntington Library.	187
7.1	Wenzel von Olmütz, Woman Weighing Coins, c. 1480, engraving,	
	dimensions unknown. Paris, Bibliothèque Nationale de France.	208
7.2	Unknown designer, florin, Miltenberg, 1350–1353. Reverse and	
	obverse, gold, dimensions unknown. Stuttgart, Münzkabinett,	
	Landesmuseum Württemberg.	210
7.3	Unknown designer, guilder, Mainz, 1491. Reverse and obverse,	
	gold, 23 mm diameter. Berlin, Münzkabinett, Staatlichen	
	Museen zu Berlin.	212
7.4	Hans Schaur, Warning about Counterfeit Coins, 1482, hand-colou-	
	red woodcut, 22.2 \times 15.6 cm. Munich, Bayerische Staatsbibliothek.	213
7.5	Israhel van Meckenem, The Fight over the Trousers, c. 1495,	
	engraving, 16.8 \times 10.9 cm. Chicago, Art Institute of Chicago.	221
8.1	Jacob Backer, Woman with a Coin, c. 1636, oil on canvas,	
	64.5×56.5 cm. Lisbon, Museu Nacional de Arte Antiga.	228
8.2	Jacob van der Merck, Woman with a Coin, 1628–1658, oil on panel,	
	78×64 cm. Dieren (Rheden), art dealer D. Katz.	230
8.3	Hans Memling, Portrait of a Man with a Roman Coin, c. 1480, oil	
	on panel, 23×31 cm. Antwerp, Royal Museum of Fine Arts.	231
8.4	Unknown designer, one ducat, Erfurt, Germany, 1634. Obverse,	
	gold, 21.3 mm diameter. Washington, DC: Division of Work and	
	Industry National Museum of American History	222



LIST OF ILLUSTRATIONS 11

8.5	Jacob Backer, Portrait of a Family Group with the Preaching	
	of John the Baptist, c. 1637, oil on canvas, 140.6 \times 151.1 cm. Sale	
	Stuttgart (Nagel), 24–26 September 1979.	235
8.6	Crispijn van de Passe the Younger, title page, Spiegel der Alder-	
	schoonste Cortisanen (Mirror of the Most Beautiful Courtesans),	
	1631, engraving, 14 $ imes$ 19.2 cm. Amsterdam, Rijksmuseum.	238
8.7	Detail of Figure 8.1.	244
9.1	Masaccio, <i>Tribute Money</i> , mid-1420s, fresco, 247×547 cm.	
	Florence, Brancacci Chapel, S. Maria del Carmine.	254
9.2	Jacopo di Cione and Niccolò di Pietro Gerini, Coronation of the	
	<i>Virgin</i> , 1372–1373, tempera on panel, 350 $ imes$ 190 cm. Florence,	
	Galleria dell'Accademia.	255
9.3	Unknown designer, florin, Florence, after 1252. Obverse and	
	reverse, gold, 19 mm diameter. New Haven, CT, Yale University	
	Art Gallery.	257
9.4	Lorenzo Ghiberti, St. Matthew, 1419–1423, bronze, 270 cm.	
	Florence, Museo di Orsanmichele.	258
10.1	Georges de La Tour, Payment of Taxes (Payment of Dues),	
	c. 1618–1620, oil on canvas, 99 × 152 cm. Lviv, Lviv National Art	
	Gallery.	275
10.2	Joachim Anthonisz. Wtewael, Adoration of the Shepherds, signed	
	and dated 1607, oil on canvas, 35.5 \times 48.5 cm. Vienna, Kunsthis-	
	torisches Museum.	276
10.3	Marinus van Reymerswaele, The Parable of the Unjust Steward,	
	c. 1540, oil on panel, 77 $ imes$ 96.5 cm. Vienna, Kunsthistorisches	
	Museum.	278
10.4	Georges de La Tour, The Cheat with the Ace of Diamonds, c. 1635,	
	oil on canvas, 106 × 146 cm. Paris, Musée du Louvre.	282
10.5	Jacques Callot, <i>The Card Game, or the Prodigal Son</i> , 1628, etching,	
	22×28 cm. Princeton, Princeton University Art Museum.	283
10.6	Georges de La Tour, <i>The Fortune Teller, c.</i> 1630–1634, oil on	
	canvas, 101.9 \times 123.5 cm. New York, Metropolitan Museum of Art.	286
10.7	Georges de La Tour, <i>The Denial of Saint Peter</i> , 1650, oil on canvas,	
	135.2 × 175.6 cm. Nantes, Musée des Beaux-Arts.	288
10.8	Georges de La Tour, <i>The Dice Players</i> , c. 1650, oil on canvas,	
	92.2 $ imes$ 130.5 cm. Stockton-on-Tees, Preston Hall Museum.	289
A.1	Kelli Rae Adams, Breaking Even, 2013, installation, porcelain,	
	porcelain greenware, foodstuffs, canning jars, water, overall	
	15 \times 20 \times 40 ft. (4.6 \times 6 \times 12 m). Providence, RI, Granoff Center for	
	the Creative Arts, Brown University.	301



A.2	Kelli Rae Adams, Forever in Your Debt, 2019–, Installation, wheel-	
	thrown stoneware and collected coins, dimensions variable	
	(each bowl approximately 15 cm diameter). Washington, DC,	
	Corcoran School of the Arts and Design.	302
A.3	Kelli Rae Adams, Beg, Borrow, Steal (detail), 2019, installation,	
	US dollar bills, adhesive, gouache, water colour, graphite, each	
	140 × 178 cm.	303



Acknowledgments

The editors wish to thank Casey Caldwell, Stephen Deng, Caylen Heckel, Lauren Jacobi, Christine Göttler, Elizabeth Honig, Diane Wolfthal, and Michael Zell for their contributions to the ideas presented in this volume. It has also been a pleasure to work with the authors who have contributed chapters to this book.

Natasha Seaman would further like to acknowledge Anthony Apesos, Amanda Seaman, and Pam Mullins for their assistance throughout the project, as well as the librarians at the Adams Library at Rhode Island College.

Joanna Woodall would like to extend her thanks to the staff of the Department of Coins and Medals at the British Museum, who supported her initial interest in this topic, and to Mechthild Fend, Rose Marie San Juan, Katie Scott and the members of the Courtauld Early Modern Research Group 2020-21.

Aspects of this project were supported by the Committee on Faculty Scholarship and Development at Rhode Island College and by the Research Committee of the Courtauld Institute of Art. This is much appreciated.



Introduction: Embodying Value

Joanna Woodall with Natasha Seaman

This book explores ways in which the potent and elusive concept of money was embodied and visualised in Western European culture between 1400 and 1750. At a moment when we increasingly use plastic cards or bank transfers to pay for goods and services and digital currency is gaining ground, the book concentrates on precious coins as artefacts and agents within works of art and literature. Topics range from Masaccio's Tribute Money in early fifteenth-century Florence, to a satirical poem in Stuart London, to a gold and tortoiseshell box presented to Prince Wilhelm IV of Orange by the Dutch West India Company in 1749. Coins' double-sided form, emblematic character and the precious materials from which they were made had deep resonance in European culture and cultural encounters. The efficacy of coins depended on faith in their intrinsic value and on the authority impressed into them, putatively guaranteed through the institution of the Mint. At the same time, coins also spoke of illusion, debasement, and counterfeiting. By exploring the signifying potential of precious coins in artefacts and different kinds of literature, this book considers parallels and intersections between early modern concepts of money and the ways in which meaning was produced by works of art.

"Money, which we hope to see and hold every day, is diabolically hard to comprehend in words," writes James Buchan in *Frozen Desire* (2001), his highly regarded exploration of views of money across time and place.² Money, as distinct from coins or notes or other tokens, is not in itself a material object but rather a medium of exchange, a means of enabling goods to circulate more easily and quickly. A monetary system overcomes the stoppages in a barter system caused by one party to an exchange not having anything to offer that is agreed or judged to be of equal value to the thing offered by the other party. For example, the catch of fish offered by Amir may not be deemed to be worth as much as the sack of corn offered by Bashaam, not because of any intrinsic or absolute difference in their value but rather due to a whole variety of factors such as Bashaam's taste for fish,

- 1 Deng, "Introduction," Money in the Renaissance (electronic resource, n.p., Paragraph 9).
- 2 Buchan, Frozen Desire, 17.

Seaman, N., and J. Woodall (eds.), *Money Matters In European Artworks and Literature, c.1400-1750*. Amsterdam: Amsterdam University Press, 2022
DOI 10.5117/9789463726078_INTRO



desire to have that amount of a perishable commodity all at once, the amount of fish available elsewhere and even her willingness to spend her time bartering. A monetary system circumvents some of these issues through the device of price. It also provides the means for Amir to obtain the sack of corn he wants by paying an amount to Bashaam in numerical units of a medium of exchange, an intermediary instrument that represents an agreed standard of value. This numerical amount can then be stored by Bashaam and mobilised in the future as purchasing power to obtain the desired quantity of what she actually wants, at any time and from anywhere participating in the monetary system.

For the monetary system to work, there must be units of purchasing power, like units of electric power or current, so that the price of a commodity can be agreed or set numerically. The units of money used in the establishment of prices and the settlement of transactions are called currency. This has historically taken the form of material tokens that can be physically counted, transported and stored. Today money has become fiat currency, not pegged to the price or availability of a physical commodity, increasingly digital and "stored" online. Value ascribed to the currency as a tangible artifact is now apparently irrelevant, although the graphic designs of cryptocurrencies reveal that the visual form of the coin form still has potency. The essential thing seems to be that there is a general willingness to agree to and trust in a displayed unit of value and to rely on it to power future transactions.

The difficulty in grasping money, as Buchan suggests, comes in part from our intense familiarity with it. It is no less demanding to comprehend how money and currency were imagined half a millennium ago in Europe. Gold and silver coins united a "noble" metal – perceived to have intrinsic value – with a physical imprint - consisting of both texts and images - that expressed the presence of the authority that guaranteed the coin's specific value.3 This dual character differs from other forms of currency then used across the globe, such as cowrie shells, beads, cacao beans, textiles and animal skins. Bronze tokens or coins had been used in China since the millennium before Christ and paper "flying cash" was used early in the Song dynasty (960-1279) by elite merchants and financiers in Szechuan, where printing had been invented.⁴ By the end of the sixteenth century, however, China had become a silver-based economy, in the form of both bullion and coins.⁵ In Europe, by contrast, the expansion of trade into Asia and the Americas, the growing volume of circulating coin and the extension of trade routes made it more convenient and safer to issue promissory notes that promised to pay on demand, rather than physically transport large quantities of cash. Yet gold and silver coins

⁵ Flynn and Giráldez, "Silver Spoon," 207-209.



³ For definitions of money and further literature: Wang, "Textiles as Money," 165-166; Pettifor, *Just Money*, 15-69. On value: Simmel, *Philosophy of Money*, 56-200; Appadurai, *Social Life of Things*, 3-63.

⁴ Von Glahn, Fountain of Fortune, 43-44; Wang, "Textiles as Money," 165-168.

remained an immensely powerful form of money; indeed, acquiring the bullion to make it motivated much international expansion.

The coin's familiar circular form, with images and words literally beaten into it, had both a long pedigree and sacred significance, particularly in Christendom and the ancient civilizations of the Mediterranean. Christ's incarnation offered a model of divine authority in embodied form. Marc Shell, whose work on art and money is foundational, states:

Money is a particularly tender subject in Christian thinking because money is a universal equivalent and also because money expresses, as does Jesus as god-man, a manifestation of an ideal *and* a real thing. Money is thus understood as a manifestation of authority and substance, of mind and matter, of soul and body; [...] Money is the expression of inscription and inscribed.⁷

In the sixteenth century, the construction of value as both intrinsic and imprinted relates to theological debates between Protestant reformers and Catholics about whether sacred objects of faith have inherent "presence" or are "representations" of a divine power that exists elsewhere. In what sense, if any, did a potent force that could fulfil every desire in life or the afterlife reside in a statue of Christ or in the eucharistic wafer – or in a gold coin?8 Unlike the promissory note on paper, which was recognisably a form of performative rhetoric whose efficacy was dependent upon trust between those party to it, the coin ideally *embodied* the (purchasing) power of its possessor, so that the acquisition and exchange of goods no longer had to involve an immediate personal encounter - it could be deferred to a different time and place. This power originated not only in the value of the precious metal in the coin but also in the issuing authority, a prince or governing body, which claimed to derive its own sovereignty ultimately from God. Bonds of faith and law between the issuing authority and those who produced and used their coins created, through their joint commitment to it, an entity that could claim to be "backed up," guaranteed and absolute. At the same time, the spread of the new technology of printing on paper began to challenge received belief in physical impress as a means of transmitting authority (like a wax seal) and introduced the possibility that the multiple could be merely an "empty" reproduction or representation of an authoritative original that existed elsewhere.9 Thus the coin was central to shifting and contested conceptions of knowledge and value in the early modern period.

- 6 Gorini, "The Coin."
- 7 Marc Shell, Art and Money, 8. See also this volume, Choi.
- 8 Woodall, "'De Wisselaer'," 51.
- 9 On contact as a means of transmitting knowledge and presence, see Balfe and Woodall, *Ad vivum*, 19-21. Compare Benjamin, "Mechanical Reproduction;" Deng, "Money, Ritual and Religion" (electronic resource, n.p. Paragraph 12).



In contrast to the claims made for coinage, the value of individual coins was in practice variable, uncertain and difficult to determine. To begin with, the traditional method of striking coins by hand does not create identical products, although it sustains this ideal. A woodcut of the 1510s provides evidence of this process (fig. I). The creation of a coin involves the design of two "dies" in which the images and texts for the final coin are inverted. These are impressed onto the obverse and reverse of a blank circular metal disk called a planchet. Minters' workshops produced sheets of a gold or silver alloy of the purity demanded by the issuing authority in their furnaces (fig. I, centre). This was then cut, filed and hammered by the sizer to produce a sheet or strip of metal of the required weight and thickness, which was cut with shears into planchets (fig. I, left). The reverse die was fixed into a block of wood on which the moneyer placed the planchet and then the obverse die. Using a hammer, he forcefully struck the upper die to reform the metal in accordance with the die designs (fig. I, right). The impression did not have to be perfect and, in part because "coin collars" were not used to ensure a standard shape and defined rim, there was considerable variation in coins of the same denomination, as surviving examples reveal (figs. 1.4, 2.2, 6.1). Even though – or perhaps because – it made adulteration, clipping and shaving easier, the handmade character of struck coins was sustained into the seventeenth and even eighteenth century.¹¹ A mechanical process of minting was developed in Augsburg around 1550 which involved rolling bullion to the required thickness, cutting the blanks with metal punches and using two heavy iron screws to press or "mill" the dies into the planchet. This made counterfeiting difficult because the coins were more standardised, with marked edges, and the technology was more sophisticated than the relatively simple equipment needed for striking. In 1551 Henry II de Valois, King of France (1519-1559) established a mechanised mint in Paris, the Monnaie du Moulin des Étuves (Mint of the Mill of the Furnaces), but this did not function for long, in part because Minters themselves resisted the new technology.¹² It reduced the demand for their labour and offered fewer opportunities to manipulate the amount of metal in coins for their own benefit.

The issue of honesty when producing coins is evident in a comparison between two depictions of the minting process (figs. I, II). In *The young Emperor Maximilian visiting a Mint*, a woodcut of 1514-1516 by Leonhard Beck (1480-1542), the virtuous prince is present as the issuing authority, every stage in the process is visible and the composition is carefully balanced around a central axis. The balance scales, used

- 11 Cooper, Coinmaking, 37-121. Giráldez, Technologies.
- 12 Sargent and Velde, Small Change, 45-61.



¹⁰ But compare Cooper, *Coinmaking*, 37. The woodcut was made for Marx Treitzsauerwein (c. 1450-1527), *Der Weisskunig* (privately circulated, 1526). Illustrated with 251 prints, it was not published but presented to selected recipients.



I Leonhard Beck, *The Young Emperor Maximilian Visiting a Mint, c.* 1514–1516, woodcut, dimensions unknown, for Marx Treitzsauerwein, *Der Weißkunig*, privately circulated, 1526. Illustration from the edition commercially published by Joseph Kurzboeck, Vienna, 1775. Cleveland, The Cleveland Museum of Art. Image: (CCO 1.0).

to measure quantities of metal and to ensure that coins accorded with a standard value, are evidently level because they parallel the perspectival orthogonals. This print contrasts with a later woodcut depicting the minting of coins in Jost Amman (1539-1591) and Hartman Schopper's (1494-1576) *Panoplia omnium illiberalium mechanicarum (The Book of Trades*), published in Frankfurt in 1568 (fig. II). Here the sharply tipped scales on the workbench and the ruffian with a moneybag at the open window hint strongly at the corruption in the minting process that was





II Jost Amman (designer), Hartman Schopper (author), Monetarius, 1568, woodcut and letterpress, 148 × 79 mm (print 90 × 61), from Panoplia Omnium Illiberalium Mechanicarum (The Book of Trades), Frankfurt: Sigmund Feierabend, 1568. © Lebrecht Music & Arts / Alamy Stock Photo

widespread at this period.¹³ The view is oblique and the gentlemanly minter obscures what his workman partner's hands are up to. In the foreground, the wine flask and what may be a receptacle for beer recall another potential source of profit for the

13 The same print is used for both "Monetarius/Muntmeister" and "Numerarius militum/Pfenningmeister." British Museum: 1904,0206.103.31,1904,0206.103.128.





III Unknown artist, *Group Portrait of Mintmaster Clemens van Eembrugge and His Companions*, 1581, oil on panel, dimensions unknown. 's-Heerenberg, Netherlands, Huis Bergh Castle.

Mint: the exemption granted by their governing authority from excise taxes on alcohol, which might then be sold on to the general public.¹⁴

An extraordinary group portrait by an unknown sixteenth century Netherlandish or German artist points to the dark side of the Mint, its Mafia-like potential to mirror criminally the institution's supposedly honest operations, expressed in the portraits and inscriptions on coins (fig. III). Honorific portrayal claims the presence and virtue of elite, named subjects and is one of the reasons why a portrait head of the sovereign issuing authority is conventionally chosen for the design of the obverse of coins. In the painting the inscription on the counter states that Clemens van Eembrugge was the Mint-Master in Maastricht, in Zaltbommel and for the lord of Bergh, and that he and his companions performed their job with honesty and with faith. In fact, Clemens was running a gang of counterfeiters alongside his legitimate activity, most probably in cahoots with his brother Anthonis, who was also a Mint Master. Clemens seems to have fled the country soon after 1581 (the date

 $\,$ 14 $\,$ A privilege enjoyed by the Mint of Brabant in Antwerp. Woodall, this volume, 56.



of the painting) and Anthonis was executed by hanging, probably in 1591. \(^{15}\) A close examination of the group portrait suggests that it too is a counterfeit, playing on a then-current Dutch term for copy and portrait (but not false money): *conterfeyt*. The Latin root of this word is to make in opposition (*contra-facere*), practically speaking to produce an immediate but reversed image by making a contact impression, like a wax seal or the die for a coin. \(^{16}\) Here the trustworthiness of the portrayed figures is undermined by shifting glances, shady facial expressions and fluctuating lighting and viewpoints. The portrayed man in the centre, presumably Clemens, is haughty rather than noble, with raised eyebrow, nose in the air and an oblique, downward look. Whilst he proffers a coin to the beholder, his other hand indicates his own fat purse. The inscription, written in the vernacular and in lower-case italics rather than impressed in Latin capitals like the text on a sound coin, is interrupted and obscured by coins. In the right background, a figure dressed as a jester indicates that the image is a hoax.

Even when coins entered the economy legally, a number of currencies using gold and silver of different degrees of purity circulated in any given location, often beyond the borders of the realm in which they had been issued. A sovereign under whose authority a currency was minted could officially "debase" it by reissuing coins of similar form and appearance but using an alloy containing a lower amount of precious metal, so that the material value did not coincide with the nominal "face value." Those responsible for valuing gold and silver, who included assayers at the mint, goldsmith-moneychangers and more or less official bankers, therefore had to be able to recognise and compare coins of different currencies, such as florins and ducats, and to be aware of different issues of the same coin. Those who had access to precious coins, such as minters, rich merchants and tax collectors, as well as thieves, could also shave or clip them to extract small quantities of precious metal, which could be melted down and redeployed. Constant handling could wear coins down, reducing their worth, as was the case with the Shilling discussed by Heather Johnson in Chapter Six.¹⁷ Value was thus in practice uncertain and unstable, putting pressure on belief in the absolute, intrinsic value attributed to the ideal coin and engendering doubt about the consonance between appearance and reality. Establishing the "real value" on which the system relied required special expertise, personal scrutiny and moral acuity.

For personal exchanges between trusted associates, it may have been sufficient to weigh a coin by hand as a token of value inseparable from the moral worth of

Woodall, "De Wisselaer", 49-50, with further literature. Johnson, this volume, 185-186.



¹⁵ De Graaf, "Van Eembrugge," 114-119.

¹⁶ Parshall, "Imago Contrafacta." Compare Felfe, "Naer het leven," 69-74.

the human parties to the transaction. However, without this personal assurance of worth, assaying – physical testing to determine the purity of the gold or silver alloy – was necessary to establish a value relative to the weight and purity of standard coins of that denomination and to the abstract "money of account" which was used to price different commodities. Assaying was traditionally undertaken by using a finely calibrated balance scale to measure coins against standard weights (Fig. 1.9). Another long-established means of testing was a touchstone, a small tablet of finely grained dark stone such as slate, on which a soft metal such as gold leaves a visible trace (fig. 10.1). The colour of the trace differs for alloys of different purity and can be compared against standard examples. Cupellation, which involves heating to separate "noble" from "base" metals, is a more accurate technique but since it involves sampling the metal to be tested would have been less suitable for coins in circulation than for ores and alloys in the production process and for coins and gold artifacts intended to be melted down (fig. 2.1). 22

Thus, the efficacy of coins as agents of exchange depended on faith in their intrinsic value and the physical impression of authority. However, as material and symbolic entities coins were susceptible to manipulation, debasement, and counterfeiting and their value was, in practice, difficult to determine and reliant on special expertise – a kind of connoisseurship. Because of the complex paths coins weave between absolute and relative value, faith and doubt, presence and representation, material and moral value, substance and appearance, they can serve as models for thinking about the construction of meaning. The resonances of coins, well-known to viewers and readers, provided rich signifying potential to artists and writers in this period. Indeed, some chapters in the book argue that works of art participated in what has been termed a "monetary imaginary," founded in historical conceptions and uses of precious coinage. 23 Yet historians of visual, material and to a lesser extent literary culture have often seen coins simply as a store of wealth or as a symbol of greed and preferred to concentrate on theological and intellectual frames of reference – an attitude that may reflect their own disregard or suspicion of money.²⁴ The studies in this volume redress this oversight, investigating their topics with attention to the full range of ways in which a monetary system founded on precious coins was imagined and deployed. Whilst the approach is historical, all contributions bear relevance to issues of truth and value that are highly relevant

- 18 Choi, this volume, 157, 164.
- 19 For money of account see below 38.
- 20 This volume, Felten and Stewart, 92-93; Woodall, 49, 63-70; Crum 261-263.
- 21 This volume, Judovitz, 276, 280-81.
- 22 This volume, Felten and Stewart, 92.
- 23 Parsons, Making Money, 237-281; Jacobi, The Architecture of Banking, 2.
- 24 For an exception to this neglect: Honig, Painting and the Market, and Honig, "Money and Representation."



today. The shared topic of money in all its complexity unites the chapters, despite the various media and contexts under examination.

The book is organised around five themes: Power and authority in the Mint, Currency and the anxieties of global trade, Coins and persons, Coins in and out of circulation and Credit and risk. The remainder of the introduction will explain how each theme is exemplified by two complementary chapters and reveal ways in which the themes extend and overlap throughout the book. An Afterword addressing the numismatic investigations of an American contemporary artist, Kelli Rae Adams, emphasises the book's commitment to a "past imperfect" that remains open to the present.

Power and authority in the Mint

The manufacture of coins was a highly charged matter. A distinction had to be maintained between legal currency and counterfeit coins, even though the technology and at times the people involved in the production of coins on both sides of the law were the same. Mints, as official institutions established by the noble or civic authority under which coins were issued, were not just coin factories but the practical and symbolic gatekeepers between "real" and false value in Christian Europe, as Carrie Anderson discusses in Chapter Four.²⁵ Mints were there to keep costly raw materials safe and to control the quantity, precious metal content and weight of the legal tender produced. As has been explained, coins produced in a Mint were not just tokens of value but embodiments of the authority and presence of the issuer's God-given power. Mints were thus important institutions of the state, defined as a community organised under one governing authority. Coins embodied wealth, and their manufacture was profitable owing to "seignioriage:" the difference between the actual cost of raw materials and the face-value attributed to the coin itself. The issuing authority of the mint benefited from this as did the moneyers, the manufacturers of coins who also received regular pay. Although they worked with their hands, minters were thus a wealthy elite which enjoyed – and often defended – ancient privileges amounting to quasi-noble status, granted by the mint's governing authority to ensure loyalty. The location of Mints in different cities and the tensions between the interests of the issuing authority and local moneyers meant that Mints were sites of political manoeuvring as well as of wealth and prestige.²⁶

Both chapters in this section take a painting belonging to a Netherlandish Mint as a case-study. Joanna Woodall examines *Tribunal of the Brabant Mint* by Maarten

- 25 Anderson, this volume, 132-133.
- 26 Parsons, Making Money, 7-11 (with reference to sixteenth-century France).



de Vos (1532-1603), a monumental oil painting on panel produced in 1594 for the Antwerp branch of the Mints of Brabant (fig. 1.1). Sebastian Felten and Jessica Stewart analyse *Allegory of Coinage*, a somewhat smaller work on canvas attributed to Romeyn de Hooghe (1645-1708) that was probably made for the Councilors and Masters-General of the Mints of the Dutch Republic sometime after 1681 (fig. 2.1). *Tribunal of the Brabant Mint* was displayed in the courtroom of the Mint complex in Antwerp, which may well have housed other assemblies and meetings of the consortium of Mints of Brabant, a province in present-day Belgium. *Allegory of Coinage* was apparently a chimney-piece made for the *muntkamer* (mint-room) of the Mints of the United Dutch Provinces, now known as The Netherlands. The iconography of both pictures is unusually complicated, claiming learning and wisdom that asserts the authority of the Mint as an institution, and the dignity and status of its members, by overwhelming lesser mortals.

The complex iconography also acknowledges the demands of characterising coin money visually and articulates the political position of the two Mint consortia at different historical moments. The Tribunal is dated 1594, less than a decade after the restoration of control over the city of Antwerp by Philip of Habsburg, King of Spain and Duke of Brabant. Besides exemplifying the value of justice, the picture is linked by Woodall with the 1594 Joyous Entry into Antwerp of Philip's governor, during which ancient privileges such as those of the Minters were normally confirmed. In 1594, however, the political situation in Antwerp remained unsettled after the failure of the Protestant-led, iconoclastic rebellion against Catholic, Habsburg authority. Woodall suggests that the unusual iconography, obscure texts and collage-like character of the work register tension, even fracture, between the central, divinely sanctioned authority of the Duke of Brabant and a faction within the local Mint at a delicate, transitional moment. By contrast, Allegory of Coinage was commissioned nearly a century later, in the economically successful confederation of provinces in the northern Netherlands, born from the same rebellion in which the city of Antwerp had unsuccessfully participated. Felten and Stewart show that, when Allegory of Coinage was painted, the Dutch polity - in the shape of the States of Holland, the States-General and the Mint council - had successfully countered challenges to centralised government by local Mints that asserted their privileges as institutions of the Holy Roman Empire. This resulted in the unilateral adoption of the guilder as the new standard specie in 1680. Emblazoned with the image of Pallas Athena, ancient Greek goddess of wisdom, this coin features prominently among the currencies depicted on the cornucopia in Allegory of Coinage.

Both pictures are organised around a central female figure. In De Vos's earlier work, sovereign authority is personified by an almost sacred figure of "Justice," not only as an exemplary virtue in the courtroom but also as a reference to the immense privilege of judicial autonomy historically enjoyed, and fiercely defended,



by members of the Mint. Lady Justice is flanked by historical legal authorities in a rather similar way to a Virgin Mary surrounded by Saints, but the presence of sacred authority associated with an altarpiece, or an ideal coin, is strained and undone by the hybrid character of the work and multiple points of view. To coin a numismatic analogy, the picture asserts its value by fiat as much as by appealing to belief in its inherent reality. In *Allegory of Coinage* another originally Marian figure, an enthroned "Maiden of Holland," receives wealth and homage from different peoples across the world, and even from the double-sided deity Hermathena, a combination of Hermes, god of trade and eloquence and Athena, goddess of wisdom.²⁷ In both Mint paintings, the richly-dressed female figures also invoke Moneta, the personification of money that traces its origins to the divine protector of money, Juno Moneta (Juno the warner or Juno the unique one), whose temple on the Capitoline Hill was attached to the silver mint in ancient Rome. In *Tribunal of* the Brabant Mint, this allusion is made through the balance scales, which are an attribute of Moneta as well as Justice and engage the beholder in the judgement or assessment of value, like the assessor of a coin. In Allegory of Coinage, the Maiden of Holland holds Moneta's other main attribute, a cornucopia, erect on her open lap. Instead of the fruits of the earth that traditionally spill forth from the Horn of Plenty, the silver vessel brims with gold coins whose own origin in the body of the earth is made clear by the labouring figures in the background. In this later painting, the Mint is identified with a globally influential Maiden of Holland whose potency is located in money in the form of coins openly derived from the industry of others and guaranteed by her own superior knowledge. As Felten and Stewart say, "the painting centres governance in the production of coinage." 28

Currency and the anxieties of global trade

Gold and silver coinage has a close, complex relationship with the expansion of global trade. It is inseparable from trade in that bullion is a commodity, transported from the sites where ores are mined and initially smelted to the institutions where they are further processed and minted. The resulting coins can either be put into domestic circulation or exported elsewhere. During the period covered by this book, silver was traded and marketed globally in the form of European coins. Historically mined in Saxony and Bohemia in present-day Germany, the supply of silver was hugely increased by Spanish exploitation of silver deposits in Mexico and Peru, and

²⁸ This volume, Felten and Stewart, 81.



²⁷ On Marian connotations: Van Winter, "Hollandse tuin," 37, 47-50, 59-65 and *passim*; Woodall, "'De Wisselaer'," 53-54, 56.



IV Unknown Indo-Christian artist, *The Virgin of Mount Potosí*, c. 1740, oil on canvas, dimensions unknown. Potosí, Museo de la Casa Nacional de Moneda. Photo © Julie Laurent/Julyinireland (Flickr).



Mount Potosí in Bolivia, the so called "Rich Mountain" that produced an estimated sixty per cent of silver mined in the world during the second half of the sixteenth century (fig. IV). About a third of this ended up in China, in the form of bullion and European coins. Silver was priced more highly in China than in Europe, and silver specie and bullion were essential items of trade for European merchants, who were interested in purchasing luxury goods such as silk and porcelain. Japan was also a major supplier of silver to China and forged a link in a multilateral trade, including Europeans, within Southeast Asia. ²⁹ Although ultimately less lucrative than silver, it was the quest for gold that motivated European voyages of exploration. The gold supply was infamously expanded by Spanish access to deposits in central America and the west of South America, and by the acquisition of gold artefacts from civilizations in which unworked gold was not believed to have intrinsic value. ³⁰ As Carrie Anderson discusses in Chapter Four, there was also trade in gold, as well as human beings, between the Portuguese, Dutch and British and the kingdoms of the Coast of Guinea, the so-called Gold Coast, such as the Asante.

The risks and expense of transporting coin specie across long distances on the high seas suggest that the dominance of precious coins was not solely due to the durability and material and visual properties of gold and silver as is often assumed. It also resulted from the control and use of tokens of value that effectively embodied divine and divinely-sanctioned Christian authority by militarily, technologically and economically powerful and ruthless Europeans in their engagement with the wider world.

Moreover, the origin of precious metals in the veins and bowels of "mother earth" and the human labour and sacrifice involved in their extraction meant that gold and silver coins embodied the power to pay in a physical sense. In Shakespeare's play of the late 1590s a pound of flesh was legally granted to Shylock when the Venetian merchant Antonio defaulted because his ships were lost at sea. Today, someone who fails to pay for a meal in a restaurant in money is proverbially asked to wash the dishes. In contrast to present-day ignorance of supply chains and production methods, there are references in period works of art and literature to the physical production of precious metals by subordinated peoples in faraway lands. This suggests that the power of coinage was at this time also acknowledged to derive from control over unremitting, forced labour, which physically guaranteed payment to obtain what was desired. In *Allegory of Coinage*, the Maiden of Holland's position of power as Moneta is predicated on the unceasing labour of the diminutive

³¹ Shakespeare, *The Merchant of Venice*, Act IV, Scene 1 and *passim*. Compare Deng "Money, Ritual and Religion" (electronic resource, n.p. Paragraph 12.45).



²⁹ Flynn and Giráldez, "Silver Spoon," 202; Von Glahn, Fountain of Fortune, 13-141.

³⁰ Fisher, "Gold in the Search for the Americas."

figures quarrying the mountain as well as the tribute of the turbaned, black and brown men presented by Hermathena, deity of trade and knowledge (fig. 2.1). As an eighteenth-century painting by an unknown Indo-Christian artist indicates, this exploitation was conceived in terms of sacred natural fertility by both the Spanish conquerors, who identified the "Rich Mountain" Potosí with the Virgin Mary and the indigenous peoples of the Andes, for whom mountains represent *Pachamama* (Mother Earth) (fig. IV). As Heather Johnson shows in her chapter on the comic poem *A Shilling or, The Travailes of Twelve-Pence*, published in London in 1621 by John Taylor, the painful birth of the coin by "men-midwives" from "America's rude barbarous bounds" explicitly haunts its subsequent life: "And that poore Slaves which were condemn'd to dye, / Were forc'd to digge for me laboriously."³²

The power embodied by precious metal coins, including the willingness and capacity to force or enslave labour, rendered other currencies "weak" and ultimately disconnected them from the hegemonic monetary system, so that the balance of trade and accrual of "wealth" was almost entirely in favour of Europe.³³ European governments delegated the authority to issue coins to trading companies such as the Dutch East India Company (VOC) for circulation in their areas of trading and military activity abroad.³⁴ Yet despite this extension of Western monetary power, judging the value of precious metals and use of precious coinage by or on behalf of Europeans in far-flung regions of the world was an anxious business. Europeans had to trade with and rely upon people whom they considered to be without "credentials" (whose Latin root *credere* – to believe – is shared with credit), who did not speak the same language and came from unfamiliar cultures with different values and beliefs.

In this second section, Carrie Anderson discusses a gold and tortoiseshell box whose theme is the appropriation and transformation of precious raw material and embodied human value in "Africa" to European wealth and culture (figs. 4.1-5 and cover). On the lid, a kneeling "African" man offers a huge elephant tusk and an "African" woman displays her charms and holds out a pan containing a large, unrefined nugget of gold. This rock is surmounted by Mercury/Hermes, the European god of trade, bearing a shield impressed with the monogram of the Dutch West India company (GWC), which monopolised Dutch trade through the Coast of Guinea. The struggling GWC presented the box to the Stadtholder Wilhelm IV in 1749 with a request for his patronage. The box offers him in miniature, in "refined" form and in a double-sided design, control over the gold, ivory and human labour of

- 32 Taylor, *Travailes of Twelve-Pence*, lines 23-6. See further Johnson, 191.
- 33 Green, A Fistful of Shells, 5-6 and passim.
- 34 Bucknill, Dutch East Indies. VOC: Vereenigde Oostindische Compagnie.
- 35 GWC: Geoctroyeerde Westindische Compagnie.



West Africa. Shallow reliefs to each side of the three figures idealise and naturalise the laborious extraction of alluvial gold and the Dutch procurement of enslaved people. On the sides of the box there are reliefs of named military forts on the Gold Coast, which protected Dutch imports and exports from other European powers (figs. 4.3, 4.4). Anderson argues that the box allays Dutch anxieties about dealing with distant, unfamiliar and distrusted trading partners. Since the usual in-person methods of assaying were no longer sufficient, the value of the raw materials was secured through processes analogous to the minting of coins: reworking and the impress of authoritative iconography and texts.

Angela Ho's chapter concerns A Market Stall in Batavia, an oil painting created almost a century earlier than the gold box and now attributed to Andries Beeckman (fig. 3.1). The picture also advertises the benefits of global trade through the Dutch India companies and betrays the anxieties and effects of distanced, mediated exchanges. It includes an array of tropical fruit, named in Dutch and Malay in an illusionistic list at lower right, and two women and a youth identifiable as Indonesian through their skin tone and clothing. It was probably owned by Joan Huydecoper, Amsterdam burgomaster and director of the VOC, whose regional capital in South-East Asia was Batavia, present-day Jakarta (Sunda Kelapa). Ho's study focuses on the man with stereotypical Chinese features who is counting out generic coins in a market transaction with the Indonesians. By arguing that Dutch viewers would have perceived the foreign scene through the lens of domestic paintings of comparable subjects, Ho shows that the characterization of the Chinese merchant is ambivalent. She draws an analogy between coins circulating in an unfamiliar realm, beyond the boundaries of the minting authority, and the uncertain value attributed to the Chinese traders in Batavia, who acted both as agents for the Dutch, as a means of obtaining goods such as textiles and porcelain, and in their own interests. A comparison can also be drawn between the coins being counted by the Chinese merchant and the natural goods laid out in the painting. However, unlike the endless abundance pouring from a cornucopia, or golden coins spilling over a counter in a domestic setting, the Indonesian fruits are fully visible, laid out in order and analysed visually through dissection. Dutch viewers of A Market Stall in Batavia could not determine the value of the indecipherable coins, unfamiliar fruits and the inscrutable Chinese figure by "weighing them up" or reference to some kind of touchstone. At such a physical and cultural distance, and lacking in the trustworthy knowledge arising from contact, they were reliant on received knowledge and expectations and close, systematic observation (or surveillance).³⁶ Value was not reaped directly but through a more abstract process of accounting: balancing profits against loss.

36 Kambaskovic and Wolfe, "The Senses" (n.p., digital content).



Coins and persons

Our case studies show that works of art and literature in this period acknowledged a connection between the forced labour of generic human beings involved in the extraction of gold and silver in faraway, pagan lands and the coins in Christian Europe forcefully "branded" with the iconography of named sovereign authorities.³⁷ In not only constituting "frozen desire" but also embodying, guaranteeing and mobilising the physical power to pay, coins acted as agents for their owners in the sense that they caused events to happen. They can usefully be considered in relation to the concept of "distributed personhood" proposed in 1998 by Alfred Gell in his Art and Agency: An Anthropological Theory. As "social persons," Gell suggests, "we are present, not just in our singular bodies, but in everything in our surroundings which bears witness to our existence, our attributes, and our agency."38 Precious coins epitomise Gell's description of things that embody and transmit human will or agency, although "presence" in coins was conceived in terms of different kinds of human labour and force exercised in relation to potent materials, rather than the enchanting technical virtuosity through which Gell characterised the magical power of a work of art.39

In this section, the investment of human presence in precious coins is explored through English literature. Rana Choi examines how Shakespeare's plays use coins as a model to imagine the human subject, especially how to grasp the "true value" of characters as they move through and act in relation to a variety of exchanges. Choi describes how the relationship between the nominal or "face value" and the intrinsic value of specie was undermined in sixteenth-century England, making reference to Henry VIII's "Great Debasement" of coinage in 1542-51 and the Recoinage of November 1560 by his daughter Elizabeth I. It is notable that the numismatic Great Debasement was immediately preceded and paralleled by a comparable undermining of the potency of sacred objects of devotion. Beginning in the 1530s, the sovereign-led English reformation involved the destruction of devotional artefacts and seizure and melting down of the wealth of the monasteries for the royal coffers. Choi shows that the ideals of consonance between materiality and divine authority, appearance and intrinsic reality, continued to be pursued. However, the experience in the following decades was of unstable prices and exchange rates and ultimately an increased reliance on informal credit exchanges, which heightened the importance of personal trust and reputation. Choi argues that, in the climate of uncertainty before recognition of the sufficiency of credit, debased

- 37 In this volume, Felten and Stewart, Anderson, Johnson.
- 38 Gell, Art and Agency, 103.
- 39 Gell, "Enchantment," 163-164, 166 and passim.



coinage metaphors in the plot and language of Shakespeare's plays register anxieties about establishing whether others will deliver on their promises, even in face-to-face relationships. In Choi's interpretation, Shakespeare's plots strategize ways to overcome the moral and social dimensions of debasement to determine the truth about a person's real moral worth – especially in relation to the embodied exchange of marriage, which ideally generates wealth through profitable alliances and the "minting" of offspring. 40

Five years after Shakespeare's death in 1616, his fellow Londoner John Taylor, an early journalist, war correspondent, adventurer, poet-impresario and political pamphleteer, published A Shilling or, The Travailes of Twelve-Pence. The text forms part of the pamphlet literature produced in a year of intense economic debate. 41 Heather Johnson examines the poem and its emblematized frontispiece in relation to Taylor's identity as the "water-poet," a workaday ferryman traversing the capital's central artery of the river Thames (fig. 6.2). In so doing, she teases out the coin's agency and impact on all who encounter it. The poem is mostly narrated by a shilling coin, which describes its violent, unnatural birth in the silver mines of America and its painful acquisition of "breeding", "badge", "face", "name and cross" in the London Mint. The coin is named as a shilling created seventy years earlier, under the authority of Henry VIII's Protestant son Edward VI, and the poem undermines the impression of divinely sanctioned authority by referring to the boy-king's lack of beard and the worn-down nose on the coin's head (fig. 6.1). It also notices that the coin's spending power has been reduced by inflation. Yet we are no longer in Shakespeare's dramatic world of belief or doubt in a sacred object/subject of divine authority: "A shilling is but Twelvepence, all men know, I am the same I was, 'tis only men, have lost the consciences they harbour'd then."42 In Taylor's modernising world, money has no intrinsic or impressed virtue, there is no divine presence or power in the sovereign's face or in the metal. The "distributed self" embodied by the shilling is only too human and relates to the myriad subjects through whose hands it passes. Johnson explores how the poem sets down these "Masters of Twelvepence not in order as they are in degree, but as he travelled from man to man, good and bad, poore and rich, without any order." Probably in alliance with the devil, the shilling constantly moves (travels) and labours (travails) in the service of subjects distinguished only by the nature of their occupation, their personal desires and the politics of gender. He is in most cases ultimately their "Infidell" master or god, shaping them as moral beings.

- 40 Shell, Art and Money, 29-30, 126-127; Woodall, "'De Wisselaer'," 42, 51, 54.
- 41 Suprinyak, "Merchants and Councillors".
- 42 Taylor, Travailes of Twelve-Pence, n.p.



Coins in and out of circulation

In relation to the dizzying array of hands through which it has passed, Taylor's personified shilling states, "Thus have I ofte been tossed to and fro."⁴³ He is referring to circulation, the movement of money through the market. The scarcity of coins in the early modern period – especially before, but even after the influx of New World gold and silver – meant that, for the proper functioning of the market, the ideal condition of the coin was to be in movement. The frequently depicted sin of Avarice, manifested in hoarding, was thus a compound error, damaging to the miser's immortal soul and starving the economy of money. ⁴⁴ The movement of coins through the market and thus society, as well as their ideal (if not actual) nature as identical units, is reflected in Dutch proverbs such as "Boeren gheld is soo goet als Heeren Munt," ("A farmer's money is just as good as a nobleman's"). ⁴⁵ Nearly three centuries later, the German philosopher of money Georg Simmel emphasized the same interchangeable quality in the circulation of modern money, arguing that its anonymity erased personal connection. ⁴⁶

The circulation of coins in the monetary economy during our period found a parallel in the function of medals in elite social networks. Both coins and medals were inspired by the coins of ancient Greece and Rome, and visually they are similar: conventionally circular and double-sided, with a portrait head of an honoured figure on the obverse, a device on the reverse and a text, often in Latin and around the rim (fig. 1.4, fig. V). Both coins and medals are likely to be made of valuable metals, although the use of burnished bronze for medals shifts attention from intrinsic value to the visual and tactile properties of the material. High relief and the use of casting (as well as striking) to produce medals also implies a more integrated relationship between substance and subject than the coin's forceful union between the precious metal and the expressions of governing authority that are impressed into it.⁴⁷ The combination of invention and skill necessary to achieve the sculptural quality and uniformity of an edition of medals contrasts with the separation of invention from execution in a coin, where more or less skilful moneyers hammered repeatedly on dies created from previous designs to produce multiples that, while somewhat variable in workmanship and appearance, were interchangeable in economic use. Although medals may be distributed or exchanged as gifts, or sold, they are not fully fungible because the value of a particular medal in an edition is not quantified and depends not

- 43 Taylor, Travailes of Twelve-Pence, n.p.
- 44 Hamon, "L'avarice."
- 45 Van de Venne, Tafereel, 189. For further examples: Honig, "Money and Representation," n. 34.
- 46 For example, Simmel, Philosophy of Money, 349.
- 47 Stahl, "Mint and Medal," 137-143; Sargent and Velde, Small Change, 53.





V Jacob Jonghelinck, medal of Philip II of Spain to commemorate the victory of Saint Quentin. Obverse: Philip II laureate, reverse: Saint Quentin with commemorative inscription, 1557, silver, 35 mm diameter. Location unknown. © Artokoloro/ Alamy Stock Photo

only on its quality as an artefact but also on its personal associations. Medals have no purchasing power *per se* and their ostensible *raison d'être* is not circulation. Their primary function is to celebrate or commemorate a particular subject and/ or event in perpetuity.

Coins, on the other hand, feature portraits not to commemorate but to imbue the metal with the honour and authority of the depicted legal entity. Coins are issued in this entity's image and name to guarantee their legality and value in circulation and economic exchanges. Coins function in relation to specific times and places. Yet whilst they are to our eyes conceptually distinct, coins and medals could be designed by the same people and, as a painting by Frans Francken the Younger reveals, could appear together in the numismatic and encyclopaedic collections that were avidly pursued by sixteenth- and seventeenth-century European elites (fig. VI).

In the mid-sixteenth century, there was a controversy over whether ancient coins were intended as medals.⁴⁸ Both coins and medals were founded in belief in personal honour, virtue and authority derived from God and when coins were stilled, excluded from exchange and prized individually, they could acquire the personal, commemorative associations of medals. In our period medals could equally function within a gift economy of trust, honour, obligation and exchange that complemented the monetary economy.

48 Cunnally, Images of the Illustrious, 136-137.





VI Frans Francken the Younger, *The Cabinet of a Collector with Paintings, Shells, Coins, Fossils and Flowers,* 1619, oil on panel, 85 × 56 cm. Antwerp, Koninklijk Museum voor Schone Kunsten. Photo: Hugo Maertens, Collection KMSKA – Flemish Community (CCO).

While "stilled" numismatic objects, including ancient coins as well as medals, constructed subjects and events as stable and eternal, the circulation of money was connected to fertility and reproduction. As it moves through the market and participates in exchanges, money is seen to produce wealth for all who touch it. In a related way, Adam and Eve's progeny were construed as coins that received the impress of God's likeness from their parents. The inevitable errors of reproduction in this human minting process contrast with the perfected form of Christ, directly formed from God in the pure gold of Mary's virginity. ⁴⁹ In secular contexts, coin purses symbolized both male and female genitals, and both coins and metal were linked with semen. Aristotle condemned usury, the practice of charging someone to use money that would otherwise remain out of circulation, as way of money begetting money without exchange (or intercourse):

Usury is most reasonably hated, because its gain comes from money itself and not from that for the sake of which money was invented. For money was brought into existence for the purpose of exchange, but interest increases the amount of the money itself [...]: offspring resembles parent, and interest is money born of

49 Woodall, "'De Wisselaer'," 42-44, 51, 56, with further literature.



money; consequently this form of the business of getting wealth is of all forms the most contrary to nature. 50

Both the articles in this section consider the significance of circulation in relation to a single coin. In both, the coin gains special significance, especially for being possessed by a woman and being received from a man. In "Margarethe Butzbach and the Florin Extorted by Blows: Coins Securing Social Bonds in Late Medieval Germany" Allison Stielau examines a little-discussed event in the 1506 autobiography of the German cleric Johannes Butzbach (1477-1516), in which Johannes's stepfather savagely beat his mother, Margarethe, in an attempt to extract from her a particular gold florin to pay her son's school fee. The coin that Margarethe Butzbach is willing to defend with her body, Stielau argues, was an *Ehepfennig*, or "marriage penny," given to her by her first husband. Men gave coins to women at the time of betrothal as a sign of the promise made between the couple. This changed function plucks the coin from circulation, freighting it with a commemorative function and emotional significance. Johannes's father dies, leaving Margarethe a widow. In the context of her new marriage, the coin's special status comes under threat. Johannes's stepfather, usurping the position of husband, wishes to violently dislodge the coin from its position as a quasi-relic and send it back into circulation at the same time that the child of Margaretha's first marriage is also sent into the world.

The woman in Natasha Seaman's "Centring the Coin in Jacob Backer's *Woman with a Coin*," is a prostitute (fig. 8.1). Although the painting has some of the qualities of a portrait, it is a *tronie*, a peculiarly Dutch genre of painting that depicts character types rather than named individuals and was typically sold on the open market. Contrasting Backer's painting of the prostitute with her coin to a portrait by him of a wife with her child – like Margarethe, bound to her household – Seaman identifies the shared quality of circulation of the woman and the coin. Unlike a wife, the prostitute belongs to no household except for its counterfeit, the brothel.

While the women's coins – and lives – differ in their circulation, they both defy Simmel's characterization of money as impersonal. Margarethe's coin, linked to her dead husband, could not be replaced by another of equal value. For her son Johannes too, once it comes into dispute, the coin is sullied by the violence over it and he refuses to take it. At both moments, it is more than a mere store of economic value. In Backer's painting, the coin enacts a personal connection to the viewer by drawing us closer to the prostitute to attempt to read its (illegible) text. As a payment, it also serves as an index of her paying male admirer, emphasized in the

50 Shell, *End of Kinship*, 29-30, 126-127; Aristotle's Politics, 1.1258b: http://www.perseus.tufts.edu/hopper/te xt?doc=Perseus%3Atext%3A1999.01.0058%3Abook%3D1%3Asection%3D1258b [accessed December 18th 2021]; Deng, "Money, Ritual and Religion" (electronic resource, n.p. Paragraph 12.60 ff, "Usury").



male portrait head shown to the viewer. In both instances, the coin materializes the women's relationship to men, in line with Buchan's formulation of "frozen desire." The way they grasp the coin, one tightly, one lightly, corresponds to how they – and the coin – move through the world.

Credit and risk

According to the contemporary political economist Ann Pettifor, "the thing we call money has its original basis in a promise, a social relationship: 'I trust that in exchange for my favour to you, you will (promise) to repay me – now or at some time in the future'." According to her, the monetary system is thus based on credit, derived from the Latin *credo*, "I believe." When we use money we are saying, in essence, "I believe that you will pay, or repay me for my goods and services."51 In the period covered by this book, the monetary system was equally reliant on trust and belief, although this was complicated by the intrinsic value ascribed to gold and silver and the divine authority ascribed to the governing authorities that issued and guaranteed legal tender. We have seen that the promise to pay could also be fulfilled by forced labour and that Moneta's horn of plenty implicitly associated coins with food, which could be relied upon to sustain life and thus fulfil the promise to pay in a different way.⁵² In this period, in which institutions and legal instruments which might compel economic compliance (especially across political borders) were relatively weak, belief and trust in money was based on the authority of the Mints, on the personal honour, reputation and connections of the parties to an exchange and ultimately on the absolute value and virtue of an eternal, unchanging God. As described earlier, the extension of trade routes produced anxieties about monetary dealings with distant, unknown trading partners or agents who were not subject to the same God. Within Christendom, however, keeping or breaking faith or promise was not only a matter of economic or even personal relations in the here and now but also of connection with the eternal, absolute and beneficent reality personified and guaranteed by God.

The two chapters in this section address monetary credit and risk in this world of human activities and sacred realities. They are both concerned with paintings and, in common with other contributions to the book, they explore not just the iconography of coins but how concepts of money (here embodied in precious coinage) can illuminate the structure, rhetoric and reception of painting as, itself, a medium of exchange.⁵³ Roger Crum discusses *The Tribute Money* by Masaccio

- 51 Pettifor, Just Money, 19. Compare Agamben, Oath.
- 52 For recognition of food as a more fundamental value than coinage, see Crum, this volume, 263.
- 53 This volume, Seaman, Woodall.



(1401-1428) in the family chapel of the Brancacci within the basilica of Santa Maria del Carmine in Florence (fig. 9.1). This rare subject, part of a fresco cycle on the life of Saint Peter, concerns a miracle at the fishing port of Capernaum (Kefar Naḥum) in which Jesus directs Peter to find a coin in the mouth of a fish, to pay a tax-collector for the temple. Dalia Judovitz considers works by Georges de La Tour (1593-1652), who spent his career in the Duchy of Lorraine in present-day north-eastern France. Judovitz analyses La Tour's depictions of scenes of payment of taxes, gambling and fortune-telling in which money plays a central role, showing how they allude to transactions involving faith, promise and risk.

Crum considers the fresco in relation to the widespread use of money of account in fifteenth-century Florence. By referring to a common, abstract unit of value, money of account enables funds to be transferred through space and time without the physical movement of hard currency. Crum explores the ways in which "abstract" properties of Masaccio's fresco, especially the spatial arrangement of the narrative and use of one-point perspective, can be related to the unfolding of Christ's authority through the miraculous discovery of the coin in the fish and transfer of its value to the tax-collector. As Crum points out, this is also an enactment of Peter's faith in Christ, which is materialised through the appearance of the coin in the mouth of the fish and implied when Peter hands over the coin, which is now invisible to us, to the temple attendant. Crum evokes Baxandall's concept of "the period eye" to suggest that the monetary culture of early fifteenth-century Florence, particularly the spatio-temporal simultaneity, abstract thinking and faith involved in the use of money of account, shaped the creation and comprehension of *The Tribute Money*.

In her close analysis of a number of paintings by Georges de la Tour in which coins are depicted, Judovitz pursues the idea that monetary transactions that involve keeping or breaking faith or promise reference not just economic concerns but also ethical and religious beliefs. She examines depictions of Biblical parables and scenes of gambling and theft as different kinds of transactions: the financial and moral obligations involved in keeping account books and settling debts and the vicarious personal risk and expenditure involved in games of fortune. Privileging *credo*, in the sense of spiritual faith or belief rather than explicitly monetary credit, and generosity rather than greed, La Tour's pictorial representations of biblical parables explore and elaborate the meanings attached to divine grace. Judovitz argues that by raising issues of breaking faith or promise, his scenes of gambling and fortune both bear witness to moments of moral and spiritual lapse and provide an artistic reflection on the risks attached to painting as a visual medium. La Tour thus exposes unfamiliar connections between economic and

- 54 Matthew's Gospel (17:24-27).
- 55 Sargent and Velde, Small Change, Chapter 9.



spiritual gains and losses through pictorial light and darkness, proportion and perspective. Skilful portrayals attest to the virtuosity of painting in duplicating – or counterfeiting – presence, while glimmering reflections on pieces of armour and clothing put on display the "aureum" of painting, its visual coinage and currency. Rife with references to their own making, his works compare painting's credibility with monetary exchanges that involve both the transmission of "true value" and deceitful illusionism.

Afterword

The book concludes with Natasha Seaman's meditation on the recent ceramic installations of the contemporary United States artist Kelli Rae Adams (b. 1977) in the light of the previous chapters. Seaman begins by drawing attention to the parallel between "fiat money" and "fiat art." The former's value is asserted by those in authority and accepted in the market of traders rather than grounded in the ostensibly intrinsic value of a precious metal. The value of "fiat art" is decreed by the "author" and accepted in the market of beholders, rather than grounded in naturalised western artistic hierarchies, categories and skills. However, all artworks are embodied in some way, even the most abstract and conceptual, and all are products of mental and/or physical labour, undertaken by the artist themself or by others in their service. Works by professional artists are also, indirectly, a means of sustaining their embodied existence.

This embodiment allows Seaman to juxtapose Adams' installations to the book's case studies on precious coinage, describing how the artist's use of the medium of clay both engages with and challenges the intrinsic, permanent value attributed to metals across history. In Seaman's interpretation, Adams' works also evoke the human labour and sustenance which we have recognised as fundamental values implicit in precious coinage during our period. Consonant with the character of our own time, Adams explores a social imaginary of usurious indebtedness rather than the dream of cornucopian wealth. She questions the value of her education in relation to the status and authority that it has given her as an artist and the labour and sacrifice needed to fulfil her promise to pay.

Conclusion

Ann Pettifor asserts that "Money is not, and never has been a commodity like a car, or oil, or gold – although coins and notes have, like your credit card, been used as a convenient measure of the trust between individuals engaged in making



transactions."⁵⁶ Whilst this book draws deeply on the insight that the monetary system is reliant on social relationships of trust, credit and the promise to pay in return for a transaction, it pays equal attention to the precious coin as the distinctive and powerful way in which money was embodied in Christian Europe during the early modern period. In an article first published in 1996, the French thinker Bruno Latour compared a map, which points to and identifies a site which the users of the map want to travel to, with a work of art, in which beholders are interested in the process of mediation rather than looking "through it" to reach a designated site or object. If the map is regarded as neutral and transparent to what it represents, it can be replaced by any other map of the same area, just as a precious coin could in theory be replaced by any other tokens of value, such as banknotes or cowrie shells. By contrast, the appreciation and value of something (including a map) as a work of art involves paying attention to the choices of material, medium, technique and motif, the manipulations and transformations necessary for the fabrication to fulfil its task(s).⁵⁷

This book treats coins as works of art in that it pays attention to the embodiment of money in disks of precious metal impressed with significant texts and images, rather than regarding them as transparent to their monetary denomination or interchangeable with, say, credit cards or virtual currency, or even with precious coins in other periods or cultures.⁵⁸ For example, the identification of money with gold and silver in this period involved a sense of value as sacred and absolute and an appreciation of human labour and sacrifice as a component of monetary value, as well as an understanding of money as akin to a commodity, subject to market forces of supply and demand.⁵⁹ The book notices that, although more "sophisticated" minting technologies, paper and other types of currency and credit were available, Europe and its trading networks between c.1400 and 1750 relied to a surprising degree on precious coins produced by hand in traditional ways by highly privileged elites and authorised by supposedly divinely ordained governing authorities. Our case studies explore how these distinctive and powerful artefacts, as they are presented in and inform works of art and literature, engaged with concepts of trust, credit and the promise to pay current in Christian Europe during a period of global economic and cultural expansion and of profound changes in conceptions of divine, natural and sovereign authority.

James Buchan's definition of money as "frozen desire" characterises money as a mobile abstraction ("desire") but also implicitly acknowledges that as a social

- 56 Pettifor, Just Money, 20.
- 57 Latour, "How to be Iconophilic," 418-428.
- 58 Compare Simmel, Philosophy of Money, 168-170.
- 59 Pettifor, *Just Money*, 17; Zorach and Philips Jr, *Gold*, 95-113, and *passim*. Deng, *Money in the Renaissance* (electronic resource, n.p. Paragraph 9.7 ff. "Intrinsic and extrinsic theories of value").



transaction it is actually inseparable from embodiment ("freezing") at the point of exchange, even if embodiment has now been reduced to the number displayed on a computer screen and the tiny, transient pulse of electricity that registers a digital transaction. Buchan's description also recognises human desire as fundamental to the monetary system – as "the other side of the coin" to trust and credit. In Buchan's view the original basis of the monetary system is not just the promise to pay but also the desire for the "favour" that Pettifor speaks of as the reason that we make the promise in the first place. If the monetary system is rooted in human desire, the crucial and historically and culturally variable question is what do we desire? This book suggests that during our period desire was, unsurprisingly, directed towards the accumulation of "goods" and stable personal power or agency within a belief system in which all desires can be fulfilled, either on earth or in heaven. On a planet which has been despoiled by these desires, we might now recognise that the favour that we all need from each other is its survival.

Bibliography

Agamben, Giorgio. *The Sacrament of Language. An Archaeology of the Oath.* (Homo Sacer II, 3). Cambridge: Polity, 2011.

Appadurai, Arjun, ed. *The Social Life of Things: Commodities in Cultural Perspective*. Cambridge: Cambridge University Press, 1986.

Balfe, Thomas and Woodall, Joanna. "Introduction: From Living Presence to Lively Likeness — The Lives of *ad vivum*." In *Ad Vivum? Visual Materials and the Vocabulary of Life-Likeness in Europe before 1800*, edited by Thomas Balfe, Joanna Woodall, Claus Zittel, 1-43. Leiden: Brill, Intersections 61, 2019.

Benjamin, Walter. "The Work of Art in the Age of Mechanical Reproduction." In Benjamin, Walter. *Illuminations*, edited by Hannah Arendt, translated by Harry Zohn, 219-253. London: Jonathan Cape, 1970 (1935).

Buchan, John. Frozen Desire: An Inquiry into the Meaning of Money. London: Picador, 1997. Bucknill, John. The Coins of the Dutch East Indies: An Introduction to the Study of the Series. London: Spink, 1931.

Cooper, Dennis. *The Art and Craft of Coinmaking: A History of Minting Technology*. London: Spink, 1988.

Cunnally, John. *Images of the Illustrious: The Numismatic Presence in the Renaissance*. Princeton: Princeton University Press, 1999.

De Graaf, Cor. "De Bende van Anthonis van Eembrugge. Een valsemuntersbende aan het eind van de 16de eeuw." In *Van Solidus tot Euro: geld in Nederland in economischhistorisch en politiek perspectief*, edited by E.H.P. Cordfunke, Herbert Sarfatij, 111-137. Hilversum: Verloren, 2004.



- De Muzio, Tim and Robbins, Richard. *An Anthropology of Money: A Critical Introduction*. Abingdon and New York: Routledge, 2017.
- Deng, Stephen, ed. *A Cultural History of Money in the Renaissance*. London: Bloomsbury Academic, 2019 (electronic resource).
- Deng, Stephen. "Money, Ritual and Religion." In *A Cultural History of Money in the Renaissance*, edited by Stephen Deng. London: Bloomsbury Academic, 2019 (electronic resource).
- Felfe, Robert. "Naer het leven: between Image-Generating Techniques and Aesthetic Mediation." In *Ad Vivum? Visual Materials and the Vocabulary of Life-Likeness in Europe before 1800*, edited by Thomas Balfe, Joanna Woodall, Claus Zittel, 44-88. Leiden: Brill, Intersections 61, 2019.
- Fisher, John. "Gold in the Search for the Americas." Gold Bulletin 9 (1976): 58-63.
- Flynn, Dennis. *World Silver and Monetary History in the 16th and 17th Centuries*. Aldershot: Variorum: 1996.
- Flynn, Dennis and Giráldez, Arturo. "Born with a 'Silver Spoon': The Origin of World Trade in 1571." In *Journal of World History* 6, no. 2 (1995): 201-221.
- Gell, Alfred. Art and Agency: An Anthropological Theory. Oxford: Clarendon Press, 1998.
- Gell, Alfred. "The Technology of Enchantment and the Enchantment of Technology." In Gell, Alfred, *The Art of Anthropology: Essays and Diagrams*, edited by Eric Hirsch, 159-186. London: Routledge, 1999.
- Giráldez, Arturo. "Money and its Technologies: Mining, Metallurgy, Minting, and Non-Metallic Monetary Forms." In *A Cultural History of Money in the Renaissance*, edited by Stephen Deng, 15-38. London: Bloomsbury Academic, 2019 (electronic resource).
- Gorini, Giovanni. "The Coin as Blazon or Talisman: Paramonetary Functions of Money." *Diogenes* 26, no. 101-102 (1978): 70-88.
- Green, Toby. A Fistfull of Shells: West Africa from the Rise of the Slave Trade to the Age of Revolution. London: Allen Lane, 2019.
- Hamon, Philippe. "L'avarice en images: mutations d'une répresentation." *Seizième Siècle* 4 (2008): 11-34.
- Honig, Elizabeth. *Painting and the Market in Early Modern Antwerp*. New Haven and London: Yale University Press, 1998.
- Honig, Elizabeth. "Counting out their Money: Money and Representation in the Early Modern Netherlands." *Leidschrift* 2 (April 1998): 31-66.
- Jacobi, Lauren. *The Architecture of Banking in Renaissance Italy: Constructing the Spaces of Money.* Cambridge: Cambridge University Press, 2019.
- Kambaskovic, Danijela and Wolfe, Charles. "The Senses in Philosophy and Science: From the Nobility of Sight to the Materialism of Touch." In *A Cultural History of the Senses in the Renaissance*, edited by Herman Roodenburg, 107-126. London: Bloomsbury Academic, 2014.



- Latour, Bruno. "How to be Iconophilic in Art, Science and Religion." In *Picturing Science, Producing Art*, edited by Carrie Jones and Peter Galison, 418-440. London: Routledge, 1998.
- Parshall, Peter. "Imago Contrafacta: Images and Facts in the Northern Renaissance." *Art History* 16, no. 4 (1993): 554–579.
- Parsons, Jotham. *Making Money in 16th Century France: Currency, Culture and the State.* Ithaca and London: Cornell University Press, 2014.
- Pettifor, Ann. *Just Money: How Society can Break the Despotic Power of Finance*. Margate: Commonwealth, 2014.
- Sargent, Thomas and Velde, François. *The Big Problem of Small Change*. Princeton: Princeton University Press, 2003.
- Shakespeare, William. The Merchant of Venice. London, 1598 (consulted in a later edition).
- Shell, Marc. *The End of Kinship: 'Measure for measure', Incest and the Ideal of Universal Siblinghood.* Stanford: Stanford University Press, 1988.
- Shell, Marc. Art and Money. Chicago: University of Chicago Press, 1995.
- Simmel, Georg. *The Philosophy of Money*, edited by David Frisby. London and New York: Routledge, 1990.
- Stahl, Alan. "Mint and Medal in the Renaissance." In *Perspectives on the Renaissance Medal*, edited by Stephen Scher, 137-147. New York: Garland, 2000.
- Suprinyak, Carlos Eduardo. "Merchants and Councillors: Intellectual Divergences in Early 17th Century British Economic Thought." *Nova Economia* 21, no. 3 (2011). https://doi.org/10.1590/S0103-63512011000300006
- Taylor, John. *A Shilling or, The Travailes of Twelve-Pence*. London: printed by Edward Allde for Henry Gosson, 1621. Early English Books Online, STC (2^{nd} ed.)/23793.
- Van de Venne, Adriaen. *Tafereel van de Belachende Werelt*. The Hague: Gedruckt voor den Autheur, 1635.
- Van Winter, Pieter. "De Hollandse tuin," *Nederlands Kunsthistorisch Jaarboek* 8 (1957): 29–121. Von Glahn, Richard. *Fountain of Fortune: Money and Monetary Policy in China, 1000-1700*. Berkeley: University of California Press, 1996.
- Wang, Helen. "Textiles as Money on the Silk Road?" *Journal of the Royal Asiatic Society* 23, no.2 (2013): 165-174. https://doi.org/10.1017/S135618631300014X
- Woodall, Joanna. "'De Wisselaer'. Quentin Matsys's Man Weighing Gold Coins and his Wife, 1514." In *Trading Values in Early Modern Antwerp. Nederlands Kunsthistorisch Jaarboek* 64, edited by Christine Goettler, Bart Ramakers, Joanna Woodall, 38-75. Leiden: Brill, 2014.
- Woodall, Joanna, "For Love and Money: The Circulation of Value and Desire in Abraham Ortelius's *Album Amicorum.*" In *Ut Pictura Amor: The Reflexive Imagery of Love in Artistic Theory and Practice* 1500-1700, edited by Walter Melion, Joanna Woodall and Michael Zell, 649-703. Leiden: Brill, 2017.
- Zorach, Rebecca and Phillips Jr., Michael. Gold: Nature and Culture. London: Reaktion, 2016.



About the authors

Joanna Woodall is Professor of Art History at The Courtauld Institute of Art. She specialises in Netherlandish visual culture during the age of global expansion. Her recent publications have focused on love and money, and sometimes the exchange between the two.

Natasha Seaman is Professor of Art History at Rhode Island College. She is the author of *Hendrick ter Brugghen and the Theology of the Image. Reinventing Painting after the Reformation in Utrecht* (Ashgate 2012) and several articles relating to the work of the Utrecht Caravaggisti.

