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Redeeming the Truth:

Robert Morden and the Marketing of Authority

in Early World Atlases

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requirements for the degree Doctor of Philosophy

in History

by

Laura Suzanne York

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ABSTRACT OF THE DISSERTATION

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Doctor of Philosophy in History
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By its very nature as a “book of the world”—a product simultaneously artistic and intellectual—the world atlas of the seventeenth century promoted a totalizing global view designed to inform, educate, and delight readers by describing the entire world through science and imagination, mathematics and wonder. Yet early modern atlas makers faced two important challenges to commercial success. First, there were many similar products available from competitors at home and abroad. Secondly, they faced consumer skepticism about the authority of any work claiming to describe the entire world, in the period before standards of publishing credibility were established, and before the transition from trust in premodern geographic authorities to trust in modern authorities was complete.

This study argues that commercial world atlas compilers of London and Paris strove to meet these challenges through marketing strategies of authorial self-presentation designed to promote their authority to create a trustworthy world atlas. It identifies and examines several key personas that, deployed through atlas texts and portraits, together formed a self-presentation asserting the atlas producer's cultural authority. As an inquiry into how successful world atlases reveal the changing values of the cultures in which they were produced, sold, and consumed, this study analyzes the self-presentations of four atlas makers of London (Herman Moll, Robert Morden, John Senex, and John Speed) and four Parisian atlas makers (Jean Boisseau, Nicolas de Fer, Alexis-Hubert Jaillot, and Allain Manesson Mallet). Examining atlases published between 1627 and 1721, I demonstrate how atlas compilers created personas advertising not only their geographic knowledge, but also other desirable characteristics and affiliations.

After reviewing the intellectual origins of the early modern world atlas, I offer thematic analyses of the three most common personas: the patron's servant, the artisanal geographic expert, and the scholarly geographic expert. These are followed by a case study of the vivid and layered self-presentation created by Robert Morden. The Conclusions consider the cross-cultural contexts influencing the choices atlas makers faced when presenting themselves to readers.

The dissertation of Laura Suzanne York is approved.

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BIOGRAPHICAL SKETCH

Laura York completed a Bachelor of Arts *cum laude* degree in History, with a specialization in European history, from the University of California, San Diego, in 1992. She received a Master of Arts degree in History, with a specialization in Early Modern Europe, from the University of California, Riverside, in 1998. Two years later, she began the doctoral program in History at the University of California, Los Angeles. In 2002-2003, she conducted doctoral research as a student at L'Ecole des Hautes Etudes en Sciences Sociales in Paris, France.

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Laura York has presented her doctoral research at the International Conference on the History of Cartography (2003) and at the annual meeting of the American Historical Association (2006). Her professional service includes membership on the Committee on Women Historians and the Committee on Graduate Students for the American Historical Association (2002-2004).

While at UC Riverside and UCLA, she served in multiple teaching assistant appointments for World History and Western Civilization courses, as well as appointments as faculty research assistant and course reader. In 2001, she also served as Academic Internship Instructor in Humanities for the UCLA Center for Experiential Education. She served as a Teaching Fellow in the UCLA History Department in 2004-2005, developing undergraduate seminars on the history of maps and on piracy in European history, and was appointed Lecturer in the Department of History at California State University, Los Angeles, in 2009, presenting an undergraduate course on Seventeenth Century Europe.

Her professional experience before and during graduate school includes numerous positions in educational assessment, higher education administration, and student affairs. Since 2005, she has served as project director in health services policy research and quality improvement for the U.S. Department of Veterans Affairs.

Selected Publications

York, Laura. "Going on the job market? Some do's and don'ts for an effective CV and cover letter," in *Perspectives: American Historical Association Newsmagazine* 44 (2006): 41-43.

York, Laura. Review of Sumathi Ramaswamy, "The Lost Land of Lemuria: Fabulous Geographies, Catastrophic Histories." *Directions in Cultural History*, 5 (2006): 23-26.

York, Laura and Florence Lemoine. *The Princeton Review's Roadmap to the Virginia Standards of Learning Exams: World History and Geography*. New York: Random House, 2005.

York, Laura. Review of Frances Harris and Michael Hunter, eds. "John Evelyn and his milieu." *Comitatus* 36 (2005): 250-252.

York, Laura. Review of Nancy Bisaha, "Creating East and West: The Ottomans and Renaissance Humanism." *Comitatus* 36 (2005): 192-193.

York, Laura. Review of Walter Goffart, "Historical atlases: the first three hundred years." *Cartographica* 39 (2004): 100-101.

York, Laura and Krystof Urban. "'The state is not the enemy': interview with Dr. Wijnand Mijnhard." *New German Review* 17 (2002): 64-83.

York, Laura. Articles in Shona Grimbley, ed., *Renaissance* (10 vols). Danbury, CT: Grolier, 2002. [Subjects: Leon Battista Alberti, Sofonisba Anguissola, Courts & Court Culture, Christine de Pizan, Artemisia Gentileschi]

York, Laura. Articles in Anne Commire and Deborah Klezmer, eds., *Women in World History: A Biographical Encyclopedia* (15 vols.). Detroit: Gale Research Group, 1999-2001. [Subjects: Berengaria of Navarre, Isabella and Beatrice d'Este, Christine de Pizan, Helen Keller, Marguerite d'Anjou, Philippa of Hainault, Charlotte Robespierre, Anna-Maria van Schurmann, Madeleine de Scudéry]

York, Laura. "The 'spirit of Caesar' and His Majesty's servant: the self-fashioning of women artists in early modern Europe." *Women's Studies* 30 (2001): 499-520.

Unpublished Historical Research

"Cartography and aesthetics in Enlightenment France"

"*Honnêteté* and the woman artist in the Académie Royale de Peinture et Sculpture, 1663-1706"

CHAPTER ONE

REDEEMING THE TRUTH: AUTHORITY IN EARLY WORLD ATLASES

In 1680, the London map seller and publisher Robert Morden (c.1650-1703) addressed potential readers of his new world atlas, *Geography Rectified*:

...And here I crave Pardon for the Audacity of this Attempt. . .surely more advantagious had it been unto Geography to have fallen into the endeavours of some able Advancers, that might have performed it unto the Life, and added Authority thereto. For I am not ignorant of the discouragement of Contradiction, of the difficulty of dissuasion from radicated Beliefs, of what cold requitals some have found in their redemptions of Truth, and how ingenious discoveries have been dismissed. . .As to this present Treatise, I shall only say, that though after many years Experience not only in making and projecting of Globes, Maps, &c. but also in examining and comparing of the Discoveries, Observations, Drafts, Journals and Writings, as well of the Antient as Modern Geographers, Travellers, Mariners, &c. wherein I had taken much Pains and spent much Time in preparing for such a work. Yet it was not my Intendment to have appeared upon the Horizon of Publique Veiw [sic], had not the great stir and Abuses of many Ignorant pretenders forced me to this undertaking; I know it wants the helps and advantages of a more Learned Pen, and in Truth it ought to have been freed from those frequent avocations and disturbances that attend a Publique Shop and Trade.¹

At first glance the passage may seem unremarkable. Many seventeenth-century books open with addresses proclaiming the author's reluctance to undertake the work and his modest account of his ability to bring the work to fruition. Yet a close reading of the text is in fact quite revealing. It reveals Morden's stated reasons for making the atlas—412 pages of maps and geographic and

1. Robert Morden, "To the Reader," in *Geography Rectified: or a Description of the World, in all its Kingdoms, Provinces, Countries...* (London: for Robert Morden and Thomas Cockeril, 1680), n.p.

historical texts with supplements helpful to those in trade (weights and measures, coinage, etc.) (Figure 1). It hints at his attitude toward the new natural philosophy—the Copernican worldview, the privileging of modern experience over ancient texts, and the Baconian approach to investigations into natural phenomena—which had begun to spread among educated Londoners. The passage further shows how Morden claims to have compiled the work, what sources he used and his method of comparing them. It strikes the reader, for example, that Morden makes no mention of biblical or Christian sources.

Lastly, the passage demonstrates Morden's projection of himself to buyers, that is, his self-presentation.² Although atlas makers could adopt a variety of identities and associations, Morden chose to emphasize his lack of formal learning, his hard work as a tradesman, and his indignation at society's frequent dismissal of “ingenious discoveries.” In short there is an array of meanings and engagements with the contemporary culture that can be drawn from this text. Linking all of these meanings is the theme of authority—who can and should make the “picture of the world,” the authorities used to compile that picture, and Morden's own calculated contradictions in simultaneously denying and asserting his own personal authority to describe the earth (his is not a “Learned Pen,” but he has “many years Experience”).

The medium of this message reveals another level of meaning. It is an address to the reader, and immediately follows the title page and dedication letter. In the seventeenth century, a reader address (or preface) filled much the same function as jacket copy does in modern books: as a short summary of the work that directly advertises to potential buyers the book's appeal, desirability and value (however defined). *Geography Rectified's* address is not a spontaneous

2. The analytical concept of “self-presentation,” the individual's assertion of a particular persona to others, is borrowed from behavioral psychology and sociology but has been fruitfully applied to historical analysis of textual sources. I define the term further and differentiate it from the related concept of self-fashioning in Chapter 3.

Geography Rectified :

OR, A

DESCRIPTION

OF THE

WORLD,

In all its Kingdoms, Provinces, Countries,
Islands, Cities, Towns, Seas, Rivers, Bayes, Capes,
Ports; Their Ancient and Present Names, Inhabitants,
Situations, Histories, Customs, Governments, &c.

As also their Commodities, Coins, Weights, and
Measures, Compared with those at LONDON.

Illustrated with Seventy eight M A P S.

*The Third Edition, Enlarged. To which is added a Compleat Geographical Index
to the Whole, Alphabetically digested.*

The whole Work performed according to the more Accurate Observations
and Discoveries of Modern Authors.

By **ROBERT MORDEN.**

L O N D O N.

Printed for *Robert Morden* and *Thomas Cockerill*, at the *Atlas*
in *Cornhill*, and at the *Three Legs* in the *Poultry*, over-against
the *Stocks-Market.* **MDCXCIII.**

1693

Figure 1. Redeeming the truth: Title page of Robert Morden's *Geography Rectified*, 3rd edition (London: Printed for Robert Morden and Thomas Cockerill, 1693). Est. 10096. (Ecole Nationale Supérieure des Beaux-Arts, Paris).

letter to friends; it is a commercial strategy invoking several forms of intellectual authority—personal experience, ancient and modern scholarship, “redemptions of Truth,” and contemporary human experience—all used as marketing tools to sell the atlas. The address follows a patronage letter—another means of invoking authority—and precedes “A General Map of the Earth,” evidence of Morden's ability to create an image of the world.

What other strategies did Robert Morden and other seventeenth-century atlas makers³ use to make their world atlases appealing and authoritative in the competitive marketplace for geographic atlases? How else did atlas compilers present themselves as an authority to readers? Did atlas makers in other cultures use the same authorizing strategies or are there cultural differences in how atlases were marketed? The following study explores these issues by examining successful early commercial world atlases. To provide a more in-depth, cross-cultural perspective, only atlases published in London and Paris are examined.

The inimitable Robert Morden—bookseller, mapmaker, globe maker, and atlas compiler of late seventeenth-century London—plays a central role throughout this analysis, though it pays careful attention to the works and self-presentations of seven other compilers as well. A successful shopkeeper and guild member, Morden identified himself with atlas production, perhaps more so than any of his competitors—in fact, Morden's shops could be found “at the sign of the Atlas” in Cheapside and Cornhill for most of his career. I chose Morden as a focal point for three reasons. First, the period of his active production (c. 1675-1700) spans the central

3. This study uses the terms "atlas compiler," "atlas maker," and "atlas producer" interchangeably to describe the individual primarily responsible for a new atlas edition. It deliberately avoids the terms "author" and "cartographer" when referring to these men, because of the complex nature of early modern cartographic production and because "cartography" is a nineteenth-century neologism; seventeenth-century compilers referred to themselves usually as geographers, and less often as mapmakers. The prohibitive cost of engraving and writing meant that rarely were all of the maps and texts comprising an atlas specifically created for that work, certainly not all by one man, but rather they were often adapted or plagiarized from existing plates and texts. Thus this study refers to the atlas compiler and not to the "atlas author," rather than assuming that the man named on the title page was individually responsible for every element. See Mireille Pastoureau's discussion in the introduction to *Les Atlas français, XVI-XVII siècles: Répertoire bibliographique et étude* (Paris: Bibliothèque Nationale de France, 1984), iii-vii.

period this study encompasses (1627-1721). Second, Morden's artisanal social status, his lack of formal education, and his career trajectory are typical of atlas compilers of his time, both in Paris and London. And lastly, Morden's self-presentation is at once more vivid, complex, and illuminating than those of his competitors, colleagues, and kindred spirits.

* * *

Few periods in European map history have generated as much scholarly (and even popular) interest as the early modern period. This interest has come, on the one hand, primarily from map librarians, map historians, and geographers, and on the other hand, from literary scholars, rather than from academic historians. Below is an overview of traditional cartographic history, with its technical, bibliographic, and positivist approach, followed by a discussion of the new cultural history of maps that emerged around 1990 and uses postmodern and Marxist methodologies.

Sources for map histories relate to production for the most part; printers' catalogs, printers' inventories, and the objects themselves make up the bulk of the sources available. Tax, probate, and other civil administrative records provide a means of reconstructing some of the lives of individual cartographers, such as where they lived and worked, marriages, guild membership, income, etc. Records of map sales and production figures are notoriously fragmentary where they do exist; there are no English or French map sellers of this period for whom substantial business records or personal documents remain.

Besides a large number of general surveys of map history,⁴ many books and articles published before 1990 are carto-bibliographies, reference works providing production data. Carto-bibliographies list the names of cartographers and publishers; individual maps, globes, and atlases; the technologies employed; and the provenance and condition of surviving examples, including bibliographic data such as size, print medium, scale, and title. Though crucial for any scholarship on map history, these works do not often discuss the consumption of printed maps, non-geographical elements and meanings of the map, or textual elements of the map or book. The evaluation and critique of maps in such works is typically confined to its geodetic accuracy, that is, the correspondence between the map (scale, plotting, and geographic features) and the geographic reality it represents. Individual maps are placed in a chronological progression towards Euclidean accuracy that privileges the timeline of discovery and the spread of new geographic information.

In the past twenty years, a number of scholars have studied the early modern map trade—that is, the map as an object of consumption. This includes Mary Sponberg Pedley’s recent *The Commerce of Cartography*, a comparative study of map production and the map trade in eighteenth-century Paris and London that focuses less on the maps and more on the map-makers and their professional lives; and the works of economic historian Chandra Mukerji and the late map historian David Woodward.⁵

4. See, for example, Norman J.W. Thrower, *Maps and Civilization: Cartography in Culture and Society*, 2nd ed. (Chicago: Univ. of Chicago Press, 1999); and John Noble Wilford, *The Mapmakers* (New York: Knopf, 1981).

5. Mary Sponberg Pedley, *The Commerce of Cartography: Making and Marketing Maps in Eighteenth-Century France and England* (Chicago: Univ. of Chicago, 2005); Chandra Mukerji, “A New World Picture: Maps as Capital Goods for the Modern World System,” in *From Graven Images: Patterns of Modern Materialism* (New York: Columbia Univ. Press, 1983), 70-127; and David Woodward, *Maps as Prints in the Italian Renaissance: Makers, Distributors and Consumers* (London: British Library, 1996).

It is striking that to a large extent, neither the “new” nor the “old” histories of science have engaged significantly with cartography as part of the Scientific Revolution. This is perhaps surprising, given the central place of geography and discovery in initiating the economic and intellectual changes with which general science histories usually begin—Columbus, Magellan, etc. General science histories note the rediscovery of Ptolemy’s *Geographia* in the fifteenth century, the Mercator projection of 1569, and the Age of Discovery, but they do not generally treat maps or atlases as important in disseminating scientific ideas to the European public, or in shaping the world views of inquisitive natural philosophers—even though many notable figures of the Scientific Revolution engaged in mapmaking and/or surveying. There are of course many works on the geographic discoveries and European reactions, but the intermediary role filled by the map between discovery and popular knowledge of the discovery demands more attention than it has received.⁶ Also somewhat surprising is that, given the remarkable artistic effort put into the better-quality maps and globes of the period and the careful attention to iconography, symbols, and decorative motifs, few art historians have shown sustained interest in map history.⁷

Despite the apparent connections among painting, drawing, technical drawing, perspective, and mapmaking, there are still few works exploring those relationships. One notable exception is Samuel Edgerton’s *The Heritage of Giotto’s Geometry*, which argues that

6. See, for example, John H. Elliott, *The Old World and the New, 1492-1650* (Cambridge, UK: Cambridge Univ. Press, 1970); and Anthony Grafton, *New Worlds, Ancient Texts: The Power of Tradition and the Shock of Discovery* (Cambridge, MA: Harvard Univ. Press, 1992). The separation of cartography from other histories may be attributed in part to the isolation of cartographic history from other historical fields, and perhaps also to the perception that geography, as a descriptive rather than explanatory science, is of less importance in the Scientific Revolution than the explanatory sciences such as physics or astronomy.

7. Many histories of cartography written after 1987 make some reference to maps as artistic productions, frequently citing map historian David Woodward, ed., *Art and Cartography: Six Historical Essays* (Chicago: Univ. of Chicago Press, 1987), as their only source; also cited is art historian Svetlana Alpers’ chapter “The Mapping Impulse in Dutch Art” in *The Art of Describing: Dutch Art in the Seventeenth Century* (Chicago: Univ. of Chicago Press, 1983).

the techniques of perspective drawing and technical drafting developed by Italian Renaissance artists were crucial to the visual thinking of scientists such as Galileo and Kepler.⁸

A shift in scholarly focus to the cultural history of maps, now termed the “new history of cartography,” began in 1990. In that year the map historian J.B. Harley wrote, “In describing the bibliographical and technical complexity of maps, [map historians] have failed to communicate an understanding of their social nature,” and added that “[w]riting about the history of maps per se has been at best a marginal interest for mainstream historians: when, we may ask, did an article about cartography last appear in the *American Historical Review*?”⁹ This last question opened an article calling for a bridging of the gap between academic historians and map historians (the answer appears to be 1934).¹⁰ Harley, dissatisfied with the scholarly isolation and largely technical nature of the work of map historians, argued that cartographic history needed to adopt the methodologies and theories of academic cultural historians, particularly those working in postmodern and Marxist historiographical schools, in order to regain scholarly relevance. He thus applied his wide knowledge of art history, literature, Marxist theory, and postmodernism to interpreting early modern English maps.¹¹

Hoping to create a “theory of maps,” Harley argued that the social, political, and cultural contexts in which a particular map is produced and consumed must be understood in order to

8. Samuel Edgerton, *The Heritage of Giotto's Geometry: Art and Science on the Eve of the Scientific Revolution* (Ithaca, NY: Cornell Univ. Press, 1991). Edgerton describes a “geometricization of terrestrial space” that derived from then-newly discovered Ptolemaic cartographic principles of the graticule (essentially lines of latitude and longitude), which rationalizes terrestrial space by measuring it in two directions. Edgerton does not deal at length with maps *per se*, yet his thesis is relevant to cartographic historiography, since he wishes to promote the visual arts to a key place in the history of the rise of Western science.

9. J.B. Harley, “Texts and Contexts in the Interpretation of Early Maps,” in *The New Nature of Maps: Essays in the History of Cartography*, ed. Paul Laxton (Baltimore: Johns Hopkins Univ. Press, 2001), 34.

10. Reviews of map-related books have been considerably more common in the *American Historical Review*.

11. Representative works are included in the posthumous collection of Harley's essays, *The New Nature of Maps*.

understand the map—and that the map, in turn, reveals something about the human context of its creation. Theorizing a new approach to cartographic history, Harley believed in the power of maps to shape the contexts around them—political, social, economic, and cultural. He theorized the power of the map to create, reinforce, challenge, and disseminate ideologies through text and image, scale, decoration, dedication, and choice of included and excluded features. A number of geographers and map historians have heeded Harley’s call to investigate the political uses and cultural meanings of maps—what they portray and what they omit.¹²

Many who are writing these new histories use a postmodernist approach; that is, they focus on texts and deconstruct the deployment of state power, colonial authority, Euro-centrism, and European racism within individual maps, often through analysis of toponymy, border illustrations, and decorative elements. This field has drawn more interest from scholars in other fields already using postmodern analyses, most notably in literary studies, than it has from cartographic historians, who are often trained as cartographers, map librarians, or geographers, and thus approach early maps with a very different methodology.

Scores of books and articles on the meaning of geography in the early modern period have been written by literary scholars, which explains why many new histories of cartography focus on travel literature and “geographic” (often interpreted to mean spatial) themes in fiction rather than on cartography, or the map trade, etc.¹³ Indeed, as Evelyn Edson has pointed out, the

12. One of these is the late Denis Cosgrove, whose *Apollo’s Eye: A Genealogy of the Globe in the Western Imagination* (Baltimore, MD: Johns Hopkins Univ. Press, 2001), is a cultural analysis of the multiple meanings and associations—cultural, spiritual, and political—of the globe, spanning western culture from antiquity to the present. See also Jerry Brotton, *Trading Territories: Mapping the Early Modern World* (Ithaca, NY: Cornell Univ. Press, 1997), which argues for the important role of maps as conveyors and thus creators of political and social power.

13. Three excellent examples of literary scholars borrowing ideas and sources from the history of maps are Tom Conley, *The Self-Made Map: Cartographic Writing in Early Modern France* (Minneapolis: Univ. of Minnesota Press, 1996), which does not address maps *per se* but is instead an analysis of spatiality, travel, and geography in a number of Renaissance literary works, employing postmodern analyses of book illustrations of non-European peoples and extra-European lands; Mary Baine Campbell, *Wonder and Science: Imagining Worlds in Early Modern Europe* (Ithaca, NY: Cornell Univ. Press, 1999), likewise a literary analysis that does not focus on cartographic works; and

content of many purported studies of cartography published after 1990 would hardly be recognized as such by more conventional cartographic historians.¹⁴

Yet much work remains to be done on early atlases, despite their potential interest to scholars of such diverse fields as the history of science and technology, world exploration, colonization, education, diplomacy, the book trade, art, and commerce. General histories of cartography discuss atlases, but usually as a step forward in the “cartographic revolution” of the sixteenth century, or within the context of individual maps within atlases, rather than examining the atlases as whole entities. The pioneering atlas works of Abraham Ortelius and Gerhard Mercator are typically mentioned as evidence of the growth of cartographic knowledge in the last decades of the sixteenth century.

Academic historians have, by and large, left atlases and cartography in general to specialists outside of history departments; each year graduate students complete a number of theses on historical maps, yet most are the product of geography departments, or, to a lesser extent, language and literature departments, rather than history departments. Atlases have also largely escaped the attention of book historians, although they were part of many libraries and were read along with other scientific books that also combined texts with images. The cartobibliographic approach to atlases is represented by several major compilations, including Mireille Pastoureau’s comprehensive *Les Atlas français, XVI-XVII siècles* (1984), a cartobibliography modeled on Cornelius Koeman’s pioneering *Atlantes Neerlandici*.^{15,16}

John Gillies, *Shakespeare and the Geography of Difference* (Cambridge, UK: Cambridge Univ. Press, 1994), which explores racial stereotyping and the creation of an “other” in Shakespeare’s plays.

14. See Evelyn Edson, “Bibliographic Essay: The History of Cartography”, *Choice* 38, no. 11/12 (2001): 1899-1909.

15. Pastoureau is former head of the Département des Cartes et Plans at the Bibliothèque Nationale de France and the leading expert on early French atlases.

16. Koeman’s multi-volume cartobibliography (1967-1971) has been updated by Peter van der Krogt as *Koeman’s Atlantes Neerlandici* (Houten, the Netherlands: HES Publishers, 1997-2000). Two other works that describe important

Several map historians have specialized in atlas studies. The major works of two of them remain unpublished; only one of them works from the discipline of history. The 800-page dissertation of map librarian James Akerman (1991) combines Harleian analyses with a traditional carto-bibliographic approach to geographic atlases from 1500-1900, arguing that the ordering of atlas maps changed over time to reflect intellectual changes and the development of Europeans' consciousness of "Europe" as a continent and culture different from the other three parts of the world (i.e., Asia, Africa, and America).¹⁷ Medievalist Walter Goffart's 2003 monograph on historical atlases concerns the relationship between the study of geography and the study of history, focusing on atlases published after 1750. Goffart examines atlases produced specifically for the study of history (which prior to 1750 meant almost all atlases), particularly ancient geography and medieval historical events.¹⁸

Another dissertation, by geographer Dalia Varanka, takes a more literary approach and focuses more on atlas texts than on atlas maps. "Editorial and Design Principles in the Rise of English World Atlases, 1606-1729" (1994) examines how the texts and design of early English atlases changed as a result of the Scientific Revolution.¹⁹ Varanka argues that changes in atlas prose style and vocabulary reflect changes among English intellectuals from the classical,

library collections, rather than national oeuvres, are Rodney Shirley, *Maps in the Atlases of the British Library: A Descriptive Catalogue, c.850-1800* (London: British Library, 2004), and Philip J. Philips, *List of Geographical Atlases in the Library of Congress* (Washington, DC: Government Printing Office, 1909[-1992]). There is no carto-bibliography of early English works to date.

17. James Akerman, "On the Shoulders of a Titan: Viewing the World of the Past in Atlas Structure" (PhD diss., Pennsylvania State University, 1991).

18. Walter Goffart, *Historical Atlases: The First Three Hundred Years, 1570-1870* (Chicago: Univ. of Chicago Press, 2003).

19. Dalia Varanka, "Editorial and Design Principles in the Rise of English World Atlases, 1606-1729" (PhD diss. University of Wisconsin, Milwaukee, 1994).

flowery Baroque to the adoption of “plain style” prose as the new Baconian ideals for the presentation of scientific information were gradually adopted.

The current study draws on this array of previous scholarship to examine early world atlases as books, rather than merely bound maps, whose introductory and textual components are as meaningful as their composition and individual maps.

London and Paris in the Age of Atlases

Below I sketch some of the major social contexts in which the commercial world atlases of this study were conceived, executed, published, and sold. This study begins at the end of the “Age of Atlases,” when Dutch and Flemish dominance of the map trade was in decline, soon to be taken over by the French and English. By the mid-seventeenth century, Dutch colonial dominance was giving way to French assertion of global colonial possessions (the so-called “Dutch decline” of the later seventeenth century), while the English were starting to assert power on the high seas.²⁰

As Dennis Reinhartz has pointed out, the demand for geographic information in any one nation was proportional in this period to the extent of its global exploration and colonizing efforts, which explains the delay between the first best-selling Netherlandish world atlases in the late sixteenth century and the first English world atlas, printed in 1627, when John Speed's *The Prospect of the World* appeared in London (the earlier *Mercator's Atlas* of 1606 published in

20. Many monographs and surveys have examined the colonial rivalries of the seventeenth-century empires. For an excellent survey of the place of the United Provinces in the wider European context, see Jonathan Israel, *The Dutch Republic: Its Rise, Greatness, and Fall, 1477-1806* (Oxford: Clarendon Press, 1995).

London being a translation of the Flemish work).²¹ Speed remained the lone voice offering Londoners a home-grown atlas of the world until English atlas publishing took off in the 1670s.

Similarly, the first world atlas published in Paris did not appear until 1643, when France, having established domestic peace after years of religious and civil war, began to consolidate its position as a trade, colonial, and military power.²² After a fifteen-year interval, French publishers began to create new works (or old works reprinted under new titles) with regularity into the modern period.

In the period of this study, London and Paris were printing, bookselling, and cartographic capitals; the centers of emerging trade and colonial empires; and the cities to which private and state-financed explorers, surveyors, and travelers returned with new geographic data to modify existing maps. Both states experienced enormous upheaval as a period of civil and religious wars in the 1640s and 1650s threatened (and in the case of England, temporarily ended) the monarchy's hold on power. These power struggles between the king, noble factions, towns, and peasants, much complicated by sectarian conflict, were gradually (if only temporarily) resolved starting in the late 1650s. Political settlements characterized the 1660s and 1670s; in France, generally empowering the monarchy, while in England, resulting in a constitutional monarchy,

21. It is important to provide my working definition of a geographic "atlas" at this point. Certainly scholars and librarians have struggled to reach a consensus, many agreeing that a geographic atlas must be a collection of maps and must be "map-dominant," in James Akerman's phrase; that is, any texts should supplement the maps, rather than the maps illustrating the text. Yet major reference works and leading archives differ in cataloguing criteria; some, such as *Koeman's Atlantes Neerlandici*, count almost any bound work featuring maps as an atlas, while others, such as the British Library, catalogue only works with a certain number of maps as an atlas. For examples of the debate, see David Woodward, "The Techniques of Atlas Making," *Map Collector* 18 (1982): 2-13; Peter van der Krogt's introduction to *Koeman's Atlantes Neerlandici*; and Akerman, "On the Shoulders of a Titan" (1992). This study adopts the widely accepted definition offered by David Woodward: that an atlas should be defined by the intent of its author(s) more than by its composition and content. In "Techniques of Atlas Making," Woodward defines an atlas as a "collection of maps, designed to be kept bound or loose in a volume" but adds that an atlas must further be the product of the author or compiler's intent to produce a unified, planned collection of maps, with a title page, to be sold in copies to a general market.

22. This was Jean Boisseau's *Trésor des cartes géographiques des principaux estatz de l'univers* (Paris: chez Jean Boisseau, 1643).

and after the turmoil of the French and English domestic conflicts, each state turned to consolidating its power on the global stage.

The second half of the century was characterized by a series of three-way wars in which the French, English, and Dutch rulers fought at home, in Asia, and in the Americas for control of the profitable colonial trade. This competition was also, not coincidentally, responsible for a large amount of the cartographic output of the three nations as well. For France and England the wars were merely an intensification of their centuries-old rivalry in trade, learning, and culture. Indeed, the much-studied phenomenon of the “crises of the seventeenth century” involved to a large degree their unstable political and economic relationship. Yet, just as they had for centuries, the French and English maintained a vibrant and constant cultural and economic exchange, not least in the area of cartographic production. With the commercial revolution of the late sixteenth and seventeenth centuries, led in large part by colonial goods, and an increase in literacy among the urban middling classes came the development in Western European nations of a thriving print market and an increase in consumption. Historians of consumption have shown that in the second half of the seventeenth century, Londoners experienced the emergence of an identifiable consumer culture, due to the growth of a commercial economy and relatively high literacy.²³ Scholars contend that such a consumer culture did not emerge in Paris until after 1700.

Of course, at the same time that each nation was beginning to create a global empire, both France and England were also witnessing the events, discoveries, and publications that today are

23. For a revisionist argument against the consensus that the “consumer revolution” was an eighteenth-century phenomenon, see Linda Levy Peck, *Consuming Splendor: Society and Culture in Seventeenth Century England* (Cambridge, UK: Cambridge Univ. Press, 2005); also see Ann Newman’s recent interdisciplinary *Cultural Capitals: Early Modern London and Paris* (Princeton, NJ: Princeton Univ. Press, 2011); Ann Bermingham, ed., *The Consumption of Culture 1600-1800: Image, Object, Text* (New York: Routledge, 1995); and John Brewer and Roy Porter, eds., *Consumption and the World of Goods* (London: Routledge, 1993).

marked as milestones in the emergence of Western science during the late seventeenth century, the series of gradual changes in natural knowledge scholars often use to mark the beginning of the modern period. A number of historians have examined the organization and state support of seventeenth-century natural philosophers in both France and England. In Paris, the crown exercised considerable control over the topics chosen for scientific inquiry and the careers of natural philosophers. Yet while doing so, it encouraged many literate men to devote themselves fully to the “useful arts” through the mechanism of the Académies, state-sponsored institutions of learning and research separate from the universities and answering only to the crown for their development of useful applications to help strengthen the state (Figure 2).²⁴ The Académies were large, well-funded, and offered their members different levels of financial support to make their inquiries and developments possible by freeing non-noble practitioners of natural philosophy and experimental science from the need to work to support themselves.

In England the picture of seventeenth-century scientific development is quite different. While the crown wanted to support the sorts of investigations into natural phenomena that might improve trade and manufacturing and thus the nation’s economic strength, it did not have the resources to do so. The Royal Society, founded in 1660, had the approbation of the king, but much of the royal funds promised for its support never materialized, meaning that membership was collegial rather than lucrative. The fellows of the Society were therefore much less constricted in their choice of experiments than were their Parisian counterparts.²⁵

24. The history of the Académie Royale des Sciences has been told by a number of scholars, most notably Roger Hahn’s classic study *Anatomy of a Scientific Institution: The Paris Academy of Sciences, 1666-1803* (Berkeley: Univ. of California Press, 1971); and David Sturdy, *Science and Social Status: The Members of the Académie des Sciences, 1666-1750* (New York: Boydell Press, 1995).

25. A number of monographs have been written on the history of the early Royal Society, including Michael Hunter, *Establishing the New Science: the Experience of the Early Royal Society* (Woodbridge: Boydell Press, 1989) and Margery Purver’s *The Royal Society: Concept and Creation* (London: Routledge, 1967).



Figure 2. The second half of the seventeenth century saw the emergence of royally-sponsored scientific institutions in Paris, Rome, and London. Founded by Jean-Baptist Colbert in 1666, the Académie des Sciences is shown here in Sebastien Le Clerc's idealized vision of 1698, the year before it was transformed into l'Académie Royale des Sciences by statute of Louis XIV. 1693 E58.M83. (University of Pittsburgh, PA).

The rise of commercial printing, literacy, and wealth led directly to the rise of the commercial atlas. The “Age of Discovery” is the most obvious historical factor explaining both the possibility of making world atlases, and the desire for them. With the discovery of the New World and travels by Europeans across Africa and Asia came ever-increasing information about peoples, lands, resources, and products previously unknown. For the scholar, the discoveries challenged ancient geographic authorities, such as Ptolemy; for all literate people, the new geography and the astronomy on which it was based also seemed to contradict religious teachings about the earth. As new lands were mapped and named, maps were revised, and slowly integrated into the educated European’s consciousness. The discovery of the Americas may come to mind first, but, as Jerry Brotton has described, it is equally important to recognize the impact of the “discovery” of Asia and Africa by Europeans that occurred during the sixteenth and seventeenth centuries. For those in the West, the great Empire of the Grand Turk posed an immediate threat that the New World did not; and as Brotton has argued, it was the real presence of the Turkish armies on Europe’s eastern doorstep that finally helped Europeans consciously define “Europe” (as a place separate from the east), and created strong curiosity about Turkey and other eastern cultures.²⁶

Yet it is easy to overlook the slowness of the acquisition and dissemination of this geographic information. Even after two centuries of exploration, there were many areas of the world whose coordinates, coastlines, and size (and even whose existence) were topics of great debate. Geographic theories about these places were promulgated, adopted, and discarded for reasons that had nothing to do with recorded observations by trustworthy eyewitnesses. The Antarctic landmass is a good example; maps well into the eighteenth century routinely displayed

26. Jerry Brotton, *Trading Territories*.

either an extremely large southern continent, derived from Greek theories, or no southern continent at all.²⁷

In the wake of these geographical discoveries of the New and Old World and new printing technologies such as copperplate engraving, Western Europe witnessed an explosion in map production. Changes in the western European's geographical awareness followed. In 1550 only a small percentage of the English or French had ever seen a map; by 1700 they were commonplace in the middle-class and elite home, bound in Bibles, travel stories, and novels, and hung on the wall as decorations. In addition, map-based geography had become a requisite part of the gentleman's education; by the later eighteenth century, it was an expected accomplishment of respectable women as well.²⁸ The atlas, appearing first in recognizable form in 1570, came to hold a special place in both English and French culture in the second half of the seventeenth century as a popular object of education and entertainment.

The growth of popular interest in geography was both cause and effect of the growth of cartography. Now it was possible to purchase sheet maps that showed the progress of a war or a state's colonial possessions and trade routes. In France, the Jesuit colleges, which came to dominate primary and secondary education in the seventeenth century, placed a high value on witness and observation of the natural world and were the first schools to require geographic education; this also contributed to a rise in demand for geographical texts, both modern and historical.²⁹

27. Peter Whitfield, *New Found Lands: Maps in the History of Exploration* (New York: Routledge, 1998), 97.

28. Jonathan M. Smith, "State Formation, Geography, and a Gentlemen's Education," *The Geographical Review* 86, no.1 (1996): 91-100.

29. See Anne Godlewska's discussion of the role of Jesuit colleges in geographic education in *Geography Unbound: French Geographic Science from Cassini to Humboldt* (Chicago: Univ. of Chicago Press, 1999), 29-32.

From a novelty produced abroad in the late sixteenth century, over the course of the next century the atlas became a familiar, locally-produced object owned by the middling and elite classes of London and Paris. With increases in prosperity and disposable income led by a growth in domestic and foreign trade, the seventeenth century witnessed considerable growth in the middle-class populations of both capital cities. Comprised of those lower in social status than the aristocracy, but above manual laborers, this independent class included merchants, professionals such as doctors and lawyers, government bureaucrats, and those in related professions. They worked for a living, but they also were literate enough to read for pleasure as well as for business and had the prosperity needed to purchase luxury items, including books.

The unprecedented growth in the literacy of this urban population in both France and England meant that the demand for reading material, including geographic works, grew apace. Although they made up no more than ten percent of the population in either France or England (slightly smaller in France), this newly enlarged bourgeoisie created sufficient demand for books, newspapers, etc. to make printing and bookselling into growth industries. For example, Peter Earle has shown that by 1700 London boasted more than 200 print shops that primarily sold books, far more than there had been in 1600—and these shops sold a much larger stock of works than their predecessors, from the new genres of novels and newspapers, to art and pornography, to instructional works on everything from handwriting to forestry (Figure 3).³⁰

From an exceedingly rare and expensive object in the early years of printing, by 1650 books, like maps, had become commonplace. This is not to imply that book printers were unconstrained by guild or government regulation. On the contrary, the London book industry

30. This discussion is drawn largely from Peter Earle, *The Making of the English Middle Class: Business, Society, and Family Life in London, 1660-1730* (Berkeley: Univ. of California Press, 1989) and Henri-Jean Martin, *Livre, pouvoirs et société à Paris au XVII^e siècle, 1598-1701*, 3rd ed., (Geneva: Librairie Droz, 1999).



Figure 3. Paris street scene, showing Alexis-Hubert Jaillot's shop in the background. Reproduced in Mireille Pastoureau, *Les Atlas français*. Paris: Bibliothèque Nationale de France, 1984.

was subject to the monopolistic regulations of the Stationers' Company (the guild to which most publishers and printers belonged) and, after 1662, the Licensing Act,³¹ while their Parisian counterparts had to apply to the king's censors for a *privilège* to print a work, which might also entail getting an approbation from the church if the subject matter warranted ecclesiastical attention.³² Yet despite the strictures, both industries experienced lively sales of a wide variety of

31. See Adrian Johns, *The Nature of the Book: Print and Knowledge in the Making* (Chicago: Univ. of Chicago Press, 1998). Also see Sarah Tyacke, *London Map-Sellers, 1660-1720: A collection of advertisements for maps placed in the London Gazette 1668-1719 with biographical notes on the map-sellers* (Tring, Hertfordshire, UK: Map Collector Publications, 1978).

32. See Marianne Grivel, *Le Commerce de l'estampe à Paris au XVII^e siècle* (Geneva: Librairie Droz, 1986), and Henri-Jean Martin, *Livre, pouvoirs et société à Paris au XVII^e siècle*.

works, and also faced the constant threat of piracy, the unauthorized publication of a book either domestically or abroad.

Books were advertised in journals and newspapers; translations were commissioned of Latin or foreign language works in demand; and sellers competed fiercely for customers. Small bookstalls operated by prosperous print businesses even appeared along the waterfronts and in government buildings such as the Royal Exchange, to accommodate potential buyers where they worked. Atlases were part and parcel of this new marketplace of printed works. The appearance of Abraham Ortelius' *Theatrum Orbis Terrarum* (1570) and later Gerhard Mercator's genre-defining *Atlas sive cosmographicae meditationes de fabrica mundi et fabricati figura* (1595) (both discussed in detail in Chapter 2) paved the way for the publication of a myriad of commercial world atlas products, especially after 1630. New publications were advertised in newspapers, but atlas makers used other promotional strategies as well, including engraved title pages, prefaces to the reader, the Term Catalogs of new books (in London), and reviews in the new journals of natural and experimental philosophy such as the *Philosophical Transactions* of the Royal Society.

Although it is generally agreed that Paris lagged behind London in the emergence of an identifiable consumer culture, Paris atlas makers did not face a lack of demand for their products.³³ The same rise in foreign trade, disposable income, desire for social advancement, and increased awareness of the world abroad that led to an explosion in demand for maps and books also led to a more general increase in consumption in luxury goods by both Parisians and Londoners. Recent historians have commented on the frequent observations made in this period

33. Indeed, the dozens of French publications and re-publications of atlases suggest that late seventeenth-century bourgeois Parisians knew what atlases were and that many wanted to own one.

by middle-class visitors to both cities on the fashions and imported luxury goods owned by people of lower social standing, even servants.³⁴

This convergence of historical processes created a remarkable increase in the sheer number of goods conveniently available for purchase at a reasonable price by anyone with the money to do so. Neil McKendrick and John Brewer have argued that mass commercialism in eighteenth-century England—marketing, branding, and publicity—can be traced to the second half of the seventeenth century and the culture of its urban coffeehouses.³⁵ The coffeehouses also played a role in creating demand for map products and geographic information (Figure 4). Coffeehouse patrons were in fact the same men that scholars, following the classic work of Jürgen Habermas, believe formed the earliest public sphere, the men who read newspapers and discussed current affairs, and who, not coincidentally, purchased educational geographic works like world atlases to help them understand what they read and discussed.

World Atlases and the Book Market of Seventeenth-Century London and Paris

This study takes as axiomatic that whatever else a world atlas was to its seventeenth-century producer and consumer, it was first and foremost a book. That means the atlas makers knew they were competing against the entire non-fiction book market for the pounds and livres of book buyers, not just against the smaller market of cartographic products (atlases, maps, charts, globes, and general geographic works). Because this commercial competition influenced

34. See, for example, Cissie Fairchild, "The Production and Marketing of Populuxe Goods in Eighteenth-Century Paris," in *Consumption and the World of Goods*, ed. John Brewer and Roy Porter (London: Routledge, 1993), 228-248.

35. See Neil McKendrick and John Brewer, *The Birth of a Consumer Society: the Commercialization of Eighteenth-Century England* (Bloomington: Indiana UP, 1982).



Figure 4. Coffeeshouses, new in the second half of the seventeenth century in both Paris and London, provided sites of sociability, news consumption, and topical discussions for urban professional men and literate artisans. Prints W.1.2(203). (Bodleian Library, Oxford University, UK).

the marketing and promotion of atlases, it is important to have an idea of the broader range of printed books that were being sold in the same period as the early world atlases. Although a comprehensive discussion is beyond the scope of this work, below I outline the types of books available for purchase in the same retail establishments that carried the atlases of John Speed, Allain Manesson Mallet, and others.³⁶

36. Sources for this summary are Edward Arber, *The Term Catalogues, 1668-1709 A.D.* (London: Edward Arber, 1903-1906); Henri-Jean Martin, *Livre, pouvoirs et société à Paris au XVII^e siècle*; Sarah Tyacke, *London Map-Sellers*; and Christiane Berkvens-Stevelinck, "Le Magasin de l'univers: The Dutch Republic as the Centre of the European Book Trade," *Brill's Studies in Intellectual History* 31 (Amsterdam: Brill, 1992). For a discussion of the evolution of commercial (as opposed to client-based) authorship and the impact on the book market, see Geoffrey Turnovsky, *The Literary Market: Authorship and Modernity in the Old Regime* (Philadelphia: Univ. of Pennsylvania Press, 2009), esp. 25-62 and 145-183.

The world atlas' primary competitors on the shelves of the Parisian or London print shop were other geographic and cosmographic books—primers, dictionaries, and world systems (e.g., Ptolemaic or Copernican). Perhaps the most important rival for the world atlas was the true cosmography, such as the very popular sixteenth-century *Cosmographia* of Sebastian Münster, first published in 1544 and appearing in about 40 editions by 1628. Also available within France was *La Cosmographie universelle de tout le monde* (1575) of François Belleforest, in reality merely a plagiarized version of Münster's work with some added descriptions of France. In England, many owned Peter Heylyn's *Microcosmus, or a little description of the great world* (1621), among others.

As described in Chapter 2, cosmographies situated an overview of geography within a description of the shape and parts of the entire universe and, usually, commented on the competing Copernican and Ptolemaic theories of the world. They did not provide extensive Euclidean geography, though they usually did offer encyclopedic material on the history and the distribution of humanity across the globe, thus competing with other descriptive geographies. Note that Heylyn's work, which appeared in many editions throughout the seventeenth century, was the last of the bestselling cosmographies, its appearance in a way signaling the end of the age of cosmographies. The rapid increase of available geographic and celestial data of the seventeenth century led to the decline of the cosmography as a single printed work; perhaps the universe had grown too large to be contained within the covers of a single book.

The mathematically-trained reader could choose any number of books, many of them purporting to solve the problem of finding longitude at sea, one of the most pressing problems of applied mathematics of the early modern period. Also on the shelves of the print shops were geographic dictionaries. Typical titles include Patrick Gordon's *Geography Anatomized: or, a*

Compleat Geographical Grammer [sic], which appeared first in 1693 and was reprinted seven times by 1711; *A Tutor in Astronomy and Geography* by the Dutch mapmaker Willem Blaeu and printed by John Moxon in London in 1654; and *A Geographical Dictionary* by Edmund Bohun (1691). These were popular pedagogical tracts, easily available in octavo or quarto, inexpensive and uncolored. Their aim was not comprehensiveness but simplicity of presentation and ease of understanding.

Also perennially available at print shops alongside the works of contemporary geographers such as Nicolas de Fer and John Speed were the classical geographers, most notably Ptolemy (fl. 150AD) but also Pliny, Pomponius Mela, and Strabo (Ptolemy and Strabo, who most influenced early modern geographic works, are discussed in Chapter 2). Although it was well known that the texts by the classical Greek and Roman authors were deeply flawed, they remained valued for their descriptions of classical and Biblical geographies, and were favored especially by university students as an aid to historical and divinity studies. The editions available on booksellers' inventories were usually not the original works, however, but seventeenth-century abridgements.

This study focuses on world atlases, but universal geographies were only a fraction of the geographic works available commercially after 1620. Chorographies (local geographies, usually including copious local history) were abundant.³⁷ Advertisements found in the *London Gazette* give us an idea of the range of chorographical works available, such as Thomas Philips' *A True Survey of the Baronie of Enishowen in Ireland* (1689). Perhaps the most popular geographic works competing with world atlases were the national geographies which found steady demand. In England these included John Speed's *Theatre of the Empire of Great Britaine* (first edition

37. In Chapter 2, I describe the various branches of geography in more detail.

1611); Tudor mapmaker Christopher Saxton's landmark *Atlas of the Counties of England and Wales* (first edition 1579); and William Camden's *Britannia* (first edition 1586), all of which appeared in authorized reprint editions as well as in plagiarized editions and the so-called "epitomes." French national geographies appeared regularly from the presses of atlas compilers, including the Sanson family's *Cartes particulières de la France* (1656-76). Regional geographies (virtually all of them of Europe but including some maps of Asia and Africa) were also considerably more common among publishers' stock than universal geographies. Indeed, demand for local and national geographic information seems to have driven the market in geographic books, judging by the preponderance of such titles in booksellers' advertisements.

Beyond geography, book buyers also found a wide range of other works on the nature of the world and science at commercial booksellers. Sources such as the Term Catalogues reveal the proportion of books published by category in the second half of the seventeenth century.³⁸ For example, looking only at scientific works, there were 102 unique titles published on medicine ("physick") in English listed in the Term Catalogues in the 1670s; and 83 titles on mathematics and its close applied relative, navigation, again only in English; and, as a comparison, 94 titles of maps, charts, and prints (Table).

Given the prevalence of world atlases emphasizing descriptive geographic material, however, it is important to see that a range of books we would now consider part of the humanities rather than science were also choices for the potential world atlas buyer. These works

38. The Term Catalogues (1668-1711) were lists of newly published books distributed quarterly in England. Primarily they list English-language works, with some French and Latin titles as well. The Term Catalogues were neither comprehensive nor objective; publishers and authors paid a small fee for inclusion in the Catalogues, and the compilers omitted works with a price less than one shilling. The Catalogues for any year represent about 20-30% of all titles published in that year and include most major works, making them an excellent guide to the book market of the time despite their limitations. The classic analysis and reprinting of the Catalogues remains Edward Arber, *The Term Catalogues, 1668-1709 A.D.*

Subject	1670-1679		1680-1689		1690-1699		1700-1709	
Mathematics/ Navigation	83	3%	57	2%	30	1%	56	2%
Maps and Plates	94	4%	139	4%	35	1%	61	2%
Divinity	858	33%	1233	37%	1479	44%	1439	48%
Histories	234	9%	387	12%	333	10%	261	9%
Medicine	102	4%	87	3%	92	3%	76	3%
Poetry + Plays	223	8%	231	7%	239	7%	186	6%
Music	18	1%	42	1%	89	3%	42	1%
Law	81	3%	75	2%	44	1%	39	1%
Latin and French titles	206	8%	194	6%	219	7%	186	6%
Other	726	28%	900	27%	780	23%	626	21%
Total	2625		3345		3340		2972	

Table. Quantitative analysis of new publications advertised in the English Term Catalogues by subject and decade, 1670-1709. Despite the seemingly high demand for texts on mathematics and related subjects such as geography and astronomy by students and scholars, it is important to bear in mind that such books formed only a tiny percentage of books available to consumers in the late seventeenth and early eighteenth centuries. Adapted from analysis by Olaf Simons (2010), based on catalogues reprinted in Edward Arber, ed., *The Term Catalogues, 1668–1709*, vols. 1-3. London: 1903-1906.

include general histories, ethnographies, travel memoirs, genealogies, and books on trade and commodities. Of these, travelogues provided the most direct rivalry against world atlases in the book market, even as atlas compilers routinely used them as primary sources of geographic and ethnographic information. Parisian print shops offered new books by travelers such as the popular guides by Jean-Baptiste Tavernier (including *Nouvelle Relation de l'interieur de sérail du Grand Seigneur* in 1675, and *Le Six Voyages* of 1676) as well as reprints of sixteenth-century books by travelers such as André Thevet and Theodor de Bry. The 94 map and chart titles appearing in the Term Catalogues during the 1670s should be compared to the 858 theological works appearing in the same period, and to the 234 books on historical subjects.

While far from comprehensive, the above should give the reader a sense of the variety and quantity of book titles that were available to the citizen of Paris and London in the long seventeenth century. The kind of information provided by world atlases overlapped significantly with many other book genres, including non-map-based geographies, travel writing, astronomy, and histories. Thus the atlas compiler or publisher hoping to convince the potential buyer of the worth of his atlas did not have a niche market ready. Instead, he needed to create a strong and persuasive case for the accuracy, legitimacy, and value of his atlas, both against other world atlases and related titles.

Who were the compilers of world atlases? My research shows that they came from a variety of class, educational, and occupational backgrounds. The typical commercial atlas compiler in Paris was trained in making maps and globes, while his counterpart in London was more likely to have started his career as an engraver. Like most craft occupations in the period, the occupation of geographic bookmaker was often a family business, with inventory and plates being inherited from generation to generation.

No single atlas or atlas maker of London or Paris held a monopoly in the seventeenth or early eighteenth century. This allowed for the conditions of competitive capitalism that led to both the innovation and the slavish imitation found in atlases of this period. However, competition did not mean that anyone could make and sell an atlas, or that he would be successful. Atlas production, more so than that of other book genres, required a large investment in scholarship, labor, and equipment, and was a project well beyond the means of many printers. Indeed, only seven atlas makers were responsible for most of the 63 atlas editions published in London between 1627-1721 (the world atlases of four of them are addressed in this study);³⁹ in

39. Numbers derived from analysis of Philip Lee Phillips, ed., *A List of Geographical Atlases* vols. 1-2; and Dalia Varanka, "Editorial and Design Principles."

Paris, only eight individuals were responsible for the majority of the 72 editions appearing between 1643-1750 (the world atlases of four of them are examined below).⁴⁰

There were a variety of ways to sell an atlas in the seventeenth century. Most were sold in print shops to anyone with the means to purchase them. Some were printed to be sold on demand, while others were ordered by the consumer and prepared especially for him. Other, more expensive atlases were also sold by subscription (at a discount from the expected retail price) to raise the funds needed to finance the preparation of the volumes. Still other atlases were not sold at all, but instead were provided to the king, his administrators, trading companies with royal charters, or nobles, either as gifts or on commission.

The broad market for world atlases and the keen competition for buyers led publishers to produce works in every variation of size and expense to meet the buyer's desire and means. World atlases could be purchased in folio or octavo or any size in between; hand-colored and in a luxury binding meant for display or uncolored in simple vellum covers for the scholastic market. Some atlas compilers plagiarized shamelessly from others at home and abroad; others branched out from the usual offerings to create new works, some of which seem very modern to our eyes, others more of a homage to older, encyclopedic cosmographies.

For the purposes of this research, a world atlas is defined as an atlas including descriptions (map, text, or both) of Africa, Asia, and America in addition to Europe, what early atlases called the "four parts of the world." Relative coverage of the four parts is never balanced in early world atlases; European maps and texts always consume much more space, a fact that can be attributed both to content knowledge and to "local" practical and intellectual interest,

40. Numbers derived from analysis of Pastoureau, *Les Atlas français*.

since the atlases were produced for European readers. World atlases were sold under a number of names, including as general and universal atlases.

While many early world atlases resemble the modern atlas, seventeenth-century world atlases were not standardized. All atlases at base are simply bound sets of maps, and a number of atlases included only a simple typeset title page and maps. Yet many world atlases also include introductory sections offering an engraved title page and the prefatory remarks common to printed works of the period. These might include one or more of the following: a patronage letter, sometimes quite lengthy, dedicating the work to a prince, noble, eminent scholar, or locally prominent individual; a promotional address to the reader explaining why the atlas was made and its advantages; an advertisement of other works available from the printer; and sometimes even a portrait of the compiler and odes to him. A number of atlases begin with essays of instruction in map reading, geography, geometry, and/or cosmography (defined in the seventeenth century as the study of both the earth and heavens, thus including world system theories). In some atlases the text pages outnumber the map pages, but the maps remain central components.

The maps within the atlases also present the great variety of the cartographer's art and skill. Some are simple works showing minimal geographic features; others are complex images showing natural and political geographic information, as well as ethnographic figures, animals, plants, historical notations, exploration routes, and so on.

As it became more widespread, the geographic atlas gradually adopted a number of functions beyond the direct function of providing geographic data about the four parts of the world. The atlas' primary use was to educate children and adults. Middle-class parents, eager to promote the prospects of their sons to a higher social status, bought atlases and other educational

instruments to help prepare them for university study or careers in government. Merchants whose business involved overseas trade purchased atlases to understand trade routes, colonial claims, distances, the cultures encountered, and the time required to travel from the homeland to the site of trade.⁴¹ Still, other than these uses, the world atlas held little practical value for the average consumer.

Yet the atlas took on other functions not directly linked to practical or immediate goals. Having a world atlas—the more luxurious the binding, the better—on display in homes that were increasingly becoming sites of sociability promoted the owner's status (or his hope to improve his status in a world where social mobility was more and more a possibility). The atlas advertised the education of the owner, his wealth, and, perhaps most importantly, his knowledge of and interest in affairs overseas—quite literally, the world atlas proclaimed the owner's “worldliness” to his peers. Some atlases were also works of art in and of themselves, with hand-colored maps, decorated cartouches, elaborate engraved scenes and other illustrations, to be appreciated for their aesthetic value in addition to their geographic value.

Lastly, the atlas was also a form of entertainment, a form of storytelling meant to provide enjoyment to the owner in his leisure hours. Some atlas compilers worked very hard to make their texts and maps as interesting as possible to the casual reader, including anecdotes of adventure and battle, and tales of strange creatures and other wonders to be found in the countries described. The world or universal atlas, especially, would have been purchased more for its educational and imaginative functions than regional or national atlases, if only because

41. Perhaps not surprisingly, evidence suggests that travelers did not purchase geographic atlases for the purposes of planning travel, as an atlas could not be both sufficiently detailed to be instructive *en route* and portable. Although towards the end of the 1600s there were a few route maps and travel guides available [including *Britannia*, the earliest road map atlas, published by London geographer John Ogilby (1600-1676) in 1675] and certainly there were regional and national atlases, traveling in the early modern period was still the haphazard undertaking it had been in the Middle Ages. See Jordana Dym, “The Familiar and the Strange: Western Travelers’ Maps of Europe and Asia, ca. 1600-1800,” *Philosophy and Geography* 7, no. 2 (2004): 155-191; and Antoni Maćzak, *Travel in Early Modern Europe* (Oxford, UK: Blackwell, 1995), 24-29.

almost none of the people who owned one expected to visit the other three parts of the world—Africa, Asia, or America—and thus had no practical reason to purchase one other than for general knowledge and to satisfy curiosity.

Yet despite this strong demand, the atlas' readers did not assign to it the automatic credibility typically assigned by modern readers to the productions of modern presses. It was also, as discussed above, in competition with not only other atlases and sheet maps, but other geographic works, cosmographies, books of science, travelogues, histories, etc. These two factors made it necessary for atlas compilers to promote the atlas' value and, just as crucially, its legitimacy as a true picture of the world.

Selling the World Atlas: Three Primary Strategies

My analysis of atlas advertisements, frontmatter, and promotional matter on individual maps shows that both French and English atlas compilers concentrated on three primary promotional strategies. The first was the promotion of the accuracy and modernity of the geographic, astronomical, historical, and ethnographic sources used to compile the maps and texts. The second strategy frequently deployed was the assertion of the unique qualities of the book as a book—its size, price, portability, reference aids such as indices and gazetteers, clarity of presentation, etc. Below I present more information on these two strategies.

The third strategy used to market the world atlas was the assertion of the qualities and authority of the atlas compiler himself. These assertions often combined to form a substantial persona or self-presentation. While much of the persona that the atlas maker crafted involves skills in the compilation of good geographic works, to a large degree atlas compilers relied on

other aspects of their lives to present a picture of themselves as the makers of atlases that were trustworthy pictures of the terrestrial globe and its inhabitants. The origins, components, and deployment of those self-presentations as strategies for atlas marketing form the core analysis of this study.

To provide context for the analysis to follow, below is a summary of the two primary marketing strategies that complemented the compilers' self-presentation but do not form the focus of this study. The first of these strategies to promote the world atlas' authority was to explicitly promote the value of its geographic sources. As Chapter 4 will show, this strategy is closely related to another by which some compilers asserted their own geographic expertise as editors of conflicting information.

Source promotion is found in several components of the typical early modern world atlas: the title page, the address to the reader or preface, and on individual maps. It takes one of two forms: naming sources directly or promoting their value generically as a group (often both in the same atlas). For example, John Senex of London relied on directly naming his primary sources when marketing his *A New General Atlas* (1721). Senex's attempt to establish the authority of his work begins on the first leaf with its expansive title:

A New General Atlas containing a Geographical and Historical Account of All the Empires, Kingdoms, and other Dominions of the World: With the Natural History and Trade of each Country. Taken from the Best Authors, particularly Cluverius, Brietius, Cellarius, Bleau [ie Blaeu], Baudrand, Hoffman, Moreri, the two Sansons, Luyts, the Atlas Historique, Sir John Chardin, Le Brun, Tournefort, &c... The maps, which are all Engraven or Revised by Mr. Senex, are laid down according to the Observations communicated to the English Royal Society, the French Royal Academy of Sciences, and those made by the latest Travellers. . .⁴²

42. John Senex, title page of *A New General Atlas* (London: for Daniel Browne, 1721), n.p.

No less than fifteen sources of geographic information are listed by name. Regardless of the quantity of sources named, however, this approach suggests that Senex, and other compilers who named sources, presumed that potential readers would be familiar with the names as respected geographic authorities, and in essence, let the names speak for themselves in establishing the credibility of the atlas.

Directly naming sources was much more frequently done by English compilers than by French; of the world atlases by the eight principal compilers analyzed for this study, 33% of English title pages name one or more sources of geographic data, while only 6% of the French title pages do so (in contrast, French atlases were far more likely to name a specific patron, as described in Chapter 3). Common to both English and French atlases was the generic assertion that the atlas had been created from the “best” sources, or was based on the “latest observations”; the advertisements for Herman Moll’s *Atlas Geographus* (1708), promoted in the *London Gazette* as containing “the Discoveries and Improvements of the best Modern authors to this time,” is a typical example.⁴³

In fact, modernity is the predominant attribute used to assert the value of the atlas’ sources. Compilers like John Senex and Robert Morden even deliberately critiqued ancient geography as defective and in need of reform in light of modern exploration and astronomical observations. Indeed, Morden’s highly popular *Geography Rectified* included this reform concept in the title itself (Chapter 5 offers a full discussion of Morden’s reformer persona). Even though the actual content of atlases published well into the eighteenth century contained material derived from Biblical and classical geography, as early as the 1640s atlas makers had all but ceased to advertise their use of medieval authors, classical authors (Ptolemy, Strabo, Pomponius

43. *London Gazette*, 24-28 June 1708; advertisement reprinted in Tyacke, *London Map-Sellers*, 92.

Mela), and the Old Testament. Indeed, only one commercial world atlas, John Speed's *A Prospect of the Most Famous Parts of the World* (1627) makes any explicit reference to the Bible as a source (in this case, it also serves as the framing device for the whole work), and it should be noted that *A Prospect* was in fact the first world atlas published in either London or Paris.

Although modern scholars frequently locate the widespread acceptance of early modern science only at the end of the seventeenth century, the evidence of successful commercial world atlases published as early as the 1640s shows that buyers wanted modern, up-to-date information about the places and peoples and commodities of the world. The geography of the past—no matter how respected the source—was clearly not desirable in a commercial atlas. Whether they assumed that potential buyers would recognize the expertise of the named sources, or hoped buyers would accept the assertion of modern, up-to-date information, advertising the atlas' geographic sources was one primary strategy used to promote the value of the book as a whole.

The second strategy was advertising its values and features as a book. Atlases were promoted in ways very similar to the ways in which other books, especially works of natural philosophy and mathematics, were advertised in the same period. As described above, publishers of atlases were competing for sales against a range of non-atlas geographic books. In their title pages and in the advertisements that appeared in newspapers and periodicals, compilers took pains to list the features of the atlas that made it unique or at least desirable. While a full analysis lies outside the scope of the present study, the common book elements noted in promotional content can be outlined briefly.

To start, however, it should be noted that, given how remarkably modern the selling points outlined here may seem, the world atlas' value in terms of price was rarely mentioned for either French or English atlases in newspaper advertisements or publisher catalog lists.

Subscription costs for atlas projects were published, as the compiler needed these upfront funds to produce the work, but regular market prices were frequently omitted. In part this probably derives from the relatively high cost of atlases (and other heavily illustrated works)—while the atlases in this study were within the reach of the prosperous but not wealthy, publishers may have deemed it more prudent to advertise the many unique and helpful features rather than the price.

If not the price, what aspects of the atlas book were promoted? Often the features advertised were those that offered descriptive geographic content, sometimes seemingly far removed from terrestrial cartography. A typical example is Allain Manesson Mallet’s five-volume *Description de l’univers* (1683), whose title page promises the reader will find not only the views of major cities but also “les Portraits des Souverains qui y commandent, leurs Blasons, Titres & Livrees: Et les Moeurs, Religions, Gouvernements & divers habillemens de chaque Nation.”⁴⁴ Special sections with diagrams of the “systems of the world” (i.e., the Ptolemaic, Copernican, and Tychoean cosmological models), world coins, time zones, and celestial maps all found mention when their respective atlases were advertised.

Dominant among the features of the atlas as a reference work that were highlighted in promotional text are reference aids, still themselves a novelty in seventeenth-century publishing. These are the elements that would help the reader locate specific information, such as indices, tables of contents, tables of geographic data (e.g., lists of major rivers) and gazetteers. “Plain” or “easy” language was also sometimes advertised, testifying to the spread of the Baconian value of simple rhetoric in scientific works as well as to the marketing of many cartographic works as educational material for women and children.

44. Allain Manesson Mallet, title page of *Description de l’univers* (Paris: D. Thierry, 1683).

In addition, the design of the atlas and its maps and illustrations were frequently asserted in title pages. Aesthetic values had a prominent place; non-scholastic atlases commonly extolled the beauty of the maps and other figurative material such as city views, ethnographic drawings, etc. Novelty of geographic content (“cartes nouvelles,” “dressée après les observations les plus nouvelles,” etc.) was also promoted as a feature distinguishing specific atlases, though in actuality few atlases differ significantly in content from their rivals and information long since outdated could be found in any atlas (Figure 5). A final common selling point was an emphasis on the comprehensiveness of the cartographic content. For example, Robert Morden’s advertisement for *Geography Rectified*’s first edition noted that it was “illustrated with above 60 New Maps”; very frequently the quantity of maps, plans, and illustrations was listed on the title page or in periodical ads.⁴⁵ Thus compilers and publishers attempted to draw the buyers’ attention to the quantity and quality of content; aids and methods that made the atlas more user-friendly; aesthetic appeal; and comprehensive coverage.

The third principal strategy used to market the commercial world atlas in a competitive marketplace is the promotion of the authority of the atlas compiler. Most of the men who created commercial world atlases in seventeenth-century London and Paris actively asserted their personal and professional qualifications to create an accurate and therefore desirable picture of the terrestrial world. They did so in a variety of ways within and beyond the atlas proper, such as in prefaces to the reader, in map cartouches, and in separate advertisements. The authority

45. *London Gazette*, 29 April-3 May 1680; advertisement reprinted in Tyacke, *London Map-Sellers*, 27.

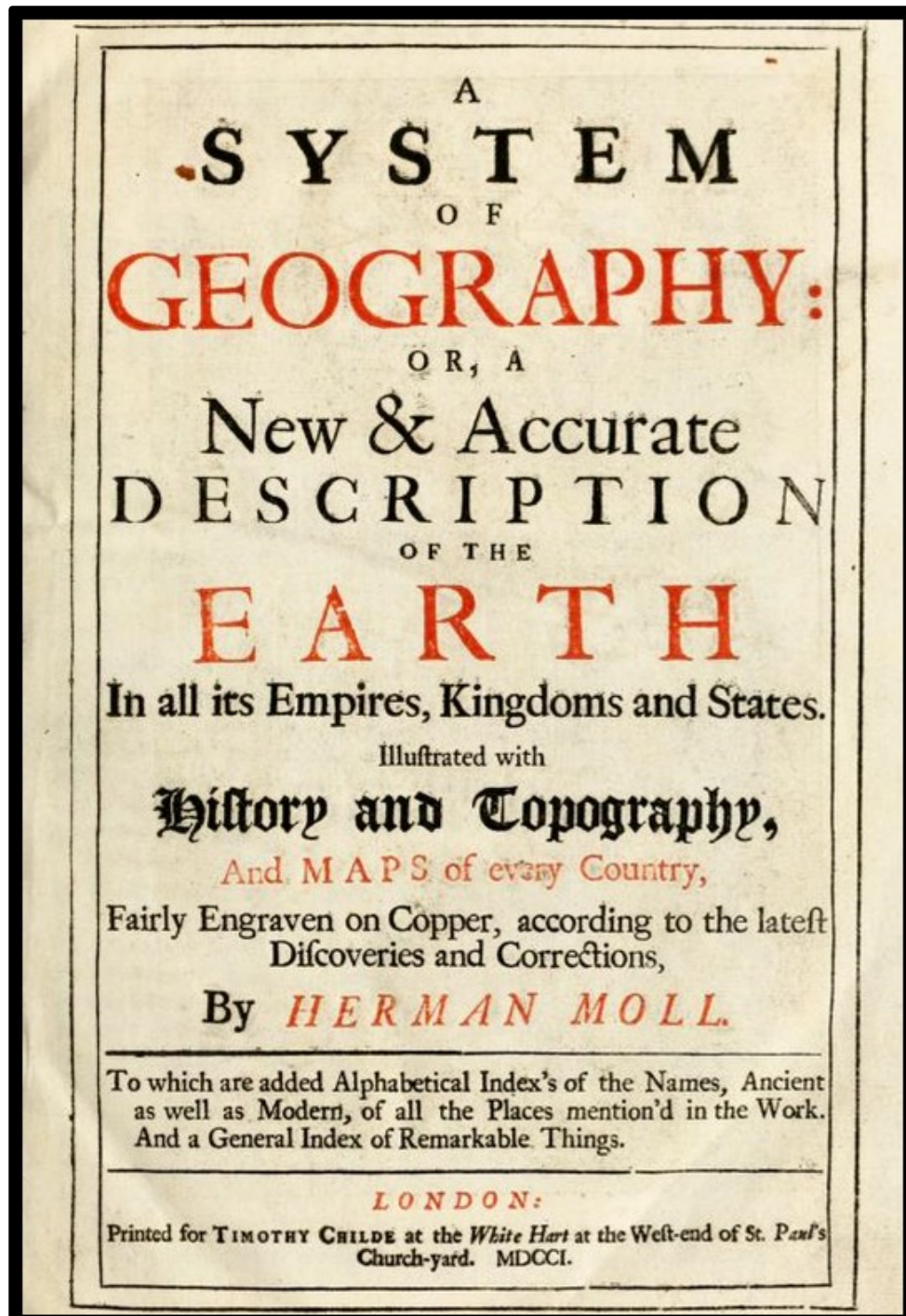


Figure 5. Herman Moll's *A System of Geography* (London: Printed for Timothy Childe, 1701), which advertises, in addition to every country in the world, the inclusion of history and topography, a toponym index, and a "General Index of Remarkable Things." Compilers frequently asserted the value of the atlas' features and ease of study in frontmatter and in newspaper advertisements. G114.M7. (Library of Congress, Washington, DC).

asserted derived from both internal and external qualifications, some far removed from the emphasis on geographic training and expertise that might be expected. Most compilers asserted authority from multiple sources, combining them into a persona unique to each compiler. It is this complex deployment of different forms of authority and legitimacy as “atlas makers” that will be examined in Chapters 3, 4, and 5.

Approaches and Sources

The following study examines the creation of cultural authority in commercially successful vernacular world atlases published by eight atlas compilers in London and Paris between 1627 and 1721.⁴⁶ In London, the leading world atlas makers were John Speed (1552-1629), Robert Morden (c.1650-1703), Herman Moll (1654-1732), and John Senex (1678-1740). These four men came from different backgrounds and training—in engraving (Moll, a German immigrant), as printers and booksellers (Morden and Senex), and tailor-to-gentleman scholar (Speed)—but each became a dominant figure in London atlas publishing. Among them they produced thirteen separate English-language world atlas titles that ran into multiple editions and re-issues, some remaining in print for decades. The Appendix provides archival and bio-bibliographic data on each figure as well as original major publications and re-issues.

Likewise, in Paris in the same period, Jean Boisseau (b.1631), Alexis-Hubert Jaillot (1632-1712), Allain Manesson Mallet (1630-1706), and Nicolas de Fer (1646-1720) were the most successful competitors in Paris' atlas industry. These men also came from varied social

46. This is by no means an exhaustive listing of cartographic publishers in the period. All eight men were in fact known for other cartographic works—globes, sheet maps, etc.—as well as for atlases; and in both cities during the seventeenth century there were other cartographic publishers equally well known, but who did not publish successful world atlases.

backgrounds, and made their name producing world and regional atlases as well as sheet maps and other cartographic works for different audiences. Altogether these four atlas makers published eight discrete French-language world atlas titles in numerous editions.⁴⁷ The Appendix also provides a bio-bibliography and publication information on each of these men.

The study that follows is an examination of the means by which the makers of commercially successful vernacular world atlases sought to convince potential buyers to purchase the atlas. Specifically, the study is concerned with the ways in which atlas makers created and marketed their personal authority as geographers and authors, in a period when “geographer” was not yet an established professional identity, and claims of authorship were subject to suspicion on the part of readers.

Primary sources for this study are the atlases created by eight compilers and published in either London or Paris, along with advertisements, publishers’ inventories, and other map products by the same compilers. While this analysis could be extended through the eighteenth century, which saw a rapid increase in atlas production, the present analysis is limited to works produced between 1627, when the first world atlas in either French or English was published, and 1721, when John Senex’s encyclopedic *A New General Atlas* appeared.⁴⁸

The chapters that follow discuss their publications by building on three related premises about the culture of early modern Europe. The first is simply that atlases were consumer goods that required promotion and legitimization in the urban marketplace. Besides being a bound collection of maps, the atlas is also a genre of book, and thus has a place in the history of the printed work and the history of commerce. From the earliest years of print in the fifteenth

47. Numbers derived from analysis of entries on Boisseau, Mallet, de Fer, and Jaillot in Pastoureau, *Les Atlas français*.

48. Herman Moll’s *Atlas Minor* was published in 1727 and is not examined at length in this study.

century, the book was transformed from a rare object produced for elites on demand to a popular consumer good. Some books existed only for their authors' circle of friends and patrons, but most, including all of the atlases examined below, were conceived and executed to make money for someone in the production process. To fulfill their role as commercial goods, books needed what commercial products always need—advertising and promotion. Every commercial atlas faced competition from similar works for the sous or shillings of potential buyers—even the very first, the atlases of Ortelius (1570) and Mercator (1595), which were competing against older cosmographies.

Thus atlas sellers eager to encourage sales engaged in different strategies to promote their works over their rivals. Because an atlas purported to be a “Redemption of Truth,” to use Morden's phrase, its veracity became a vital selling point, common to every atlas examined for this study. But it was far from being the only selling point—the accuracy and reliability of the contents were not, apparently, deemed sufficient to win the buyer's order. The complexity of the marketing strategies used will be shown in the context of the self-presentation of the atlas compilers in Chapters 3-5.

My second premise is that printed atlases were not automatically received by early modern readers as authoritative and true portraits of the terrestrial world; and that (like other book producers), commercial atlas makers recognized the need to overcome this skepticism in order to make their product successful and deliberately constructed their world atlases to accomplish this. This premise builds on the work of Adrian Johns on the history of early books and the book trade. In *The Nature of the Book*, Johns counters prevailing scholarship on print culture by arguing that early modern readers were skeptical, rather than trusting, of the books they read. Before the nineteenth century, there were no firmly established traditions of

authorship, enforced legal protections for authors, or effective institutions to prosecute piracy and plagiarism. Johns argues that early modern readers were well aware of plagiarism and book piracy; they did not accept at face value that a book was penned by the person named as the author, or if it was, that the author knew of and approved the printing, or even that it was printed in the city named in the colophon.

The trust that modern readers in the west assign to published works was the result of long historical processes by which publishers built up their authority, in large part through their struggles with printing laborers, print guilds, and writers. Johns uses the publication of scientific books to illustrate the rise of the printed book's authority, precisely because scientific works were themselves establishing the legitimacy of a new framework for knowing the truth about the natural world. While Johns is concerned with the processes of labor relations and power struggles between printers and publishers, this study builds on his premise in another direction, by using aspects of the atlas' contents and advertising to demonstrate other factors at play in establishing the authority and trustworthiness of the atlas genre.

The issue of the public's trust in printed works in early modern Europe cannot be separated from the historical problem of the processes of cultural authority—its establishment and change over time. Thus the following study is predicated on a third premise as well: that the concept of cultural authority is fundamental for understanding the intellectual and cultural changes of the seventeenth century.

Cultural authority is an authority of trust (and thus akin to spiritual authority and also to scientific authority). In what forms and sources of knowledge does a culture trust to know the truth? How do people weigh conflicting ideas, books, or philosophies and decide which is the more accurate and trustworthy? Cultural authority differs significantly from, for example,

political or familial authority because it is not (necessarily) associated with real power or legal authority. That is, a person might hold no legal or political power, yet hold significant cultural authority in his society—he cannot compel taxes, judge laws, validate a house, or command an army’s obedience, but his society trusts that he understands and expresses true knowledge. It is important not to oversimplify the phenomenon, however; cultural authorities can be overlapping and even contradictory, and the same person or group may invest cultural authority in opposing agents, as the present study will show.

For the seventeenth century, perhaps no issue of cultural authority is more salient than the problem of the popular dissemination of the “new science” in the second half of the century, and the conflicts it engendered with classical and biblical explanations of the natural world. The intellectual shift away from reliance on the knowledge of past generations (generally classical Greek and Roman works but also including biblical and medieval works), to reliance on the observations and experiments of contemporary Europeans occurred in the context of the political, religious, and economic crises experienced by early modern western Europe. So fundamental was this shift in intellectual authority, so basic to the rise of western science, that it has become a trope of early modern European history.⁴⁹

According to this traditional view, the European world of 1500 was essentially backward-looking and conservative, venerating the texts of antiquity and shunning the outside world; in contrast stands the world of 1700, forward-looking, deriding ancient knowledge and eagerly investigating the “book of the natural world.” A revisionist school of historians has more recently argued against this interpretation, seeing European intellectuals as conservatively

49. Anthony Grafton offers a concise summary of the traditional and revisionist historiographical schools in *New Worlds, Ancient Texts: The Power of Tradition and the Shock of Discovery* (Cambridge, MA: Harvard Univ. Press, 1992), 1-10.

retaining the medieval worldview, including commitment to classical texts, until well into the eighteenth century; new discoveries were simply fitted into the existing medieval worldview and the contradictions they posed for that Aristotelian-Christian paradigm only vaguely discerned. Yet even revisionist scholars recognize that there was in fact a change in the nature of intellectual authority—who could be trusted to provide an accurate picture of the natural world—that was both a cause and a result of the nebulous practical and intellectual developments we now term the Scientific Revolution.

Scholarly work on the problem of cultural and scientific authority has been central to the study of the early modern periods, precisely because the shift from medieval to modern modes of thought appears to rest squarely on proportional shifts in the accepted sources of truth. Beginning with Paul Hazard in the 1930s, scholars have identified an intellectual transition from the classical seventeenth century to the modern eighteenth century, comprising the widespread adoption between 1680 and 1720 of the principles and theories of the Scientific Revolution.⁵⁰ Put simply, this shift moved western European cultural authority from the religious to the secular, individual to institution, ancient to contemporary, with the nature of acceptable evidence evolving from faith, intuition, and venerated texts, to objective experiment, witness, and reason.

In Hazard's footsteps have come many scholars of the history of science and philosophy. Notable among these is Michel Foucault who, although coming from a different theoretical background, likewise identifies the early eighteenth century as a time of rapid transition between the two intellectual modes (which he dubs "epistemes," unified systems of knowledge).⁵¹ More recently, an historian of early modern science, Margaret Jacob, has described a transfer of

50. Paul Hazard, *La Crise de la conscience européenne* (Paris: Boivin, 1935).

51. See Michel Foucault, *The Order of Things: An Archaeology of the Human Sciences* (New York: Random House, 1970).

cultural authority in the late seventeenth century from classical scientific authorities—the theorists such as Aristotle—to the artisans whose day-to-day experience with and manipulation of the physical world as engineers and mechanics inspired natural philosophers such as Newton.⁵²

The current study is meant as a contribution to the debate between traditional and revisionist versions of early modern scientific and cultural authority, by examining a genre of popular, commercial scientific works whose production required the synthesis of multiple contradictory authorities into a single geographic vision. That is, the compiler himself had to invest some geographic sources with authority over others to be able to create the atlas at all. Should his own atlas be received as authoritative by the consuming public, his choice of sources could have a profound impact on his reader because of the atlas' role in popularizing knowledge that was hitherto the province of scholars. As Mireille Pastoureau comments, “[E]n raison des délais de confection et de son format nécessairement réduit pour rester maniable, l’atlas ne peut être qu’un instrument de vulgarization...étant plus largement diffusés que les cartes isolées, ils ont contribué à la penetration de certaines images cartographiques dans le public et ont aidé celui-ci à faire son education scientifique.”⁵³ Given that role of the atlas in educating the literate Parisian and London public of the seventeenth century, in a period of contested scientific authorities and rapid growth of geographic information, the early world atlas is perhaps uniquely

52. See Margaret Jacob, *The Cultural Meaning of the Scientific Revolution* (Philadelphia: Temple Univ. Press, 1988); and Harry Redner, *The Ends of Science: An Essay in Scientific Authority* (Boulder, CO: Westview Press, 1987) on institutional authority. For the emergence of the cultural construct of information, see Elizabeth Lunbeck and Suzanne Marchand, eds., *Proof and Persuasion: Essays on Authority, Objectivity, and Evidence* (Belgium: Brepols, 1996); and Daniel R. Headrick, *When Information Came of Age: Technologies of Knowledge in the Age of Reason and Revolution, 1700-1850* (New York: Oxford Univ. Press, 2000).

53. Pastoureau, *Les Atlas français*: v.

positioned to inform our understanding of what readers sought in a trustworthy and reliable description of the world.

Although the historical problem of cultural authority and scientific works poses many interesting questions, this study focuses on only one aspect of the problem as it relates to geographic products. It examines how those who produced world atlases promoted their works by promoting themselves as authoritative sources of geographic knowledge; and how their choices inform our understanding of the complexities of cultural authority in seventeenth century France and England.

The present study also offers a comparative analysis. While comparative historical analysis may risk superficiality and overgeneralization, comparison of a single historical process in a defined period does offer potential benefits—namely, the potential to highlight culturally unique phenomena that a single-culture study would not be able to identify, or to identify phenomena that are in fact not unique to one culture.⁵⁴ Given France and England's shared history of cultural exchange and geographic proximity, and their different political and intellectual experiences over the long seventeenth century, this study seeks meaningful differences between the atlases and the self-presentations of French and English world atlas compilers.

* * *

This study argues that world atlas compilers promoted their works as truthful representations of the world primarily through asserting their own cultural authority, using

54. Raymond Grew makes a persuasive argument for this type of comparative scholarship in "The Case for Comparing Histories," in *American Historical Review* 85 (1980): 763-778.

strategies of textual self-presentation. Commercially successful atlas makers used a variety of self-presentations to better place their works in the competitive marketplace of geographic books. Two other common promotional tactics—establishing the scientific merit of the atlas' sources and asserting its values as a book—were important but secondary techniques.

In its examination, this study also suggests explanations for the components of those personas, looking for the critical cultural factors or contexts that made it possible for atlas compilers to construct the self-presentations that they did. As I stress in the chapters that follow, allowing for the decisive role of the individual as an agent in creating his self-presentation does not diminish the importance of the constraints under which he operated. Different cultural values and political, social, and economic contexts made some personas probable, and others impossible. Chapters 3, 4, and 5 and the Conclusions consider those opportunities and constraints.

The importance placed on establishing the compilers' credibility derived from the nature of the world atlas as a necessarily composite production. Personal witness was highly valued in late seventeenth-century theories of knowledge, crucial to establishing the reliability of both experimental natural philosophers and explorer-surveyors. Yet no world atlas maker could claim to describe the world from his own witnessing of it. He could only collate, edit, modify, aggregate, and omit existing sources from a wide variety of writers, mapmakers, and chart makers from different periods and different cultures. Therefore the truthfulness and accuracy of the atlas could only derive from aspects of the compiler other than his personal experience of the geographies he mapped and described. As I discuss in the Conclusions, the specific aspects that

atlas makers chose to advertise can shed light on the complex nature of knowledge and cultural authority in seventeenth-century England and France.⁵⁵

While the world atlas was a new genre in the seventeenth century, it was the product of a long tradition of European mapping and geographic description. In order to understand why atlases were marketed as they were, it is important to understand their intellectual origins and the multiple roles they played in seventeenth-century English and French culture. These intellectual origins and the atlas “family tree” are described in Chapter 2.

Chapter 3 begins with a brief discussion of early modern book marketing to give context to the marketing of atlases as books. The rest of Chapter 3 and Chapter 4 present a typology of the self-presentations offered by eight commercially successful atlas compilers of Paris and London. Many of the atlases examined feature paratexts (i.e., frontmatter and backmatter, including author and patron portraits) that identify the atlas maker, his background, his reasons for creating the current work, his patrons, etc. Much can be learned about the writer's attitudes, values, and motivations, even about his social status and education, through a close and detailed analysis of these texts and portraits. I pay particular attention to the formation of the professional identity of the “geographer” and the complex relationship between patronage and commercial relations, while emphasizing that in neither London nor Paris was content expertise sufficient to establish credibility.

While Chapter 3 and Chapter 4 describe the most common personas, they cannot give a clear picture of how different personae were combined into multifaceted and unique individual self-presentations. To provide this perspective, Chapter 5 offers a case study of the unique self-presentation that was created by Robert Morden and comprised multiple personas.

55. Dennis Reinhartz, *The Cartographer and the Literati: Herman Moll and His Intellectual Circle* (Lewiston, NY: Edwin Mellen Press, 1997).

Lastly, the Conclusions suggest how understanding the marketing of geographic atlases—simultaneously scientific, artistic, educational, and fanciful works—can deepen our knowledge of shifting seventeenth-century French and English cultural values in a period of increasing commodification of scientific knowledge.

* * *

By its very nature as a “book of the world”—a simultaneously graphic and textual product—the early atlas promoted a totalizing world view that was the result of an artistic and intellectual process designed to inform, educate, and delight readers by describing the entire world through science and imagination, mathematics and wonder. The study that follows offers evidence for one of the processes by which commercial ambition, popular consumption, intellectual authority, geographic discoveries, and changing world views were brought together to create the geographic atlas, which found its readers in the newly “worldly” merchants and professionals of seventeenth-century London and Paris. Atlas makers simultaneously reveal in their work both their own ideas and assumptions, and those of their intended consumers and patrons. Below is an inquiry into what certain successful atlases can reveal about the changing values of the culture in which they were produced, sold, and consumed.

CHAPTER 2

THE INTELLECTUAL ORIGINS OF EARLY WORLD ATLASES

Where did the English or French atlas-maker turn for compositional and editorial inspiration and guidance when planning a new atlas? Seventeenth-century world atlases derived form and content from a variety of intellectual origins. Certainly the atlases of Abraham Ortelius and Gerhard Mercator were still the chief influences on atlas compilers well into the eighteenth century. These models had in turn derived primarily from four sources: The classical geographies of Ptolemy and Strabo; maritime cartography, such as portolan atlases, pilot books, and *isolarii*; cosmographies; and late medieval and Renaissance travel narratives.⁵⁶ These four genres and their influence on seventeenth-century works comprise the pre-history of the atlas.

Precursors of the Seventeenth-Century Atlas

The history of bound map collections begins with the first geographical treatises of the ancient Greeks, and continues through the Middle Ages, when mariners and a very few elites (wealthy monasteries, some nobles and royalty) had their manuscript maps bound together for convenience and preservation. However, the history of the atlas proper—as a unified and planned work with a title page—begins in 1477, with the first printed edition of the *Geographia*

56. A comprehensive discussion of the atlas' heritage is found in Akerman, "On the Shoulders of a Titan," 146-290.

by the Greek geographer Ptolemy (Claudius Ptolemaeus) of Alexandria (fl.c. 150AD). Its enormous influence merits examining this work in some detail.

The *Geographia* is a treatise both theoretical and practical which remained the definitive work on world geography well into the early modern period. Known only in Greek manuscript versions to Arab and European medieval scholars, it was translated into Latin in 1406, an achievement that made possible its dissemination across Europe in the early Renaissance. The *Geographia* was one of the first Renaissance scientific tracts to be printed, and comprises first printed atlas in Europe. It defined terms such as geography and chorography (the study of regions), explained latitude and longitude, and provided coordinates for about 8000 towns in Europe, Asia, and Africa based on astronomical observations. Even more importantly for later cartographic works, Ptolemy's text included practical information on how to construct a map, i.e., how to create mathematically-derived cartographic projections, although no known edition from antiquity included any maps. The 1477 edition, printed at Bologna, added to the classical manuscript text a total of 26 maps (one world map and 25 regional maps) derived from Ptolemy's projection and coordinates. It was followed by five incunable editions in Italy and then many editions in Germany, Italy, France, and the Low Countries through the sixteenth century (Figure 6).

Some scholars have pointed to the irony of the *Geographia's* relatively wide dissemination in the late fifteenth and sixteenth centuries, at the same historical moment when its picture of the world became obsolete.⁵⁷ Only a few years after the first edition, the voyages of Portuguese and Spanish explorers (many, like Christopher Columbus, armed with copies of

57. For a discussion of the impact of Ptolemy on fifteenth- and sixteenth-century geographic knowledge, see R.A. Skelton's introduction to his facsimile edition of Ptolemy's *Cosmographia* (Rome: 1478), edited by R. A. Skelton (Amsterdam: Theatrum Orbis Terrarum Limited, 1966).

Geographia on their travels) exposed the gaps and errors in classical geographic knowledge. Yet despite the increase in knowledge of the New World and better information about the situation of the Old World, the *Geographia* continued to thrive as the authoritative source of geographic knowledge in Latin and vernacular editions across western Europe throughout the sixteenth



Figure 6. Ptolemy's *Geographia* came down to the Middle Ages without maps, so fifteenth-century publishers added maps based on Ptolemy's text and instructions on mapping. Shown here is a world map based on Ptolemy from the 1482 Ulm edition of *Geographia*. Publications de l'Ecole Moderne Française, Cannes, France.

century. Even in the seventeenth century, by which time the discovery of America was two centuries in the past, the *Geographia* remained a highly respected work.

Indeed, some have argued that by giving such weight to classical knowledge, the nineteen pre-1550 editions of the *Geographia* both helped and hindered the spread of knowledge acquired by the surveyors and voyagers of the Age of Exploration; in J.H. Parry's words, the *Geographia* was "both stimulating and enslaving, and the advancement of knowledge . . . required that his theories should first be mastered and then superseded." The backward-looking scholars of Renaissance Europe held Ptolemy in high regard, and the flow of new evidence of his flawed knowledge did little to damage that reputation. Many sixteenth-century editions of the *Geographia* did attempt to modernize Ptolemy by adding new maps to the *Geographia*, but they maintained the integrity and authority of the work by appending the modern maps (*tabulae modernae*) to the end of the ancient Greek tract, or placed them side-by-side with the corresponding Ptolemaic map.⁵⁸

By the end of the sixteenth century, however, the *Geographia* was being published (by Gerhard Mercator in 1578, among others) more for its historical interest than as a current reference work (Figure 7). The end of the *Geographia*'s reign as the standard encyclopedia of geographic knowledge came in 1628; for seven decades after that, no new or revised editions appeared at all. The few editions appearing in the eighteenth century were published by scholars out of antiquarian interest.

58. See the extensive bibliographic discussion of editions of *Geographia* in Henry N. Stevens, *Ptolemy's Geography: a Brief Account of All Printed Editions down to 1730* (London: Henry Stevens, Son, and Stiles, 1908).

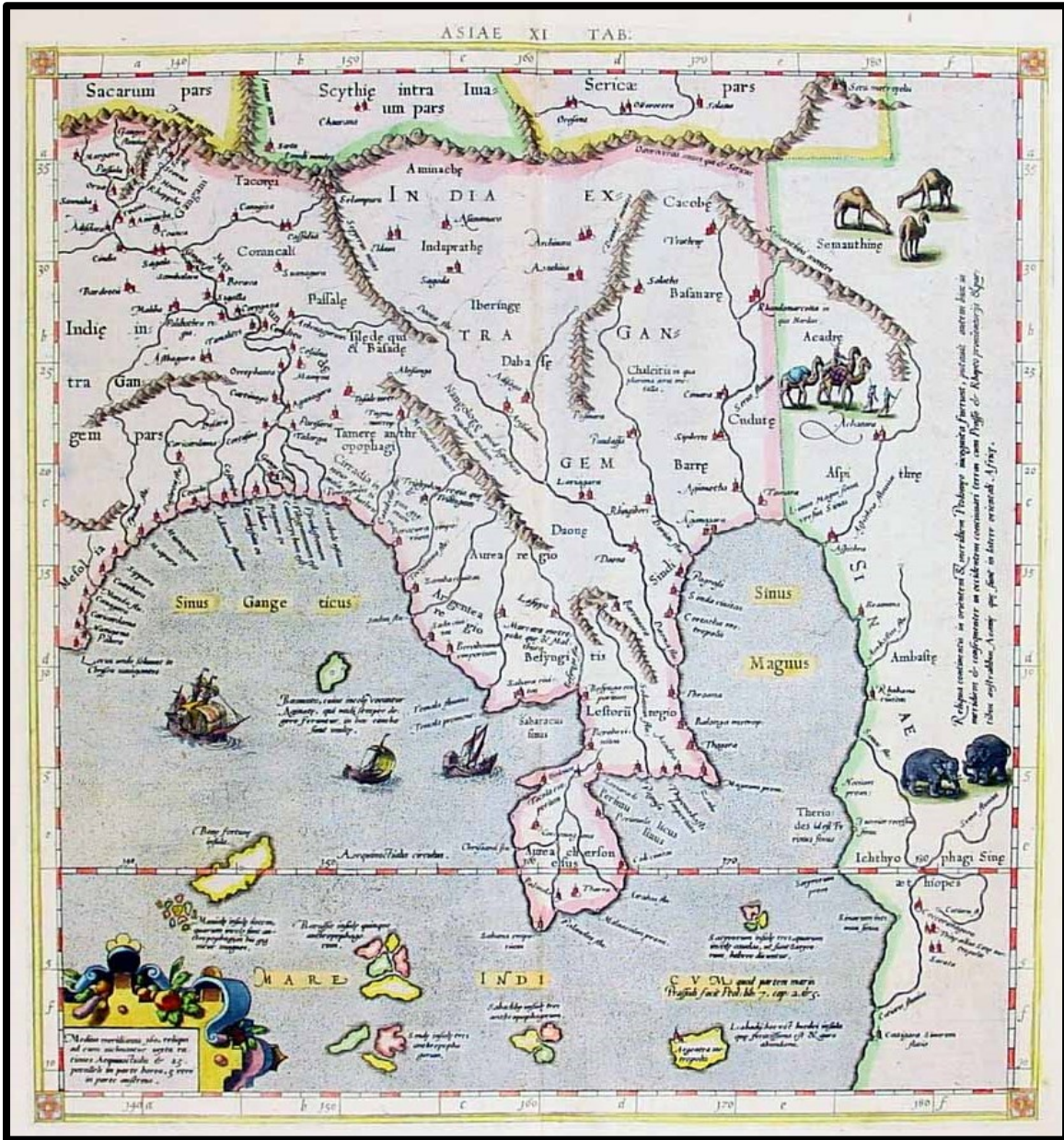


Figure 7. Map of South Asia, from Gerhard Mercator's edition of Ptolemy, *Cl. Ptolemaei Alexandrini Geographiae libri octo...per Gerardum Mercatorum* (Cologne: Godefridi Kempensis, 1584). G1005.1584 Vault (Geography and Map Division, Library of Congress, Washington, DC).

However, asserting that the reign of the *Geographia* was over by 1628 is not the equivalent of asserting that the reign of Ptolemy as the “Prince of Geographers” was over. To seventeenth-century atlas-makers, Ptolemy's knowledge of place locations and the size of the terrestrial world was admittedly flawed and had been surpassed by the discoveries and voyages

of modern men. Yet his methods, his mathematical precision in identifying coordinates on earth based on astronomical observation, and perhaps most of all his effort to describe the entire globe in one work—all lent him an aura of authority that could not easily be diminished.

While astronomer and mathematician Ptolemy was praised by writers into the eighteenth century as the Prince of Geographers, equally important in the development of European geographic science in general, and in the development of world atlases, was the historian and geographer Strabo (Figure 8).⁵⁹ Strabo (c.64BC-c.24AD), a Greek living in the Roman Empire, is best known for his seventeen-volume encyclopedic work *Geographica* (c.7BC), which was conceived as a general work of geographic knowledge, but in reality provides information about all branches of natural philosophy and human history. This work followed the publication of Strabo's *Historical Sketches* (in 47 volumes, now unknown), his attempt to retell all of human history since the conquest of the Greeks by the Romans. While the Greek *Geographica* was largely unknown in imperial Rome, it was familiar to scholars in the Arab east. In another example of the transmission of western knowledge back to the west via Arabic scholars, *Geographica* was first translated into Latin in the fifteenth century, and Strabo became one of the fathers of classical geographic thought.

Strabo was an historian, not a mathematician, and his framework for geography is terrestrial, human, and historical, not celestial and geometrical. His introduction to *Geographica* sounds strikingly similar to that of seventeenth-century atlases, and indeed to that of modern atlases. He stresses that utility was his only goal in designing the massive work, defining geography's usefulness as "manifold, not only as regards the activities of statesmen and

59. This discussion of Strabo is derived from *The Geography of Strabo*, vol. I, trans. Horace Jones (Cambridge, MA: Harvard Univ. Press, 1960), xi-xxviii.



Figure 8. Revering the ancients: Portrait of Strabo from a sixteenth-century printing of *Geographica*. 0014/SIL14-S006-12a (Smithsonian Institution Libraries, Washington, DC).

commanders but also as regards knowledge both of the heavens and of things on land and sea, animals, plants, fruits, and everything else to be seen in various regions.”⁶⁰ Thus geography for Strabo goes far beyond latitude and longitude, and includes, in essence, the entire natural world. Like John Speed or Alexis-Hubert Jaillot seventeen centuries later, Strabo claims as his audience kings, statesmen, and generals, whose need for geographic learning he emphasizes, as well as the public at large (but explicitly excluding the “wholly ignorant” among the public). He acknowledges the necessity of understanding terrestrial geometry as a base on which to build geographic knowledge, and stresses the utility of mathematics and astronomical observation for accurate mapping. Yet he makes a compelling case for mathematical geometry to serve as only a foundation of geographic study, not as its end.

Lastly, Strabo notes that in compiling the content, his criteria for inclusion were that which is “practically useful, or memorable, or entertaining,” all of which we see expressed in the compilation of early world atlases.⁶¹ Thus these two Greek-born Roman citizens, Strabo and Ptolemy, have had a profound influence on the concept of geography up to our own time. The two threads of western geographic thought that they founded—the Ptolemaic and the Strabonian, the mathematical and the historical—affected the development, cultural role and marketing of world atlases in early modern Europe.

Marine cartographic practice in the Middle Ages likewise profoundly influenced the development of the atlas genre in the West. Terrestrial cartography remained well behind marine cartography in terms of accuracy and production quantity in the late Middle Ages and Renaissance. In the centuries preceding the translation of Ptolemy's *Geographia* into Latin,

60. Ibid, 3-4.

61. Ibid, 49.

world mapping in Europe remained a spiritual and cosmographic endeavor, emphasizing the unity of the world, centered on Jerusalem, rather than accuracy of locations and distances. Thus historians of cartography have frequently expressed surprise at the geodetic accuracy, simplicity, practicality, and modern look of the sea charts, called *portolans*, drawn and used by mariners as early as the thirteenth century.⁶²

A portolan is a manuscript marine chart showing coastlines as well as bearings, distances, wind direction, and sea depths. To modern (non-mariner) eyes a manuscript portolan is difficult to read, covered as it is with a thick web of straight lines, called rhumb lines, representing direct bearing and intersecting at symbols called compass roses (Figure 9). The portolan was a practical and necessary tool of navigation developed among southern European cultures—Spain and Italy most notably—to facilitate trade and fishing, with the help of a compass, in the Mediterranean Sea. Mariners drew them primarily for their personal use, although a trade in manuscript portolans had developed by the fourteenth century. Surviving portolans provide remarkably accurate portrayals of, besides the Mediterranean, the Black Sea and the Atlantic coasts of Europe and North Africa.⁶³ Recent scholarship has emphasized the conservative nature of the portolan genre; that is, portolans from the thirteenth century are almost identical to those of the sixteenth century.

How does the portolan relate to the history of early terrestrial atlases? In two ways: first, portolans were frequently bound together in wood or leather covers, making them among the first bound sets of maps and thus precursors to the printed atlas. These bound charts are referred

62. Akerman, "On the Shoulders of a Titan," 152.

63. *Ibid.*, 154.



Figure 9. Coastlines and rhumbines: an example of a portolan or mariner's coastal map, probably from the atelier of Christopher and Bartolomeo Columbus, Lisbon (1490). Rés. Ge AA 562. (Cartes et Plans, Bibliothèque Nationale de France, Paris).

to today as portolan atlases; the earliest example dates to about 1313, with 69 surviving examples dating before 1500. Second, they gradually came into the hands of governments and other elites, where “the sophistication of portolan charts established a reputation for their makers that demanded representations of more than the Mediterranean theatre.”⁶⁴ In response to this increased demand from non-mariners, portolans available for trade came to include more information on coastal settlements. As Akerman writes, “Movement away from strictly maritime content and contexts is apparent in some fourteenth- and fifteenth-century [portolan] examples. . . . Though a manuscript cartographic form, portolan atlas-making thus made an important contribution to the growth of cartographic literacy in Western Europe, and to the growth of a market for bound map sets.”⁶⁵ The demand generated helped create, by the mid-sixteenth century, high demand for complete terrestrial world and European atlases that would provide the kind of detail and accuracy found in large-scale mariner charts.

Sailors did not just carry portolan charts with them to sea. They also carried pilot books, another precursor to the modern atlas. Pilot books, also called pilots or rutters in English, were manuscript sets of written sailing directions and descriptions of winds, landmarks, hazards, bearings, and distances. The earliest pilot books date to about 200BC.⁶⁶ They were essential navigation guides in the centuries before bearing and location (especially longitude) could be accurately assessed, when mariners usually sailed within sight of the coast at all times. Detailed descriptions of coastlines, harbors, etc. thus became vital to orienting the mariner. Primarily textual, pilot books sometimes also included illustrations such as drawings of landmarks or harbor views, offering a narrative complement to the graphic portrayal offered by the portolan.

64. Ibid, 155.

65. Ibid, 170-171.

66. Ibid, 148.

By the early sixteenth century, pilot books were being integrated with the corresponding portolan charts and printed together for sale as sea atlases or maritime atlases. The most well known is *De Spieghel der Zeevaerdt* by Lukas Janszoon Waghenaer (Leiden, c. 1585), from whose name derives the early modern English term for sea atlases, “waggoner.” The maritime atlas was a cartographic genre that developed in tandem with terrestrial atlases, yet for different audiences. James Akerman has argued that the continued integration of these two navigational sources, the graphic portolan and the textual pilot book, influenced the development of the early modern world atlas as an integrated work of text and cartography.⁶⁷ The influence of the maritime atlas on the world atlas is clear as well—during the early sixteenth century, sea atlases became increasingly standardized and stylized, as demand for maps by non-mariners grew. When the first world atlases were being devised in the late sixteenth century, geographers already had a similar product with proven commercial viability available as a model.

The genre of cartography called *isolarii*, or island books, is related to the portolan genre. Primarily a Venetian product, an *isolario* was essentially a maritime atlas developed from portolan and land maps to describe a group of islands or peninsulas, such as the islands of the Mediterranean Sea. Most were not intended as navigational tools, however, as they lacked rhumb lines and compass roses to aid sailors. Printed island books, such as the well-known *L'Isole piu famose del mondo* (1572) by Tomasso Porcacchi and André Thevet's *Le Grand insulaire et pilotage d'André Thevet, cosmographe du roi* (1585), were popular among elite and middle-class urban readers. Besides maps of the islands and surrounding waters, *isolarii* featured descriptive geographical, historical, and sometimes ethnographic texts, and thus were

67. Ibid, 170-171.

chorographic in nature (i.e., describing a local area). Recent scholarship⁶⁸ has examined the special cultural significance of islands in the European imagination and its impact on exploration.

Akerman argues that island books were also important as a precursor of the rise of the world atlas. Defined by and limited to a certain category of geographic feature (the “island,” which is not a country, town, continent, etc.), they began to “impos[e] order on the geographic consciousness of their readers.”⁶⁹ That is, island books contributed to a new mental framework of geography which would eventually define categories of marine or terrestrial geography by similarity of features across regions, allowing the development of the typology of modern geographic science. The success of books such as Porcacchi’s suggests that readers appreciated the combination of illustration, cartography, and descriptive texts, the same sort of materials later offered by terrestrial atlases. In keeping with the tradition of treating islands as distinct from their mainlands, it is interesting to note that early modern world atlases often included several maps of island groups (including the British isles), but they frequently placed them at the end of the atlas, away from the maps of their mainlands.

Another important source of inspiration and tradition for the early modern atlas-compiler was the printed cosmography. Defined by cosmographer Peter Apian in the sixteenth century as “a description and outline of the Earth. . .the Sun, the Moon, and all the stars, with all that is contained in the circuit of the sky,”⁷⁰ cosmographies were long narrative works, often illustrated,

68. See the extended analysis of the impact that pre-existing cultural notions of “the island” had on Martin Frobisher and other sixteenth-century English explorers of the New World in Amir Alexander, *Geometrical Landscapes: The Voyages of Discovery and the Transformation of Mathematical Practice* (Palo Alto, CA: Stanford Univ. Press, 2002), 6-68.

69. Akerman, “On the Shoulders of a Titan,” 178.

70. Peter Apian, *Cosmographicus liber* (Landshut: Peter Apian, 1524), quoted in Akerman, “On the Shoulders of a Titan,” 177-178.

describing the physical structure of the world. Their subjects varied, but they usually offered both secular and human histories as well as descriptions of nations, cities, flora and fauna, and much else. In short, the cosmography was a narrative of encyclopedic ambition.

The cosmographic narrative was a monastic medieval tradition going back to the *Tractatus de Sphaera Mundi* by the English astronomer Johannes de Sacrobosco (John of Holywood), which appeared around 1230. With the growth of print in the sixteenth century, cosmographies were transformed into commercial works produced by scholars and marketed toward the growing class of middle-class and elite literate consumers. Sixteenth-century cosmographies were essentially compendia of natural history, biblical and human chronology, and astronomy. They offered simplified descriptions for a literate but not well-educated laity, rather than for scholars. The typical cosmography opens with a description of the universe (following Ptolemy and Thomas Aquinas), explains the system by which the planets and other heavenly bodies move around the earth, then follows with a description of the parts of the earth. Another important component in a cosmography is a narrative of sacred and human history.

Among the best-known cosmographies of the sixteenth century are the so-called Nuremberg Chronicle (*Liber chronicarum*) of 1493, and Sebastian Münster's beautiful multi-volume *Cosmographia universalis* (1544). The Latin edition of Münster proved to be fairly popular. In response, the French humanist François de Belleforest (1530-1583) expanded the text and translated it into French (without Münster's approval but with the endorsement of the French king). He then published it under his own name in France as the *Cosmographie universelle* in 1575.⁷¹ As with Ptolemy's *Geographia* and so many other scholarly works of the Renaissance,

71. François Belleforest, *La Cosmographie universelle de tout le monde...auteur en partie Munster, mais beaucoup plus augmentée, ornée et enrichie par François de Belle-Forest* (Paris: Nicolas Chesneau, 1575) .

the original Latin edition proved commercially viable and led to multiple vernacular editions that enjoyed even greater sales.

The encyclopaedic ambition of the medieval and Renaissance cosmographer was overtly theological in nature. The cosmography's elements of history, astronomy, and natural philosophy were connected by a common purpose of describing God's creation as delineated in the Bible. Producing a cosmography was a spiritual act because it dealt with all holy things; his task being to reproduce on paper the world God had made, the cosmographer had to strive for perfection in his understanding and description of the world. The great medieval scholar Nicolas of Cusa, who made an explicit association between the cosmographer and God the Creator, eloquently described the spiritual nature of the cosmographer's task in the late fifteenth century:

The cosmographer therefore tries as hard as he can to keep [his senses] open. . .to bring his description ever closer to the truth. Finally, when he has made a complete representation of the perceptible world in his own city, he compiles it into a well-ordered and proportionally-measured map lest it be lost. He then turns to it . . .and transfers his inner understanding to the creator of the world, who is none of those things that he understood and recorded. . .but rather the maker and cause of them all. He considers that the creator was prior to the entire world, just as he himself was prior to the map. And from the relationship of the map to the true world, he beholds in himself, insofar as he is a cosmographer, the creator of the world.⁷²

The cosmographer was also, for Nicolas, a metaphor for the perfect human being, one who seeks understanding and truth through careful examination of the perceptions of all five senses.

Most cosmographies employed one or more world maps, along with city views and regional maps, in order to illustrate their narratives of the history of the world. These world maps were not Ptolemaic constructions, but three-part schematic illustrations of the parts of the world,

72. Nicolas of Cusa, "Compendium, Ch. XIII," in *Opera Omnia* XI, transl. Victoria Morse, History of Cartography Project, Department of Geography, Univ. of Wisconsin, accessed April 2, 2012, <http://www.geography.wisc.edu/histcart/broadsht/brdsht7.html>.

oriented with east towards the top, and centered on the holy city of Jerusalem. Called T-O maps⁷³ or mappaemundi, they were not intended to accurately represent geographic features. Rather they served as instruments of theological instruction and meditation, much like a stained-glass window in a church (Figure 10). The mappaemundi's three parts of the world corresponded to the division of humanity into three races, each founded by one of Noah's sons after the Flood. Taking the intent of the authors into consideration, it is misleading to label these maps, as some historians of cartography have done, as inaccurate, since they did in fact perform their intended function of Christian theological instruction.

Cosmographies also, following Strabo and other descriptive geographers, offered entertainment (and perhaps anxiety) through fanciful illustrations of the wondrous human and animal races of the world. Münster's *Cosmographia*, with its numerous depictions of bizarre, monstrous humans with a single foot, or the head of a dog, is just one example of the codification and dissemination of ancient geography's ideas about the appearance and customs of exotic races through the Renaissance cosmography.

The structure of the Renaissance printed cosmography along with its commercial success influenced the development of the geographic atlases of the early modern period. By the mid-seventeenth century, the cosmography was a time-honored and pious model of how to present a world description in a combined graphic and textual narrative format (Figure 11, Figure 12). The composition and content of the cosmography would have a profound influence on the comprehensive concept and structure underlying later world atlases.

73. The maps are so called because of their shape, resembling a "T" of rivers dividing Asia, Europe, and Africa inside an "O" of ocean.

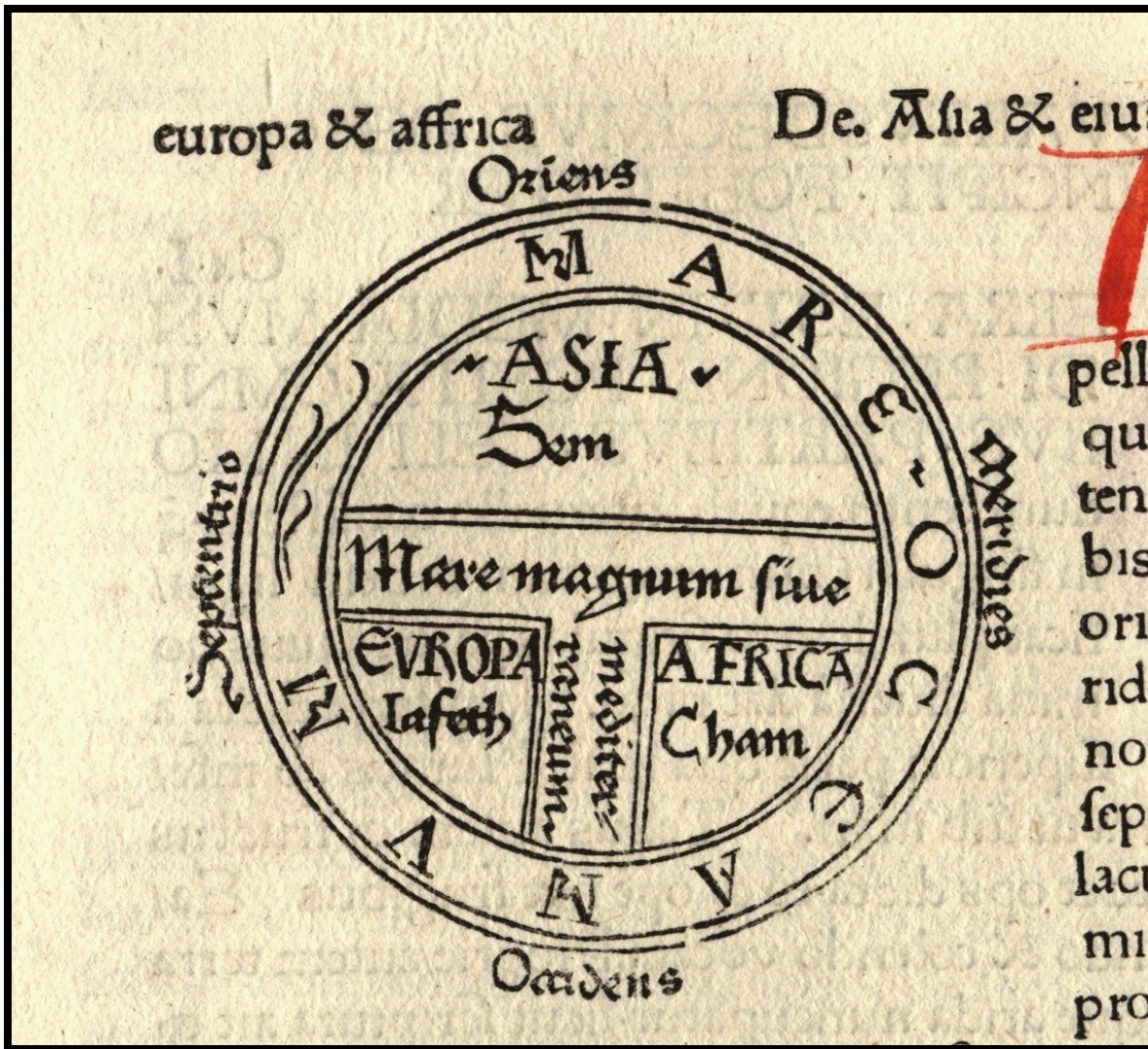


Figure 10. A medieval world map, the earliest known example of a map printed in a book, from the Augsburg printing of Isidore of Seville's *Etymologiae* (1472). Known today as T-O maps, they derive their name from their simplified shape: the three parts of the known world divided by a T formed by the Mediterranean Ocean ("mare magnum") encompassed in an O of the great ocean. Kraus 13. (Harry Ransom Humanities Research Center, University of Texas at Austin).

Lastly, along with cosmographies, maritime cartography, and Ptolemy's *Geographia*, a fourth book genre likewise had a major influence on early world atlases. This was the medieval and Renaissance travel narrative. It has garnered the attention of a number of scholars, most

recently postmodernist literary scholars.⁷⁴ A literary genre well established by the high Middle Ages, the early travel narrative genre ranges from completely fictitious creations, such as the enduring and entertaining *Travels* of Sir John Mandeville, to works that offer substantially believable accounts, such as Marco Polo's thirteenth-century account of his travels in China and the French diplomat André Thevet's *Cosmographie du Levant* (1554). Such works offered readers thrilling accounts of exotic places and strange peoples, even monstrous races. They could even be disseminated to bolster support for political causes; perhaps the most famous example is the perpetuation of accounts of the glorious Christian kingdom of Prester John, located beyond the Muslim east, by proponents of new Crusades to give hope of a strong Christian ally against the Ottoman Empire.⁷⁵ Real or fictitious, these books comprised most of what was known about the world beyond Christendom and the Holy Land prior to the sixteenth century.

The influence of the travel narrative on early world atlases is twofold. First, seventeenth-century mapmakers counted travel accounts among the more reliable of contemporary sources of geographic knowledge, because of the growing value placed on the eyewitness account; for example, geographers such as Mercator spent long hours trying to reconcile one traveler's account of the distances traveled between two points with other sources to decide on the most reasonable coordinates possible. Travel books also influenced the atlas' narrative structure. Many seventeenth-century world atlases are structured to present a narrative, rather than discrete reference-book bits of data. They sometimes use the conceit of taking the reader on a journey

74. See, for example, the important work of Mary Baine Campbell, *Wonder and Science: Imagining Worlds in Early Modern Europe* (Ithaca, NY: Cornell Univ. Press, 1999); and Stephen Greenblatt, *Marvellous Possessions: the Wonder of the New World* (Chicago: Univ. of Chicago Press, 1992).

75. For a monograph on the myth and political meaning of Prester John's kingdom in the Middle Ages, see Robert Silverberg's classic *The Realm of Prester John* (first edition 1972) (Athens, OH: Ohio Univ. Press, 1996).

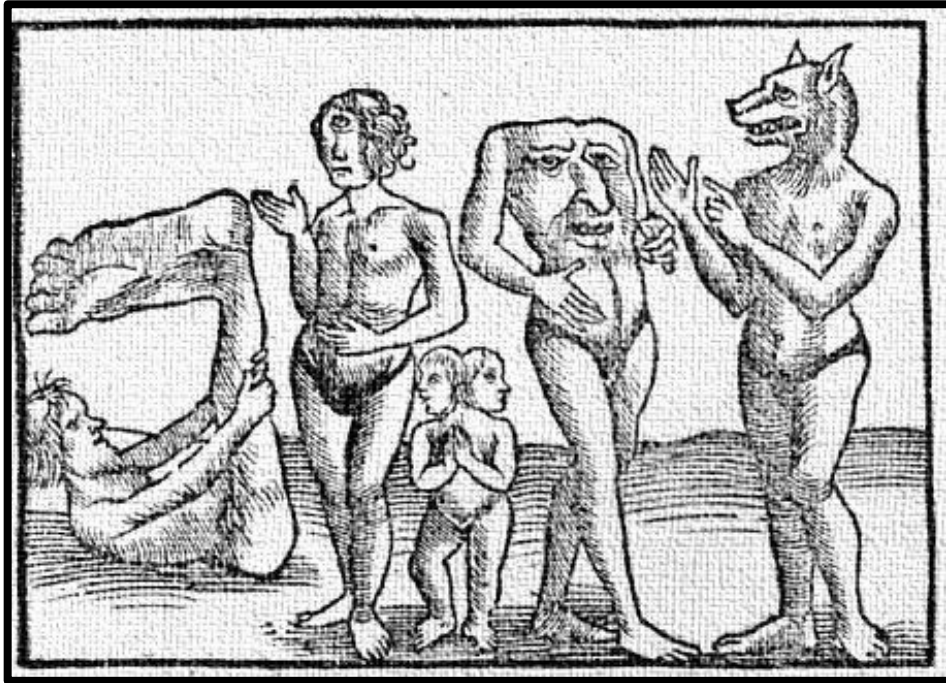


Figure 11-Figure 12. The entire universe between the covers of a book: Cosmographies offered readers a plethora of maps, illustrations, plans, and textual descriptions. Shown here are two illustrations from Sebastian Münster's *Cosmographia* (Basel: Heinrich Petri, 1550). Figure 11 shows four monstrous races (sciapods, cyclops, blemmyes, and cynocephales) described by the Roman natural historian Pliny. Roy G96.M8B50 (Special Collections, Saint Andrews University Library, UK). Figure 12 is a map of Paris. R2=89C136 (Laor Map Collection, National Library of Israel).

without leaving home—that is, making the reading of the atlas into the equivalent of actually traveling around the world without the dangers and discomforts of travel. The travel narrative holds a unique place in the development of modern literature, geography, and geographic consciousness. It very often served a moral didactic function and frequently gave short attention to recording distances, directions, and times traveled, providing interesting anecdotes and seemingly random observations on people, flora, and fauna instead (Figure 13). Yet its existence was proof, or at least many readers accepted as proof, that individual Europeans could travel to strange lands, interact with peasants and kings, note their observations, and draw comparisons between human and natural geographies there and at home. Thus foreign lands and peoples changed from the subjects of ancient and sacred history or storytelling to real human beings whose values and practices could be observed, recorded, and compared with others. As with the *isolarii*, which offered descriptions of one specific type of geographic feature, the travel narrative contributed to the beginning of an intellectual framework of scientific thought: the observation and recording of natural phenomena, the categorizing and cataloging of landscapes, plants, animals, and peoples, and comparisons made among different areas.

The influence of these four forms of geographic knowledge—the classical geographies, cosmography, maritime cartography, and the travel narrative—can be traced in most early world atlases. While the genre itself was new in the late sixteenth century, the organization of early world atlases drew on these familiar secular, theological, and occupational printed and manuscript forms. The literate public's familiarity with these forms may well account for the rapid growth of public demand for commercial atlases and the emergence of a competitive atlas market by the 1640s.



Figure 13. Travel memoirs often featured botanical illustrations, such as this sketch of the hetich (batatas yam) of Brazil in André Thevet's *Les Singularitez de la France Antarctique, autrement nommée Amérique* (Paris: chez les héritiers de Maurice de La Porte, 1558). Rés-4-Lk12-1. (Bibliothèque Nationale de France).

My approach to understanding the intellectual origins of early modern atlases departs somewhat from that of previous scholars. As discussed in Chapter 1, most of the historiography of early atlases has been written by map librarians or cartographic historians, who conceive of and treat the atlas as a collection of maps, rather than as a book, as this study does. Because of the wide range of materials besides maps and city plans that are included in many atlases, it is important to understand the broad contours of European geographic thought as it influenced the development of the atlas genre, in addition to unraveling its technical and cartographic developments.

To understand the professional identities and marketing strategies that shaped seventeenth-century atlases, we need to look back to the preceding centuries to see how the field of geography developed from its classical roots through the medieval period. Below I outline first the meaning of the term “geography” in the medieval period before the rediscovery of Ptolemy and Strabo, then look at how the field continued to develop along three major branches—chorography, mathematical geography, and descriptive geography—up to the seventeenth century.⁷⁶

Between the end of the Western Roman Empire and the translation of Ptolemy’s *Geographia* into Latin in 1406, “geography” indicated the travel writings, real and fictitious, that circulated through literate Europe in the high and later Middle Ages. It also indicated sacred geography and chorography.⁷⁷ The Holy Land itself was the primary subject of sacred geography. By the term is meant both the study of the sites of events in sacred history, as well as

76. The following account is drawn from the synthetic work of David Livingstone, *The Geographical Tradition* (Oxford, UK: Blackwell, 1992), 32-101; Catherine Delano-Smith and Roger Kain, *English Maps: A History* (Toronto: Univ. of Toronto Press, 1999), 7-141; and Norman J.W. Thrower, *Maps and Civilization*, 39-90.

77. For the now-standard comprehensive presentation of maps and geographic practice in medieval Europe, see J.B. Harley and David Woodward, eds., *The History of Cartography*, vol. 1 (Chicago: Univ. of Chicago Press, 1987), 283-501.

the study of the earth as God's creation and the site of the life and death of Jesus. It belongs to the larger field of cosmography, but concerns earthly places rather than the place of the earth in Creation. Many of the problems attracting the attention of geographers were historical and chorographical—for example, discovering the location of towns long since vanished, or plotting the wanderings of Saint Paul. Others were attempts to rectify conflicting accounts of the whereabouts of sacred places—the terrestrial Eden being the most important—or involved interpretive problems such as the spread of the three races of the sons of Noah across Asia, Africa, and Europe.

Medieval chorography, or local or regional geography, bore no resemblance to the exotic wonders offered by travelogue geographies, or to the theological and sometimes theoretical products of sacred geography. Until the development of triangulation and scientific surveying in the late sixteenth century, it also bore little connection to mathematical geography. Chorography served dual purposes. On the one hand, chorography was the geographic knowledge owned by local government administration, as visual and descriptive accounts of lands and natural resources. It was developed as an aid to proper taxation, to establish agreed-upon property boundaries, to plan transportation routes and forest management. It comprised various kinds of cartographic, illustrative, and textual description, and developed differently across locales as information was needed to administer local property rights and collect taxes. On the other hand, medieval chorography could also be “owned” by the people whose properties it described, as it encompassed local history, families, and human settlements. Other than the rare Christian world maps found in some churches, chorography also produced the only maps most medieval Europeans would have seen.

While travel writing, sacred geography, and chorography continued to be produced throughout the early modern period, the paradigm of western geography was radically altered by the dissemination of classical geographic texts in the fifteenth and sixteenth centuries. This process led to the development of the three branches of modern geography—that is, mathematical geography, descriptive geography, and chorography—following the rediscovery of Ptolemy’s *Geographia* and Strabo’s *Geographica* in the fifteenth century and the beginning of what J.R. Parry called the “Age of Reconnaissance.”⁷⁸

The Eternal Earth: Mathematical Geography

Suppose a sphericall superficies with meridians, paralels, rumbs, and the whole hydrographically description drawne thereupon to bee inscribed into a concave cylinder, their axes agreeing in one. Let this sphericall superficies swell like a bladder, (whiles it is in blowing) equally alwayes in euery part thereof (that is as much in longitude as in latitude) till it apply, and ioyn it selfe (round about, and all alongst also towards either pole) vnto the concave superficies of the cylinder: each paralel vpon this sphericall superficies increasing successively from the equinoctiall towards eyther pole, vntill it come to bee of equall diameter with the cylinder, and consequently the meridians stil widening them selves, til they come to be so far distant euery where ech from other as they are at the Equinoctiall. Thus it may most easily be vnderstoode, how a sphericall superficies may (by extension) be made a cylindrical, and consequently a plaine parallelogram [sic] superficies; because the superficies of a cylinder is nothing else but a plaine parallelogramme wovnd about two equall aequidistant circles that have one common axtree perpendicular vpon the centers of them both, and the peripheties of each of them equall to the length of the parallelogramme as the distance betwixt those circles, or height of the cylinder is equall to the breadth thereof.⁷⁹

-Mathematical geographer Edward Wright, explaining Mercator’s cylindrical map projection, 1599

78. A classic account of extra-European world exploration and colonization is found in J.R. Parry, *The Age of Reconnaissance: Discovery, Exploration, and Settlement, 1450-1650* (Berkeley: Univ. of California Press, 1982).

79. Edward Wright, “A Correction of Errors in the Sea Chart: How the former errors may be avoyded,” in *Certain Errors in Navigation* (London: Valentine Simms and W. White, 1599), n.p.

Ptolemy's *Geographia* survived as an authoritative text not because of the accuracy of its geographic content—within a few years of its appearance, the explorations of Columbus and others would render obsolete the data of Ptolemy's world view. Rather, it was Ptolemy's description of a mathematical framework through which to understand and describe the terrestrial globe that earned it the highest respect throughout the early modern period.⁸⁰ The book became the foundation text of the new discipline of mathematical geography—the use of mathematical principles to measure the earth ever more accurately, and to improve maritime charts and terrestrial maps. In the sixteenth century, problem-oriented mathematical geography developed particularly in England, the Netherlands, and the German states. In France, it is represented primarily by the work of Oronce Fine, who produced a new cordiform (heart-shaped) projection and published his famous world map in 1534; and to a lesser degree, by Sebastian Münster and his school. The other well-known geographic writers of sixteenth-century France, most notably André Thevet, were travel writers. Yet across Western Europe, by 1600 mathematical geography, far from being an obscure deviation from cosmographic and descriptive geographies, had become the foundational knowledge base for all geographic practice. A scholar could study mathematical geography and earth-measurement without reading descriptive geographies, but he could not understand descriptive geographies without the elements of terrestrial geometry (the equator and lesser circles, latitude and longitude, etc.).

By 1580, geography was practiced in England as a branch of applied mathematics, one at the disciplinary crossroads of astronomy and geometry.⁸¹ Its chief method was correlating

80. J.A. May, "The Interpretation of Ptolemy in the Renaissance," in *Tijdschrift voor Economische en Sociale Geografie* 73, no.6 (1982): 350-361.

81. The following discussion is drawn primarily from E.G.R. Taylor, *Mathematical Practitioners of Tudor and Stuart England* (Cambridge UK: Cambridge Univ. Press, 1954); and Lesley Cormack, *Charting an Empire: Geography at the English Universities, 1580-1620* (Chicago: Univ. of Chicago Press, 1997).

modern astronomical observations in order to correct charts and maps. Although we may think first of land measurement when considering the tasks of the geographer, in the sixteenth century mathematical geographers were far more concerned with the difficult problems of maritime geography. As esoteric or theoretical as their investigations could be, most were, in fact, aimed at solving the real problems challenging the expansion of the kingdom into the New World as well as navigation in general (perhaps ironically, some of these problems were created by dependence on Ptolemy's calculations of the size of the earth and its landmasses). In England, the practitioners themselves, as Lesley Cormack has shown, were not individuals working in isolation. Rather they were typically Oxford or Cambridge students, professors, or tutors who formed a relatively small group of colleagues; Cormack shows that the majority of those interested in mathematical geography were from merchant, gentry, or clerical families.

Most notable among the English mathematical geographers of the sixteenth century are the courtier John Dee (1527-1608), who interested himself in most applied mathematics fields as well as in natural magic;⁸² Thomas Blundeville (1522-1606), whose best-known work is a pedagogical text on navigation principles; Edward Wright (1561-1615), and Thomas Digges (1546-1595).⁸³ All of these men worked on related issues of geometry, surveying, navigation, astronomy, and cartography, all with the primary goal of producing an accurate understanding of the size and shape of the terrestrial globe. This goal had its origin in English patriotism and the

82. On John Dee's life and works, see William H. Sherman, *John Dee: The Politics of Reading and Writing in the English Renaissance* (Amherst, MA: Univ. of Massachusetts Press, 1995). Dee's *Mathematical Preface to the Elements of Geometry of Euclid of Megara* (1570) (the first translation of Euclid's *Elements* into English) is the source of the ubiquitous quotation on the popularity of early modern maps: "To conclude, some, for one purpose: and some, for an other, liketh, loveth, getteth and useth, Mappes, Chartes, and Geographical Globes. Of whose use, to speake sufficiently, would require a booke peculier."

83. Humanist and scientist Thomas Blundeville is awaiting his biographer, as is mathematician-cartographer Edward Wright, whose work made it possible for navigators to plot their course using Mercator's projection; see their entries in *Oxford Dictionary of National Biography*. Thomas Digges was mentored by John Dee, and became the first English proponent of the Copernican system; on Digges and Dee, see Martin Kugler, *Astronomy in Elizabethan England, 1558 to 1585: John Dee, Thomas Digges, and Giordano Bruno* (Montpellier: Université Paul Valéry, 1982).

desire to help the nation profit from the new transatlantic and Indian Ocean trade. Explicit connections were made between mathematical geography and building the English empire; for example, geographer Richard Hakluyt wrote a dedication in praise of explorer-courtier Sir Walter Raleigh: “By your experience in navigation you saw clearly that our highest glory as an insular kingdom would be built up to its greatest splendor on the firm foundation of the mathematical sciences...”⁸⁴ The firm conviction that solving the looming problems of mathematical geography would be to the profit of the kingdom (and thus to the profit of the geographer) motivated the best efforts of many educated men throughout the late sixteenth and seventeenth centuries. Thus mathematical geography belongs as much to the history of empire and politics as it does to the history of science. It also, of course, belongs to the history of the university, where professors and fellows formed social circles of like-minded academic geographers.

Three critical problems faced men like Dee, Wright, and Digges. The first was to discover a reliable and feasible way to determine longitude at sea. Longitude could be found on land through triangulation surveying, but without fixed reference points, navigators were at a loss to determine how far east or west a ship was. Latitude at sea was relatively easy to find by sighting the sun or the stars against printed tables of declination, so ships crossing the Atlantic sailed along a fixed parallel until they reached the American coast, then sailed north or south to their destination. But with colonial trade becoming increasingly competitive, there was a strong impetus to find a way to solve the longitude problem so that ships could sail the shortest route to their destinations. Although the crux of the problem was well-known—that navigators needed to know local time in order to calculate longitude—the lack of accurate chronometers meant that

84. Quoted in Raleigh Trevelyan, *Sir Walter Raleigh* (New York: Macmillan, 2004), 113.

mathematical geographers sought other solutions.⁸⁵ Several theories seemed promising enough to keep scholars engaged for decades, including charting the geographic variation of the compass from true north, charting the dip of the compass needle (its pull to the earth) at different longitudes, and using various astronomical eclipses to estimate local time. Although none of the theories proved effective (in fact, the problem of longitude at sea would not be solved until the late eighteenth century), the astronomical and magnetic data collected during the search improved geographical science, especially cartography.

Mathematical geography was also put to use to solve a closely related problem: how to navigate safely near the Arctic Circle. The problem was twofold: first, existing plane chart projections, designed for sailing in the Mediterranean and treating latitude and longitude lines as constantly equidistant, proved dangerously inaccurate for sailing at northern extremes where maps' latitude and longitude lines converge. Second, magnetic variation is so strong near the North Pole that conventional compass navigation is unreliable. With France and England's relatively late entry into the imperial game of the sixteenth century, political strategists in both nations wanted to take advantage of their northern locations by finding a northwest or northeast passage to the New World.⁸⁶ This meant an effective polar map projection was needed. Though a number of theories were put forth, it was John Dee who devised a feasible answer, plotting the North Pole at the center with latitude lines shown as concentric circles. However, he kept his invention a secret for many years, hoping for compensation from Queen Elizabeth or another high-placed patron (and proving that service to the realm could be secondary to personal

85. Dava Sobel gives a lively account of the international race to solve the longitude problem in *Longitude: The True Story of a Lone Genius Who Solved the Greatest Scientific Problem of His Time* (New York: Walker & Co., 1995).

86. The long search for the northern sea routes is described in Robert McGhee, *The Last Imaginary Place: A Human History of the Arctic World* (Chicago: Univ. of Chicago Press, 2007), 134-216.

ambition even for patriotic courtiers like Dee). It was finally made public without his consent in Captain John Davis' *The Seaman's Secrets* in 1595.

The third major area of mathematical-geographical investigation in the sixteenth century was the invention of a projection that would allow navigators to plot courses in a straight line. Plotting a course on a plane chart for latitudes away from the equator meant mathematically calculating a series of curves--since plane charts treated the globe as a flat plane, they could not account for the curvature of the globe. In detailed local coastal charts, this presented no difficulty, but for navigators plotting courses across the huge expanses of the Atlantic or Indian Oceans, constant recalculations of correct bearing were necessary. Unlike the problems of longitude and the polar projection, this issue would not be solved by an Englishman but by the Flemish geographer Gerhard Mercator. Mercator developed a geometric progression that distorted map areas near the poles, but maintained the correct proportion between latitude and longitude. His world map of 1569 was the first to use the new projection.⁸⁷ However, it was published without explanation adequate for others to create their own maps on the same projection.

It took two Englishman, William Barlow (*The Navigator's Supply*, 1597) and Edward Wright (*Certain Errors of Navigation*, 1599), to publish clear instructions on creating maps for navigation using Mercator's cylindrical projection (Figure 14). Although other practical issues also engaged the attention of mathematical geographers in the late sixteenth century, the three described above were among the most pressing topics since they were directly relevant to the political and economic priorities of the period. With the solutions offered by Dee's polar projection and Mercator's global projection, the English and their rivals could travel further from

87. For the history of Mercator's innovation and the controversies surrounding its legacy, see Mark Monmonier, *Rhumb Lines and Map Wars: A Social History of the Mercator Projection* (Chicago: Univ. of Chicago Press, 2004).

home in greater safety and with greater speed, setting the stage for the rapid expansion of imperial ventures and the intense colonial trade wars of the seventeenth and eighteenth centuries. Thus the intellectual and political values that influenced the development of seventeenth-century world atlases, even the primarily descriptive ones, drew more or less heavily on the accomplishments and disciplinary frameworks of past and contemporary mathematical geographers.

Wonders, Humans, Time: Descriptive and Chorographical Geographies

...and Master Chancellor held on his course towards that unknown part of the world, and sailed so far, that he came at last to the place where he found no night at all, but a continual light and brightness of the sun shining clearly upon the huge and mighty sea. At length it pleased God to bring them into a certain great bay...this country was called Russia, or Moscovy...The whole country is plain and champaign, and a few hills in it: and towards the north it hath very large and spacious woods, wherein is great store of fir trees, a wood very necessary and fit for the building of houses: there are also wild beasts bred in those woods, as bear and black wolves. When the winter doth once begin there it doth still more and more increase by a perpetuity of cold...the empire and government of the king is very large, and his wealth at this time exceeding great. The city of Moscow is the chiefest of all the rest. Their streets are not paved with stone as ours are: the walls of their houses are of wood...⁸⁸

-Richard Hakluyt, *Voyages and Discoveries*

Navigation, exploration, topography, flora and fauna, climate, politics, economics, human settlements and customs—all of these topics and others appear in a cascade of rich and unordered detail in Richard Hakluyt's version of Sir Hugh Willoughby's 1553 voyage to Muscovy. It is just one of hundreds of voyages described in scholar and diplomat Hakluyt's

88. Richard Hakluyt, "Discovery of the Kingdom of Moscovy," in *Voyages and Discoveries*, ed. Jack Beeching (New York: Penguin, 1985), 62-64.



Figure 14. Mathematical geography in the early modern period was frequently applied to longstanding navigation problems. Edward Wright's *Certaine Errors in Navigation* is one such work (first edition 1599) (London: Printed by Felix Kingston, 1610). A1610.W75. (Albert H. and Shirley Small Special Collections, University of Virginia Library, Charlottesville, VA).

magnum opus of descriptive geography, *The Principal Navigations, Voyages, Traffiques, and Discoveries of the English Nation* (first edition 1590). Hakluyt spent years collecting and translating accounts of travels in Europe, the New World, Africa, and Asia, with the deliberate goal of encouraging Englishmen to continue exploring for the benefit of the nation. *The Principal Navigations* typifies the work of descriptive geographers that would have enormous influence on later world atlases.

Seventeenth-century atlas makers would borrow heavily from the descriptive geographies produced after 1550. They had an obvious appeal to the casual reader, required no prior knowledge or special skills to comprehend, and served equally the purposes of politics, trade, education, and entertainment. As described above, medieval geographic enterprises comprised three genres: travelogues, sacred (i.e., historical-biblical) geography, and chorography. Two of these, travelogues and sacred geography, evolved directly into modern descriptive geography. But the true origin of descriptive geography, as stated earlier, lies in the classical oeuvre of Strabo. Like Ptolemy's *Geographia*, Strabo's work became well known in Latin in Western Europe around the time when early extra-European explorations were beginning to reveal the limited knowledge of the ancients. However, the respect shown to Strabo as a geographic authority continued into the eighteenth century due to the wealth of information he provided on land features, human settlements, different races, animals, history, and so on.

What was "descriptive geography" in the late sixteenth and seventeenth centuries? Unconcerned with geodetic accuracy, precise terrain or maritime measurement, or the astronomy that made scientific mapping possible, descriptive geography was the geography of people, of cities and forests and animals. Who lives here? What are the manners and rituals of the inhabitants? How do they receive foreigners? How wealthy are they? Who governs them and

how? How many days' travel is it between this city and the next? Descriptive geography was entertaining, narrative, adventuresome, and often anecdotal. And it could even be inspiring, as were the works of Hakluyt and his protégé Samuel Purchas (*Purchas His Pilgrimage*, 1613) which urged fellow countrymen to explore, conquer, claim, convert, and exploit the undiscovered regions of the world.

Popular works described other European nations, with a number of titles reflecting strong reader interest in Eastern Europe and the Ottoman Empire (such as Philip Lonicer's 1578 *Cronica Turcica* and Antonio Possevino's 1587 *Muscovia*). Other works offered information on the New World, Africa, and Asia. And drawing on all of these regional and national geographies were the cosmographies, those encyclopedic compendia describing the entire universe in two halves: the celestial and the terrestrial worlds.

The most scholarly descriptive geographies, such as the works of Frenchman André Thevet, were chronological and described real travels abroad with many details, but little obvious embellishment. The attraction and excitement generated by factual works like Thevet's came from the author's gift for detail, his enthusiasm for describing the contrasts between his own culture and his subject. Tales that would stretch the reader's credulity were framed as hearsay from the natives or other travelers. But even more exciting to peruse, if less reliable as a guide for travelers, were those works that blended fact and fiction, with little regard for authenticity or evidence. These, including parts of Sebastian Münster's *Cosmographia*, describe monstrous races, mythical kingdoms, incredible natural wonders, and natural disasters—

earthquakes, floods, volcanic eruptions—blended more or less skillfully into tales that did not require sustained effort or deep contemplation to enjoy.⁸⁹

Many general histories of the field of geography, such as David Livingstone's *The Geographical Tradition*, do not clearly differentiate between the mathematical and descriptive branches of scholarship in the early modern period. Yet the distinction is crucial for the purposes of this study. The volumes of descriptive geography produced in the later sixteenth and seventeenth centuries bear little relation in content, execution, or audience to the mathematical-geographic works of the same period, though both purport to describe the terrestrial world. Where mathematical geographers expressed their work in formulae, maps, and globe gores, their counterparts were writers, even storytellers who used few maps and only then to illustrate the texts.⁹⁰

These differences emerged from the different purposes of each field of study. If mathematical geography was meant (for the most part) to be heuristic and utilitarian, to be used by navigators in the daily challenges of finding a safe route from Point A to Point B or by mapmakers in plotting accurate topographic relationships, descriptive geography was meant for the armchair explorer, and for women and children as much as it was meant for those involved in trade and politics. Descriptive works certainly played a role in promoting the nascent empire-building of the period by describing the natural resources of foreign lands, yet they did not aim solely to serve the needs of working specialists. Mathematical geography required rigorous training in applied mathematical sciences and consequently had relatively few practitioners, who

89. Münster's work is unusual in that it may be characterized as a work of mathematical geography as well; its mathematical section follows the rigorous standards of similar works. Only in the descriptive portions of this monumental work does Münster give in to tales of the fabulous, the lurid, and the incredible.

90. Despite the heavy influence of descriptive works on the later atlas genre, there is a clear distinction between the two. Where atlases are books of maps often supplemented with texts, a descriptive geography is a book of text sometimes supplemented with maps.

formed a network of colleagues centered at the universities; in contrast, descriptive geography required nothing more than the ability to read and hence attracted a wide range of serious scholars and dilettantes.

A final distinction between the two fields in the early modern period concerns their relationship to human time. Mathematical geography was, by definition, universal and ahistorical. The globe could not change its size or shape; degrees of latitude and longitude were permanent and reliable, if imaginary, markers. While understanding of earth magnetism and the ability to predict magnetic variation eluded scholars of the period, they remained convinced that such prediction was possible with enough data and a unifying theory. In contrast, descriptive geography was apt to evolve with each edition and author, and it was usually either historical in nature or included a location's history as a significant aspect of its description. This trend derived in part from the attention paid by Strabo, an historian, to chronological detail in site description. Yet it seems to have continued in large part because descriptive geography was, primarily, the geography of humanity, whose story had to be told in chronology. This detail included the history of the inhabitants of the nation, development of its government, rulers, etc., and the long-term rise and fall of cities and nations.

The third branch of modern geography, and arguably the geography used by the greatest number of English and Frenchmen around the turn of the seventeenth century, is chorography. Chorography (from the Greek choro-, regional) is local or regional geography. It is the most basic and the oldest form of geographic description, perhaps because it is the only branch that addresses the local and familiar rather than the theoretical or the strange. First defined by Ptolemy and essential to Roman local administration, the practice of chorography changed little from the classical to the early modern period, and served two primary functions. The first was to

allow for the knowledgeable exercise of land and city governance by measuring natural resources, populations, transportation routes, etc. The second was to record local history (emphasizing genealogy), land ownership and lordship, town growth, local shrines and sites of miracles or other natural wonders, etc. In doing so chorographies gave cohesion and identity to a population.

The “human” side of chorography was, almost by definition, performed locally. The expertise needed to write an area history was available only to someone who had lived there. Local historians took on the role of documenting geographical issues such as property exchanges and family history as part of their duties of chronology. There are notable cases in early modern Europe where “outsiders” were sent to survey an area, interview residents, and aggregate the information into reports for the crown, such as the *Relaciones Topográficas de España* commissioned by Philip II of Spain. However, royal bureaucrats were less interested in issues such as how a place got its name, former names, its local saints and sites of pilgrimage, and the genealogies of prominent landholding families than in more tangible questions.

These tangible questions involved money. Local administrators and the growing central bureaucracies needed detailed information to fulfill their office functions. The numbers of households in a city or county needed to be counted accurately when taxation was based on hearth counts. Especially in France, there were also local offices to be bought and sold, their duties and jurisdictions described. There was the constant tricky issue of establishing agreed-upon property boundaries in an era of multiple overlapping jurisdictions governing land use; and, of paramount importance to county or provincial government and national government, the process of determining ownership and the extent of harvestable resources of field and forest. All of these information needs called on the expertise of chorographers.

While the purposes of chorography were largely the same across England, France, and Western Europe in the early modern period, surviving examples reflect the local and uncoordinated nature of the effort to record events, people, and natural and spiritual phenomena. As centralized bureaucracies based in London and Paris grew, the geographical questions they asked became more and more standardized, but local historians produced works largely for the use of local landed and urban elites (who were the primary consumers and patrons of these specialized documents) and the works themselves are a reflection of the individuals whose lives and funds shaped them.

Like mathematical and descriptive geography, chorography played a role in shaping the world atlases that are the subject of this study. While by the eighteenth century chorographic surveying was becoming a truly rigorous scientific endeavor while remaining a subset of descriptive geography, chorography and the world atlas were at opposite ends of the scale of geographic description. Yet in the descriptions of “home” regions in world atlases (e.g., when French atlases turn to describing French provinces), the reader can recognize chorographic techniques—the attention paid to people and places and events of only local interest, the emphasis on sites of wonder and local saintly deeds. Even into the seventeenth century, it was chorography that most people outside of the universities thought of as land description, and it was in chorographic works that non-scholars had the greatest exposure to maps and topographical surveys.⁹¹

All three branches of modern geography influenced the development of the seventeenth-century world atlas. They provided the content that was edited and recycled into various atlas

91. Numa Broc, “Chorographie ou topographie: une géographie régionale?,” in *La géographie de la Renaissance, 1420-1620* (Paris: Bibliothèque Nationale, 1980), 99ff.

texts. They also provided the conventions of structure that atlas makers imitated or, at times, departed from when creating new works.

The Application of Geography

Thus the three fields of geographic study were well-established as subjects of publication by the turn of the seventeenth century. By itself, the fact that geographic books were being printed is significant only for the histories of printing and science. For cultural history, we need to ask, were they read and by whom? Who created the demand for the many atlases and sheet maps and globes appearing at book fairs and in term catalogues, and in the inventories of college libraries? How were the works used?

In fact, there was a steady increase in demand for geographic learning throughout the later sixteenth and early seventeenth centuries in both England and France. As described above, since the later Middle Ages there had been a small but consistent demand for maps: practical chorographic maps for administrative purposes, and world maps for spiritual instruction and historical scholarship by scholars and clerics. But after 1570 there was a marked growth in the commercial map market, one that cannot be explained simply by an increase in either geographic knowledge or literacy. There was new demand for maps by men who needed them for more than scholarly or didactic purposes. They needed maps and information on peoples and natural resources to colonize, conquer, and defeat their European neighbors in overseas competition, and build an empire.

These consumers were the “new men” of the late Renaissance—those middling sorts of men who in growing numbers sought a university education, but not for a career in law,

medicine, or the church. Instead they pursued two newly developed career paths. Some sought appointments to the political and bureaucratic offices created by the enormous expansion of royal and regional government after the mid-sixteenth century. There they worked to find solutions to public issues that often involved a geographic component; for example, finding new markets abroad for English wool after continental markets began to shut out English trade after 1600, and relieving the social pressures caused by high unemployment by developing new colonization programs. Others filled positions of private economic and financial power generated by the period's rapid growth of trade. Geographic learning and cartographic data was vital to occupational functioning for all of these men.

By the later sixteenth century, universities were responding to the new demand for geography by expanding their curricula to include lectures on descriptive geography and navigation. Jonathan M. Smith explains the increase in college students in the last decades of the sixteenth century by pointing to the gentleman's realization that the path to political power had changed from military prowess to intellectual and bureaucratic skill: "Young gentlemen, it appears, realized that a traditional education as a page in one of the noble houses, with its emphasis on modes of deference and martial arts, was poor preparation for a position of power in the modern bureaucratic state, so they turned for the first time to the universities" for training that would result in an appointment to office.⁹² Students from the gentry and nobility who read Ptolemy, Strabo, Pierre d'Ailly, Münster, and eventually Ortelius would go on to become investors, merchants, economic planners, military and maritime officials, and political advisors—men of public position and influence.

92. Jonathan M. Smith, "State Formation, Geography, and a Gentleman's Education," *Geographical Review* 86, no. 1 (1996): 94.

Maps and descriptive geographies provided the crucial data on which exploration, exploitation, conquest, negotiation, and safe merchant shipping were planned in company offices and royal councils, as well as on board shipping and military vessels. In France, the rise of Jesuit-controlled educational institutions coincided with a growing demand for geographic training. François de Dainville has shown that by the early seventeenth century, the Jesuit domination of higher education, with its emphasis on ethno-geography as preparation for missionary work, turned out to be well suited to meet the changing needs of students who would go on to serve in state economic administration.⁹³

Second, as Lesley Cormack has shown, the maps, atlases, and travel descriptions of the period served a more abstract function as well. As colonial empires grew, and national wealth and power was increasingly linked to control of the world outside the nation, world geographies came to serve an immediate and practical purpose. They filled the libraries of the visionaries of the nascent French and English empires, and contributed to a coherent vision of colonial empire. As Cormack notes: “Thus, geography, studied in the Arts curriculum by students increasingly destined for public positions of power, provided a series of images and attitudes towards governance and empire that gave these young men a posture of superiority toward other European and non-Western countries.”⁹⁴ Thus the geography books being published in the late sixteenth century, whether mathematical or descriptive, were read and absorbed not only by armchair geographers but also by those men who had or would gain influence and control over the political, financial, and economic decisions that would shape the seventeenth century. Works

93. François de Dainville, *La géographie des humanistes: les Jésuites et l'éducation de la société française* (Paris: Beauchesne, 1940).

94. Cormack, *Charting an Empire*, 203.

such as the atlases of Abraham Ortelius and Gerhard Mercator would shape the world view of those readers, who would eventually shape the fortunes of their nation.

Ortelius, Mercator, and the Atlas Family Tree

While this chapter has outlined the pre-history of the atlas as beginning in ancient Greece, historians of cartography locate the origin of the true atlas only in the late sixteenth century, a period referred to by Norman Thrower, Daniel Boorstin and others as the “Age of Atlases.” The term refers not to the quantity of atlases published, for there were few discrete atlas titles, but to the emergence of the first recognizably modern, popular commercial atlases. Specifically it refers primarily to the works of Abraham Ortelius and Gerhard Mercator. No two men did more to create the modern concept of the atlas. Yet they came out of very different intellectual backgrounds, and represent the two major branches of the modern atlas enterprise. Their influence on the emergence, development, and marketing of the early modern atlas cannot be overstated. Below I discuss briefly each man’s background and training, with a look at the influence of his approach to describing the world on his successors.

Abraham Ortelius was Mercator’s good friend and commercial rival (Figure 15, Figure 16). Born Abraham Oertels (which, following humanist convention, he latinized to Ortelius when he began publishing), he is best known as a geographer but was also a respected antiquarian and humanist scholar. He was born in Antwerp in 1527, during the boom years under Hapsburg rule that preceded the revolt of the Netherlands against Spain.⁹⁵

95. Biographical details drawn from Marcel Van Den Broecke, *Ortelius Atlas Maps* (Houten, the Netherlands: HES Publishers, 1996); and Robert J. Karrow, *Mapmakers of the Sixteenth Century and Their Maps: Bio-bibliographies of the Cartographers of Abraham Ortelius* (Wittnetka, IL: Speculum Orbis, 1993).

His father was a wealthy merchant from Augsburg (Abraham would keep both national identities and sign his works “Belgo-Germanus”). The death of his father in 1535 destroyed the family wealth and within a few years, the young Ortelius was at work selling maps and maritime charts. In 1547 he was admitted to the Antwerp Guild of Saint Luke, the artists’ guild, as *afsetter van Karten* (map and chart colorist). Ortelius had his family’s entrepreneurial spirit, and in addition to his colorist work, he began buying plain charts, coloring and mounting them on



Figure 15-Figure 16. Abraham Ortelius almost single-handedly shaped the format of future world atlases. Shown here are two illustrations from the *Theatrum Orbis Terrarum* (Antwerp: Gilles Coppens de Diest, 1570). Figure 15: Portrait of Ortelius (included in editions from 1579). Figure 16: Title page. G1006.T5 1570. (Geography and Map Division, Library of Congress, Washington, DC).

canvas, and selling them to support his mother and siblings. As his business grew he began traveling widely as a chart merchant across the Netherlands and the Holy Roman Empire, as well as to England and Italy. From charts, Ortelius expanded his scope to include terrestrial maps and progressed from buying and selling to producing his own engraved maps. His genius as a businessman, and the trait that distinguishes Ortelius from Mercator, was the ability to identify public demand and move quickly to create map products to satisfy it. He reproduced and modified existing maps by other authors where possible, to save the expense and time of creating new maps and charts. While this often meant selling work that did not completely reflect the latest information, it also meant that Ortelius was one of the most successful mapsellers of Antwerp.

In 1575, five years after the first edition of the *Theatrum Orbis Terrarum* (described below), Ortelius was appointed royal geographer to King Philip II of Spain. Although he was not formally educated in mathematics, astronomy, or geography, he was able to combine the expertise of formally educated geographers with his own keen commercial skills to fill a market demand for maritime and land maps. He also traded in archaeological artifacts and antiques such as coins. Well-known and well-respected, Ortelius became wealthy enough to devote much of his time to his antiquarian pursuits; his passion for historical scholarship and self-study led to a number of publications on antiquarian topics and historical geography. A devout Catholic and lifelong resident of Antwerp, he never married. Instead he devoted himself to his studies and cultivated a circle of cosmopolitan friends both in and beyond Antwerp, including Gerhard Mercator and Justus Lipsius. Ortelius died in Antwerp in 1598, at age 71.

Although he is by far best known for his *Theatrum Orbis Terrarum* (first edition in folio, Antwerp, 1570), widely recognized as the “first world atlas,” Abraham Ortelius was responsible

for a number of major works of geographic and antiquarian scholarship. His life points to the different routes to humanist scholarship available in the sixteenth century. While his friends like Mercator were trained at the university, approaching geography as a form of applied mathematics, Ortelius studied geography as an artisan, learning his trade not from university men but from printers and from self-study. A voracious reader, Ortelius also taught himself Latin, still the language of geography and history in his time. He published his first map at age 37. This was an eight-sheet world map extant in only one copy. He also published a map of Egypt in 1565, followed by a large wall map of Asia (1567), now unknown, and a large wall map of Spain. In 1578 the Plantijn publishing firm brought out his *Synonymia Geographica* (republished as *Thesaurus Geographicus* in 1587 and 1596), a dictionary of toponyms and geographic terms. In the 1596 edition appears Ortelius' hypothesis that the continents were once joined together.

Later in his career, Ortelius was able to indulge his passion for the past and to publish on his non-geographical interests, including the *Itinerarium per nonnullas Galliae Belgicae partes* on ancient Belgium. A true humanist, Ortelius collected prints, coins, and inscriptions, and occasionally published books with engravings and descriptions of his specimens, along with a number of commentaries on ancient authors.

On May 20, 1570, the printer Gilles Coppens de Diest offered a new folio book for sale in his shop in Antwerp, more than twenty years before Mercator's unfinished *Atlas* would be published.⁹⁶ Printed in Latin, the folio contained 70 maps on 53 sheets, with copious textual descriptions on the verso of the map sheets. This was Abraham Ortelius' masterpiece, the *Theatrum Orbis Terrarum* (*The Theatre of the Terrestrial World*). As mentioned above, today

96. This history of Ortelius' atlas is drawn from the works of the two most important Ortelius scholars. See Cornelius Koeman, *The History of Abraham Ortelius and His Theatrum Orbis Terrarum* (Lausanne: Sequoia, 1964); and Marcel van den Broecke et al, *Abraham Ortelius and the First Atlas: Essays Commemorating the Quadricentennial of His Death, 1598-1998* (Houten, the Netherlands: HES Publishers, 1998).

the book is routinely described as the “first atlas,” “first world atlas,” or “first modern atlas.” Often the first of any new genre or product is a tentative step, only partly resembling later developments and recognized as a progenitor by scholars only much later. Yet in this case, the routine scholarly emphasis placed on the *Theatrum*’s novelty may hinder recognition of its seminal influence on the atlas genre.⁹⁷

Readers were immediately responsive and demand was strong. Such was the *Theatrum*’s popularity that it appeared in six editions and four languages within the span of two years, an astounding feat in early modern publishing. By 1572, there were two re-publications of the original Latin edition for the scholarly audience, and editions translated into Dutch, French, and German for a very large lay audience of readers. Demand remained strong for almost forty years, despite the publication of rival mapbooks by fellow Antwerp citizens Mercator and Gerard de Jode (1508-1591) (*Speculum Orbis Terrarum*, 1578).⁹⁸ Re-publications were issued frequently; in all, 31 editions were issued, with the final appearing in 1612. The Latin texts were ultimately translated into seven languages, including Italian, Spanish, and English (1606). Sales were especially strong after 1579, when Ortelius began working with the large, respected printing house of fellow Antwerp citizen Christoph Plantijn (1520-1589) to produce new editions. These re-publications were true new editions, not simple reprints of existing plates. Ortelius never ceased to expand and modify the book’s maps. The *Theatrum* grew steadily in size and scope of coverage from the original 70 maps to a remarkable 167 maps in the 1612 edition. Ever the

97. Some scholars, such as Dalia Varanka, have argued that the *Theatrum* belongs to the genre of theatres, and should not be considered an atlas at all. This argument is based largely on a negative evaluation of Ortelius’ cartographic skill and from a presentist perspective on the mathematical nature of geography, as opposed to a historical or humanistic nature. See Varanka, “Editorial and Design Principles,” 45-46.

98. Nicolas Crane suggests that “opportunistic” Ortelius used his influence to force a delay in de Jode’s publication of *Speculum Orbis Terrarum* in order to prevent competition for sales. See Crane, *Mercator: The Man Who Mapped the Planet* (New York: Henry Holt, 2003), 219.

savvy merchant, Ortelius also had maps re-engraved and simplified to fit smaller book formats; those customers who could not afford the large folio could still afford to own the *Theatrum* in a smaller size.

Why did this work enjoy such enormous commercial success? Several factors seem to have played a role, all of them pertinent for understanding the influence of the *Theatrum* on seventeenth-century English and French atlas design and marketing. Again, scholars tend to emphasize the novelty of the work as the key to its success, but novelty in itself is not sufficient to explain forty years of dominance of the map book market across western and central Europe. That said, it is certainly true that the *Theatrum* was different from the bound map books available before 1570. Primarily, its novelty lay in the coherent organization, comprehensiveness, and purpose behind its composition. In 1570, the only bound books of maps that any European readers would recognize were the so-called Lafreri atlases, where patrons paid to have a custom selection of map sheets by different authors, of varying sizes, styles, and scales, bound together in a one-of-a-kind book.

In contrast, Ortelius' work was designed as a product for a mass market. It offered a convenient format of maps cut to the size of the book covers, so no unrolling and unfolding was needed. All editions were published as a single volume work—the entire world between two covers. It offered a title page illustrated by representations of the four continents plus Magellenica. It offered maps that, although not original products by the compiler, had been carefully redesigned and engraved in a consistent format and size. Although Ortelius has been judged as a lesser figure in cartographic history than, say, Gemma Frisius or Gerhard Mercator because he was not a mathematical geographer and usually copied others' maps, he was not a plagiarizer. Scholarly credit is yet another innovation of the *Theatrum*: Ortelius included a

bibliography, the *Catalogus Auctorum*, listing the 33 sources for his maps plus many other “worthy” geographers of his time. The 87 names referenced in the first edition grew to 183 names (some of them known only by their inclusion in this list) in the 1612 edition.⁹⁹ And perhaps most importantly, the *Theatrum* was novel because together these maps formed a complete and unified description of the terrestrial world. They proceeded in what to a modern reader will seem like a natural and logical order, from the largest to the smallest land divisions: the world, then continents, regions, states, then islands and urban localities.

Ortelius maintained consistency within a single edition and among the many editions he oversaw. The composition of any *Theatrum* is always the same:

- Title page with allegorical figures
- Dedication to Philip II of Spain and the Netherlands
- Poem by Adolf van Meetkercke
- Portrait of Ortelius engraved by Philip Galle (in editions from 1579 on)
- Ortelius’ Introduction
- Letter praising Ortelius and the work, from Gerhard Mercator
- *Catalogus Auctorum*
- *Index Tabularum* (gazetteer)
- Body of the atlas: maps and descriptive texts
- *Nomenclator* (gazetteer of ancient toponyms)
- *De Mona Druidum*, an essay by Welsh geographer Humfred Lhuyd
- Publication privilege and colophon

Besides the maps and the map composition, the design for the texts was also innovative. Ortelius scholar Marcel van den Broecke has described how Ortelius’ descriptive texts changed from edition to edition. Texts appearing in the Spanish, Italian, and English *Theatrum* were direct translations from the Latin original, and include scholarly notes necessitating a strong background in classical history. However, texts included in the French, German, and Dutch editions were different; they were simpler texts written in the vernacular language, aimed at readers such as wealthy burghers and bourgeois who did not have university training but were

99. Karrow’s *Mapmakers of the Sixteenth Century* is a detailed inquiry into Ortelius’ named sources.

reading for pleasure and to aid commercial profit.¹⁰⁰ Since Ortelius' texts appeared on the verso of the map whose terrain and people they described, they were not comprehensive in scope, but described the location, major geographical features, major historical events and political system, and information on cultural beliefs and customs.

It is perhaps not an exaggeration to say that the *Theatrum Orbis Terrarum* founded and defined the atlas genre. It created the expectations for a "good" atlas that readers across Western and Central Europe brought to the purchase of a new mapbook, and its composition and format shaped virtually all atlases that followed, even that of Gerhard Mercator, published 25 years after the first *Theatrum* appeared in 1570.

The impact of the *Theatrum* is different from that of Gerhard Mercator's *Atlas*, but in some ways even more important. The *Atlas* set a new standard for precision and accuracy of plotting, and presented what quickly became cartographic standards such as keying geographic features to different styles of lettering, presenting maps of the same region at different scales, and using a graticule (an overlay of lines representing latitude and longitude). While Ortelius did not create the maps on his own, as Mercator did, he did use his scholarly judgment to choose which of many conflicting maps he wanted to reproduce as being the most accurate. Thus, unlike the *Atlas*, the *Theatrum* did not set new standards for plotting sites or for reference systems and, outside of the atlas genre per se, it was not a milestone in European cartography.

Yet what it did was define the atlas as a book. The composition of components listed above—title page, personal texts, introduction to geographic texts, maps and descriptions, and reference lists—all were synthesized from conventions of sixteenth-century book publishing by Ortelius and almost universally adopted by his followers. Throughout the seventeenth and into

100. Marcel Van Den Broecke, "Ortelius' *Theatrum Orbis Terrarum* (1570-1641). Characteristics and development of a sample of *on verso* map texts," *Netherlands Geographical Studies* 380 (Utrecht: University of Utrecht, 2009).

the eighteenth centuries, atlas compilers who developed new organizing principles often felt compelled to explain to readers why they were breaking with convention.

Not only did it inspire imitators to create world atlases, but the *Theatrum*'s logical structure (and no doubt, its popularity) also inspired other geographic books. Among these is a well-known work engraved by the same man who engraved most of the plates of the *Theatrum*, Franz Hogenberg (1535-1590) of Munich. The *Civitates Orbis Terrarum* (*Cities of the World*) is a six-volume compendium of engraved views, maps, and text descriptions of world cities overtly designed to complement the *Theatrum*. The first volume appeared in 1572, only two years after the first edition of the *Theatrum*; the sixth and final volume appeared in 1617. Its author, Georg Braun (1541-1622) was a cleric of Cologne. He and Hogenberg consulted with Ortelius frequently on the work, suggesting that Ortelius' interest in supporting the field of geographic publishing even included consulting with potential commercial rivals.

Lastly, the *Theatrum* made a break with the scientific past that would prove as enduring as any of its other innovations. Frans Koks notes that between 1406 and 1570, cosmographies and theatres took Ptolemy's *Geographia* as their primary source of geographic data. Respect for Ptolemy led Renaissance cosmographers to explicitly separate the old world—the Ptolemaic world of Europe, Africa, and Asia—from the new world of the Americas and Magellenica (the hypothesized great southern continent), giving precedence to Ptolemaic maps over maps of contemporary discoveries, and often using only classical names for toponyms. In contrast, the *Theatrum* dropped the separation of the old and new worlds and used contemporary toponyms. As Koks notes, "Ortelius's *Theatrum* definitively freed cartography from the influence of Ptolemy although convention still demanded that the new form of map presentation and

illustration pay homage to the classical writers.”¹⁰¹ The continued reverence for classical authority, even as the content of classical works was replaced with modern knowledge, defined Ortelius’ approach in his *Theatrum*, and became the approach to atlas compilation that would prevail throughout the seventeenth century.

Ortelius’ close friend and commercial competitor, the Fleming Gerhard Kramer,¹⁰² is one of the most accomplished scholars of the sixteenth century. While Mercator is usually thought of as a cartographer, Mark Monmonier has pointed out that “Mercator distinguished himself at various times as a calligrapher, an engraver, a maker of scientific instruments, and a publisher. No less impressive are his deep interests in mathematics, astronomy, cosmography, terrestrial magnetism, history, philosophy, and theology.”¹⁰³ Born in Rupelmonde (near Antwerp), in 1512, Gerhard Kramer was son of a German shoemaker (Figure 17).¹⁰⁴ Mercator’s rise to continental fame as a scholar from these less-than-promising beginnings is owed to his uncle, a priest, who used his influence to get Mercator enrolled at a monastic school taught by the Brethren of the Common Life, where he learned the italic engraving that distinguishes his maps and globes. He spent the first half of his life in Flanders, then in 1552 settled with his wife and six children (all three sons would become geographers) in Duisburg, a small town in the imperial duchy of Cleves. Mercator’s faith, if any, has never been clearly understood. Raised and schooled in Catholicism, he was briefly imprisoned for heresy by Counter-Reformation authorities in

101. Frans Koks, “Abraham Ortelius: *Theatrum Orbis Terrarum*,” accessed November 14, 2009, <http://memory.loc.gov/ammem/gmdhtml/gnrlort.html>.

102. Mercator’s deliberate self-fashioning and cultivation of patronage relations deserve closer examination than they have yet received. It was not uncommon for humanist scholars of the sixteenth century, such as Erasmus and Philip Melanchthon, to drop their family names for scholarly pen names. Among other strategies, the man born Gerhard Kramer (“shopkeeper”) raised his social status by signing his works *Mercator*, Latin for “merchant.”

103. Mark Monmonier, *Rhumb Lines and Map Wars*, 31.

104. Two excellent works on Mercator’s life and legacy are Marcel Watelet, *Gérard Mercator, cosmographe: le temps et l’espace* (Brussels: Fonds Mercator Paribas, 1994); and Nicholas Crane, *Mercator*.

Rupelmonde on shadowy evidence, but never made any outward profession of Protestant belief. While he did leave Catholic Louvain to spend the last forty years of his life in Protestant Cleves, he never suffered from a lack of Catholic patrons and sponsors, including the Cardinal de Lorraine.

In Duisburg he supported his family briefly by teaching mathematics, and he also held a court appointment as cosmographer to the duke of Cleves. Although modern scholars are divided on the reasons, Mercator, despite his unusual talent, patronage, and learning, usually struggled to support his family and did not achieve much commercial success. For years he seems to have been distracted by the need to produce smaller projects, maps and books on a variety of subjects, in order to earn money. These distractions, coupled with a very slow and meticulous method of working, prevented him from completing his magnum opus, his five-volume *Atlas*. He died at age 82 in 1594, leaving his three sons to carry on his many unfinished geographical projects, including *Atlas*.

Mercator's rigorous formal education distinguishes him from Ortelius, who was not university-trained. In 1532 Mercator earned a master's degree from the University of Louvain, one of Europe's most prominent universities. He had completed a conventional scholastic education, that is, an Aristotelian canon that had remained firmly in place despite the evidence that was exposed the limits of the Philosopher's knowledge. A period of self-study and nascent challenges to scholasticism led him to Antwerp, a bustling metropolis of commerce, trade, and diversity of cultures and ideas. Initially intending a clerical life, Mercator was always interested in the connection between theology and the natural world. In Antwerp, Mercator "was drawn by degrees towards the branch of knowledge that was best suited to explaining the structure and mystery of God's creation"; as he wrote in the preface to his edition of Ptolemy's *Geographia* in



Figure 17. Gerhard Mercator's influence on subsequent Western cartography is incalculable. This engraving, after a painting made in 1574, appeared in Mercator's 1584 edition of Ptolemy's *Geographia* and in the first edition of the *Atlas sive cosmographicae meditationes* (Dusseldorf: Albert Busius, 1595). 263.G.9. (Royal Geographical Society, London, UK).

1578, “geography has been for me the primary object of study. When I was engaged in it, having applied the considerations of the natural and geometric sciences, I liked, little by little, not only the description of the earth, but also the structure of the whole machinery of the world.”¹⁰⁵ In these “natural and geometric sciences,” Mercator had a brilliant instructor: Gemma Frisius (1508-1555), physician, mathematician, geographer, globemaker, and editor of German astronomer Peter Apian’s *Cosmographicus Liber* (1529).

With Gemma’s aid, Mercator began studying mathematics as the key to understanding God’s universe, and pursued a career as an instructor of geography and Gemma’s assistant instrument-maker and engraver, careers very much in demand in sixteenth-century Flanders. For Gemma and Mercator, mathematics was the key to understanding the shape and movements of heaven and earth. While his wide-ranging studies included human and biblical chronology, for Mercator the study of geography meant primarily geometry and astronomy, subfields of mathematical study.

Mercator first established a name for himself as the engraver of Gemma’s famous globe (1536). Using the clear italic calligraphy he developed, the globe established the convention of using capital letters for regions, roman script for toponyms, and cursive for other texts. His first published wall map, of the Holy Land, followed in 1537, and in 1538 his first world map, a double cordiform (heart-shaped) in which Mercator converted the islands north of America into a continent and named it “North America.” In 1541 he published a small manual on his italic calligraphy style, which was immensely influential, as well as his first globe.¹⁰⁶ A series of

105. Crane, *Mercator*, 47-48.

106. *Ibid*, 111-116.

regional maps followed in the 1540s and 1550s, distinguished by attention to plotting accuracy and the clarity of the engraving.

In 1569, Mercator published a breakthrough in cartographic history: a rectilinear world map drawn on a geometric progression that helped solve one of the most pressing dilemmas of navigation: how to plot an ocean course using a straight line from Point A to Point B, given the curvature of the earth's surface. His solution made the mathematics of navigation much less complex and profoundly altered the practice of navigation once his methods were publicized. Yet even though the Mercator projection and his other singular accomplishments would have been enough to secure Mercator's fame, they were not his magnum opus. That distinction belongs to the culmination of his life's work, a project that required years of effort and lay unfinished at the time of his death in 1594.

Mercator's passion for geographic truth and his desire to understand and elucidate "the structure and mystery of God's creation," the "whole machinery of the world," led him in his later years to conceive a plan for the magnum opus that, although never completed, would define an entire genre of scientific production right down to our time. This was the definitive five-volume compendium of knowledge of time and space that he would call *Atlas sive cosmographicae meditationes de fabrica mundi et fabricati figura* (*Atlas, or cosmographical meditations on the creation of the universe and the form of created matter*). It was an attempt to produce a new cosmography, a complete description of the entire universe. Drawing on a lifetime of study in mathematics, cosmography, and history both sacred and human, it was based on careful research, correlation of different sources, and the most up-to-date observations of the heavens and the earth (Figure 18).



Figure 18. The book that named a genre: Title page with allegorical figure of King Atlas from the first edition of Mercator's *Atlas sive cosmographicae meditationes* (Dusseldorf: Albert Busius, 1595). 264.H.4. (Royal Geographical Society, London, UK).

The *Atlas* was a massive undertaking by Mercator and his sons Rumold and Arnold. As the culmination of Mercator's life's work, it was not a sponsored project; without a patron to support it, Mercator could make only incremental progress in between other projects that would generate income. The *Atlas sive cosmographicae meditationes* as conceived comprised five parts—the title was meant to identify the entire work. Only one of the parts was a geographic atlas, featuring world maps as well as chorography. The other four projected parts (each to be published in multiple volumes, in Latin only) were: the creation of the world (essentially a re-telling of the Old Testament), an astronomical treatise or celestial atlas, the history of the world's states and political systems, and a chronology of all time correlating different calendars. If completed as planned, it would have been the most comprehensive cosmography ever produced.

Yet only one volume of those grandiose plans would ever be published by the Mercator family. Mercator was debilitated by stroke in his last years; his characteristic refusal to allow assistance with engraving or writing slowed progress as well. When Mercator died in 1594, he had only completed the text for Part I, on the history of Creation; four months later his sons published that section and a volume of Part II, the “New Geography of the Whole World,” under the full *Atlas* title.¹⁰⁷

What they released disappointed potential buyers and sales were low, despite promises of more volumes of maps to come. There were no maps of Spain or Portugal, much in demand as the Hapsburg's Iberian empire remained a major political and economic power, nor were there

107. Why call the work “Atlas”? It is to Mercator that we owe this term for a bound collection of maps. In turn, he chose it deliberately to curry favor with a wealthy potential patron. In his *Atlas*' address to the reader, Mercator explained that the title was an eponym, but not in honor of the Titan of Greek mythology who was in some myths a great astronomer and creator of the first map, and in other myths the god punished for rebellion by Zeus, who condemned Atlas to hold up the heavens. Instead, Mercator used the name to honor that Atlas' son, also called Atlas, who was the tutor to the wise King Janus of Etruria, modern Tuscany. In doing so Mercator was making a convoluted effort to please a potential patron, King Janus' supposed descendent, Ferdinando de Medici, Grand Duke of Tuscany, to whom he dedicated the Italian maps of Part II (two volumes of Part II were published in 1585 and 1589). Mercator's sons decided to dedicate the entire work to Queen Elizabeth I of England after their father's death. Nicholas Crane provides the full story of the naming of Atlas in *Mercator*, 274-276.

more than a few maps of the world beyond Europe. However, the maps that were published and the structure of the book were themselves revolutionary in several ways. Mercator meticulously repeated the orienting lines of latitude and longitude on every map, making comparison among maps possible. Because his maps were not rolled but sold as flat sheets, he also devised a method of printing overlapping edges so that buyers could remove the large-scale maps of a single area and easily paste them together into a wall map. His maps all featured a correspondence of font size and style to type or scale of geographic feature. That is, Mercator's design of copperplate italic lettering, such as engraving regional names in all capitals, made it easy for readers to understand the hierarchy and categories of geographic features. A final innovation was multiple maps of the same region at different scales: the maps of any one region were designed to be viewed as a whole, with small-scale regional maps (covering large areas) complemented by large-scale maps of the same region (each covering a small area).

Rumold died in 1599 without producing a single new map. However, it was not the end for the work. Mercator's heirs sold the copperplates to Jodocus Hondius, a mapmaker of Amsterdam. The commercially savvy Hondius added many of his own maps, expanded coverage of the world beyond Europe, and republished the original Part II in 1606, under the *Atlas* title and Mercator's name. It included 103 beautifully engraved and decorated maps—Mercator's rigorously compiled originals reflecting his command of mathematical geography, while Hondius' maps reflected the Dutch emphasis on cartographic aesthetics. All were accompanied by long texts drawing on the work of descriptive geographers from across Europe. Revised and expanded, the multi-volume *Atlas* now met consumers' expectations for a collection of maps covering the entire globe. Hondius also responded to demand from literate bourgeois consumers who lacked a university education by translating the texts into Dutch, French, English, and

German. Such was the success of the revised Mercator-Hondius *Atlas* that no less than 29 editions appeared before 1641.

By 1650, the near ubiquity of the work in bookshops from the Empire to England had led readers to associate the term “atlas” with a description of the earth in a bound set of maps and (secondarily) texts. So strong was the association that in no Western European language is the term even spelled differently. As a cosmography, of course, the *Atlas* failed because it was never completed. It is essentially an accident of history that “atlas” came to mean a bound set of terrestrial maps instead of being the title of a book of cosmography, including history, politics, and the heavens. But it succeeded in ways Mercator could not have predicted, and like Ortelius’ *Theatrum*, its influence on seventeenth- and eighteenth-century atlases was decisive.

Compared to other atlases of the first half of the seventeenth century, the Mercator-Hondius work was both expensive and enormous.¹⁰⁸ Yet its popularity and the adoption of its proper title as a generic name for the genre testify to the prestige of the original compiler (whose eponymous projection had made Mercator a familiar name among seaman by 1650) and to buyers’ positive reaction to the elegant, clear copperplate engraving and massive amount of topographic detail each Mercator map offered.

The influence of Mercator’s *Atlas* on later world atlases and indeed on the entire field of mapmaking in early modern Europe cannot be overstated, even beyond bestowing its name on the entire genre. Its application of the principles of mathematical geography—such as using astronomical observations to plot points, the use of the graticule of latitude and longitude, the rigorous evaluation and assessment of conflicting data and different sources—to the creation of individual maps and to a sustained, coherent, planned aggregation of maps became the gold

108. Mercator and Mercator-Hondius maps today remain among the most highly valued cartographic products of the sixteenth and seventeenth centuries.

standard by which “good” maps would be measured. His numerous innovations of cartographic and book design became conventions of atlas- and mapmaking across Western Europe within a few years of *Atlas*’ publication in 1595.

More broadly, the Mercator-Hondius atlas gave Europeans a new way, literally, to think about the world and thus, with Abraham Ortelius’ *Theatrum Orbis Terrarum*, was the most fundamental of the intellectual origins of seventeenth-century world atlases. Mercator’s *Atlas* contained the world in regular, imaginary lines linked to the stars. It separated the world into sections of comparable scope and scale; it offered the reader ways to identify the correspondences and similarities among nations and continents; and through lettering and the development of a symbolic reference system, it taught readers to consider geographic features in the abstract—“political boundary,” “mountain range,” “episcopal seat,” “river”—rather than seeing only specific examples. Within a few decades, as more and more atlases appeared that employed Mercator’s innovations, these new concepts and frameworks of cartographic thought became naturalized in the literate European mind.

Thus together, the *Atlas* and the *Theatrum*, appearing in the relatively short span of twenty-five years, created the standards, design, format, and expected content of a new genre of commercial geographic work. From Mercator, the atlas genre derived its name and its standards of cartographic accuracy, compilation from multiple sources, and mathematical design of scale, projection, and reference systems. From Ortelius, the atlas genre derived its format as a book, its organizing principles of composition, its uniformity and consistency as a united mass-produced work, the provision of editions in multiple vulgar languages, the end of the division between the Old and New Worlds, and the acceptable types of frontmatter and backmatter. These qualities meant that by 1600, the geographic world atlas had already been defined, including its nature as

a simultaneously historical and mathematical work. The broad dissemination of the atlases helped shape the geographic consciousness of literate Europeans. The atlas format itself remained virtually unaltered into our own time, despite many technological and scientific advances in geography and in book publishing.

To place the Ortelius and Mercator atlases more broadly in their cultural context, it is important to note that both works were created in the flourishing urban centers of the late-sixteenth-century Spanish Netherlands to feed the domestic demand for geographic information, at the time when the Low Countries were establishing a viable colonial empire in Asia, and when Spain was fighting the rebellious Hollanders to maintain control of Dutch territory during the Eighty Years' War. Yet there is more to the high volume of Dutch and Flemish maps after 1570 than demand from populations hungry for information on the current wars and colonial enterprises. The people of the Netherlands enjoyed one of the highest literacy rates in all of Europe, and the general prosperity of the United Provinces well into the seventeenth century is well known. There was also a well-established commercial and artisan class and few enforced legal constraints on publishing. All these factors, combined with easy access to the resources needed for printing due to the port towns' role as major entrepôts, led to the development of major publishing enterprises. An important segment of the Netherlands publishing industry was devoted to geography, the colonies, and cartography.

Dutch and Flemish maps, atlases, and globes become renowned in the late sixteenth and early seventeenth centuries for their accuracy and beauty of design, and were imitated (and sometimes illegally reprinted) by French, English, Italian, and Spanish cartographers and publishers. Dennis Reinhartz, among others, has pointed out that a nation's cartographic pre-eminence was closely linked to its imperial pre-eminence, and this is certainly the case with the

Low Countries, France, and England, whose cartography become predominant in the same decades that their nations rose to dominance in the ongoing colonial rivalry.¹⁰⁹

Most importantly for understanding the following chapters, the economic, legal, and commercial advantages enjoyed by geographic publishers and printers in the Netherlands gave them an early lead against their would-be commercial rivals in Western Europe. Dutch and Flemish publishers created (or pirated) mapbooks, travelogues, and general geographies in all the major languages, and used their extensive merchant connections to sell them at book fairs and in shops from England to Italy and Germany. Selling those works in translation in other countries kept nascent native publishing enterprises from flourishing in towns like Paris, Lyon, Rome, and London, where small printers could hardly compete with the quasi-monopolies of the established Dutch and Flemish publishing giants. Mercator and Ortelius may have been the founders of the Netherlands' role as world geographer to Europe, but even after their enterprises had declined, successor houses such as the Blaeu, Hondius, and Janssonius firms of the early seventeenth century kept the Netherlands ascendant as Europe's mapmaker until well after 1650.

From the time of Strabo and Ptolemy through the works of Abraham Ortelius and Gerhard Mercator, there was tension in the field of geography. This tension resulted in the development of two principal branches in the world atlas "family tree," branches that would manifest in the seventeenth and eighteenth centuries. Of course, these categories are retroactively applied—the geographers of this study did not themselves identify as belonging to one or the other branch, nor does every world atlas fall neatly into one or the other branch.

The first is the Strabo-Ortelius branch. It may be summed up as descriptive geography, as the term was explained earlier. Yet the term is not sufficient to convey the impact of this form of

109. Reinhartz, *The Cartographer and the Literati*, 8.

geographic thought on the development of world atlases, and thus on the image of the terrestrial world presented to early modern readers. More than merely describing who and what lives on the surface of the earth, this branch of the atlas genre presented to readers a historically-informed, human-centered geographic paradigm, often with an explicit Christian theme, and sometimes with an explicit Christian purpose—to describe the world and recount sacred history as the story of God’s Creation.

For geographers following Ortelius, with his love of antiquarian pursuits like collecting inscriptions and coins, “earth description” meant primarily the history and cultures of humanity on earth, emphasizing human relationships to land and sea. Flora and fauna were treated as resources for local peoples or for exploitation by European colonizers. In short, the world as defined by atlases on the Strabo-Ortelius branch is time-bound, time-conscious, changeable, idiosyncratic, and human in scope. They have strong links backward to the cosmographies of the fifteenth and sixteenth centuries, with their emphasis on describing the earth as the site of the Creation, the fall, the races of Noah, and the rest of human history. In these atlases, as in early cosmographies, narrative and descriptive texts are as important as maps to achieving the atlas’ didactic purposes, and text pages usually outnumber map pages. They privilege the story of humanity and are written to instruct through entertainment. While again this is more a trend than a rule, in keeping with the entertainment purpose of the writing, the cartographic design in these atlases feature more decorative elements, such as ships on the seas, trees, and human figures.

The second major branch on the early world atlas family tree is the Ptolemy-Mercator branch. Deriving from mathematical geography, it, like the Strabo-Ortelius branch, presented a totalizing world view. In contrast to the Strabo branch, it is ahistorical and geocentric, with the earth seen as a sphere to be described geometrically, with reference to the stars. Humanity is a

secondary concern to quantitative and mathematical earth description. Atlases on the Ptolemy-Mercator branch are heavily cartographic—many feature no textual descriptions at all. Instead they feature instructional features on geometry and celestial maps. That is, the earth as defined by a Ptolemy-Mercator world atlas is finite, quantifiable, where the land, the sea, mountains, lakes, cities, etc., can all be measured and tabulated. Such atlases tend to constrain the singularities of geographic features within broad categories, thereby privileging a framework of geographic understanding over the unique and unusual. Writing in these atlases, when there is writing, is not aimed at entertaining the reader but only at informing him. This scientific and quantitative framework holds true for map design in Ptolemy-Mercator type world atlases as well. They tend to look more “scientific”—that is, with fewer decorative elements such as icons and flowing calligraphy—than the cartographic features of Strabo-Ortelius world atlases.

Understanding the intellectual origins and early history of the world atlas is crucial for understanding the intellectual context in which geographers of seventeenth-century London and Paris worked. The atlas compiler was both an heir to, and a participant in, a long tradition of global geographic endeavor stretching back to ancient Greece. This identity played an important role in the atlas compilers’ self-presentation. Yet it was not the only identity to assert the compilers’ authority and ability to create a valuable atlas, as Chapter 3 and Chapter 4 will show.

CHAPTER 3

“THE MERITS OF ONE MAN TRANSFERR’D UPON ANOTHER”: THE PERSONA OF THE PATRON’S SERVANT

In the previous chapter, I outlined the intellectual origins of early world atlases, from Ptolemy and Strabo through Abraham Ortelius and Gerhard Mercator, stressing the twin branches of geographic inquiry and writing that persisted from the classical period (and indeed, persist today). Understanding these origins gives the reader a sense of where the seventeenth-century atlas came from—that while it was a new genre of book publishing after 1570, it derived from a long and rich heritage of world-description. Yet framing the atlas’ development in this way runs the risk of removing the atlas from the domain of human endeavor, from being a product of specific individuals working in specific historical, geographic, linguistic, and cultural circumstances. It was the men who fashioned world atlases who more or less consciously drew on that heritage when planning and compiling a new edition. It was the creators of specific world atlases and the circumstances in which they labored that concern the remainder of this study, which examines the connections among the atlas compiler as an individual, the compiler as a constructed persona, and the marketing of his atlases.

The analysis of self-presentation as an approach to cultural history has been neglected by scholars of early modern maps and atlases. Yet a close analysis of the self-presentation of an atlas compiler can give us insight into his thought process in creating and marketing his works,

his values, and—perhaps more importantly for a cultural history—also his assumptions about his intended audience and their values. Chapters 3 and 4 first define the conceptual framework of “self-presentation,” then use rhetoric and image analysis to separate the strands that form the personas that the compiler wanted to project to his readers. In doing so, the chapters offer a typology of the major personas created in the works of English and French world atlas makers, looking for the strategies they used to establish claims of personal authority through the construction of a public image.

By looking at representative examples of the self-descriptions, claims, and affiliations found in the texts and images that made up the frontmatter of numerous world atlases, I show that a number of atlas compilers constructed a self-presentation that, among other purposes, served to assert the compiler’s personal authority and his ability to create an accurate and useful world atlas. In the frontmatter of early atlases, the textual dominates, but visual representations of the atlas makers appear occasionally in the form of portraiture, and these are analyzed together with textual references to form a clearer picture of how the atlas compiler wanted, literally, to be “seen.” I examine representative instances of each persona, stressing that no two self-presentations are the same. Indeed, each compiler who created some type of self-presentation in his atlases combined more than one aspect of his life or values to promote a unique self-image, so that multiple layers of authority were blended to create a specific overall impression on their readers (Chapter 5 offers a case study of a multi-layered self-presentation).

Chapter 3 and Chapter 4 will show that social status and its associations played the most important role in shaping how atlas makers promoted their personal image to their readers. While the importance of social distinctions and social rank in seventeenth-century England and France will hardly be surprising to the reader, their continued importance in commercial atlases reveals

a popular form of geographic knowledge in which (professed) social rank determined (or was thought to determine) personal authority in geographic matters seemingly far removed from class considerations.

Self-Presentation in Historical Analysis

Also called impression management, self-presentation as a conceptual tool was developed by sociologist Erving Goffman in his landmark *The Presentation of Self in Everyday Life* (1956). It is essentially a dramaturgical framework that posits the individual's choices of behavior, dress, style, and language as more or less conscious efforts to construct or manage a particular, beneficial public image—that is, among family, friends, coworkers, community, and strangers.¹¹⁰ Just as authors create characters with specific attributes in order to achieve a specific effect in fiction, so too does the real person create a public persona to achieve specific goals that can often be understood through his or her cultural setting.

Social psychologist Mark Leary has defined self-presentation as the means “by which people convey to others that they are a certain kind of person or possess certain characteristics.”¹¹¹ That is, it is the projection of a specific image (or performance, or persona) of oneself through texts, images, material objects, language, and the body—in short, any aspect of a person that can be manipulated by that person to achieve a desired impression on others. Analysis of self-presentation looks at the conscious and unconscious choices an individual makes in, literally, representing his character to others. Although it is closely related to identity and the

110. Erving Goffman, *The Presentation of Self in Everyday Life* (1959; repr. New York: Penguin Books, 1990).

111. Mark Leary, *Self Presentation: Impression Management and Interpersonal Behavior* (Boulder, CO: Westview Press, 1996), 17.

self, self-presentation is not a synonym for either, nor is it a psychological or characterological study. In historical scholarship, its defining characteristic is not the “true character” of the historical figure; it is rather explicating those communications with others meant to shape their perceptions of him and thereby achieve some benefit, such as maintaining or advancing his social status.

In his study of self-presentation in early modern portraiture, art historian Harry Berger distinguishes “presentation of the self” from the “self” in this way:

Presentation is always presentation-to, either presentation directly before or indirectly for others. Yet one never simply, unconditionally, presents oneself. Rather, one presents oneself *as*—as a man, a woman, an actor, a character, a professional, a victim, a noble, a monarch, a martyr, a merchant, a figure of authority, a figure of fun, an allegorical embodiment, a presenter, etc.—or, as oneself. In all these cases one performs a “role” that is...a pre-existing interpretation of the role[.]¹¹²

Although this “presenting oneself as” should not be read as necessarily hypocritical, deceptive, or cynical—a historical figure may have been exactly as he presented himself—it is still in essence a form of self-promotion, whether the individual’s goal was political, moral, familial, social, or financial in nature.

In practice, self-presentation in historical textual analysis interprets the historical figure’s word choice, metaphors, associations, etc., as neither random or transparent, but instead as revealing important information about the *mentalité* of the person behind the persona, and what he or she wanted to gain from that presentation; in other words, it takes rhetoric seriously. This approach does not assume that the figure who referred to himself, say, as “modest” in his letters to patrons or friends really was self-effacing; instead it asks, how did this person go about trying

112. Harry Berger, Jr., *Fictions of the Pose: Rembrandt against the Italian Renaissance* (Palo Alto, CA: Stanford Univ. Press, 2000), 15.

to create the impression that he was modest? For what reasons? What was the perceived value in giving others this impression?

In historical scholarship, this approach looks for the cultural connections (associations, characteristics, and affiliations) explicitly made by the individual as part of his self-presentation. A textual analysis of historical self-presentation looks, not for the actual individual behind the text per se, which is likely irretrievable, but for the recoverable public persona that the individual created in his writings and portraiture. Its usefulness goes far beyond reconstructing daily life, for it reveals attitudes, mentalities, and cultural norms otherwise difficult to recover from the historical record, gleaning insight into his thought processes and those of his contemporaries by critically reading metaphors, justifications, arguments, critiques, etc.; with portraits, self-presentation analysis examines the meanings of the image in symbols, dress, setting, objects, gesture, etc.

The purpose of all these presentational efforts is assumed to be the “marketing” of the self to advance one’s career, family, and/or patron relations. Among scholars who have fruitfully used this method for early modern European history is Dale Kent, who has explored the self-fashioning of Cosimo I de Medici through his artistic patronage; and Gregory S. Brown, whose study of Enlightenment-era French writers examines the “documents of self-presentation” (such as dedications and prefaces in plays), to determine how the authors tried to represent themselves.¹¹³ As used in the present study, self-presentation is a means of determining not only an individual's world view and his view of his own place in it, but—because these were mostly

113. Dale V. Kent, *Cosimo de Medici and the Florentine Renaissance* (New Haven: Yale Univ. Press, 2000); Gregory S. Brown, *A Field of Honor: Writers, Court Culture and Public Theater in French Literary Life from Racine to the Revolution* (New York: Columbia Univ. Press, 2002).

men of commerce—also the values he believed were held by his society, that is, his rivals, patrons, customers, etc.

Here it will be useful to distinguish between my use of “self-presentation,” the core theme of this study, and the concept of “self-fashioning.” While scholars sometimes use the terms interchangeably, the approaches derive from different disciplinary backgrounds. Self-fashioning is a method of analysis derived from the work of postmodern literary critics and New Historicist scholars writing in the past three decades, and is closely linked to the development of modern individual identity in the Renaissance. The term was coined by Stephen Greenblatt in *Renaissance Self-Fashioning: from More to Shakespeare* (1980). Greenblatt’s concern was to identify how individuals came to perceive themselves as autonomous in the sixteenth century, even as they were constrained in their choices of appearance, behavior, and language by political, social, and religious forces. He posited an analyzable nexus between the individual and his culture, an individual creative process whereby self-identity was formed from both internal characteristics and external factors. Greenblatt points out that the early modern period is especially rich territory for such analyses, noting that the era saw “an increased self-consciousness about the fashioning of human identity as a manipulable, artful process.”¹¹⁴ Scholars have applied this method to a wide range of historical problems of identity formation,

114. Stephen Greenblatt, *Renaissance Self-Fashioning: From More to Shakespeare* (Chicago: Univ. of Chicago Press, 1980), 2. Greenblatt’s influence has been most marked on other literary scholars. Yet historians of science, especially of science patronage, were also quick to realize the analytical potential of this development in literary studies. Among the most influential scholars to adopt self-fashioning as a conceptual model are historians of science Steven Shapin and Mario Biagioli. For example, in his ground-breaking *Galileo, Courtier: The Practice of Science in the Culture of Absolutism* (Chicago: Univ. of Chicago Press, 1983), Biagioli builds on previous patronage studies and offers an interpretation of Galileo’s career through analysis of his self-fashioning as a Medici client and as a natural philosopher. Biagioli shows him not as a detached scientist independently developing hypotheses and publishing the simple facts of his experiments, but as a man who struggled to create both a socio-professional identity and a rewarding career through conscious performance of the role of the patron’s client.

from self-ritual and clothing in medieval France, to religious identity in the English Reformation, the formation of Jewish identity through autobiography, and the career of Benjamin Disraeli.¹¹⁵

The distinction between self-presentation and self-fashioning is important for understanding the present study. Harry Berger has argued that the difference in the two concepts lies in the product created: “By definition, self-presentation is something you show about yourself... but not something you do *to* or *for* yourself. . .By definition, self-fashioning is something you do to yourself and with yourself (and if you’re lucky, for yourself), but not something you show about yourself.”¹¹⁶ Johannes van Waarden, who has written on self-presentation in late antiquity, similarly argues that “self-fashioning is about cultural identity, fashioning and educating the self in interaction with society” (that is, involving the authentic personality), while self-presentation is the “processes by which people try to control the impressions others form of them.”¹¹⁷ In other words, self-fashioning is an internal creative process of individual identity formation, while self-presentation is external communication, a “show” put on for a specific reason.

The analytical potential of self-presentation as a conceptual framework for historical figures is its ability to show how one person used contemporary values to negotiate a successful path through his time. This path may have been artistic, political or ecclesiastic patronage, or, as in the case of the small number of commercial geographers to be examined below, commercial

115. Susan Crane, *The Performance of Self: Ritual, Clothing, and Identity During the Hundred Years War* (Philadelphia: Univ. of Pennsylvania Press, 2002); Muriel McClendon, Joseph P. Ward, and Michael MacDonald, eds., *Protestant Identities: Religion, Society, and Self-Fashioning in Post-Reformation England* (Palo Alto, CA: Stanford Univ. Press, 2000); Michael Stanislawski, *Autobiographical Jews: Essays in Jewish Self-Fashioning* (Seattle, WA: Univ. of Washington Press, 2004); and Charles Richmond and Paul Smith, eds., *The Self-Fashioning of Disraeli, 1818-1851* (Cambridge, U.K.: Cambridge Univ. Press, 1999).

116. Berger, *Fictions of the Pose*, 20.

117. Johannes A. Van Waarden, “Episcopal Self-Presentation: Sidonius Appolinaris and the Episcopal Election in Bourges, AD 470,” in *Episcopal Elections in Late Antiquity*, ed. Johan Leemans et al. (Berlin: De Gruyter, 2011), 556.

achievement in the competitive world of the seventeenth-century London or Paris print and book trades.

Book Marketing and Book Piracy

Whatever else the early modern atlas was, it was first and foremost a book—conceived of, constructed, sold, and used as a book. This simple fact has direct bearing on the analysis of the self-presentation of the atlas compiler within the covers of the atlas. A premise of this study is that the self-presentation of the atlas compiler was made in response to the perceived values of potential consumers. Thus, in order to understand the personas constructed by atlas compilers, it is necessary to have some understanding of the values and concerns that early modern readers brought to the purchase of an atlas. In Chapter 1, I gave an overview of the types of books competing with world atlases on the shelves of London and Parisian bookshops in the seventeenth century. Readers did not have to buy an atlas to obtain information about the terrestrial world. Nor did they have to buy a book. There were many globes available for purchase at instrument stores, in a variety of sizes—from the pocket globes only a few inches in diameter to the large floor globes in carved wooden bases. Larger globes used the empty spaces of the oceans to offer copious textual descriptions. Customers with more narrow geographic interests could also buy one or more of the hundreds of sheet maps available (Figure 19). They had many options among commercial books as well; they could purchase one of several sixteenth-century cosmographies still in print, or find mathematical geography in textbooks of geometry, astronomy, and general mathematics; or, finally, they could seek descriptions of other countries and peoples in the many histories and travelogues that appeared year after year.



Figure 19. Sheet map of *Provinces-Unies des Pays-Bas avec leurs acquisitions dans la Flandre...* by Alexis-Hubert Jaillot [copy by Pierre Mortier, Amsterdam, c.1710]. DIGMAP cc-1307-a. (Biblioteca Nacional de Portugal). Accessed June 6, 2013. <http://purl.pt/4050>.

To help complete the picture of the commercial milieu in which atlas compilers such as Nicolas de Fer and John Senex operated, below I outline two other important aspects of the seventeenth-century publishing industry that had direct impact on how world atlases were marketed. These are the development of commercial book marketing from earlier forms of literary patronage; and the endemic problem of book piracy and its effect on readers' attitudes and behavior.

Chapter 1 provided an overview of the rapid growth of the publishing industry in the late sixteenth and early seventeenth centuries. Despite the trend towards commercialization and standardization in production, the physical properties of books were still widely customized, and an individual's private library was often a reflection of the owner.¹¹⁸ The variety of formats, sizes, and bindings, and hence of price—even for copies of a single title—is considerable (and atlases are no exception, a fact which makes early atlas bibliography quite challenging).¹¹⁹ Paper quality differed along with paper size; illustrations could be colored with washes or left plain. Bindings are equally varied: even titles printed in large runs were often left unbound until purchase, when the buyer could specify the quality of binding desired. Distribution processes were also not uniform: some titles were printed in editions of 500-1000 copies by a single publisher and then distributed among several bookshops for sale, while others were advertised but printed only on demand. Outside the largest cities, the lack of bookshops meant that books were available only through regional biannual fairs, except for the wealthiest consumers.

Chapter 1 mentioned the legal constraints under which books appeared on the market in France and England, yet the financial burden on publishers was even more significant, in most cases, than the legal burdens. Publishers struggled for the funds to pay overhead and the upfront costs of book production—salaries, shop rent, copperplate, the press itself, paper, ink, etc. Atlases, by definition heavily illustrated and combining copperplate engraving with typesetting, were some of the most expensive works sold because of the high costs and long period needed to produce them. All sorts of solutions to the endemic funding problem were tried.

118. This discussion is drawn from Henri-Jean Martin, *Livre, pouvoirs et société à Paris au XVII^e siècle*.

119. For an example of this inconsistency and variety, see Peter van der Krogt, "Amsterdam Atlas Production in the 1630s: A Bibliographer's Nightmare," *Imago Mundi* 48 (1996): 149-160.

One of these solutions was the joint publication, where two or more publishers combined resources and shared the costs, risks, and profits for large or illustrated works, or for large print runs. Another very common solution was the subscription publication. In this scheme, a publisher would pre-sell subscriptions to an unfinished book or multivolume set. In exchange for paying upfront and giving the author or publisher funds needed to produce the work, the subscriber received a discount off the sale price of the work, and sometimes had his coat-of-arms inscribed in a subscriber list in the book's frontmatter (Figure 20).¹²⁰ A third solution, common by the late seventeenth century, was the serial publication, in which an extensive work would appear in sections, giving the publisher a chance to recoup costs through sales in order to fund further sections. Nicolas de Fer's *Atlas Curieux* was published in this fashion, between 1700 and 1705.

Because the economics of publishing and the book trade are pertinent to the following analyses, it is important to situate this analysis of atlas promotion within promotion in the book trade generally. Historians are only beginning to understand the role and forms of literary advertisement (conceived broadly as any promotion of a work to potential consumers) in the early modern period. While many forms of book promotion crossed national boundaries, the development of advertising conventions was in fact culturally-specific and tied to developments in the printing industry. Yet as Sidfrid Steinberg notes, by 1475, printers had "evolved the main forms of publicity which publishers have used ever since to advertise their production," including publishers' title lists, the prospectus, leaflets, posters, and promotional frontmatter.¹²¹

120. See Sarah L. C. Clapp, "The Beginnings of Subscription Publication in the Seventeenth Century," *Modern Philology* 29 (1931): 199-224; Roy M. Wiles, *Serial Publication in England before 1750* (Cambridge U.K.: Cambridge Univ. Press, 1957); and Geoffrey Turnovsky, *The Literary Market: Authorship and Modernity in the Old Regime* (Philadelphia: Univ. of Pennsylvania Press, 2010).

121. Sigfrid H. Steinberg, *Five Hundred Years of Printing*, 4th ed. (London: The British Library, 2001).



Figure 20. In exchange for supporting subscription publications, atlas compilers often included the coats of arms of subscribers in the frontmatter of the finished work, such as the hundreds of coats of arms published in John Senex's *A New General Atlas* (London: Daniel Browne, 1721). G1015.b.S57 1721. (Map Division, New York Public Library, New York, NY).

But if those forms and strategies were nascent by 1500, there was not a sustained increase in their use over the course of the sixteenth century, due to the manner in which books were printed and sold. In the late sixteenth century, there were few bookshops per se and little activity that can be construed as a commercial book market (i.e., with products created for sale on the open market to the public). These cultural and economic phenomena were seventeenth-century developments. Instead, books were usually printed on demand, for specific patrons or using the

resources of specific patrons. A tiny market for books meant there was little need for various types of advertising aimed at convincing the anonymous consumer to purchase the work. What sixteenth-century France and England witnessed instead was a rapid increase in literary patronage, both in the number of patrons and the amount of support offered to printers, publishers, and authors.¹²² This literary patronage was the direct descendent of medieval artistic and intellectual patronage by the elite. Royal and noble literary patrons would commission printers to produce one or more copies of a specific work, or commission a work from a writer, in return for direct and indirect support.

The patron's support could take the form of a gift of cash or valuable goods, a regular stipend with or without an official title, stated commitment to support future efforts, recommendations to other potential patrons, board at the patron's court, access to his library, or other favors and assistance. Regardless of the form the support took, however, book production and exchange did not happen anonymously. Rather, as in all early modern patronage relations, whether scientific, political, or artistic, the ongoing relationship between literary patrons and their publisher- or author-clients was at base a personal, hierarchical relationship. It was defined by reciprocity of obligation to serve and support. The author could write, research, and translate under the protection of the patron; in return, the patron could choose the book topic and influence to a greater or lesser degree what was written. Such were the means by which most books appeared in print in the sixteenth century. The following century would see the rise of a modern commercial book trade and a concomitant decline in the importance of the traditional literary patronage system.

122. This discussion is drawn from Dustin Griffin, *Literary Patronage in England, 1650-1800* (Cambridge, U.K.: Cambridge Univ. Press, 1996); Geoffrey Turnovsky, *The Literary Market*; Mark Bannister, "The Crisis of Literary Patronage in France, 1643-1655," *French Studies* XXXIX (1985): 18-30; and Paul J. Korshin, "Types of Eighteenth-Century Literary Patronage," *Eighteenth-Century Studies* 7 (1974): 453-473.

Both London and Paris experienced a change in the established literary patronage system in the period immediately preceding this study.¹²³ The change followed two vectors: an increase in disposable income and literacy on the part of non-elites, and a reduction in the tangible support offered to writers and publishers by private or royal patrons. The growth of a viable consumer culture in both societies in the early seventeenth century brought the development of what we recognize as a modern marketplace of goods and services. Books and maps were very much part of this new marketplace.

In his work on book promotion in late sixteenth-century England, Paul Voss notes a rapid decrease in literary patronage after 1590.¹²⁴ Publishers and authors still sought direct patronage, as evidenced by hundreds of dedications and letters to actual or potential patrons found in printed books through the seventeenth century.¹²⁵ However, there was a drastic decline in the amount of real patron support offered, and also in the number of elites offering any support for book publishing, compared to the period 1500-1590. The reasons for this decline are complex, and matter less here than the impact of the decline on the development of the book industry of the seventeenth century: publishers and authors turned away from fostering patron-client relations and turned towards promoting commercial demand for books. If they could not make a profit (or at least survive financially) by relying on support from noble, gentry, or wealthy urban patrons, those in the print business would look to the expanding class of literate non-nobles for customers.

123. Alistair Fox, "The Complaint of Poetry for the Death of Liberty: the Decline of Literary Patronage in the 1590s," in *The Reign of Elizabeth I: Court and Culture in the Last Decade*, ed. John Guy, (Cambridge, U.K.: Cambridge Univ. Press, 1995), 229-257.

124. The following discussion is based on Paul T. Voss, "Books for Sale: Advertising and Patronage in Late Elizabethan England," *The Sixteenth Century Journal* 29 (1998): 733-756.

125. *Ibid.*, 734.

The break from primary reliance on individual, hierarchical, and personal patron-client relationships gave rise to what Voss calls the “advertising arts” of book publishing. While the shift to seeking customers in lieu of patrons may seem natural and unproblematic, it represented, in fact, a foundational shift of the nature of book publishing and authorship. The relationship of the writer or publisher to his livelihood ceased to be one of a personal, reciprocal service rendered to one or to a few well-known individuals of means, and became one of marketing one’s self and one’s works to an unknown, anonymous consuming public. After 1600, the forms of advertisement that had been created by enterprising publishers in the incunabular period of the late Middle Ages became the primary means by which those involved in writing and printing sought to make a profit.

What is striking about the advertisement and promotional schemes of early modern booksellers and publishers is how contemporary they seem to modern readers. The competition booksellers faced grew rapidly as more and more shopkeepers ventured into the book trade, and more printers set up presses in London and Paris; as Voss puts it, starting at the end of the reign of Elizabeth I, “advertising became much more necessary as hundreds of printers, publishers, and authors began promoting, extolling, and praising pieces of writing for sale in a competitive market”; this need continued to grow throughout the seventeenth century.¹²⁶ The necessary response was the rapid growth of an industry of advertisement. One major outlet was line advertising in the new medium of newspapers and the few journals of natural philosophy (beginning in the second half of the century). This overlapped with the book reviews that started appearing in newspapers and journals after 1650, which (when positive in their assessment) served a promotional function too. Print ads promoted newly published or newly revised works,

126. *Ibid.*, 736.

gave the full title (usually quite long and descriptive, itself a marketing tool), and said which shop or shops carried the work (or, in the case of subscription works, where a potential buyer should inquire).¹²⁷

Title pages developed as another form of advertisement. These were often very decorative and printed with full imprint information, and hung in shop windows or on the walls of bookstalls to catch the attention of browsers. Other forms of frontmatter, while not actively displayed to potential buyers, were available to them as they browsed sample copies of a work. These include prefaces to the reader, author portraits, and recommendations by respected names. A final category of book advertisements, mentioned earlier, is the Term Catalogues of books for sale. A pay-for-entry listing of available works, the Term Catalogues were published twice a year in England. They did feature books in languages other than English, including a variety of French titles.

Book Piracy and the Credibility Gap

A world atlas is a comprehensive work describing physical and human geographies of every corner of the globe. Yet in the seventeenth century, the contents of any world atlas were virtually unverifiable by the reader, because every atlas represented an aggregation of information from many sources. This unverifiable comprehensiveness, combined with the typically high cost, created special problems for those hoping to sell the atlas compared to the problems of marketing other book genres. Trust had to play a more critical role in the assessment of an atlas against its competitors than it played for other books. As two scholars of seventeenth-

127. See Christine Ferdinand, "Constructing the frameworks of desire: How newspapers sold books in the seventeenth and eighteenth centuries," *Prose Studies: History, Theory, Criticism* 21 (1998): 157-175.

century science and cultural authority have shown, in the early modern period the trust between reader and publisher, between reader and scientific information, was always hard-won.

The seminal work of Steven Shapin has shown that trust was a key factor in the establishment of the cultural authority of science in the early modern period. Shapin's major work, *A Social History of Truth: Civility and Science in Seventeenth-Century England*, examines the processes by which experimental natural philosophy came to be accepted as a legitimate framework for understanding the natural world.¹²⁸ Key to these processes was the translation of already extant codes of civility (civil discourse and gentlemanly behavior) into the realm of scientific inquiry. A gentleman was by definition virtuous, disinterested, objective, honest, freed from the profit motive, and free from servility to others; therefore, if a gentleman said that he witnessed such-and-such in an experiment, his peers were predisposed to believe him because of their trust in his gentlemanly character. Natural philosophers who were not gentle-born often adopted gentle rhetoric and codes of civil behavior as a means of earning the audience's trust. Thus Shapin focuses on the question of "who could be trusted"—the question of cultural authority. While commercial atlas compilers were not natural philosophers nor did they perform experiments, they did create and disseminate knowledge about the natural world; indeed, assertions of gentility and associations with civil discourse were in fact part of the atlas makers' self-presentations discussed below. I suggest below that Shapin's argument on civil discourse as a credibility strategy operated even more broadly beyond the community of experimentalists.

Adrian Johns' work on the nature of seventeenth-century printing and readers' attitudes also engages with the complex question of trust in sources of knowledge. Johns has adopted many of Shapin's premises to answer not "who could be trusted?" but rather "what books could

128. Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth-Century England* (Chicago: Univ. of Chicago Press, 1995).

be trusted?” In *The Nature of the Book*, Johns describes the uncertainty and instability of book publishing in the seventeenth century, uncertainty deriving from a lack of controls on printing that allowed a thriving industry of intellectual property piracy to flourish. There was an even broader trend towards printers unilaterally abridging and otherwise altering an author’s work without his consent. Johns argues that the seventeenth-century reader was well aware of the problems of pirated and otherwise modified intellectual property, and that this awareness created a strong skepticism that affected both the purchase and the act of reading a book:

There was one concern in particular that possessed early modern reader... Could a printed book be trusted to be what it claimed? Perhaps a reader would be prudent to reserve judgment... Piracy and plagiarism occupied readers’ minds just as prominently as fixity and enlightenment. Unauthorized translations, epitomes, imitations, and other varieties of ‘impropriety’ were, they believed, routine hazards... Profound problems of credit thus attended printed materials of all kinds.¹²⁹

That skepticism was, in fact, well founded. Printers, writers, and publishers complained bitterly about the menace posed by a flood of illegal publications—menace to the truth as well as to their personal livelihood (Figure 21). Even though the false accusation of piracy became itself a means of attacking one’s commercial rivals, real acts of piracy and plagiarism were certainly widespread, testifying to the lack of stability in the book market that was created by the spread of printing technology and increased consumer demand for printed works.

The problem was twofold: first, the technology of printing made it possible for anyone with a printing press to reproduce a work in whole or in part, domestically or abroad; and the strategies intended to verify authenticity, such as printer’s marks, could easily be reproduced as well. Second, what publishing licensing laws existed to protect printers were poorly and

129. Johns, *The Nature of the Book*, 30-31.

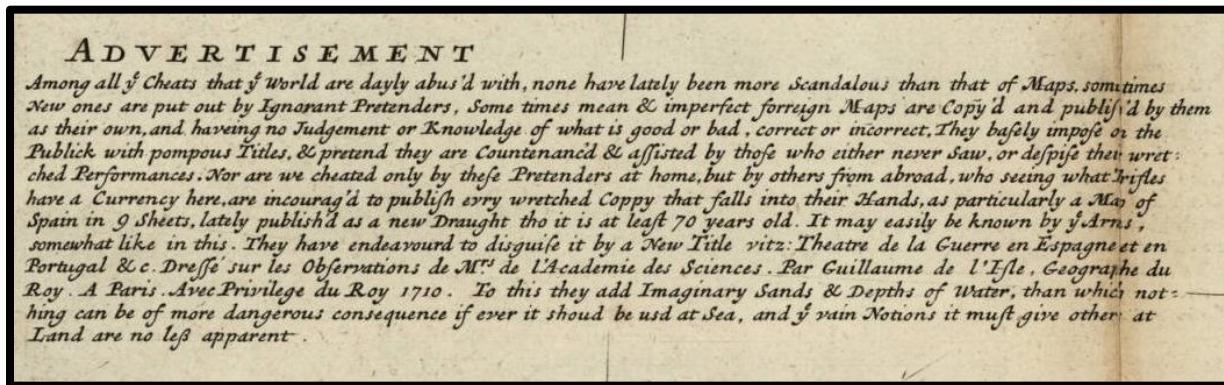


Figure 21. Mapmakers like Herman Moll publicly drew attention to the problem of pirated publications. This “Advertisement” appeared on the body of Moll’s *A New and Exact Map of Spain divided into its Kingdoms and Principalities* (1711), warning readers about the many false maps being published under his name. From *The World Describ’d: or, a new and correct set of maps* (London: H. Moll, D. Midwinter and R. Davies, 1708[-1720]. 4.TAB.17. (Maps Reading Room, British Library, London, UK).

sporadically enforced. In both England and France the development of law concerning literary properties, printer’s rights, and authorial rights lagged behind the explosion of new printed works—books, as well as journals, pamphlets, serials, and newspapers. The text of a book could fairly easily be plagiarized, reprinted in its entirety under a new or the original title, abridged, translated, or combined with unrelated texts in the same binding. Similar to the rampant counterfeiting of designer goods in China that are smuggled into Western nations today, much of this early modern literary piracy took place abroad, with the products smuggled into the cities to be sold as legitimate editions.

Most salient for the analysis that follows is that Johns establishes that readers did not readily accept that any given book was in fact what it purported to be—that it was not a pirated work, that the person named as author would own the work. As Johns states, this skepticism led to emphasis on the good character and credibility of the printer: “Seventeenth-century readers settled for looser, practical criteria of trust. . . Such readers judged the printed books they met by what they knew of the people places, and practices implicated in their production, distribution,

and use. This was pragmatic, expedient, ad hoc reasoning; but in the main, it worked.”¹³⁰ That is, those who produced books for a living were well aware of that mistrust of the printing industry and sought means to overcome it. Johns examines the processes and strategies employed by printers and the Stationers Guild over time to build up reader trust in the books they saw for sale in London.

Neither Shapin nor Johns examines scientific book marketing and promotional strategies explicitly. Yet their findings help illuminate the reasons why seventeenth-century atlas compilers developed the promotional strategies that they did. Atlas compilers’ self-presentations show that they, too, were aware of the broad, essential mistrust of their readers. The compiler’s task was twofold: he needed not only to convince the potential buyer that his work was not pirated, but also to convince him that his work was the best, most accurate one available in a marketplace of many competing atlases and related geographic books and maps—all of whose content defied verification and confirmation by the reader. Thus the compiler was compelled, not only to assert his particular authority to reproduce the picture of the world, but to make that authority and credibility into the central feature of the world atlas’ promotion. Compilers understood that since readers had little else on which to base their assessment of the atlas (in the absence of publisher authority, objective book reviews, or personal knowledge of the subject matter), a book would be judged valuable and worthy only so far as its creators were judged to be valuable and worthy.

130. *Ibid*, 188.

The Self-Presentations of World Atlas Compilers

Given their enormous influence on the creation and development of the atlas genre, it is worthwhile to look briefly at the self-presentations offered by Abraham Ortelius and Gerhard Mercator in their works and letters. Both of these sixteenth-century Flemish geographers created complex self-presentations that may well have influenced the strategies of the geographers who followed them.¹³¹

For example, Gerhard Mercator carefully promoted an image of himself as a philosopher and cosmographer, and as the ideal patron's client. University-trained, the man born Gerhard Kramer chose to Latinize his surname very early in his career, a common conceit among humanists of his time and an act of writing that announced his place among scholars and university men. At the same time, he also chose to raise his social status: instead of translating the German word Kramer as "small shopkeeper" (*institor* or *caupo*), Kramer made himself a "merchant" (*mercator*). In his letters and dedications he asserts an insatiable thirst for knowledge for its own sake, not for the practical applications astronomical and geographic knowledge could have. Mercator's persona is also that of the perfectionist and the loner. He positions himself as a man burdened by his life's work because he trusts no one else to assist with it. Lastly, in his letters Mercator projects himself as being far more concerned with the abstractions of the heavens and mathematical formulae than with the realities of money, family, and civic life.

Abraham Ortelius projected quite a different persona in his personal texts. He, too, published under a Latinized name, announcing himself as part of the humanist circle of intellectuals and philosophers whose members lived across Europe. Yet the rest of the persona he

131. Unfortunately, no historian has yet produced a full analysis of either man's attempt to shape public and patron perceptions of his character and work.

cultivated points away from a life of philosophy and study, instead projecting an artisanal life of pious labor. The Ortelius of letters and other personal printed texts is a humble, devout man. An artisan with little formal education, he is a man interested in the places of Creation, but never claiming to possess any grand understanding or perspective on the nature of the universe. He is also, especially compared to Mercator's self-presentation as a lone seeker after truth, a highly social man who cultivates friendships and collegial relationships. Lastly, Ortelius, rather than raising himself above his competitors and fellow geographers as Mercator does, presents himself as one among equals, insisting on sharing credit for his maps with other geographers and local informants, and readily asking readers to send him any geographic, antiquarian, or local information they have that he can add to his books. Thus, although they lived in the same society at the same time, were friends, and even shared the same occupation and social circle, Mercator and Ortelius offered contrasting "self-portraits" to friends, patrons, and customers, each emphasizing different aspects of his background and different values and characteristics but for the common purpose of establishing their credibility as makers of the picture of the world.

The remainder of Chapter 3 will examine the self-presentations offered by a number of English and French atlas makers for the strategies they used to establish claims of personal authority by looking at representative texts—self-descriptions, assertions, claims, affiliations—found in the introductory texts and images that made up the frontmatter of numerous world atlases. Despite the unique combination of traits each compiler promoted, my analysis identified the three personas that were most commonly deployed. These are the patron's servant; the experienced geographic expert; and the scholarly geographic expert. As will be shown, personas can assert what I term external validity, meaning that the atlas maker's credibility relied on

persons or institutions external to himself; or internal validity, meaning that his credibility derived from his personal values, morals, and behavior.

Representative instances of each of the three major personas will emphasize that no two self-presentations are the same—indeed, each compiler who created some type of self-presentation in his atlases combined more than one aspect of his life or values to promote a unique self-image. That is, atlas makers blended multiple layers of authority in order to create a specific overall impression on their readers.

The Patron's Servant

A number of world atlas compilers offered self-presentations as loyal servants of a patron. This is a form of external validity in self-presentation—that is, the compilers asserted their own authority as deriving from the trustworthy nature of an actor external to themselves. The simple logic of this form of marketing is that the potential consumer realizes that he does not have the expertise to judge one world atlas against another; thus he naturally looks for some other trusted authority beyond the compiler (whose profit motive makes suspect his own claims about the atlas' worth) to verify the worthiness of the atlas. For the potential consumer to trust this external authority, the authority needs to be an expert (or have access to experts) and also needs to be disinterested in the commercial success of the atlas.

Use of external authorities was and remains widespread in book marketing, of course, and it was used to market world atlases in other forms as well, as I show below. Yet what is the particular strategy behind deploying the persona of a loyal client in a patronage relationship? Although scholars have long recognized the importance of patronage as a defining structure of

early modern European economic relations, only relatively recently have we begun to learn how patronage occurs as a process or set of actions in politics, art, the humanities, and science. Currently more advanced for French history than for English history, the recent study of patronage in the early modern period has revealed a deeper cultural meaning to historical actions, behaviors, and rhetoric previously considered trivial. Two well-known examples are Peter Burke's analysis of political patronage relations revealed by ritual at the court of Louis XIV, and Sharon Kettering's work on seventeenth-century interfamilial relations among the French nobility, which shows the importance of rhetoric in the pursuit of noble alliances.¹³² Historians of science, too, following Mario Biagioli's landmark *Galileo, Courtier*, have found in patronage studies new insights, not only into the career paths and hero-making of the best-known figures of science but also insights into the formation of scientific ideas themselves. Mary Terrall's study of mathematician Pierre-Louis Moreau de Maupertuis, for example, is in large part a study of his fluid patronage connections and the opportunities and constraints they gave to his scientific work, while Stephen Pumfrey and Frances Dawbarn's examination of scientific patronage networks in England around 1600 shows that such relations are in fact culturally specific and have a major influence on the intellectual achievements of their participants.¹³³

Conventionally, patron-client relations have been examined separately from the contemporary commercial revolution and expansion of trade and commercial goods that help define the early modern period—the personal, one-on-one nature of patronage and service contrasting strongly with the impersonal, public nature of commerce. Yet the two systems co-

132. Peter Burke, *The Fabrication of Louis XIV* (New Haven: Yale Univ. Press, 1992); Sharon Kettering, *Patrons, Brokers, and Clients in Seventeenth-Century France* (New York: Oxford Univ. Press, 1986), and *Patronage in Sixteenth and Seventeenth Century France* (Aldershot, U.K.: Ashgate Publishing, 2002).

133. See Mary Terrall, *The Man Who Flattened the Earth: Maupertuis and the Sciences in the Enlightenment* (Chicago: Univ. of Chicago Press, 2002); Stephen Pumfrey and Frances Dawbarn, "Science and Patronage in England, 1570-1625: A Preliminary Study," in *History of Science* 42 (2004): 137-188.

existed and individuals were frequently engaged in both systems at the same time. This is the case for a number of atlas compilers and other geographers. Even though the atlas compilers who are the subject of this study were engaged in commerce and would thus seem to have been removed from the very personal politics of early modern patron-client relations, a number of them were in fact engaged in individual brokering relationships. Their desire to receive support from well-placed social superiors, as evidenced by letters to patrons printed in their atlases among other things, demonstrates that even commercial geographer-printers in the seventeenth century could seek personal, long-term career support in addition to profits made from the sale of their cartographic works to the public. While research is lacking on the important question of patronage networks of early modern geographers at this time, this analysis is concerned with the appearance, so to speak, of patronage; that is, the assertion, offered as a promotional tool within the commercially-available work, that one or more socially elevated and ostensibly trustworthy men support the atlas compiler.

Scholarship on early modern patronage is considerably more advanced in French historical studies than it is in British studies, an effect partly explained by the greater significance of patronage relations in the economic organization of early modern France. In fact, patronage studies have, in the last two decades or so, significantly altered our understanding of the culture and economic systems of early modern France, and comprise a major explanatory framework for the processes of cultural productions (art, literature, etc.) and political advancement. Similar investigations have also substantially contributed to current interpretations of the rise of modern science. Studies of self-presentation are closely tied to the study of patronage relations, because it is precisely through those efforts that ambitious men of the early modern period obtained, lost, and changed patrons. However, the current study is not an investigation into the actual

patronage relationships of the world atlas compilers. It is rather an examination of the deployment of the language of patronage as a marketing strategy. Before I turn to that examination, a brief review of the conventional language of early modern patron-client communication will be helpful.

Building on the pioneering work of Roland Mousnier and his positing of early modern France as a “society of orders” in which patronage relations were fundamental, scholars such as Sharon Kettering, Kristin Neuschel, and others have described the language of patron-client relations common in seventeenth century France and England.¹³⁴ Language is far from an incidental aspect of patronage relations. Even scholars who focus on the economic realities of patronage rather than its cultural meanings recognize the key importance of the rhetoric used by patrons, brokers, and clients, and those who observed them. In fact, much of the interpretive debate surrounding patron relations concerns the nuances of the contemporary meaning of such terms as *mecenat*, *créature*, patron, client, *fidèle*, *ami*, servant, etc.

As I noted earlier, early modern patronage was a system of personal relationships between two persons of unequal social status, wealth, and power in which reciprocity for service and loyalty was expected. The burden of gaining and maintaining these relationships fell squarely on the shoulders of the would-be client and much of his effort was conducted in writing, through letters composed to the patron or a broker, and, in the case of literary patronage, through book or play dedications.

134. Mousnier's classic work on the theory of the ancient regime as a society of orders is *The Institutions of France under the Absolute Monarchy* (Chicago: Univ. of Chicago Press, 1979). Also see Sharon Kettering, *Patrons, Brokers, and Clients*; and Kristin Neuschel, *Word of Honor: Interpreting Noble Culture in Sixteenth-Century France* (Ithaca: Cornell Univ. Press, 1989). For a recent critique and summary of Mousnier and his critics from the perspective of literary history, see Peter W. Shoemaker, *Powerful Connections: The Poetics of Patronage in the Age of Louis XIII* (Cranbury, NJ: Associated Univ. Presses, 2007), 26-36. Mousnier's theory is discussed further in the conclusion of Chapter 4.

Scholars emphasize the hyperbolic, obsequious tone and flattering, servile rhetoric of such letters and dedications across early modern Europe between the sixteenth and eighteenth centuries. What was typical of client rhetoric? Four elements made up the typical statement: expansive praise for the patron's many virtues, including his or her largesse; statements of extreme self-effacement and unworthiness to benefit from that largesse; professions of past, current, and future fidelity and friendship; and promises of a constant readiness to serve the patron in any way. To give just one typical example, in a letter written to Cardinal Mazarin in 1660, a client professes: "I would be infinitely unhappy if Your Eminence were to doubt the fidelity and sincerity of my feelings. I must add that you are my sole master, and that it is blindly that I must execute all the wishes and orders of Your Eminence."¹³⁵ In many letters there is an explicit request for support; in literary dedications, the request is not usually spelled out, as the request for recompense is inherent in the dedication itself.

Dedications could also play transparent word games, denying that the letter is intended to result in the author's profit, while its very existence and placement testify that that is exactly what the author hopes for. An interesting example is the unusual dedication letter appended to the 1685 English translation of Pierre Duval's *Geographia Universalis: The Present State of the Whole World* by its translator, Ferrand Spence. In the dedication to the "Honorable Edward Coke, Esq.," Spence addresses the conventional purpose of dedications to eminent men:

One of the Principal Designs of most Dedications inscrib'd to Men of Eminence and Condition, is the Imploring their Patronage and Protection. This the Authors ever Pretend, and add, that their Books, being to travel in a wide and censorious World, do want a Passport from some Great Name, which may defend them from the arrogance and obloquy of Criticks, a sort of Men, that are born to be the Scourges of Mankind, in all the ages. . . They pretend that the least Triflings and Dwarflings of Wit, are most mightily safe and secure, provided they have but kindly and favourable Patrons. . . [and] that those

135. Quoted in Kettering, *Patrons, Brokers, and Clients*, 15.

glorious and adorable Personages. . .have either the Will or Power to give Estimation to such things, as if, like Deities, they cou'd create something out of nothing, and the Merits of one Man cou'd be transferr'd upon another.¹³⁶

Spence goes on to give a lengthy explanation why his dedication to Edward Coke is intended to do nothing of this sort, when it is obvious that that is exactly what it is intended to do.

Current scholarly debates hinge on the question of whether a reality of loyalty and friendship lay behind the client language. Scholars following the earlier work of Mousnier emphasize the personal ties that bound early modern patrons and clients, suggesting authentic feelings were expressed in patronage correspondence. Others, such as Sharon Kettering, see self-interest as the motivator behind this political and financial writing, i.e., suggesting that the formulaic writing was a shrewd calculation to flatter the recipient's ego and therefore result in the hoped-for reward. Study of geographers' patronage networks is lacking, and may contribute to better understanding of the dynamics of the scientific-literary patronage processes. However, while important for understanding patronage systems, for the purposes of this analysis, the question of the authenticity of emotion is moot. That is, what matters for this study is not the reality of feeling that atlas compilers felt for their dedicatees or even if the dedication represented a real or future supporting relationship, it is the fact that the compilers knew the rhetoric and employed it in commercially-published atlases to other ends.

136. Ferrand Spence, dedication of Pierre Duval's *Geographia Universalis: The Present State of the Whole World*, trans. Ferrand Spence (London: for H. Clark, 1685), n.p. Spence (d.1698) was a prolific translator of works into English from French, Greek, and Latin. He signed himself the servant of Their Majesties King William and Queen Mary; the records of the House of Commons notes that he was assigned a pension of 300 pounds per annum by Letters Patent (December 17, 1697); see *Journal of the House of Commons*, vol. 12: 1697-1699 British History Online, accessed March 7, 2011, <http://www.british-history.ac.uk/report.aspx?compid=39512>.

Alexis-Hubert Jaillot as Patron's Servant

Self-presentation as the patron's servant appears in a number of works by the eight world atlas compilers. Notable among these personas is that of Alexis-Hubert Jaillot (1632-1712) of Paris (see Appendix for bio-bibliographic data).¹³⁷

Jaillot was probably the most financially successful of the group. Born outside of the kingdom in Franche-Comté, he began his career as a sculptor. He established himself with his brother in 1657 in Paris, where he found work with the Intendance des Bâtiments and was granted the title of *sculpteur ordinaire du roi*. In 1664 he married Jeanne Berey, daughter of Nicolas Berey, a publisher and print merchant who sold geographic works and scientific instruments in a shop at the sign *Aux Deux Globes* and who held the title *enlumineur du roi*. When Jaillot and his wife inherited in 1667 Nicolas Berey's stock of maps, copperplates, and other goods—globes, armillary spheres, various astronomical instruments—Jaillot quickly took over the shop, which enjoyed brisk business. He became both a producer of maps and merchant of other geographers' works.

Given the relatively small size of the geographic publishing field in Paris in the later seventeenth century, naturally Jaillot came in contact with other French atlas producers. Some of these encounters were competitive and antagonistic, as when Jaillot sued the scholastic publisher Pierre Duval over the publishing rights to a certain map of France; others were productive, as with Jaillot's long contractual agreement to bring out maps for Guillaume Sanson (son of Nicolas Sanson) when the latter could not afford the large up-front costs of engraving and paper for his

137. The following is drawn in part from F. Roland, "Alex-Hubert Jaillot, géographe du roi Louis XIV, 1632-1712," in *Mémoires de l'Académie de Sciences, Belles-lettres et Arts de Besançon* (1915-1918), 46-76; and from Pastoureau, "Alexis-Hubert Jaillot," in *Les Atlas français*, 229-233.

maps. This business relationship would also end up in court, it must be noted, but not before Jaillot had reaped considerable profit from publishing and selling Sanson maps. His second marriage in 1676 continued his upward mobility, bringing him a large dowry from the daughter of a wealthy perfume merchant. He continued to expand the offerings available *Aux Deux Globes* to the public, and in 1681 Jaillot brought out his masterpiece, the *Atlas nouveau*, which earned for him the title *géographe du roi* in 1686 although few of the maps were Jaillot originals.

It was the first atlas published in France to bear the “atlas” title. In 1695 his other world atlas, *Atlas françois*, appeared; it comprised mostly Jaillot’s own maps but included those of Guillaume Sanson as well. Two years later he was able to purchase an office as royal *procureur* of the forests of Melun and Fontainebleau. He died a wealthy man in 1712; his heirs continued the family business using his stock of copperplates, with dwindling success as the maps became more and more outdated, until the 1780s.

The large-format *Atlas nouveau* was the work that earned Alexis-Hubert Jaillot the patronage of Louis XIV after almost twenty years as a mapmaker and map publisher. It appeared in four editions by 1689, and found long life as (probable) counterfeits published in another three editions in Amsterdam by Pierre Mortier. Although almost all of the maps it contains were produced by the Sansons and not by Jaillot, Jaillot conceived of the work and carefully controlled its compilation himself. The self-presentation of the atlas compiler as a client within the maps and the introductory texts seems to have been as carefully cultivated as its 46 maps, texts, illustrations, and nineteen geographical tables. The same care is true of the later *Atlas françois*, which is even more deliberate than the *Atlas nouveau* in asserting Jaillot as engaged in an important patronage relationship.

The title page of the 1689 edition of the *Atlas nouveau* is typical in its presentation of the atlas maker as a patron's servant (Figure 22). In this case it is not an actual, but a desired patron: Louis le Grand Dauphin (1661-1711), heir to the French throne. Under the title and above the colophon is the presentation:

PRESENTÉ
À MONSEIG[N]EUR LE DAUPHIN
Par son très-humble, très-obeissant,
et très-fidèle Serviteur
HUBERT JAILLOT
Geographe du Roy¹³⁸

Designed in typical Baroque title page style as a theatrical façade, with the title block flanked by statues of the classical gods of war Mars and Pallas, the title page further asserts Jaillot's connection to the ruling family by representing three icons of France, two of them patrons in conventional equestrian statue poses: Louis XIV ("Louis le Grand Roy de France et de Navarre"), the Dauphin ("Monseigneur le Dauphin") and Hercules, supporting the terrestrial globe on his shoulders ("L'Hercule françois").¹³⁹ In a further attempt to make a flattering appeal to the heir to the throne, the Dauphin's personal coat of arms, flanked by two charming dolphins, is prominently displayed at the top of the façade, surmounted by two figures of Fame—Jaillot's attempt to associate the Dauphin, fame, and his atlas.

Christine Petto notes that it is unclear whether Jaillot's atlas and the other maps he dedicated to the Dauphin actually were received by the royal heir or if they were part of his

138. Alexis-Hubert Jaillot, title page of *Atlas nouveau* (Paris: chez Hubert Jaillot, 1689), n.p.

139. Below, the nationalistic and militaristic motif is furthered by inclusion on the plinths of the façade of two scenes of historical battles between the French and the Low Countries: on the left the Battle of Cassel (fought in 1328, when Philip IV brought Flanders under French control) and on the right the Battle of Seneffe (a draw between the Prince of Condé and William of Orange in 1674).



Figure 22. Alexis-Hubert Jaillot advertised his royal patronage connections in this exquisitely engraved title page for his *Atlas nouveau contenant toutes les parties du monde* (Paris: Alexis-Hubert Jaillot, 1689). Ge DD-4796(61). (Cartes et Plans, Bibliothèque Nationale de France).

education.¹⁴⁰ However, royal support had not, of course, eluded Jaillot, for by 1689 Jaillot had been *géographe ordinaire du roi* for three years, a title that brought a modest stipend from the royal treasury. Jaillot was seeking more explicit support and recognition from the (assumed) future king, something that would set him apart from the dozen other *géographes ordinaires* and, presumably, he hoped at least for some guarantee that he would retain his title after the death of the aging Louis XIV.¹⁴¹

Perhaps hoping to make his next work more worthy of reward from royalty by increasing its patriotic luster, Jaillot named his next world atlas (1695) the *Atlas françois*, even though its contents cover the entire globe. There are at least two interpretations of the title, given the contents of the atlas. Perhaps Jaillot meant to stress that the atlas was produced in France, of French-made maps, for a French public—a rational marketing ploy, given the continued market dominance of the atlases of Dutch and Flemish houses throughout the century. Similar appeals to national sentiment were being deployed more and more often in the contemporary, competitive map trade. Or perhaps Jaillot meant to stress the growing power of France as an imperial power—the atlas of the world thus being equated with the French as France claimed control of greater and greater parts of the globe.

The title page of the 1695 edition of *Atlas françois* may better support the second meaning (Figure 23). In this complex and beautifully engraved scene, Jaillot repeats the formulaic dedication of the *Atlas nouveau*, only he changes from the potential patron of the Dauphin to his actual patron, the king: the atlas is “...dedié au Roy par son tres-humble, tres-

140. Christine Petto, *When France Was King of Cartography: the Patronage and Production of Maps in Early Modern France* (Lanham, MD: Lexington Books, 2007), 27.

141. The long-lived Louis XIV (1638-1715) would in the end survive Jaillot and all of the Dauphins and the Grand-Dauphin.

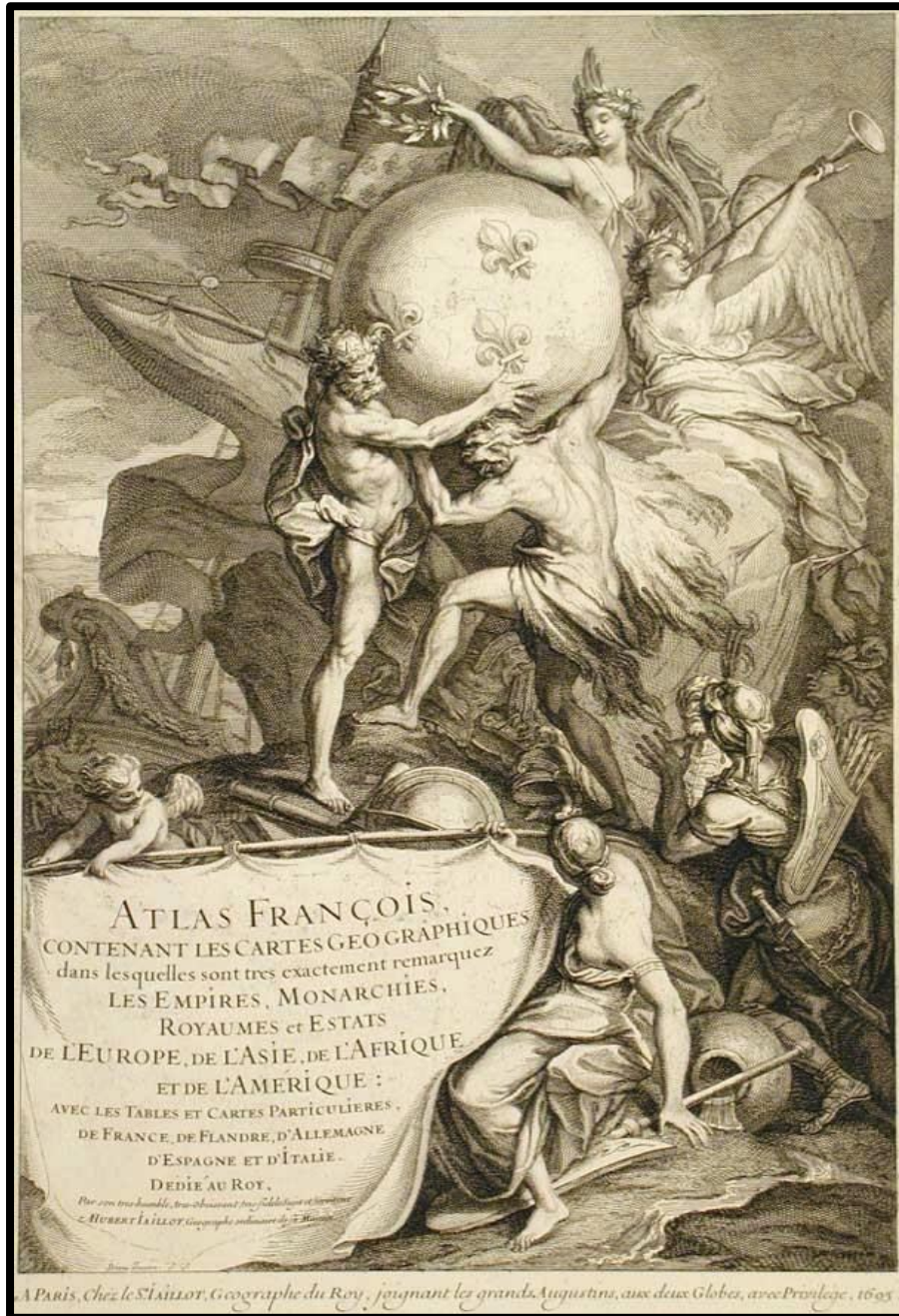


Figure 23. The title page of Jaillot's *Atlas françois* (Paris: Alexis-Hubert Jaillot, 1695). The entire atlas, glorifying the French state, could be interpreted as a bid for Louis XIV's continued patronage. GeDD 1280. (Cartes et Plans, Bibliothèque Nationale de France).

obeissant, et tres-fidele Sujet et Serviteur HUBERT IAILLOT, Geographe ordinaire de Sa Majesté.” The colophon repeats his title: “A Paris, Chez le Sr. IAILLOT, Geographe du Roy [...]”.¹⁴² Yet this appeal to national sentiment cannot be separated, in the early modern era, from professions of loyalty to the monarch in an age of personal rule, and Jaillot’s act of dedicating the atlas to the king himself was both an expression of gratitude for the royal stipend he received, and a means of keeping his master works linked overtly to the crown. The dedicatory letter Jaillot included in the first edition further enhances Louis XIV’s reputation and links Jaillot’s name with the glory of France: “J’apporte aux pieds de Vostre Majeste le Monde entire comme le Theatre de sa gloire...,” the glory of a powerful monarch “qui ont remply toute la terre d’admiration de terreur et de veneration, par la magnificence de son Regne, par ses grandes Conquestes et par la sagesse de sa conduite” and asks with a rhetorical flourish “[Q]uelle Partie du Monde n’a vu des effects de vostre valeur? Quels Peuples les plus reculez n’ont entendu parler de sa sagesse, et n’ont souhaité avoir part à vostre amitié ou a vostre protection?”¹⁴³ Thus Jaillot hoped to benefit from the association of his name with Louis XIV both through commerce and, through flattery of the king, through royal largesse as well.

The elaborate engraved title page was a perhaps even more explicit means of flattering the king by making lofty claims for Louis’ royal power. Here the globe held aloft by two Herculean figures is no longer covered with continents as in the earlier atlas—it is not a map—but is instead covered with large fleur-de-lys, symbol of the French monarchy, and is being crowned by the figure of Victory, as Fame sounds her trumpet. Below the globe, cowering in awe and fear are figurative representations of the three other parts of the world—Asia, Africa,

142. Alexis-Hubert Jaillot, title page of *Atlas françois* (Paris: chez Hubert Jaillot, 1698), n.p.

143. Jaillot, dedication in *Atlas françois* (Paris, 1695), n.p.

and America. The overall impression is a celebration of the global power of royal France and the Sun King.

More important for this study than the reality of Jaillot's bid for the patronage and favor of Louis XIV and his oldest son is the fact that Jaillot did not create these images and texts merely to impress the Bourbons. Rather, they formed an important part of his meta-message to his potential buyers and readers of the atlas. Petto notes that the goal of patronage dedications in seventeenth-century Paris mapmaking was twofold: "While the result of obtaining patronage often manifested itself in a royal title such as royal geographer, a royal post, a royal pension, or a one-time monetary reward, mapmakers and map publishers continued to seek the attention of the Bourbon crown in the hopes that such attention would translate into commercial success..."¹⁴⁴ Jaillot could have had the title pages engraved as part of presentation copies, that is, to be viewed only by the king and his associates. Instead, the pages became unifying documents for an entire book intended to be sold to anyone who had the means to buy it in a public print shop.

What message did the title pages and dedication letter give the atlas' buyer? Their location on the opening leaf of the atlas ensured that Jaillot's name, dedication, and his status as client to the two most important patrons any Frenchman could claim would be among the very first impressions a potential buyer would receive. Theorists of reading and book historians have shown that the front- and backmatter of printed books, what literary theorist Gérard Genette has dubbed paratexts, are far from trivial supplements to any book's main text. Instead they frame the work, offering the reader clues to the work's purpose, its authenticity, and its interpretation.¹⁴⁵ This is especially true in the early modern period, before the complex apparatus

144. Petto, *When France Was King of Cartography*, 26.

145. See Gérard Genette, *Paratexts: Thresholds of Interpretation*, transl. Jane E. Lewin (New York: Cambridge Univ. Press, 1997), 1-15.

of advertising and promotional book reviews was fully established. Title pages and dedicatory passages were important marketing devices in seventeenth-century books. In fact, printers frequently produced extra copies of title pages to post in the street and in book stalls as advertisements—hence the conventional inclusion of the phrase “Printed and sold at ...” and shop names and locations in the colophon of early atlas title pages.¹⁴⁶

In Jaillot’s case, one of the best ways to showcase his skill, knowledge, and credibility was to position himself publicly as one of the royal house’s favored geographers. The title pages told consumers that Jaillot had the favor of the king and the Grand Dauphin; that he was a skilled geographer, so skilled that the king had granted him an office in recognition of his knowledge (the Dauphin’s patronage is merely heavily implied). The persona of patron’s servant, especially when that patron was king, was a powerful assertion of personal authority. Yet Jaillot reassures his readers that he remains, in his own formulaic client language, humble, obedient, and a loyal subject and Frenchman.

John Speed as Patron’s Servant

Like A.-H. Jaillot, the late Renaissance cartographer John Speed (1552-1629) also offered a self-presentation asserting his authority through his status as the patron’s servant in the first English-made world atlas, *A Prospect of the Most Famous Parts of the World* (1627).

Speed’s cartographic career was unusual, to say the least, yet it is critical for understanding his careful crafting of a public persona (see Appendix). Undoubtedly the most well-known English cartographer of his time, Speed is still one of the most esteemed

146. Philip Gaskell, *A New Introduction to Bibliography* (New York: Oxford Univ. Press, 1972).

Renaissance English mapmakers. His maps of the British Isles, carefully compiled and beautifully decorated, have been highly sought after by collectors since the seventeenth century, and often copied. Yet he did not publish his first map until he was in his late forties.¹⁴⁷ Born 1552 in Farndon, Cheshire, in northwest England, Speed was the son of a modest tailor and became a tailor himself. Around 1572 Speed moved to London, where he married and became a member of the Merchant Tailor's Company. Largely self-educated, Speed spent his spare time reading history and geography, and developed the passion for genealogy and antiquities shared by so many better-educated minds in the late Renaissance. In 1595, at age 43, he drew his first map, a historical map of Canaan in four sheets; its successful publication launched Speed on an unexpected career as geographer, historian, and antiquarian. He wrote histories and genealogies in addition to compiling maps, most of them engraved, printed and sold by the print- and map-house of Sudbury and Humble. Around 1600 Speed conceived a monumental historical-geographical project, a multi-volume textual *History of Great Britain* accompanied by a folio atlas, *The Theatre of the Empire of Great Britain*. It was to this *Theatre*, the work that ensured his reputation for centuries to come, that Speed would later append his *A Prospect of the Most Famous Parts of the World*.

Speed spent more than half of his life earning a living as a common tailor. He claimed no gentry or aristocratic lineage, had no family of note, did not marry “above his station,” and was not educated in the professions—medicine, law, and the clergy. Yet compared to other English and French atlas compilers, this son of a provincial artisan cultivated a remarkably coherent self-presentation. The first edition (1627) of his *A Prospect of the Most Famous Parts of the World*

147. Biographical details taken in part from R.A. Skelton's introduction to his facsimile edition of John Speed, *The Theatre of the Empire of Great Britain and the Prospect of the Most Famous Parts of the World*, ed. R. A. Skelton (Amsterdam: Theatrum Orbis Terrarum Limited, 1991).

was sold bound together with a new edition of his bestselling *Theatre of the Empire of Great Britain*. This combined publication in folio featured several introductory texts by John Speed in addition to the title page and tables of contents. Among these texts are a dedication to King James I, an address to the reader, and three full folio pages of verses and prose lauding Speed as a man, as a Christian, and as a mapmaker.

Unlike Jaillot, who sought patronage support after establishing himself through marriage and family inheritance—the more typical route to career success for non-nobles—patronage relations were crucial to establishing Speed as a geographer rather than tailor. Publication of his Palestine map brought Speed to the attention of Sir Fulke Greville (Lord Brooke), the wealthy courtier, writer, and Treasurer of the Royal Navy. Greville became Speed’s long-term patron, arranging for Queen Elizabeth to appoint Speed to a life-long office in the Customs Service. This office lifted Speed permanently out of the artisan class, allowing him to pursue his intellectual ambitions freely. Greville also introduced Speed to London's intellectual élites, including geographer William Camden and antiquarian and Member of Parliament Sir Robert Cotton; Greville also paved the way for Speed to join the prestigious Society of Antiquaries.

Speed’s dedication to King James I appears in the combined *Theatre/Prospect* directly after the title page and consumes an entire page in large font:

To the Most High, and Most Potent
MONARCH,
JAMES,
of Great Britain, France, and Ireland,
KING;
The Most Constant and Most Learned Defender of the Faith;
Inlarger and Uniter of the British Empire; Restorer of the
British Name; Establisher of Perpetual Peace, in Church
And Commonwealth; President of all Princely Vertues and
Noble Arts:

JOHN SPEED,
His Majesties most Lowly and
most Loyal Subject and Ser-
vant, Consecrateth these his
Labours, though unworthy
the Aspect of so High an Im-
perial Majesty¹⁴⁸

Although the terms used to describe James are typical of the rhetoric of clientage as described earlier, and indeed are typical of subject servility for the period, this dedication appeared in the first edition (1627) of the *Theatre/Prospect*. Yet James I had died in 1625 and was succeeded by his son, Charles I. It is unusual that the dedication page was reprinted unmodified from earlier editions (probably from extant copies) of the *Theatre* (first edition 1611). The common solution for reprinting dedications in early books and maps was simply to erase the deceased dedicatee's name from the copperplate of the title page, and re-engage it with that of the new dedicatee; outdated dedications were not preserved the way modern publishers preserve the integrity of an original edition in a reprint. The fact that this did not occur in the 1627 edition of the *Theatre/Prospect* may have been the result of Speed's advanced age—he was in his mid-seventies and likely knew the *Prospect* would be the last work to bear his name as author. Although James had been a patron much as Elizabeth I had been—Speed served as attendant on the king until retiring in 1613—it is not surprising that at the end of his life, Speed was not seeking continued patronage from the young King Charles I.

Yet perhaps this fact makes the inclusion of the dedication all the more meaningful as a form of self-presentation. It is not particularly significant to which particular monarch Speed dedicated the work; the message Speed wants to convey to the potential buyer is that Speed is loyal, patriotic, and claims a connection to the most elevated patron of the realm, whose name

148. John Speed, dedication of *The Theatre/Prospect*, n.p.

appears in a font an inch tall. Using the conventional formula of humility that protests that the writer is unworthy of addressing himself to the king, Speed actually makes clear to the reader that his work is in fact worthy of the monarch's attention and support through this act of public dedication.

James' "most Loyal Subject" expresses his devotion and service to England's monarch in the other introductory texts as well. The lengthy reader address, "To the Well-Affected and Favourable Reader," is headed by an elaborate engraving of King James' coat of arms, the rose and the thistle. The medium of this message is significant. In the seventeenth century, the address to the reader (similar to a preface) filled much the same function as jacket copy does in modern books: as a short summary of the work whose purpose is to advertise to potential buyers the book's appeal, desirability and value (however defined). As Steven Zwicker has pointed out, it was precisely in dedications and addresses that "writers, publishers, and printers at once imagined and conjured the early modern patron, reader, and marketplace for books."¹⁴⁹ Thus Speed uses paratexts to conjure patrons in both modern senses of the word—one, the elites who could commission works and issue titles and offices, and two, the members of the public buying the work for private use. Speed's effort to link his patriotic, global atlas to the king he had served was an overt attempt to promote the *Theatre/Prospect* as a work worthy of the attention, and the money, of London's book-buying public.

149. Steven N. Zwicker, "The Reader Revealed," in *The Reader Revealed*, ed. Sabrina A. Baron (Washington, D.C.: Folger Shakespeare Library, 2001), 13.

Robert Morden as Patron's Servant

London map- and instrument-maker Robert Morden created perhaps the most complex self-presentation of all the atlas compilers of this study (it is treated in detail in Chapter 5). His persona in *Geography Rectified* as a patron's servant was an important component of his attempt to assert his authority to create the atlas.

Like many printers, Robert Morden (c.1650-1703) occupied shops in London in the New Cheapside and Cornhill neighborhoods (see Appendix).¹⁵⁰ He began his career selling mathematical texts and expanded into the booming cartographic trade of the Restoration era. His father's name and specific trade is not known from the records, but since Morden became a member of the Weavers Company, the oldest of London's livery companies, we can surmise that his father was probably a member himself and practiced one of the many allied textile trades protected by the Weavers Company. After the Great Fire of London (1666), the Weavers Company, originally comprising cloth tradesmen, began incorporating new trades under its name, including printers. It is likely that Robert Morden learned his trade as apprentice to the successful and well-known hydrographer Joseph Moxon; his later business partner, William Berry, was certainly Moxon's apprentice. By 1675 Robert Morden was a master Weaver. He took on an apprentice of his own, Philip Lea, who would also become a frequent publishing partner of his former master.

Morden sold maps, atlases, playing cards and geographical and astronomical primers under the sign of the Atlas. He also made and sold geographic instruments and globes. Although successful, Morden does not rank among the best of London's mapmakers and his work was

150. Biographical information is drawn in part from Tyacke, *London Map-Sellers*, 1978, xii-xxi.

criticized by contemporaries. Like his contemporary in Paris, Pierre Duval, Morden specialized in low-cost and small pedagogical works. His best-known work was the production of English county maps for a new translation of William Camden's *Britannia* (1695).

Morden included a lengthy dedicatory letter after the title page of his *Geography Rectified*. The letter is addressed to “His much Honoured Friend Mr. Thomas Goddard of London, Merchant,” a prosperous, respectable merchant¹⁵¹ who had shown particular appreciation for Morden's maps, globes, and scientific instruments: “Worthy Sir,/’Tis not the design of this Address, to let the World know how much I Honour your Person or am Debtor to your Bounty; for though both my Obligations and Respects are beyond the Vulgar Size, yet I shall neither trouble you with a Formal story of my Gratitude, nor offer any thing that may be thought a Complement.”¹⁵² Like so many early modern dedications, Morden’s goes on to offer praise by denying that it is offering praise:

I know your Generous Disposition delights rather to do good offices than to receive the Ecchoes [sic] of Acknowledgment, and to perform Worthy Actions rather than to receive deserved Applauses. Rhetorick is none of my Talent, and my Inability as well as Inclination secures you from being pestered with Flattery, or the impertinent Flourishes and feigned Passions of our fawning Dedicators. [...] There is therefore all the reason in the World I should shelter it under the Patronage of your Name, whose affairs abroad have given you a better knowledge and experience of Forrein Parts and whose encouragement [sic] and assistance have contributed so much to its production. [...] I humbly beg your kind reception, with pardon for this presumption, of

Your most Humble and most
Obliged Servant,
Robert Morden.¹⁵³

151. My efforts to establish with certainty the identity of this Thomas Goddard, merchant, have been unsuccessful. He is probably the same Thomas Goddard, esquire and gentleman of London, who served as Director of the Bank of London from 1694-1700. Another possibility is that Thomas Goddard who published a work celebrating the Restoration in 1661, *Miscellanea: or serious, useful considerations, moral, historical, theological. Together with the characters of a true believer, in paradoxes and seeming contradictions* (London: Printed by E. C. for Thomas William and William Thompson, 1661).

152. Morden, dedication of *Geography Rectified* (1680), n.p.

153. Ibid.

Here Morden shows that he has learned the conventions of client language—such as the writer’s humility overshadowed only by the patron’s modesty, the writer’s lack of talent and worth asserted to make the opposite impression, and the writer’s permanent servitude to the patron.

It is striking to note that most patronage letters published in books in the seventeenth century were addressed to nobles, high clergy, or members of the royal house. John Speed dedicated his combined *Theatre/Prospect* to no less a person than the king. Yet only half a century later, the rising status and wealth of London's merchants is given proof in the form of letters such as Morden's, where, instead of dedications to aristocrats, a non-nobleman—a mere businessman—is treated to the same kind of fawning praise and humble supplications for reward.

Because Morden decided to publish publicly what could have been included in a private copy given directly to Goddard, his dedication letter became part of his self-presentation. That is, Morden wanted the atlas’ readers to read the ostensibly private letter to Goddard and draw positive conclusions about his atlas based on their knowledge that a respected local merchant (whom readers may or may not have been aware of otherwise) knew Morden and chose to support his work.

Allain Manesson Mallet as Patron’s Servant

Unlike other atlas compilers, Allain Manesson Mallet (1630-1706) began his career as a soldier before moving into commercial geography (see Appendix).¹⁵⁴ He served first as a musketeer, then as a military engineer supervising fortifications for Louis XIV’s armies in Portugal and Spain. He returned to France and used his military experience and the support of a

154. Biographical information is drawn largely from Pastoureau, “Allain Manesson-Mallet,” in *Les Atlas français*, 309-323.

relative to become instructor of mathematics to the king's pages. His background in practical surveying and his travels led to the publication in 1671 of the first edition of *Les Travaux de Mars ou l'art de la guerre*, on designing and building fortifications. *Description de l'univers*, Mallet's comprehensive world atlas featuring hundreds of plates, appeared in 1683, followed by the textbook *Géométrie pratique* in 1702.

This soldier-turned-geographer offers a detailed patronage letter to Louis XIV at the beginning of *Description de l'univers*. In many ways it is typical of the formulaic letters appearing as frontmatter of French books in the age of the Sun King. Like those of other atlas compilers, it promotes the work and personal stature of the writer by associating the writer directly with an important person—in Mallet's case, the most important person in France and the most important patron of the arts and sciences of his era—and by promoting himself by promoting the power and virtue of the patron.

Mallet opens the letter by suggesting that his atlas shows the “veritable caractère” of all the nations of the universe to “un Monarque qui regit la plus florissante partie de la Terre, & qui est digne de commander á toutes les autres.” Thus Mallet connects his atlas to the king, to the French empire, and to the globe. Under the pretext of reminding the king about his previous service to the crown, Mallet then is careful to detail for the buyers of this commercial work his honorable career path: “[Je] prendray cette occasion de renouveler à VOSTRE MAJESTE les respectueuses soumissions que j'eus l'honneur de Luy faire, il y a douze ans, en Luy presentant mon Ouvrage des Travaux de Mars, à mon retour de Portugal, où j'avois servy en qualité d'Ingenieur. Je compte pour un heureux fruit de ces Travaux & de mes Campagnes, l'honneur que j'ay receu d'estre choisy pour instruire aux Mathematiques, les Pages de VOSTRE

MAJESTE.”¹⁵⁵ Mallet does his best to impress upon the reader the importance of his instructor position. However, in comparison to other contemporary atlas makers such as Nicolas Sanson, who served a geography tutor to the dauphin himself, Mallet’s appointment was minor and in reality was owed more to his relative, Philippe Mallet, another former engineer and a professor of mathematics in Paris, then to the king’s personal favoritism. Mallet closes the letter by invoking his loyalty, through a reference to the peoples of the world whom the atlas describes: “j’ose la venir assurer que parmy tous les Peuples dont je fais icy le dénombrement, il n’y a pas un homme qui me surpasse en zele & en veneration pour Elle [i.e., the king], & que je suis avec un profond respect, SIRE, DE VOSTRE MAJESTE, Le très-humble; très-obeissant, & très-fidele serviteur & sujet. ALLAIN MANESSON MALLET.”¹⁵⁶ Again, since a dedicatory letter is a marketing tool in a commercial work rather than a private message to the actual patron, Mallet was hoping to appeal to potential buyers of the atlas to accept it as a credible work, because it was produced by someone in the king’s favor.

Like a number of the atlas compilers such as Jaillot and Speed (discussed in Chapter 4), Mallet also uses a frontispiece portrait of himself to further validate his authority as an atlas maker (Figure 24). Frontispiece portraits commonly appeared in late seventeenth-century books of all genres, both fictional and non-fictional. Janine Barchas has called these images “perhaps the most prominent example of the graphic packaging of books” in the early modern period, because they were always placed opposite the title page.¹⁵⁷ Because the cost of

155. Allain Manesson Mallet, dedication of *Description de l’Univers* (Paris: chez Denis Thierry, 1683), n.p.

156. Ibid.

157. Janine Barchas, “Prefiguring genre: frontispiece portraits from ‘Gulliver’s Travels’ to ‘Millenium Hall’,” *Studies in the Novel* 30 (1998): 261.



Figure 24. Conveying authority visually: Frontispiece portrait of Allain Manesson Mallet from *Description de l'univers* (1683). 8-Z-Le Senne-4867. (Cartes et Plans, Bibliothèque Nationale de France).

copperplate engraving and printing was considerably higher than letterpress printing, such portraits usually appear only in works that were already illustrated, such as geographic atlases, or in works aimed at prosperous readers, such as collected editions. Although the inclusion of author portraits became common in Italy in the sixteenth century, in France and England it remained unusual until well into the seventeenth century. Portrait images engraved specifically as a frontispiece were usually simple and undecorated images, lacking backgrounds, in plain rondels or trompe-l'oeil masonry frames. Others, such as those of John Speed and Alexis-Hubert Jaillot, were produced as reduced engraved versions of full-size paintings and were extremely detailed vignettes. Frequently there was also a caption in abbreviated Latin, Greek, or the vernacular, making the frontispiece portrait into, in David Piper's words, "the equivalent in engraving of the sculpted memorial bust in its niche," associating the atlas maker and the atlas with revered classical literature and thus in its own way serving to establish the credibility of the atlas maker.¹⁵⁸

As discussed earlier, the early modern reader was naturally skeptical of the claims to truth made by the books he read. Given the piracy rampant in publishing, he had good reason to doubt both production and content claims—that is, he could easily suspect the information given in the colophon about the book's author, publisher, place, and date of publication, which could lead to doubts about the truthfulness and accuracy of the text itself. In this light, the occasional inclusion of a portrait shows more than a mere desire to ornament the work with the picture of the author or compiler, or to increase the market value of the work by including expensive engravings. Indeed the author or compiler portrait served to verify to the reader the actual existence of the author: that he was in fact a real person, and also that he was the person whose

158. David Piper, *The Image of the Poet: British Poets and Their Portraits* (Oxford, U.K.: Clarendon Press, 1982), 36.

words were reproduced in the book. Naturally many portraits were not good likenesses by modern standards, given the constraints of portraiture engraving in the small sizes demanded by most presses and the artistic conventions of the era that sacrificed exactitude for conformity to aesthetic standards. Yet the writer's likeness remained a staple in the ongoing efforts of publishing houses and printers to earn the reader's faith in the work.

Mallet's portrait in *Description de l'Univers* reinforces his military background and his connection to the crown. The trompe l'oeil image shows a simple oval half-portrait of the atlas compiler dressed in decorative armor and a lace cravat, with symbols of military surveying, a helmet, and an open book spread on a table below the portrait. Thus Mallet presents himself as a proud representative of the royal military. The open book informs the viewer that he is not a common, uneducated soldier but a learned man, an engineer able to serve his royal patron through surveying, mapping, and the design of fortifications. Around the frame of the portrait are the words "ALLAIN MANESSON MALLET PARISI. INGENI. DES CAMPS ET ARMEES DU ROY DE PORTUGAL," asserting both Mallet's technical experience and his office in the king's army. He also is portrayed wearing a long wig, a clear symbol of respectable gentlemen and nobles that serves to separate Mallet from men of lesser fortune. Thus, in both his dedication letter and his frontispiece portrait, Mallet fashions himself to his readers as a worthy client of the king's patronage, a man who had served the army directly by making fortifications and who now serves in a scientific, scholarly capacity as an atlas compiler, bringing the entire world to the gaze of the Sun King.

Nicolas de Fer as Patron's Servant

The French geographer Nicolas de Fer also explicitly promoted himself as a client in his commercial world atlases. Compared to the other compilers in this study, de Fer had the most authentic voice as the client of a powerful patron, in his case, Louis le Dauphin and subsequently Louis XIV. However, he created no personal texts to enhance his atlases and his persona as patron's servant is the least developed of the five compilers reviewed here.

For over thirty years, Nicolas de Fer (1646-1720) was one of Paris' most commercially successful and prolific map and atlas producers, a position aided by his appointment as *géographe ordinaire* to the king and to the dauphin (see Appendix).¹⁵⁹ His father, Antoine de Fer, who appears in tax records as *marchand de tailles douces* and *enlumineur de cartes géographiques*, was a modestly successful print merchant who specialized in printing and selling cartographic works. Always short on capital in an industry that required long lead times and a significant output in labor costs to produce a finished work, Antoine de Fer formed business partnerships with a number of leading map publishers, including Jacques Lagnet, Nicolas Berey, and Melchior Tavernier, the latter an important name in French atlas history.

Son of a Flemish engraver, Tavernier (1594-1665) is best known for selling maps by Flemish and Dutch cartographers in Paris, but he also promoted the emergence of a native French cartography with his atlases of the French kingdom. In his shop on the Isle du Palais at the sign of the Sphere Royale (i.e., an armillary sphere) Tavernier sold atlases, sheet maps, and globes in addition to mathematical and scientific instruments. Although he abandoned print commerce suddenly in 1644 to purchase a clerkship in the household of the duke of Orleans,

159. Biographical details drawn in part from Pastoureau, "Nicolas de Fer," in *Les Atlas français*, 167-217.

Tavernier's place in French cartographic history was already assured, as much by his own work as by his association with cartographers such as Nicolas Sanson, whom he mentored, and Antoine de Fer. It was after Tavernier's retirement from the print business that Antoine de Fer adopted the Sphere Royale as his own insignia, which his more successful son Nicolas would later adopt as his own.

The youngest of the de Fers' eight surviving children, Nicolas was apprenticed to a copperplate engraver, and soon was specializing in cartographic engraving. After the death of Antoine de Fer in 1673, Nicolas returned to his parents' house to continue his father's print business with his mother. It was of course common for a widow to continue to run a family trade with her children, although in this case Nicolas seems to have been constrained to simply re-issuing works from his father's plates, rather than creating original maps. However, in 1687, de Fer's mother retired and he became sole proprietor of the shop on the Quai de l'Horloge. He set about expanding the business, seeking new customers and pursuing patron support at court. In 1690, he succeeded in impressing Louis le Dauphin, who made de Fer his official geographer. After the Dauphin's death in 1711, de Fer became *géographe ordinaire* to Louis XIV.

In all de Fer published fourteen atlases, five of them world atlases, and more than 600 maps. Unlike a number of his peers, de Fer showed a marked interest in producing maps not for general reference but with specific themes. Befitting his role as geographer to the Dauphin, who was commander of the royal armies, de Fer specialized in military and "current events" cartography—military fortifications, political frontiers, fortified cities, etc. He produced very few maps for historical or biblical study, instead advertising many of his atlases and maps as being the most up-to-date and correct available. On de Fer's death in 1720, he left his shop and

inventory to his three daughters, all of whom had married map engravers, and so the business continued until 1760.

Nicolas de Fer's first world atlas was the *Petit et nouveau atlas*, a work in quarto that appeared in 1697, 1705, and finally in 1723. On the title page de Fer advertises his connection to the royal family by including an engraving of the obverse and reverse of a commemorative medallion. On the obverse is a portrait of Louis le Dauphin; on the reverse, a vignette representing the French army (led by the Dauphin) pushing the Empire's armies eastward across the Rhine.



Figure 25. Dropping the patron's name: the title page of Nicolas de Fer's *Atlas curieux* (Paris: chez Nicolas de Fer, 1700-1705). C.39.c.2. (Maps Reading Room, British Library, London, UK).

Three years after the *Petit et nouveau atlas*, de Fer published the first installment of what would become his major atlas production. This was the *Atlas curieux*, published serially in six parts between 1700 and 1705 (Figure 25). De Fer continued to add new maps, views, and illustrations, so that by the time it was republished as a single work in two volumes in 1716, it comprised over 200 maps and almost as many city, ethnographic, and fortification views. The atlas was republished and expanded by de Fer's sons-in-law after his death, making it one of the most successful world atlases published in early modern France.

De Fer again used his connection to the Dauphin to promote the credibility of himself and his atlas to customers at La Sphere Royale on the Quai de l'Horloge. The title page of the *Atlas curieux* promotes itself as "L'Atlas Curieux/ou le Monde Réprésenté/dans des Cartes Générales et Particulières du Ciel et de la Terre... par N. de Fer, Geographe du Monseigneur le Dauphin."¹⁶⁰

The Dauphin's arms are prominently displayed in the center of the page. In the lower left corner, an allegorical figure of Geometry displays a monumental cartouche dedication: "Dédié/a Nosseigneurs/ les Enfans (sic) de France/Par leur très humble et tres obeïssant Serviteur/ deFer."¹⁶¹ This dedication to the sons and daughters of the king (traditionally referred to as the "Children of France") is repeated on the frontispiece as well. The frontispiece illustration itself, created originally for de Fer's maritime atlas *Les Costes de la France*, is a fanciful image of a naval battle taking place near a port, while men and women on the docks in the foreground either work or watch the fighting. The arms of the Dauphin on one of the ships' flags further fosters de Fer's image as the loyal servant of the future king.

160. Nicolas de Fer, title page of *L'Atlas curieux: ou Le Monde représenté dans des cartes générales et particulières de ciel et de la terre* (Paris: chez Nicolas de Fer, 1700-1705), n.p.

161. Ibid.

The atlas compiler recognized the value of his appointment as royal geographer for building his credibility with his customers, and never failed to include his title as *géographe ordinaire* anywhere his name appears in his atlases and sheet maps, whether on the title page, frontispiece, or within his emblem “à la Sphere Royale,” an armillary sphere.

However, after Louis le Dauphin’s death in 1711, de Fer dedicated his subsequent atlas, an instructional work called *Introduction à la Géographie* (1717), to a different kind of patron, one outside the Bourbon dynasty. This was Philippe de la Hire (1640-1718), the celebrated mathematician, geographer, and artist who was a member of both the Académie Royale de Peinture et Sculpture and the Académie Royale des Sciences. De la Hire was one of the respected academicians in France; by dedicating his work to de la Hire, de Fer was associating his name with the rigorous and renowned work of Paris’ scientific community. There is no known correspondence between the two men, so the question of the reality of their patronage relationship remains obscure. However, whether or not de la Hire was already a patron in some regard, or responded with monetary reward to de Fer for this dedication, it appears that de Fer and de la Hire were well acquainted, since de Fer used de la Hire’s astronomical work in compiling his maps, and credits de la Hire for the two-page celestial planisphere that appears at the beginning of his *Atlas ou recueil de cartes géographiques*, published in 1709.

Thus, even though Nicolas de Fer did not include any lengthy dedications or addresses in his world atlases, he clearly wanted to create a public persona as servant to three important and well-known patrons, the monarch, the monarch’s heir, and a respected astronomer. Like other atlas compilers, de Fer used his official title, wrote dedications, and included the arms and portrait of his patron prominently in the promotional frontmatter of his world atlases. All of these

strategies sought to define him as a client, thus borrowing the credibility of his patrons, despite his primary occupation as owner of a commercial print shop and as a geographer-engraver.

Jean Boisseau as Patron's Servant

Finally, the few known publications of Parisian map colorist and engraver Jean Boisseau (1600?-1659?) suggest that he, also, promoted a self-presentation as a patron's servant in his commercially-published works. Creator of the first French world atlas (*Trésor des cartes géographiques*, 1643), he seems to have been a prolific map publisher. Unfortunately, few hard facts have been confirmed about the life of Boisseau, whom Mireille Pastoureau calls “quelque peu mystérieux.”¹⁶² His family, birth and death years remain unknown. He is best known for his geographic publications, but he also published works on heraldry, knighthood, genealogy, and chronology.

Boisseau appears for the first time in 1631 in the Paris archives as a “master illuminator” (see Appendix for a bio-bibliography). He resided in Rue Vallée-de-Misère and it is recorded that his fellow map publisher Melchior Tavernier borrowed money from him in the 1630s. In 1635 Boisseau is listed in tax records as an illuminator of maritime maps (*enlumineur de cartes marines*) working under the sign “Au Soleil Levant” near the Palais. He engraved several maps himself, including maps of the Pays-Bas, Alsace, and the diocese of Aire. Mireille Pastoureau notes that Boisseau seems to have gained notice as a map publisher more by publishing others' works (“rachetant des planches déjà gravées”) than with his original maps; at first he merely served as publisher, but by 1642 he was modifying others' atlases and publishing them under his

162. Pastoureau, *Les Atlas français*, 67. Biographical details drawn from Pastoureau, “Jean Boisseau,” in *Les Atlas français*, 67-73, 497-500.

name. He remained an active figure in publishing until at least 1659, when *Promptuaire armorial et general*, his last known work, was published. After 1659 he disappears from archival records and apparently left no heirs.

Jean Boisseau held the title of *enlumineur du roi*, a post whose origins stretch back to the High Middle Ages when royal manuscripts were frequently decorated with miniatures. More precisely, he was “enlumineur du roy pour les cartes géographiques.” In every publication Boisseau was careful to sign his name with his official title, sometimes varying it as “...pour les cartes maritimes et géographiques.” Although it may seem a minor and formulaic addition to his signature, this title was in fact a major marketing tool distinguishing an otherwise undistinguished rival in the nascent commercial publishing industry of Paris in the 1640s, a marketing tool that linked Boisseau directly to the authority of Louis XIII and Louis XIV.

Boisseau also presents himself as patron’s servant in his *Theatre des Gaules ou descriptions generales et particulieres de toutes les provinces du royaume de France* (1642), which, despite the title, can be said to constitute a world atlas since it features one map each of Africa, Asia, and America. Boisseau’s *Theatre* is mostly copied from Jean LeClerc’s *Theatre géographique du royaume de France* (1631) but Boisseau expanded it with nineteen of his own maps. He made the title page his own, however: Louis XIII’s double coat of arms (as king of Navarre and king of France) appears between the title and the colophon, thus signally to the potential reader immediately that Boisseau is connected to royal patronage.

The following page of *Theatre des Gaules* makes Boisseau’s royal patronage even more explicit. It features a large equestrian portrait of Louis XIII in armor, with angels descending from heaven to place a laurel wreath on his head, while ships battle in a naval scene in the background. Above the portrait the subject is identified as “Louis Treiziesme par la Grace de

Dieu Roy Tres Chrestien de France et de Navarre.” Below the portrait appears a poem in praise of the king:

Genereux filz de Mars Nourrisson de Bellonne
En l’avril de tes ans tu faictz voir à nos yeux
Que chery des Mortelz et favori des Dieux
Tu domte les brouillars d’une troupe felonne
Tu faicts par ta valeur paroistre grand Monarque
Comme tu scais ranger Soubz toy tes ennemis
De[s]ia l’on voit du Ciel tant de lauriers promis
Honorer tu vertu d’une immortelle marquee

Although the poem is taken from Jean Le Clerc’s original atlas, its reproduction in Boisseau’s *Theatre des Gaules* demonstrates his desire for potential buyers to identify him, likewise, as the loyal servant of his royal patron.¹⁶³

Boisseau is perhaps best remembered for compiling *Trésor des cartes géographiques des principaux estatz de l’univers*, in 1643. Again, in the frontmatter of this atlas, the compiler is careful to promote a persona as faithful client. This time, however, he is not the servant of the king but the servant of the reader himself. In the *Advis au lecteur*, Boisseau explains why he is publishing Isaac Dumas de Fores’ treatise on geography (“La Clef de la géographie générale, ou Sommaire discours sur la mappemonde”) bound with his own atlas maps. He uses a conventional client’s signature for this notice to the general reader when he signs it “Vostre affectionné serviteur. BOISSEAU.”¹⁶⁴ Following this *advis* is a dedication to “Monsieur de Lafite Solon, F.M.D.S.E.,” a well-known Huguenot pastor.¹⁶⁵ The dedication extols Pierre Lafite Solon’s “rare sçavoir,” acknowledging his encouragement to publish “La Clef,” and assuring Lafite Solon that

163. Jean Boisseau, *Théâtre des Gaules ou descriptions générales et particulières de toutes les provinces du royaume de France...* (Paris: chez Jean Boisseau, 1642), n.p.

164. Jean Boisseau, “Advis au lecteur” in *Trésor des cartes géographiques* (Paris: chez Jean Boisseau, 1643), n.p.

165. Fidèle Ministre du Saint Evangile. Pierre Lafite Solon (fl. 1630-1671) was a writer of Bayonne and later of Bearn.

the author would rather have Solon's approbation for the work more than that of anyone else; and also asserts "l'estime que je fais de vos merites." Boisseau's *Trésor* and Dumas de Fores' "La Clef" were planned as a joint project, but the dedication is only signed by Dumas de Fores, "vostre tres-humble, & tres obeissant serviteur."¹⁶⁶ While Boisseau does not therefore directly claim the patronage of Lafite Solon, the placement of the dedication immediately following Boisseau's notice and before Boisseau's atlas maps suggests that both authors wanted to benefit from Dumas de Fores' personal ties of loyalty and clientage to Lafite Solon.

Thus in both of his atlases, Jean Boisseau presents himself as servant to both the king and the reader. He further bolsters his credibility with potential buyers by borrowing from the credibility that his predecessor Le Clerc and his co-author Dumas de Fores earned through their own patronage connections to the king and Pierre Lafite Solon.

Discussion

Although the client self-presentations discussed above for Jaillot, Morden, Mallet, de Fer, Boisseau, and Speed are only a handful of examples from early French and English world atlases, they represent a genre of self-promotion that aimed to convince the reader of the geographer's authority. All of the atlas compilers in this study, along with most atlas compilers of the seventeenth and eighteenth centuries, dedicated maps and/or whole atlases either to one or to several potential or actual patrons. Often the dedication is succinct, following the formula of "Dedicated to so-and-so" and giving the dedicatee's title or position, while others are lengthy narratives, extolling the patron's virtues in the manner of a conventional patronage letter. Since

166. Isaac Dumas de Fores, dedication of *Trésor des cartes géographiques* (Paris: chez Jean Boisseau, 1643), n.p.

pre-existing maps were very often included in atlases, frequently an atlas is dedicated to one patron while many of its maps feature cartouches offering dedications to other patrons. If not royalty, usually the actual or desired patron named on an individual map is a gentleman, noble, or high-ranking bureaucrat or ecclesiastic, frequently someone who resides in, administers, or has a hereditary claim to the area described by the map.¹⁶⁷

In adopting this particular form of self-promotion, atlas compilers were in fact adapting the rhetoric and forms of a pre-existing economic and political system of personal relationships that predated, and then co-existed with, the impersonal commercial system in which each compiler earned his living in the seventeenth century. This adaptation of old forms of authority-building was not unique to atlas makers; certainly writers of many genres of the growing book trade adapted a variety of mechanisms to promote their work, one of which was engagement in patronage networks. As notes earlier, the actual reduction in the amount of support offered to authors and in the number of patrons seen in both France and England across the century did not impact the number of dedications offered in literary works.

For Jaillot, Speed, and others, the strategy of promoting a persona as a patron's servant worked in two directions. First, patronage documents such as dedication pages, coats of arms, and dedicatory letters published in the frontmatter of the atlas were appeals to the actual or potential patron himself: the direct request for tangible support. More importantly for understanding early commercial atlases, though, the atlas compiler was also simultaneously engaging in a strategic market calculation. Gérard Genette has described the double message implied by the book dedication: "Whoever the official dedicatee, there is always ambiguity in the destination of a dedication, which is always intended for at least two addressees: the dedicatee,

167. The assumption made by map compilers seems to have been that a man of means would be very likely to support the production of a map of a geographic area to which he had a personal connection.

of course, but also the reader, for dedicating a work is a public act that the reader is, as it were, called on to witness.”¹⁶⁸ He further analyzes the “service” performed by the dedication for the book itself rather humorously:

[When an author writes] ‘I dedicate this book to So-and-So’ he is also saying ‘I am telling the reader that I am dedicating this book to So-and-So.’ But by that very fact, the formula is likewise... ‘I am telling So-and-So that I am publicly dedicating the work to him.’ The dedication is always a matter of demonstration, ostentation, exhibition: it proclaims a relationship, intellectual or personal, actual or symbolic, and this proclamation is always at the service of the work, as a reason for elevating the work’s standing...¹⁶⁹

The strategic calculation made by atlas compilers and others marketing early modern books was that by making an ostensibly private letter into a public communication, he hoped to earn professional credibility and authority indirectly—using the established patronage system of exchange that was based on personal ties in order to gain credit within the new impersonal, commercial system of exchange.

It was not incidental to the compiler or atlas seller that the consumer in the book shop should know the name and title of the man to whom the atlas was dedicated. It was a major selling point, a fact made clear by the sheer number of atlases proposing one or more patron dedications. The compiler drew upon the public’s understanding of how patronage worked, and upon the credit assigned by readers to those men and women in a position to support research and publication, by publicly associating his name with theirs. While it was preferable to name a patron who enjoyed prestige and name recognition, such as a member of the royal family or a

168. Genette, *Paratexts*, 134.

169. *Ibid*, 134-135.

famous public figure such as Philippe de la Hire, patrons lauded and titled by the atlas maker could effectively be as obscure as petty nobles or merchants.

Publishers have for centuries routinely placed laudatory quotes by experts or celebrities, those believed to have strong name recognition among the book's audience, in the jacket copy or frontmatter or advertisements of new publications. The assumption is that if the reader respects (or perhaps, has simply heard of) the name of the person quoted, she or he will give more credence to the worthiness of the book and be more likely to purchase it. The source of the quote does not necessarily have any personal or professional relationship to the author—in fact, modern readers may well give more credibility to the recommender's words if the reader perceives the recommender to be an objective judge of the book.

The compiler was trying to profit (literally) from the patron himself, and from the public's (perceived) respect for the virtue, judgment, and authority of the named patron. Yet something more complex was happening when a seventeenth-century atlas compiler presented himself as the loyal servant of a patron in the atlas' promotional material, due to the readers' understanding of the unequal relationship of service and protection that was the core of the patronage relationship. I argue that the compiler was trying to influence the buyer's decision by prompting him to mentally transfer a set of received cultural values from one type of social organization—the traditional society of ranks, where personal loyalties and affiliations are vertically oriented across statuses, and trust between actors is based on personal knowledge—to a new type of social organization: the emerging society of commerce, where social and trade encounters between strangers become the norm and trust must be indirectly derived from external sources.¹⁷⁰ For this mental transference to occur, the atlas reader had to belong to a

170. For a historically-informed discussion of local knowledge and the rise of institutional trust and credit in the West, see Kieron O'Hara, *Trust: From Socrates to Spin* (Cambridge, U.K.: Icon Books, 2004), esp. 75-94.

society undergoing transition in the basic forms of social interaction, such as seventeenth-century France and England, where both forms of social relationships, the personal and the anonymous, the loyal and the commercial, retained widespread validity and acceptance as legitimate. By projecting a persona as patron's servant—loyal, virtuous, gratefully dedicated to serving a benevolent and worthy patron of higher social rank—to the anonymous urban public of potential buyers, the atlas compiler attempted to benefit from the changing nature of social interactions and cultural authority that was emerging in both France and England in the seventeenth century.

For the atlas compiler who chose to include a dedication, letter, patron's portrait or coat of arms, or official title as part of his self-presentation, the association with the patron's name—whether the association was formalized by an office or appointment or not, or even existed—was assumed to bring credibility to the atlas and promote sales. It was supposed to influence the consumer to choose that particular atlas over competing works, making it an important marketing strategy in the competitive world of the seventeenth-century map trade. I turn now to an examination of two other common personas: the scholarly geographic expert and the geographic expert by virtue of experience.

CHAPTER 4

PERSONAS OF THE GEOGRAPHIC EXPERT

Two other personas were created in the introductory pages and portraiture of numerous early world atlas compilers. The first is the artisanal geographic expert, the expert by virtue of his hands-on experience making maps. The second is the scholarly geographic expert. In both personas the compiler, in crafting his particular identity, believed that his potential customers would respond positively to geographic atlases produced by someone with that form of expertise. As I will discuss, the artisanal expert and the scholarly expert were both strategies of legitimizing the atlas, yet they drew on different kinds of cultural authority and played with the possibilities inherent in the nebulous concept of the geographer in early modern Europe.

Professionalization and Geography in the Seventeenth Century

The Truth is, every one that can copy or engrave a MAP, sets up for a Geographer, and having done that, thinks the Property is transferr'd, and accordingly calls himself the Author.¹⁷¹

-Mapmaker John Green

171. John Green, "Appendix, Wherein the present State of Geography is consider'd....," in *The Construction of Maps and Globes* (London: T. Horne, 1717), 134.

What was a “geographer” in the seventeenth century? Although law, medicine, and the clergy had been recognized as professions—essentially literate trades—since the Middle Ages, other occupations had not yet been conventionalized as specialties, as forms of expertise. From sociologists, historians have borrowed the definition of “professionalization” as the development of the social organization of a field of knowledge including exclusive associations, a specialized vocabulary, and accepted forms of qualification and training; the related emergence of the expert is concerned more with actual content knowledge than its social organization. For example, the profession of law is made up of legal experts, but not all experts in law belong to the profession of lawyers. The seventeenth century saw the nascent formation of many of what we now recognize as the professions, such as banking, education, and engineering, and including that of geography and other fields of scientific endeavor.

The history of professionalization and the emergence of the “expert” in the seventeenth century have been examined by a few scholars of England, but for France only broad outlines have been drawn and much of the process remain unclear. For both countries and for Europe generally, the majority of monographs focus on the nineteenth century, with a number concentrating on the eighteenth century. Despite the common assertion in these works that professionalization and the rise of the expert began in the late sixteenth century and continued throughout the seventeenth centuries, few scholars have yet focused on the pre-1700 period.¹⁷²

172. For Europe generally, Daniel R. Headrick's important *When Information Came of Age: Technologies of Knowledge in the Age of Reason and Revolution, 1700-1850* (New York: Oxford Univ. Press, 2000) discusses the rise of professionals in the early modern period in the context of increased demand for information (defined as organized knowledge) and also discusses geography and mapping specifically. For England, a number of works examine individual professions, most commonly medicine, law, or engineering. Helpful works that are more broadly conceived include Penelope Corfield's *Power and the Professions in Britain, 1700-1850* (London: Routledge, 1995) and Geoffrey Holmes' *Professions and Social Change in England, 1680-1730* (Oxford, U.K.: Oxford Univ. Press, 1981); more recently, Eric Ash has written on the role of theory in creating the sixteenth-century expert in *Power, Knowledge, and Expertise in Elizabethan England* (Baltimore: Johns Hopkins Univ. Press, 2004). For France, most scholars focus on the post-1800 growth of the professions; one exception, Gerald Geison's edited collection *Professions and the French State, 1700-1900* (Philadelphia: Univ. of Pennsylvania Press, 1984) is limited to medicine and engineering and features only one essay on the pre-1800 period, pointing up the need for more scholarship on the early modern period.

What is clear is that along with the development of recognized areas of expertise and specialization came new professional identities. What makes the professionalization of geography in particular so interesting is that, although geography's first Western practitioners were the ancient Greeks, its boundaries, origins, and purposes were tangled in cosmography (astronomy), religion, ethnography, and politics, rendering it not one but many forms of inquiry into the shape and features of the earth. The late sixteenth century saw the beginning of the long process of formalizing geography into a single discipline with an agreed set of methods, purposes, and forms of knowledge. The early atlas compilers of the early seventeenth to early eighteenth centuries were thus operating not so much in a period of transition in the geographer's identity but in the period of the formal emergence of "the geographer": the man who was an expert in, and made a living practicing and teaching, the mathematical, textual, and visual description of the earth.

The complicated development of geography as a discipline and an occupation in the early modern era has been examined at length recently by a number of scholars, including notably Jerry Brotton, David Livingstone, Anna Godlewska, and Lesley Cormack.¹⁷³ As discussed in Chapter 2, Cormack has shown how in England by 1600 the various origins of western geographic thought coalesced into two schools of geographic practice, the descriptive and the mathematical. Livingstone's *The Geographical Tradition* describes seventeenth-century geographers as creating a discipline drawing on "empiricism, social utility, natural magic, and Reformation religion."¹⁷⁴ For the seventeenth century, crucial to the story was the growth of the state's need for geographic information for administrative, military, and fiscal ends.

173. See Jerry Brotton, *Trading Territories*, 151-186; David Livingstone, *The Geographical Tradition*, 32-101; Anna Godlewska, *Geography Unbound*, 1-20; and Lesley Cormack, *Charting an Empire*, 1-47.

174. Livingstone, *The Geographical Tradition*, 73.

It could be argued that, given the diverse origins of the discipline, it was centralized nation-states such as France that created the “geographer” by creating a sustained demand for his products—thus the invention in the seventeenth century in England and France of the honorific title of “géographe du roi” or “geographer to the king.” In England this title was bestowed on only one individual at a time. It was thus a singular honor, and one useful as a career promotional tool. However, it was not a title that carried a monetary value, for Parliament was unwilling or unable to offer financial support of geography, surveying, or mapmaking in this period, and the king offered no stipend to his official geographer. In France the situation was quite different. Louis XIII and Louis XIV were very supportive of the nascent modern geographic enterprise, recognizing the value of accurate surveying and maps of estates, towns, roads, forests, and waters for efficient administration, accurate tax collection, and effective warfare. They named any number of men *géographes du roi*, including (after 1718) one who was *premier géographe du roi*, and rewarded each with a modest yearly stipend from the royal treasury for providing the crown’s fiscal, colonial, and military officials with maps and charts.¹⁷⁵ Note that these outlays were in addition to the material support given to cartographic and astronomic activities undertaken by the Académie des Sciences.¹⁷⁶

Yet it is critical to recall that between 1627 and 1721, there was still considerable room for personal interpretation of the identity of the geographer on the part of the individual practitioner. There was not yet a conventional education required of geographers; nor was there a typical class background or experience requisite to the practice of geography as a career. The identity and the term existed; but what the term defined about the men who called themselves

175. Josef Konvitz offers an excellent monograph on state-sponsored surveying and mapping in *Cartography in France, 1660-1848: Science, Engineering, and Statecraft* (Chicago: Univ. of Chicago Press, 1987).

176. Mary Sponberg Pedley, *The Commerce of Cartography*, 30.

geographers had not yet crystallized. The disparate origins of western geographic inquiry contributed in part to this—geographers could, and in the case of the early commercial atlas compilers, did, come out of backgrounds as varied as engineering, engraving, the humanities, astrology, and book printing.

It is in this context that the two variations of geographic expert deployed as forms of self-presentation must be understood. Without a common path of training and experience or class to link an individual to the class of geographers, the way was open for these atlas makers to formulate public personas and thereby assert their personal authority as “geographers” in multiple ways.

The Artisanal Geographic Expert

One way to assert a geographer’s identity was to emphasize extensive geographic work experience. As I discuss below, this approach is different from asserting knowledge derived from actual experience or witness of the places described. Instead, it is the claim to expertise in making maps and geographic descriptions through labor, that is, learning through doing. Most atlas compilers could not plausibly claim academic training in geography and the related mathematical sciences. Yet having labored a decade or more producing maps and globes or in publishing, they could plausibly claim mastery of the craft, much as any artisan could, once he had completed his terms as apprentice and journeyman and reached the status of master craftsman.

Robert Morden as Artisanal Expert in *Geography Rectified*

Robert Morden, who as discussed earlier chose to present himself as a patron's client in his *Geography Rectified*, also offered a persona stressing his content knowledge derived from his extensive experience creating maps and other geographic materials. His strategy for doing so is cultivated in its contradictory messages.

...And here I crave Pardon for the Audacity of this Attempt. . .surely more advantagious [!] had it been unto Geography to have fallen into the endeavours of some able Advancers, that might have performed it unto the Life, and added Authority thereto. For I am not ignorant of the discouragement of Contradiction, of the difficulty of disswasion from radicated Beliefs, of what cold requitals some have found in their redemptions of Truth, and how ingenious discoveries have been dismissed . . .As to this present Treatise, I shall only say, that though after many years Experience not only in making and projecting of Globes, Maps, &c. but also in examining and comparing of the Discoveries, Observations, Drafts, Journals and Writings, as well of the Antient as Modern Geographers, Travellers, Mariners, &c. wherein I had taken much Pains and spent much Time in preparing for such a work. Yet it was not my Intendment to have appeared upon the Horizon of Publique Veiw [!], had not the great stir and Abuses of many Ignorant pretenders forced me to this undertaking; I know it wants the helps and advantages of a more Learned Pen, and in Truth it ought to have been freed from those frequent avocations and disturbances that attend a Publique Shop and Trade...¹⁷⁷

First, Morden stresses his artisan social status as a fundamental component of his public persona. He frequently references his lack of learning obliquely by pointing to others who are well educated. In line with the overt modesty so common in early modern author's addresses, on the surface Morden is repetitiously self-effacing, suggesting that the atlas would have been much improved had a formally educated person compiled it: the subject has been "treated of by others famous for Learning and Parts," and it would have been "surely more advantageous had it been unto Geography to have fallen in the endeavours of some able Advancers"; he knows that the

177. Morden, "To the Reader," in *Geography Rectified*, n.p.

atlas “wants the helps and advantages of a more Learned Pen.” He also references his status as a shopkeeper directly, complaining that the atlas should have been produced “freed from those frequent avocations and disturbances that attend a Publique Shop and Trade,” and of the “Distractions” that afflict those like himself who do not have the luxury of “quiet doors and unmolested hours.”¹⁷⁸

Yet within the same texts, Morden devotes a great deal of space to justifying, even celebrating his vast knowledge. This he attempts by directly invoking the geographic, historical, and travel authorities he has used to create his atlas. Compare this strategy to that evoked half a century earlier by Morden’s compatriot, John Speed, in his *A Prospect of the Most Famous Parts of the World*. Unlike John Speed, Morden carefully delineates for the reader the sources he has compiled into his atlas. Speed listed no specific authors, making only references to earlier geographers. I suggest that this difference can be attributed to the different social statuses of these two atlas-makers. Speed’s climb in social status from tailor to geographer, as described in Chapter 3, had transformed him into one of the scholarly class, a man whose gentlemanly reputation (even in the absence of gentlemanly birth) meant that he could be trusted when he said he used the best earlier geographers in compiling his *Theatre/Prospect* atlas. This elevated status rendered it unnecessary for him to name his sources individually, following the mores of early modern scholarly conduct.

Morden, however, outside the realm of the formally educated, appears eager to impress on the reader the magnitude of his geographic authorities, perhaps even to overwhelm the reader with the atlas’s authority by dropping names ancient and modern, familiar and unknown. A flurry of twelve names, all described with flowery adjectives, ends the reader address, urging the reader

178. Ibid.

to conclude that although the atlas itself is not large (being in octavo format), within it are all of the authorities necessary for understanding the shape and arrangement of the world: "...you have therein [in *Geography Rectified*] summed up, the Reverend Observations of the Antient Strabo, Pliny and Ptolomy [sic], the choice rarities of the Nubian Geographer, the unwearied Industry of Mercator and Munster, the Great World of Ortelius and Maginus, the stately Volumes of Bleau [sic] and Johnson [i.e., Jansson]; the Modern and Applauded Maps of Du Val and Sanson..."¹⁷⁹ He ends the list by listing his more obscure sources as "the Quintessence of the Chorographies, Topographies, Relations, Journals and Travailes of most Authors extant."¹⁸⁰ Morden stresses that he knows these works intimately, has compared them with one another and has thus been able to create a more perfect picture of the world—a "geography rectified."

Nowhere in Morden's works does he reference Bacon directly, but Morden does reveal in his introductory texts two Baconian values, the first being the privileging of progressive experience over the static or even backward-looking insistence on the primacy of ancient authors. His approach to the "rectification of geography" follows Francis Bacon's positing in *The Advancement of Learning* of "knowledges" being like pyramids, built up slowly over generations by experimenters, observers, and witnesses (Morden's persona as a reformer is discussed at length in Chapter 5). However, Morden does not exclusively embrace this model; indeed, he steers a middle course by privileging modern discoveries and authors while continuing to offer praise to, notably, the good and useful parts of the ancient and medieval geographic authorities, without presenting the enthusiastic praise and lauding of the writing of the ancient Greeks and Romans typical of sixteenth-century writers. Secondly, Bacon, hoping to promote the

179. Ibid.

180. Ibid.

development of technology, “lamented the disengagement of ‘speculative men’ from ‘men of experience’ and attributed to this cause alone the lack of advancement of learning.”¹⁸¹ The primary value Bacon placed on observation, witness, and experience meant that he privileged experience over unproductive learning. Speculative men, in Bacon’s influential framework, were the formally learned, men of abstraction and theory; men of experience were mechanics, artisans who applied hard-earned craft knowledge to solve technological problems.¹⁸² Morden opens his “To the Reader” with a reminder that since the dawn of learning, writers had continually striven to “Mend, Supply, or Methodize, whatsoever hath been done before...nor is it less apparent that still the Latter must needs have a great Advantage beyond the former, by adding the Experience of his own Time to the perusal of what was formerly attained unto...”¹⁸³ Morden's authority to create images and texts of the whole world derives from his superior form of knowledge—that is, his experience as a maker of maps and globes. Thus his self-presentation simultaneously emphasizes his lack of learning and his thorough knowledge of geographic authorities.

Morden seeks to further validate the experience behind his efforts through association with his merchant-patron, Thomas Goddard. Morden clearly did not have the luxury to travel freely to gather the data for his cartographic works. Thus while he could and did reference his many years of experience in cartographic and instrument productions, he could not boast of actually having been to those places that he claims he is more accurately describing in his atlas. To overcome this potential commercial drawback, he uses a strategy common to atlas makers and many authors of the period when he associates himself with his well-traveled patron: “There

181. Livingstone, *The Geographical Tradition*, 65.

182. Francis Bacon, *The Advancement of Learning* (Oxford, U.K.: Oxford Univ. Press, 1974); Margarita Bowen, *Empiricism and Geographical Thought: From Francis Bacon to Alexander von Humboldt* (Cambridge, U.K.: Cambridge, Univ. Press, 1981), 48-57.

183. Morden, “To the Reader,” in *Geography Rectified*, n.p.

is therefore all the reason in the World I should shelter [the atlas] under the Patronage of your Name, whose affairs abroad have given you a better knowledge and experience of Forrein Parts and whose encouragment [sic] and assistance have contributed so much to its production.”¹⁸⁴

Although we assume Goddard had not actually traveled to the four parts of the world, we recognize Morden’s attempt to lead the atlas buyer to draw the hoped-for conclusion: Goddard has traveled extensively on business, and Goddard supports Morden's geographic work; therefore Morden must be the geographic authority he claims to be.

Perhaps the most striking aspect of Morden's self-presentation in *Geography Rectified* is his wholehearted advocacy of the “new learning” and new discoveries of his contemporaries that we now term the Scientific Revolution. His is not a mild or indirect support; rather, Morden projects an opinionated, even self-righteous persona. In just a few pages, Morden makes a number of rather harsh critiques—including against his times and society in general, other geographers, and Englishmen he feels are unpatriotic. His personal authority in this aspect generates from what is, despite his lack of formal learning, not only a claim to superior knowledge about geography specifically, but also a claim to a superior understanding of the Truth, whether the truth concerns the value of Englishmen's work or the important distinctions between men of fact and men of opinions.

Morden saves most of his venom for two groups: rival publishers of geographic works, and those who resist accepting the discoveries of the age. Here Morden asserts his own expertise and geographic authority by condemning the persons who make maps and globes, as well as their products. In fact Morden offers a blanket critique of previous geographies and atlases, noting that “it is a boldness justifiable by Truth to affirm that all former Geographies diligently compared

184. Morden, dedication of *Geography Rectified*, n.p.

with the more accurate Observations and Discoveries of late years are greatly Defective and strangely Erroneous.”¹⁸⁵ In his account, he was forced to take up the creation of *Geography Rectified* in part because there was no map of the earth that was not “false and imperfect” in situating the parts of the world. In the passage quoted at length at above, Morden complains that “the great stir and Abuses of many Ignorant pretenders forced me to this undertaking,” even though he did not wish to create an atlas.¹⁸⁶

He further tries to establish himself as an authority on geographic knowledge by criticizing those who refuse to accept the latest discoveries and scientific experiments. In his letter to Goddard, Morden sets himself apart from people who prefer opinion to fact, ancient falsehoods to modern evidence. As he states with obvious passion, “this Age feeds upon Opinion, and Spider-Wits will draw nourishment from defamings, and grow upon disgraces”;¹⁸⁷ it seems clear that he expects to be criticized for his work by malicious men who are neither “judicious” nor “unprejudiced” readers.

In his address to the reader he offers even more direct criticisms: “For I am not ignorant of the discouragement of Contradiction, of the difficulty of disswasion from radicated Beliefs, of what cold requitals some have found in their redemptions of Truth, and how ingenious discoveries have been dismissed with Obloquie and censured with Singularity.”¹⁸⁸ He does not list those ingenious discoveries, yet his expertise in geography leads to the probable conclusion that he is thinking of cosmography and geography. Although we now generally identify Copernicus and the Age of Discovery in the sixteenth century as the start of the Scientific

185. Morden, “To the Reader,” in *Geography Rectified*, n.p.

186. *Ibid.*, n.p.

187. Morden, dedication of *Geography Rectified*, n.p.

188. Morden, “To the Reader,” *Geography Rectified*, n.p.

Revolution, even by 1680 the geocentric world system and a version of Aristotelian physics were still commonly accepted among the English. Given his oblique defense of the new science of the seventeenth century and his condemnation of those who scorn new truths, it is interesting to note that *Geography Rectified* appeared in 1680, the year many scholars, following Paul Hazard, use to bookend the period of transition from the classical to the modern intellectual age, the beginning of the period in which modern scientific views came to largely replace pre-modern paradigms.

Herman Moll as Artisanal Expert

Atlas compiler Herman Moll (1654-1732) is certainly one of the most interesting figures in early modern English geography (see Appendix for a bio-bibliography). Like his contemporary London neighbor Robert Morden, Moll created a number of personal texts that display a scrappy, competitive personality determined to publicize the many failings of his commercial rivals in the realm of mapmaking in order to bolster his own work by comparison.

Perhaps more is known about the life of Herman Moll than about any of the atlas-makers examined in this study, even though a fact as basic as his birthplace remains unknown. Beginning as an engraver, he became a prolific mapmaker and remained active in the London map business for almost fifty years. His family background is rather unclear—scholars are not even certain if he was German or Dutch, as references to his origins in archival documents and by his contemporaries are vague. Dennis Reinhartz, who has written the only detailed treatment of Moll, believes he was raised in Bremen, where he learned engraving before moving to

London.¹⁸⁹ Given the different origins ascribed to him by those who knew him, it is also certainly possible that he was raised in Germany and spent time in Holland before arriving in England.¹⁹⁰ It is fairly certain that he immigrated to London around 1678, and known that he died there in 1732.

His first job in London was engraving maps for Moses Pitt and other geographers, his first known work being the world maps in Sir Jonas Moore's *A New System of the Mathematicks* (1681) (Figure 26). His career coincides with the peak of the London map trade in the early decades of the English empire under Stuart and Hanoverian rule. In 1688 he opened his own shop in Blackfriars, establishing himself as a mapmaker in his own right. His background in copperplate engraving led to the creation of maps and plans which are heavily illustrated with vignettes, strapwork and other detailed decorative elements. Over the course of his career he published, jointly published, or contributed maps to dozens of geographic publications, including sheet maps, globes, introductions to geography, atlases, and histories. He ran a prosperous business, although he is not to be ranked among the best geographers (despite his own marked protests to the contrary); his works still impress the viewer for their fine engraving and aesthetic elements, but they were not the best maps available. Like many mapmakers of his time, Moll produced serial publications, such as his long-running *Atlas Geographus* (1708-1717), which appeared in installments over a ten-year period.

Reinhartz has reconstructed the intellectual and social world Moll came to join. Raising his status from artisan working on commissions, to a knowledge producer, Moll found

189. Dennis Reinhartz, *The Cartographer and the Literati: Herman Moll and His Intellectual Circle* (New York: Edwin Mellen Press, 1997).

190. Since Englishman of the late seventeenth and early eighteenth centuries certainly knew the difference between the Empire and the United Provinces, this seems a plausible explanation; yet it is not advanced in Reinhartz's book or in any other treatment of Moll's life that I have found.



Figure 26. Frontispiece from Sir Jonas Moore's *New System of the Mathematicks* (London: Printed by A. Godbid and J. Playford, 1681), in which Herman Moll's first known maps appeared. SIL33-160-01. (Smithsonian Institution Libraries, Washington, DC).

camaraderie at that new intellectual institution, the coffeehouses of London, with London's philosophers, writers, and scientists. Among his friends were Daniel Defoe, who included Moll's maps in *Robinson Crusoe*, and Jonathan Swift, who both mentioned Moll by name and included maps by Moll in *Gulliver's Travels* (see Moll's bio-bibliography in Appendix). Other members of his social circle include the explorer and pirate William Dampier and the experimentalists Robert Boyle and Robert Hooke. His coffeehouse connections with travelers like Dampier helped Moll secure new information on geographic and ethnographic discoveries before his less-connected rivals. Besides several world atlases and atlases of Europe, Herman Moll created many maps of the New World. These were designed to encourage colonial settlement, offering views of an idealized North America as an empty land rich in resources. For example, the most well-known vignette to appear on a Moll map, the so-called "Beaver Map," gave viewers a scene of industrious, anthropomorphic beavers cutting down trees and marching in formation to carry wood to build a dam, and thus emphasized the abundant natural resources (wood, waterways, pelt animals) available on the Atlantic seaboard.¹⁹¹

Herman Moll was an enthusiastic competitor, judging by the harsh critiques he leveled against his commercial rivals. Of course he was not alone in publishing personal and professional attacks on others; indeed what we might call "anti-advertisements"—published texts suggesting the public not buy the competitor's wares—were common marketing tools and appeared in broadsheets, catalogues, atlases, and on sheet maps.¹⁹² Indeed, Ashley Baynton-

191. The vignette was created by Nicolas Guérard based on the travel reports of Jean-Louis Hennepin, and appeared on a wall map, *L'Amerique*, by Nicolas de Fer (1698); see Edward H. Dahl, "The Original Beaver Map: De Fer's 1698 wall map of America," *Map Collector* 29 (1984): 22-26. Moll did not use De Fer's plate to copy the vignette; instead, his engraver copied directly from the map onto the copperplate, thereby reversing the image when the map was printed.

192. A close examination of these advertisements is lacking. Such a study, including the ways in which an attacked mapseller would publish counter-attacks, thus bringing the public into the debate, could illuminate better the mentalities of the participants in early modern London's growing consumer markets.

Williams has referred to the London map trade at the turn of the eighteenth century as “a fierce and cut-throat business,” with advertisements full of “overblown examples of purple prose.”¹⁹³ Baynton-Williams even singles out Moll among his competitors as a “master of abuse” and notes that Moll “seems to have been relatively even-handed. In the final analysis, he does not seem to have had a good word for anyone!”¹⁹⁴

Key to Moll’s competitiveness was the promotion of himself as an artisanal geographic expert by virtue of his experience making maps and compiling atlases. Moll could not claim formal education—he was part of the urban artisan rank, trained as an engraver—nor was he ever appointed as a royal geographer, but after producing his own maps for a few years, he began to promote himself as an expert in mapmaking. He used three primary strategies for asserting this particular persona: adopting the identity of a “geographer”; positioning himself as a victim of piracy; and denigrating the worthiness of maps by other publishers.

He usually refers to himself carefully in catalogues and other advertisements as “Herman Moll, Geographer.” This title, modest as it seems, is in fact rather bold given his lack of formal training or any official recognition of his work. Many of his London competitors frequently styled themselves more modestly as “print and map sellers.” As discussed above, a “geographer” in seventeenth-century England was a moldable identity, still lacking the supports and hallmarks, so to speak, of a true profession. Yet compared to calling oneself “map seller,” thus emphasizing the shopkeeper’s role as most producers of map products did, Moll’s adoption of “geographer” was a claim of substantial knowledge and expertise not only in making maps, but in the abstract concepts and content of world geography. He is the only world atlas compiler

193. Ashley Baynton-Williams, “Treacle and Vinegar: Publisher’s Adverts,” *Map Forum* 6 (1999), accessed February 3, 2007, <http://www.mapforum.com/06/6issue.htm>.

194. Baynton-Williams, “Treacle and Vinegar.”

in this study to adopt the identification without ever holding a royally-bestowed honorific. This simple moniker demonstrates belies Moll's effort to distinguish his work from merely commercial map printing—and certainly from his artisan training in engraving—even though in reality Moll was no different from his competitors in training and knowledge.

Besides adopting the title of geographer, Moll furthers his persona as an artisanal, experienced expert by positioning himself as the victim of persistent piracy. The logic of this marketing strategy is simple: potential buyers could be expected to conclude that Moll's maps must be in demand and therefore must be worthy, if others are copying his maps to sell for their own profit. In atlas frontmatter, as well as in catalogues, on broadsheets, and on the body and margins of individual maps (indeed, almost anywhere there was empty space he could fill with text), Moll offers sharp warnings to the reader about the menace of false and unauthorized maps—copies of his maps—being sold to unwary buyers.

He openly accuses English, French, and Dutch mapmakers of copying his maps and plans, poorly, and selling them both abroad and right under his nose in London. Sometimes the maps are sold under his name, with the unscrupulous rivals banking on the reputation as a geographer that Moll has established; other maps are published under the map pirate's name. For example, Moll placed a long "Advertisement" on the body of his world map of 1709, included in multiple editions of his folio *The World Describ'd* (first edition 1709) and other world atlases.¹⁹⁵ In it he asserts how much he has suffered, personally and professionally, from map pirates: "Now it being a great hazard we run in Undertakings of this nature, and we labouring under y.e frequent hardships, of having our Maps Copy'd upon us in Holland &c. brought over hither,

195. Bibliographers disagree on the publication dates for *The World Describ'd*, due in part to the different collations of editions and to the varied dates on maps included in the atlas. This study follows the British Library cataloging and dates the first edition to 1709.

publicly advertised and sold under other names, to their Profit, and to y.e manifest defrauding of us, as well in point of Reputation, as otherwise.”¹⁹⁶ The stock catalog printed to accompany *The World Describ’d* (1717 edition) also complains about piracy and its damaging effects:

I have been the more particular in describing these Maps, that Gentlemen may know them from others, and not be imposed upon; for there are Persons who sell Setts of Maps, under the Notion of their being all mine, but leave out the Principal of them, viz. Europe, England, Ireland, Germany, France, Spain, Flanders, &c. and put Old and Erroneous ones of their own in the room of them. This they do to under-sell, to the confounding of the whole. . .¹⁹⁷

Moll refrains from naming names, but he does offer public threats to those map pirates to cease their activities lest he be forced to shame them publicly. The same stock catalog threatens the offenders in no uncertain terms: “[Pirated Moll map sets] have been sent me with Complaints of this base way of Dealing; in which, if those who have been guilty do persist, I shall expose their Names publickly in Print, that all Buyers may be aware of such Impositions.”¹⁹⁸

It is certainly possible that Moll does not name the offenders because he was not in fact sure of their identities. While in London the proximity and relatively small number of map and print sellers meant that Moll had the opportunity to catch those trying to pass off his maps as their own, some of the piracy happened in France and Holland, and Moll could not have been very aware of the dealings of participants in the map trade in those places.

It is true that Moll’s maps were copied in Holland and elsewhere—but not only his. In fact, almost all established mapmakers faced financial losses due to map pirates. However, it is also true that Moll was no less guilty of the ubiquitous crime of map piracy than those he

196. Herman Moll, “Advertisement,” in *The World Describ’d* (London: J. Bowles, 1709), n.p.

197. Quoted in Ashley Baynton-Williams, “Treacle and Vinegar.”

198. Quoted in Ashley Baynton-Williams, “Treacle and Vinegar.”

accused, freely borrowing content from the maps of others. In fact, some of his publications are barely distinguishable from their principal source, except for the addition of the lavish vignettes and other engraved decorative elements for which Moll was well-known.

Moll's apparent incongruence on the issue of copying—engaging in unauthorized copying while publicly decrying the practice when he is its victim—demonstrates the self-presentation strategy that motivated his actions. He could have privately pursued legal recourse against those who copied his maps as some of his contemporaries would do; instead he chose to transform his grievances into promotional devices. The Herman Moll presented in these advertisements is beleaguered by those who would profit from the fruits of his hard labor and knowledge, who would make poor copies of his accurate and well-researched maps and pass the new maps off as their own.

Moll also asserts a persona of geographic expert by contrast of his carefully-compiled maps with the inaccurate maps sold by his rivals. The flourishing rhetoric of the advertisement on the world map in *The World Describ'd* makes a case against his competitors in no uncertain terms:

. . . SINCE the beginning of this New Set of Maps, now completely finish'd, several ignorant Pretenders have started up, and with great Shew and Noise frequently advertis'd their trifling Performances; calling them Cheap, Curious, Useful and Correct: As to the first Epithet, they are really Dear at any Price; in the second place, every Body may see they are Wild, Confused and Poorly Engraven; as for their Usefulness; they tend only to lead People into Errors and Dangers; lastly, they are so far from being Correct, that the Fundamental or Projection of their Principal Maps is Notoriously False.¹⁹⁹

199. Herman Moll, "Advertisement," in *The World Describ'd*, n.p.

He repeatedly issues similar pronouncements about the worthiness and accuracy of other atlases and maps, positioning himself as qualified judge—a position that strongly implies his geographic expertise and qualification to offer a valid assessment.

The World Describ'd's map of Spain also sets Moll up as an expert qualified to judge other maps and warn potential buyers against trusting other mapsellers:

Among all y.e Cheats that y.e World are dayly abus'd with, none have lately been more Scandalous than that of Maps, some times New Ones that are put out by Ignorant Pretenders, Some times mean & imperfect forreign Maps are Copy'd and publish'd by them as their own, and haveing no Judgement or Knowledge of what is good or bad, correct or incorrect, They basely impose on the Publick with pompous Titles, & pretend they are Countenanc'd & assisted by those who either never Saw, or despise their wretched Performances. Nor are we cheated only by these Pretenders at home, but by others from abroad, who seeing what Trifles have a Currency here, are encourag'd to publish every wretched Cobby that falls into their Hands. . .²⁰⁰

Note that Moll dismisses these “ignorant Pretenders”—his commercial rivals—as having “no Judgement or Knowledge of what is good or bad, correct or incorrect,” in implied contrast to Moll’s own judgment and knowledge about which maps and atlases are mean, imperfect, wretched trifles, and which are worthy of the buyer’s money. Moll asserts himself as an expert, and one who has charged himself with protecting the public by exposing these cheats. Yet Moll makes an implicit claim about his virtuous character as well. Along with impugning the quality of others’ atlases and maps, it is interesting to note that Moll proclaims himself, again by contrast, as virtuous and honest in his work and in his treatment of his customers. He impugns the integrity of his commercial competition as a group as well as individually, even those whom he does not accuse of stealing his maps for their own profit. In Chapter 5, I examine the similar persona of the virtuous artisan as deployed by Robert Morden.

200. Herman Moll, *Map of Spain* (1711), in *The World Describ'd*, n.p.

Thus in three ways Herman Moll projected a persona as a geographic expert: calling himself a geographer, complaining of piracy against his work, and passing judgment on the value of his rivals' maps. There are pronounced discrepancies between his assertions and the historical truth—claiming a geographer title despite a lack of academic training in mathematics, astronomy, and geography; complaining of the abuse by intellectual property pirates when he was just as guilty as they; and asserting the higher accuracy of his maps when they were not better on the whole than his competitors' maps. These discrepancies point to Moll's conscious construction of an integrated, public self-fashioning that he believed would serve his commercial interests by making his atlases more creditable.

The Scholarly Geographic Expert

The third common persona used by early atlas compilers is that of the geographic expert by virtue of scholarship. A number of atlas compilers chose to assert their authority to create a world atlas due to their years of study of geography and its best authors from the classical and medieval periods as well as contemporary authorities. Notably, the decision to present oneself as an expert geographic scholar did not hinge on having actually received academic training in mathematics, descriptive geography, Latin, vernacular languages, etc. Similar to the way in which the persona of the patron's servant could be deployed without holding client status, several atlas compilers deployed a scholarly persona that depended on the use of meaningful symbols rather than fact.

John Speed's Portrait: The Atlas Compiler as Scholar

John Speed's self-presentation included a strong scholarly persona. Besides his desire to portray himself as the client of the king and well-placed lesser patrons discussed earlier, Speed's self-presentation also included assertions of his expertise in geography, not by his experience but by virtue of his long study. Perhaps nowhere in the *Theatre of the Empire of Great Britain/A Prospect of the Most Famous Parts of the World* is Speed's authority more clearly laid out than in the portrait included next to the title page.

Speed's portrait appeared prominently in editions of the *Theatre* as well as in editions of *A Prospect* starting in 1632. It was engraved the year before, after Speed's death, by a prominent engraver, Solomon Savery, after a painting done from life. The geographer is shown in good health, vigorous though not young; the original painting was completed around 1602, since the Latin caption says the famous sitter (*vir clarissimi*) is 50 years old (Figure 27).

Recalling that Speed was a humble tailor for the first half of his life, and was not well educated, the viewer is struck by the richness and by the intellectual accoutrements with which he wished to display himself. Far from a manual laborer, the Speed of the portrait is a gentleman-scholar. He sits in a carved wooden chair trimmed with fringe. His sleeves are trimmed with lace, his face framed by a thick lace ruff. He wears no visible jewels, but his fashionable short gentleman's doublet is made of rich, contrasting fabrics, as is his coat trimmed with fur. A swath of brocade draped above and to the right evokes the classical setting of hundreds of aristocratic portraits from the early modern period. Speed looks out of the frame with an intelligent, piercing gaze. His right hand is idle; his left holds a pair of dividers with confidence over a sheet map.

In short the atlas-maker presents himself through this image as an expert, and an expert in the field of geography. He is a successful man, wealthy though not garishly so, a scholar and intellectual. It is interesting to note that, given the lifelong passion for history and all things antiquarian that led him to geography, Speed chooses to identify his profession only as a geographer, not as an antiquarian, and certainly not as a tailor. Nothing in the image recalls the first forty-odd years of his life. There are no references to tailoring, which is not surprising since he clearly was proud to have risen above “the daily employments of a manuell Trade,” and no references to his family. Yet, remarkably, there are also no historical symbols—no books, busts, coins, metals, or any of the stock-in-trade of the antiquarian—to mark an association with antiquarian scholarship, as appear in other seventeenth-century historians’ portraits. It would not have been out of place to include antiquarian symbols, given the traditional relationship between geography and history (*geographia oculus historia*). As depicted, Speed is only a geographer, a man who works only through the scientific and the visual—a man of surveys, measurement, geometry, numbers, and scientific instruments. This singularity of identity is part of what makes the portrait a powerful form of self-presentation. It is an illustration for a geographic atlas; its maker, according to the image, is an expert geographer and nothing else.

Alexis-Hubert Jaillot’s Portrait

French atlas compilers likewise chose to stress their expertise and knowledge as an important component of their personas. That of Alexis-Hubert Jaillot is a typical example.



Figure 27. The tailor-turned-scholar: Little in this elegant portrait of John Speed holding dividers over a map recalls that this man has spent decades wielding needle and thread as a simple tailor. From *A Prospect of the most famous Parts of the World... Together with all the Provinces, Counties and Shires, contained in that Large Theater of Great Brittaines Empire* (London: Printed by John Dawson for George Humble, 1631). C.7.c.6. (Maps Reading Room, British Library, London, UK).

Opening to the title page of the *Atlas françois*, the reader is struck first by the full-page portrait that faces it (Figure 28). Immediately Jaillot makes his status as a geographer and a scholar clear. The atlas maker's skillful self-presentation emerges from his simultaneous deployment of two associations, his patronage connection and his connection to the world of scholarship and erudition, through the depiction of his clothing, accoutrements, and the setting, as well as the caption.

The elegant and self-assured figure painted certainly does not seem to be a man of lower status, a mere shopkeeper who was formerly a sculptor. Jaillot does not display around him the symbols of trade, such as currency or ledgers or a balance, nor anything that would remind the viewer that his industry is that of a printer. Instead of representing himself as he must have appeared in his daily work, Jaillot chooses to present himself dressed as a wealthy gentleman, with lace cravat and lace-trimmed chemise under a buttoned waistcoat of rich fabric. To ensure that the viewer understands the presentation of the atlas maker as a scholar, there is also a classical drapery—convention of aristocratic portraiture and reminiscent of ancient Greco-Roman culture and learning—which is wrapped over his right arm and tucked around his body, the other end thrown with artful carelessness over his left shoulder. No one would direct pressmen, cut book pages, or handle cash in classical drapery.

Jaillot also wears an extravagant dark wig whose tight curls make the wearer seem taller than he is and cascade luxuriously halfway to his waist. Louis XIV had made fashionable, almost mandatory, the wearing of periwigs among French elite and bourgeois men some years earlier, and court fashion dictated changes in the length, color, powdering, and style of the wigs from year to year. Perhaps surprisingly, French sumptuary laws did not address who could and



Figure 28. The gentleman scholar in his study: Alexis-Hubert Jaillot's frontispiece portrait in the *Atlas françois* (Paris: Alexis-Hubert Jaillot, 1698) presents an educated man at leisure, not a shopkeeper. GeDD-4796(62-63). (Cartes et Plans, Bibliothèque Nationale de France).

could not don a periwig—thus Jaillot, though only a shopkeeper of the Third Estate and not an aristocrat, could wear one if he could afford it, making the wig in France a sign of a man's wealth rather than his actual social rank.²⁰¹ When seen in combination with his elaborate clothing and classical drapery, the wig shows viewers a respectable, wealthy, fashion-conscious and elegant man. He is a man who can afford the luxury of hours reading in his study, an impression enhanced by the portrait's setting.

Behind the atlas maker is a large bookshelf overflowing with thick tomes. Jaillot was a book- and map dealer, yet the effect created by the setting is very different from that of a busy commercial shop in the heart of London's bookseller's district. It appears to be a spacious gentleman's study in a country estate, an impression confirmed by the riparian landscape glimpsed through the large window. The objects that surround the atlas maker and the setting of the portrait also serve to remove Jaillot from his actual daily environment and reinforce his expertise and its origin in formal learning. From his left hand dangles a compass, symbol of the art of earth measurement. His right hand holds a large Latin edition of his *Atlas françois*, the title *Atlas gallicus* easily legible on the spine. The title is in fact a fiction—no Latin edition of the *Atlas françois* is known, rendering the Latin title even more significant as a means of establishing a scholarly persona for the atlas compiler, since only scholars could read and write Latin. The decorative binding of the *Atlas* matches those of the books behind him, intimating that its author has produced those books as well. On the worn stone pedestal to the right (itself a recollection of antiquity), rests a large globe in a wooden Dutch-style base, partially covered by a long sheath of drapery (another reference to antiquity). Jaillot is thus flanked by the textual and

201. See Michael Krass, "Big Hair: A Wig History of Consumption in Eighteenth-Century France," *American Historical Review* 111, no. 3 (2006): 631-659.

material evidence of his learning, while the compass identifies the particular field of that learning.

The title of the atlas is not the only text in a learned language found in this complex portrait. The portrait's Latin caption names the atlas compiler and establishes his status as servant of the king of France: Alexius Hubertus Jaillot, Regis Christianissimi Geographus Ordinarius (geographer-in-ordinary to the most Christian king).²⁰² The use of Latin rather than French (within a French-language work) lends the portrait an air of erudition and classical sophistication that had, by the time of the portrait in 1698, already become fairly uncommon in commercial geographic works, a genre that had adopted the vernacular as a means of increasing sales. Beyond its use in the liturgy, Latin had been restricted to the universities by the seventeenth century. Thus its use in a portrait in an otherwise vernacular work was a clear attempt to associate the subject of the portrait with academia. In fact, by 1700, virtually the only geographic works published that were still in Latin were ancient geography works designed for the academic market.²⁰³ Although the phrase Jaillot uses had to be simple to ensure that his audience, mostly lacking university education, could understand it, its use associated Jaillot with the world of scholarship, academies, and universities.

Thus the different components of Jaillot's portrait combine to present a coherent image of the atlas maker. In several respects it is a misleading image—Jaillot was not a country gentleman and was not university-educated—yet in this case that was exactly its purpose: Jaillot wanted to construct a particular persona to convince readers of the *Atlas françois* not only that he was an expert in the field of geography and thus his atlas could be trusted to be accurate, but also that his

202. It is notable that, unlike many other dedications to royalty, Jaillot does not here name the most Christian king's kingdom, suggesting that he did not expect the atlas to be sold outside of France.

203. See Françoise Waquet, *Latin or the Empire of a Sign*, trans. John Howe (New York: Verso, 2003).

expertise derived primarily from his scholarship. The portrait reinforces Jaillot's patronage connections, made more explicit in other frontmatter, but here they are secondary to establishing the atlas maker's geographic expertise.

Allain Manesson Mallet as Scholarly Geographer

In conjunction with presenting himself as a patron's servant, atlas compiler Allain Manesson Mallet also created a persona as a geographic expert by virtue of his scholarship. His world atlas, *Description de l'univers*, promotes this persona in its geographic texts as well as in the frontmatter texts.

As mentioned earlier in discussing Mallet's client persona, he is unusual among the atlas compilers in this study, and indeed among atlas compilers of the seventeenth century in general, in having a military and surveying background. Mallet repeatedly invokes his position as a mathematics instructor—by definition a position requiring academic training—as a means of asserting his qualifications to compile a world atlas. This persona begins on the title page of *Description de l'univers*, where he styles himself “Allain Manesson Mallet, Maistre de Mathematiques des Pages de la petite Escurie de sa Majesté,” jointly promoting his learning and his royal connection. In the preface, he even invokes his teaching position to excuse the omissions and other errors that the reader will find in the atlas, explaining that during the compilation and printing process, he was “obligé d'aller souvent á S. Germain & á Versailles, pour enseigner les Mathematiques aux Pages du Roy, & a ceux de leurs Altesses Serenissimes Messeigneurs les Princes de Conde & Duc d'Anguien.”²⁰⁴ He explains that he will issue an

204. Allain Manesson Mallet. preface to *Description de l'univers* (Paris, 1683), n.p.

Erratum to compensate, and, in a final sentence that sounds very familiar to modern scholars, begs the reader not to hold any of his learned sources responsible for his errors.

The dedication letter to Louis XIV follows the title page. In it Mallet carefully notes that he has conducted extensive research in compiling this large atlas. He informs the potential buyer that he has added to the atlas “tout ce que les plus Sçavans ont remarqué de curieux & de sublime dans la Nature; & je me tiens trop heureux après les longues recherches que j’ay faites, de trouver aux pieds de mon Roy, le terme le plus glorieux qui pouvoit borner ma carrière.”²⁰⁵ Note that his “longues recherches” are not in surveying or another hands-on form of information-gathering, but rather in reading the works of the learned on curious and sublime natural phenomena. Here Mallet asserts his familiarity with learned writers, something many contemporary mapmakers could not claim. In the following pages, he becomes more specific about the scholarship that went into making *Description de l’univers*.

The atlas’ preface establishes Mallet’s geographic expertise in two ways. First, Mallet names the scholarly friends who contributed to his knowledge. He tells the potential reader that he has been collecting the material for *Description* for more than a decade, but even so, the material is so extensive that he could not have accomplished the feat without the assistance of “plusieurs Sçavans, dont j’ay pû ménager le commerce & l’amitié.” He then names these six respected scholars, including Abbé Baudrand (Michael Antoine Baudrand, 1633-1700)²⁰⁶ and Abbé Picard (Jean Picard, 1620-1682), “qui s’est particulièrement distingué dans l’Académie Royale des Sciences.”²⁰⁷ He also mentions “feu Monsieur Philippe Mallet” (1606-1679), his

205. Mallet, “Epistre,” in *Description de l’univers*, n.p.

206. Mallet references Baudrand’s *Geographia ordine litterarum disposita* (Paris: 1681-1682). See Robert C. White, “Early Geographic Dictionaries,” *Geographical Review* 58, no. 4 (1968): 652-659.

207. An early member of the Académie Royale des Sciences (admitted 1667). Picard was a leading astronomer, mathematician and surveyor, well known for his contributions to scientific cartography.

relative (perhaps uncle) and mathematician, who authored a mathematics text (*Cursus mathematicus*), which Mallet edited and republished under his own name as *Géométrie pratique* in 1702, and a text on military fortification techniques. By name-dropping these friends and sources, Mallet promotes himself as a fellow learned man, keeping company with Paris' most respected Académiciens.

Secondly, Mallet's preface explicitly promotes his familiarity with ancient history and ancient geography, which were not typically in the domain of artisan mapmakers. By 1683, when *Description de l'univers* was published, ancient geography had already become largely divorced from modern geography in texts and atlases. The purpose of geographic study evolved in the seventeenth century to emphasize understanding current affairs, such as the colonial trade wars, over understanding historical events (*geographia oculus historia*), which had been the traditional goal of geography when it was exclusively the province of the universities. In response to changing demand, the creators of atlases and geographic dictionaries catered more and more to the contemporary interests of buyers, and by and large dropped ancient geography content (the exception being those who, like Pierre Duval, specialized in scholastic products). Thus by the time of Mallet's publication, ancient geography was associated primarily with the universities, with erudition and scholarship. Mallet includes some ancient geography along with modern material. More importantly, in his preface, he discusses this inclusion at some length, specifying that he will provide ancient geography prior to modern descriptions, and justifying his decision to cite modern authors for ancient geography: "pour la commodité du Lecteur, qui trouvera les anciens Geographes citez dans les Modernes ou je le renvoye. . .car s'il falloit. . .rapporter les endroits de tous les anciens Auteurs qui en ont fait mention, les marges de mon Ouvrage auroient este trop charges de ces sortes de citations, qui ne sont recherchees que par un petit nombre de

Scavans, & qui seroient aussi importunes qu'inutiles a ceux qui n'ont pas des Bibliothèques completes."²⁰⁸ In other words, Mallet is himself an expert on the ancient and modern authorities, but he explicitly will refrain from burdening his reader with that level of erudition. Indeed, the descriptive texts in *Description de l'univers* themselves further present Mallet as an expert by virtue of his scholarship. These texts differ from all other commercial atlases produced by the eight compilers who comprise this study, by featuring copious marginal citations to authority and other academic minutiae.

Thus in his world atlas, Mallet asserts his credibility with four textual strategies. He deploys his title as mathematics instructor; mentions by name the numerous scientific authorities who are both his friends and colleagues; includes ancient geography with modern descriptions, a link to university studies; and, lastly, uses the scholarly convention of marginal references to authority. All of these strategies serve to promote Allain Mallet's persona as a geographic expert whose authority to make an atlas of the entire world derives primarily from his advanced learning.

“Conversant in this Study”: John Senex as Scholarly Geographic Expert

With John Senex (1678-1740), we find another artisan-rank atlas compiler who, lacking formal education, successfully managed to create a persona as a scholarly authority on mapping, astronomy, and world geography. Born in Ludlow, Shropshire to John Senex, a gentleman, the younger Senex became an apprentice engraver to London bookseller Robert Clavell (see bibliography in Appendix for Senex's life and career). He became a master in the Stationers'

208. Mallet, preface to *Description de l'univers*, n.p.

Company in 1705. In his early career he engraved the illustrations for a number of scientific publications, including copperplates for a series of almanacs and for a text on microscopy and telescoping. Yet for most of his 35 years in business Senex specialized in the production of sheet maps and globes, sometimes as compiler and sometimes as engraver of a work compiled by a partner. He is perhaps best known today for the detail and clarity of his globes, engraved in Latin and English. Like most mapmakers, Senex occasionally produced and published his own works on other topics, and served as publisher and vendor for works by other authors. Among his publications are local histories, maritime works, numerous astronomical texts, theological tracts, and ecclesiastical histories, many of these with Latin texts, intended for an academic audience. Senex alternately kept his own independent shop and worked in partnership with other London mapmakers to produce labor- and cost-intensive works such as atlases. Over the course of his career, Senex' partners included Jeremiah Seller, Charles Price, George Willdey, and John Maxwell.

His publications included many individual maps, mostly of England and France, and he is especially noted for a set of road maps of England and Wales (1719) that was still in print in 1775. Senex's atlases include *A New Sett of Correct Mapps* (1707), *The Universal Geographer, or Compleat Atlas containing all the known countries in the world* (1708), and a beautiful folio production, *A New General Atlas* (1721), which included both his own maps and maps by other geographers. In 1727, Senex was made a Grand Warden of the Freemasons; the following year, he became a Fellow of the Royal Society, a title that distinguished him from the majority of artisans in the Stationers' Company. After his death in 1740, his widow Mary carried on the Senex book and map trade.

Yet for all his success, or perhaps because of it, Senex suffered from a legitimacy problem over part of his career. This makes him an especially interesting subject for analysis of his self-presentation. He had a close but possibly shady professional relationship with the famed astronomer Edmund Halley, publishing Halley's celestial observations and using Halley's data to make his globes. But Halley's rival, royal astronomer John Flamsteed, publically accused Senex and Halley of conspiring to steal his astronomical data and compiling it with Halley's data in Senex' publications.

Flamsteed's accusations led one of his supporters to worry that Senex was "too much a tool" of Halley to be trusted, adding caustically that Senex "is reputed the very worst engraver in London."²⁰⁹ The Flamsteed-Halley affair is mentioned here to give context to Senex's self-presentation as a scholarly geographic authority. The world of astronomical and geographic experts of seventeenth- and early-eighteenth century London was small and highly competitive. It was a world characterized, as Steven Shapin has shown, by strong associations of cultural and scientific authority with gentlemanly virtue, including honesty. In the gentlemanly culture of natural philosophers, personal knowledge of the claimant's character was necessary to evaluate his scientific reports. The suspicion that a man conducted himself dishonestly, no matter how high his rank, cast a shadow over any claims he made of natural knowledge: "Practical evaluation of scientific testimony pervasively relied upon the recognition of integrity and disinterestedness in the source. Narratives of empirical evidence received through testimony repeatedly specified the integrity of sources: 'a gentleman,' 'a person of quality,' 'a person of

209. The affair is discussed in Adrian Johns, *The Nature of the Book*, 615-616. Johns' opinion of the situation is clear; he calls Senex a "lowlife." On Senex's reputation and abilities, note that his works are now recognized as some of the finest maps to be published in early eighteenth-century London.

honour.”²¹⁰ Lack of personal virtue was equated with lack of rigor and truth-telling in learned matters.

Thus, unlike other atlas compilers discussed in this chapter, Senex was himself under public criticism from a group of his peers for dishonest appropriation of another's works. Although he was not what we would today term a scholar, Senex's commercial partnership with Halley and the learned nature of his publications, many aimed at university students, meant that meant that he needed legitimacy within the scholarly community in order to be commercially successful. It would seem a natural response for him to be even more conscientious than his peers about establishing himself as an authority who, like any credible scholar, gives proper credit to the various sources of the data used in compiling his maps and atlases. Indeed, Senex provides more detailed and explicit discussion of his sources than any other early English world atlas compiler, in the process promoting himself as an expert on classical and modern geographic scholarship.

Perhaps the clearest evidence of Senex's attempt to present himself as a scholarly authority is found on the title page of *A New General Atlas*. On the first leaf, the title page proclaims the work as:

A New General Atlas containing a Geographical and Historical Account of All the Empires, Kingdoms, and other Dominions of the World: With the Natural History and Trade of each Country. Taken from the Best Authors, particularly Cluverius, Brietius, Cellarius, Bleau [ie, Blaeu], Baudrand, Hoffman, Moreri, the two Sansons, Luyts, the Atlas Historique, Sir John Chardin, Le Brun, Tournefort, &c.²¹¹

210. Steven Shapin, *A Social History of Truth*, 226-227.

211. Senex, title page of *A New General Atlas*, n.p.

No less than thirteen sources of geographic information are listed by name (Figure 29). Who are these “best authors”?

Three were academic mathematicians who published in Latin for an academic audience. Philippus Cluverius (1580-1623) was a near contemporary of John Speed. Born in Prussia, he studied and published at Leiden and so is usually classified as a Dutch cartographer. His masterpiece, the geographic textbook *Introductio in Universam Geographiam*, first appeared posthumously in 1624, and was reprinted in over sixty editions by 1729.²¹² Philippe Briet (1601-1668) was a Jesuit priest and scholar who specialized in ancient and sacred geographic textbooks in Latin for Jesuit college students. His most important work was *Parallela Geographiae Veteris et Novae* (1649), which as the title suggests, offered parallel maps and descriptions of ancient and modern geography.

German-born Andreas Cellarius (c.1596-1665), like his fellow German Cluverius, made his name in the Netherlands. Trained as a mathematician and best remembered as an astronomer, he served as rector of a Latin school in Hoorn, and published on engineering, astronomy, and geography. He is best known for the celestial atlas *Harmonia Macrocosmica* (1660).²¹³

The Amsterdam mapmaker Joan Blaeu (or Blauw) (1598-1673) produced exquisitely engraved and gorgeously illustrated maps and atlases; the Blaeu publishing house dominated the Dutch cartographic industry through most of the Netherlands’ “Golden Age,” and thus dominated European cartography as a whole. Yet despite their monopoly over the East and West Indian Companies' surveys, the Blaeus privileged aesthetic appeal and lavish, lengthy

212. See H.A.M. van der Heijen, “Phillipus Cluverius and Dutch Cartography: An Introduction,” *Quaerendo* 32, no. 3-4 (2002): 222-244.

213. Rob H. van Gent, “De hemelatlant van Andreas Cellarius: Het meesterwerk van een vergeten Hollandse kosmograaf,” *Caert-Thresoor* 19 (2000): 9-25.

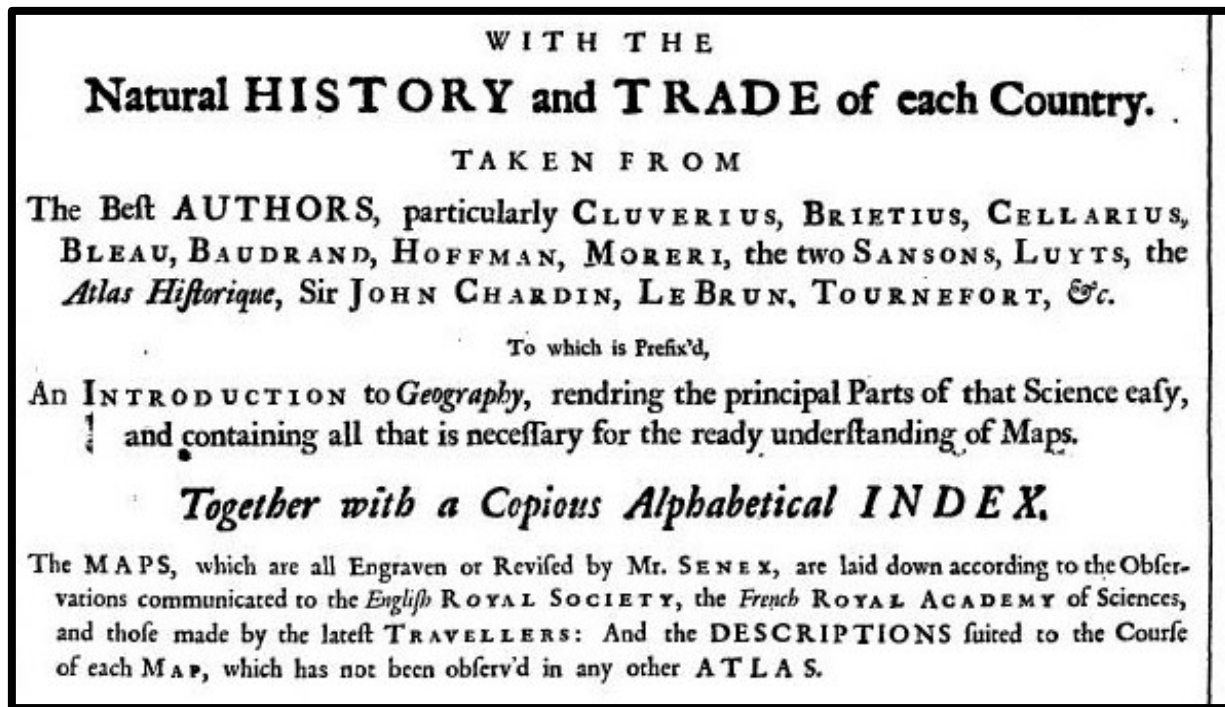


Figure 29. Detail of the title page of John Senex's *A New General Atlas* (London: Daniel Browne, 1721), which promoted itself to potential buyers with an extensive listing of other geographic authorities. G1015.b.S57 1721 (Map Division, New York Public Library, New York, NY).

productions over accurate data, and their works were frequently outdated by the time they were published. Michel Antoine Baudrand (1633-1700) was a Parisian *geographe du roi*, author of the Latin geographic dictionary *Lexicon Geographicum* of 1677, which John Locke strongly recommended to gentlemen wishing to be conversant in history and geography.²¹⁴

“Hoffman” refers to Johann Baptist Homann (1663-1724), whose geographic atlases were the most respected to come out of the German states in the early eighteenth century.²¹⁵

214. Locke also recommends two general atlases, those of Peter Heylyn and Herman Moll; he claims Moll's is more up-to-date, while Heylyn's is preferred for the reader who wants in-depth descriptions. John Locke, "Some Thoughts Concerning Reading and Study for a Gentleman," *The Works of John Locke*, vol. 3 (London: Thomas Tegg, 1823), 297-300.

215. Carl Moreland and David Bannister, *Antique Maps*, 3rd ed., (London: Phaidon Press, 1993), 84.

Unlike most of the other authors mentioned, Homann was still actively producing works when Senex published *A New General Atlas*. Encyclopedist Louis Moréri (1643-1680) was a French monk. He wrote on a variety of subjects and made his name with *Le Grand dictionnaire historique* (1671), a compendium of sacred and human history and classical mythology. It appeared in twenty editions over 88 years.²¹⁶

Nicolas Sanson (1600-1667) is one of the best known French cartographers.²¹⁷ It was largely due to the influence of his rigorous and plain style of mapping that the French surpassed the Dutch as cartographic leaders in the last half of the seventeenth century. His sons Guillaume and Adrien continued their father's work, updating and reprinting his atlases and sheet maps, but were not known for original contributions. The well-known Dutch astronomer Jan or Joannes Luyts (1655-1721) published widely on his subject, most notably the *Astronomica institutio* (1692).

Three of Senex's "best authors" were contemporary travel writers, two French and one Dutch. The French-born Huguenot Sir John (or Jean) Chardin (1643-1713) was the author of the *Travels of Sir John Chardin into Persia and the East Indies* (first edition 1686-1711).²¹⁸ He twice made extended voyages as a merchant across Persia and India. After settling in London to avoid persecution for his faith, he served as court jeweler to Charles II. He was knighted for his service as representative of the English East India Company in Amsterdam before writing his multi-volume memoirs, which made him famous as an expert on Persian geography and culture.

Cornelis Le Brun (De Bruijn) (1652-1726) was a painter from The Hague. He traveled to Italy in

216. *New Catholic Encyclopedia*, vol. X, s.v. "Moréri, Louis" (New York: Robert Appleton Co., 1911).

217. Moreland and Bannister, *Antique Maps*, 128.

218. Information drawn from Sir Percy Sykes, introduction to *Travels in Persia, 1673-1677*, by Sir John Chardin (New York: Dover Press, 1988).

1674, then east to Asia Minor and the Middle East, drawing and painting the monuments, flora and fauna with an eye for detail. On his return some twenty years later Le Brun published his memoirs (*Reizen van Cornelis de Bruyn, door de vermaardste deelen van Klein Asia*, 1698); they appeared in English in 1702 as *A Voyage to the Levant; or Travels in the Principal Parts of Asia Minor*, and gave Le Brun an international reputation. A second journey took him to Russia, Persia, and the Dutch colonies in India, which he recounted with many engravings in *Reizen over Moskovie, door Perzie en Indie* (1711).²¹⁹

Joseph Pitton de Tournefort (1656-1708) was also Senex's contemporary. A professor of botany and taxonomy, Tournefort was serving as director of the French royal gardens when Louis XIV chose him to lead a scientific mission to study the geography and natural history of Asia Minor and the Middle East. For two years he traveled extensively, returning in 1702 to recount his adventures in *Relation d'un voyage du Levant*, published in Lyon in 1717.²²⁰ The *Atlas Historique* is a work of ancient and modern geography by Henri Abraham Chatelain (1684-1743) that was published anonymously (the author listed only as Mr. C.). It was one volume of an encyclopedia of human knowledge that appeared in multiple volumes in Amsterdam between 1705 and 1720.

Thus, of the thirteen sources listed by name, all are what Senex would have called modern authors, of the seventeenth century. Seven were contemporary or near-contemporary geographers and mapmakers. Two were astronomers, three were travel writers, and one was an encyclopedist and historian. None were medieval, early Christian, or classical. Yet two further

219. Jan de Hond, "Cornelis de Bruijn (1652-1726/27): A Dutch Painter in the East," in *Eastward Bound: Dutch Ventures and Adventures in the Middle East*, ed. Geert Jan van Gelder and Ed de Moor (Amsterdam: Editions Rodopi, 1994), 51-81.

220. *Dictionary of Scientific Biography*, vol. 13, s.v. "Tournefort, Joseph Pitton de." (New York: Charles Scribner, 1970-1990), 442-444.

sources are named on the title page of Senex's atlas: "The maps, which are all Engraven or Revised by Mr. Senex, are laid down according to the Observations communicated to the English Royal Society, the French Royal Academy of Sciences, and those made by the latest Travellers..."²¹¹ Deploying the names of the two royal societies, discussed earlier in this study, not only identifies the atlas as favoring contemporary over medieval, classical, or biblical sources, but also identifies it as a thoroughly modern work of rigorous scholarship. Note that Senex's scholarly authority comes from his knowledge of the best sources writing in modern times; no ancient authors are listed. Although references to the classical authorities were still being included in mid-seventeenth-century atlas works, by the time of the publication of *A New General Atlas* in 1721, the classical writers were quoted almost exclusively in works of historical (i.e., classical and biblical) geography, where they remained revered authorities.

Senex's careful naming of the "best authors" from whom he has compiled his atlas is an important component of his self-presentation as a scholarly geographic authority. Not only does he present himself as thoroughly familiar with the authors listed, he goes further by assessing their value and choosing only the "best" to be his sources, implying that he is also familiar with many other authors whose works were of insufficient quality.

Like the title page, the preface to Senex's *A New General Atlas* also explicitly asserts Senex's claim to be an authority on geography by virtue of his scholarly knowledge. Unlike works by compilers such as Robert Morden who self-identified as hard-working artisans, Senex carefully lays out his own authority by making reference to his scholarly adaptation of the works of other geographic experts. In explaining the format of *A New General Atlas*—which is in fact very text-dominant and more encyclopedic than what we now would consider an atlas—Senex states that he wants to "acquaint the Reader that he will find the Authors every where [sic] fairly

quoted, by which ‘twill appear that they are such as the Learned esteem the best of their kind, whether antient [sic] or modern. We have chiefly made use of the latter, because modern Geography was our principal View, that they are much more exact than their Predecessors, and have corrected many of their Errors.’²²¹ Like Allain Manesson Mallet and John Speed, Senex approaches his subject with at least the outward appearance of scholarly rigor and broad knowledge of both the theory and practice of geography.

Even with the growth of experimentalism in natural philosophy, reference to authority remained, in and of itself, essential to making any scholarly claim in the seventeenth century, even as the universe of accepted authorities was slowly transforming from classical to modern writers.²²² University education trained students to distinguish their own contributions and conclusions from those adopted from classical or contemporary authorities; this meant that, to be considered a legitimate scholar, a writer had to quote those authorities and describe his sources, in part so that the reader could, if he chose, verify the sources himself. Thus Senex’s claim to be “fairly quoting” his sources demonstrates his desire to be seen by his readers as being in league with university-trained experts.

He continues this theme by including himself among those who have studied both classical and modern geographic inquiry and hence recognize, as the uninitiated do not, that the task of modern geographers is to correct and reform geographic knowledge: “Those who are conversant in this Study, know very well how defective the Antients were, both in their Theory and Descriptions; and that ever since Learning began to revive betwixt two and three Centuries ago, the first Authors on this Subject gave into abundance of fabulous descriptions, which served

221. Senex, preface to *A New General Atlas*, n.p.

222. See Bryce Allen, Jian Qin, and F.W. Lancaster, “Persuasive Communities: A Longitudinal Analysis of references in the Philosophical Transactions of the Royal Society, 1665-1990,” *Social Studies in Science* 24 (1994): 279-310.

for nothing but to amuse and mislead the unwary Reader, by romantick Accounts of Countries, People and Cities, that never had a Being... There was no way to reform this but by a careful Perusal of the best modern Geographers, Voyages, and Travels, which is here faithfully performed.”²²³ Senex is not the only atlas compiler to assert the need for a reform of geography around the turn of the eighteenth century; indeed, as will be examined in Chapter 5, the defective nature of received learning is a trope of seventeenth- and eighteenth-century geographic writing, such as that of Robert Morden.

Senex does differ from Robert Morden and others, however, in one important respect. While he agrees with many of his contemporaries that classical writers were flawed in their knowledge, this criticism is tempered, since the ancients lacked the data to understand correctly the shape of the world and thus cannot be fairly blamed for faulty knowledge. However Senex is unusual in criticizing writers of the Renaissance (“since Learning began to revive betwixt two and three Centuries ago”) for deliberately perpetuating “fabulous descriptions” and “romantick Accounts” of non-existent places that “mislead the unwary Reader.” His reliance in *A New General Atlas* on contemporary and therefore (by his standard) trustworthy sources is thus underlined, since even writers of 200 years ago engaged in non-scholarly practices and cannot be relied upon. Thus in several ways did John Senex assert himself as a scholarly authority in the introductory texts of his commercial atlas. He presents himself as being broadly and deeply immersed in the geographic literatures of ancient and modern authors. Moreover, he suggests that he is able to use that familiarity to evaluate the relative worth of all of this copious body of extant geographic writings and select only the most reliable sources (largely equivalent to the most contemporary sources) to compile the maps and texts of his publication. He further

223. Senex, preface to *A New General Atlas*, n.p.

understands the ongoing need for a substantial revision and correction of the many errors and deficits found in ancient works and even works from what we now call the Age of Discovery, from the fourteenth to the seventeenth centuries. Just as importantly, he asserts that he is following the rules of rigorous scholarship by presenting to the reader accurate quotations from these esteemed authorities.

Expertise by Labor and Expertise by Scholarship

When it came to promoting the authority of commercial world atlases, no geographer of this period (or any period) could claim personal authority and knowledge solely through eyewitness and observation. Although writers in other fields could and did exaggerate their experiences in order to promote their works in the seventeenth-century book market, even those very few atlas compilers who had traveled outside their native lands could not credibly claim to have observed the entire globe. The question for the compiler seeking credibility was how to convince potential buyers that his atlas was in fact accurate in its depictions when he himself had not personally seen what he described. As the above discussion has shown, one solution was to claim authority based on expertise in the geographic discoveries made by others.

Some, such as Speed, Jaillot, Senex, and Mallet, claimed personal authority by projecting a persona of the scholarly geographer. They asserted, or implied, that they had developed knowledge of the world's countries and peoples, and with that, knowledge of the science of mapmaking, through academic or self-study of earlier geographers and contemporary explorers—even when the reality of their training was less impressive. Because university education, the luxury of long study, and an extensive personal library were all privileges reserved

to an elite minority in the period in both France and England, asserting one's authority via scholarship was, in a way, to claim authority through economic privilege.

It was also to claim credibility through traditional authority. As discussed above, reference to and affiliation with venerated authority was the sine qua non of scholarship in the classical and medieval ages, and remained throughout the early modern period a powerful justification for real power in its many forms: economic, political, ecclesiastical. This is in marked contrast to the modern and humble authorities on which the persona of the artisanal, experienced geographic expert drew. Though it did not in fact reflect their lived experience, Speed, Jaillot, Senex and Mallet constructed these studious personas hoping that potential atlas buyers would associate them with a number of erudite endeavours: cosmography, astronomical observation to establish terrestrial coordinates, skill in multiple languages, mathematical cartography, contested theories about the forms of the earth, and ancient and Biblical geography. Their typical customer would have had only a shallow understanding of any of these areas, but that is precisely why it was possible for a man like John Speed, a former tailor, or Alexis-Hubert Jaillot, a shopkeeper, to construct a persona of himself as a scholar and enjoy success in mapselling. But the person who was purchasing a world atlas could be assumed to have familiarity with the outlines of serious geographic thought, as witnessed by his desire to invest a considerable sum in a world atlas. This (the atlas compilers presumed) would lead the buyer to give credit to those whom he believed had the expert understanding of such matters that he himself lacked.

Other compilers, including Robert Morden and Herman Moll, claimed authority through a different form of self-fashioning as an expert. Their qualifications to create an accurate world atlas derived from years of hands-on, practical experience compiling maps and descriptive texts.

This meant having access to many existing maps, globes, and other source materials; the basic knowledge needed to create maps to scale, on the most common projections; familiarity with compass and dividers; skill in copperplate engraving; and skill in printing. This persona fits the contemporary artisan guild or company system—i.e., the formal progression from apprentice to journeyman to master—as the artisan gains experience not through reading or coursework, but through performing the skills being learned. Experience in the sense used in this persona did not bring expertise, it was synonymous with expertise.²²⁴ I discuss in greater detail the associations surrounding tradesman status in the following chapter. In the realm of atlas- and map-making, however, this authority by virtue of experience is different from the emphasis on eyewitness and observation that was so closely bound up in early modern scientific practice. It is important not to conflate the two because of the great importance placed on observation among the theorists of seventeenth-century science. Promoters of the new natural philosophy privileged the direct observation and truthful reporting of natural phenomena.²²⁵ That is, to rely on established authority or received wisdom about the workings of the natural world was to risk accepting false ideas because received wisdom could be based on faulty assumptions, inconsistent with reality, biased, or inaccurately transmitted from the original. The only credible authority was that of one's own senses and mind and thus witnessing a phenomenon in person—experiencing it directly with the senses—was the only sure way of knowing it to be true.

224. Sir William Petty (1623-1687), political economist and advocate of the new science, did propose the creation of an encyclopedia of the crafts; before becoming bound to a master, an apprentice could learn the theory of a trade and thus complete his apprenticeship in less than the traditional seven years. For more on the artisan training system, see Steven R. Smith, "The London Apprentices as Seventeenth Century Adolescents," *Past and Present* 61 (1973): 149-161.

225. Steven Shapin and Charles Withers have described the intricate social processes by which a reporter was invested with credibility. See Shapin, *A Social History of Truth*; and Charles W.J. Withers, "Reporting, Mapping, Trusting: Making Geographical Knowledge in the Late Seventeenth Century," *Isis* 90, no. 3 (1999): 497-521.

Yet what the atlas compilers were claiming was in fact none of this. Their “experience” is not the acquisition direct knowledge from the senses; rather it is the material and process knowledge gained by familiarity and lengthy participation in a defined set of skilled tasks. The men who put forth this expert persona were not doing so to align themselves with the new natural philosophy. While chorographers, local geographers, and surveyors certainly could testify to the truth of their work on the basis of their personal observation and measurement, the men who created world atlases could not.²²⁶ In essence, all they had to work with was second-hand knowledge, even if their sources were in fact direct observers and truthful reporters. They were compilers in the simplest sense of the term. Thus their job (at least ideally, given the vast amount of map plagiarism and copying that occurred) was twofold: first, sort the received wisdom and judge its relative worthiness (by drawing on their practical experience); second, create the atlas by compiling the best sources into accurate and attractive maps, adding descriptive texts, and organizing all this material in logical order into a book.

Thus, those who made a living peddling geographic works in seventeenth-century Paris and London were both constrained and liberated by the unstable and emerging identity of the geographer. The seven atlas makers discussed above all promoted their authority, and through themselves, promoted the authority of their world atlases, by referencing their geographic expertise as one of these two personas. From the turn of the nineteenth century, a person who wanted to credibly claim to be “a geographer” or an expert on world geography would need academic and professional credentials—specialization of occupation, a bachelor’s or higher degree, and membership in a professional organization—which were recognized as legitimate by

226. Even recent histories of geographic thought do not always consider the epistemological differences between knowable, local geography, and global geography. Geography is a descriptive science, not an explanatory science; however, this distinction does not give a sense of the varying degrees of reliability belonging to different scales of geographic description well into the twentieth century.

the public and, more importantly, by other geographers. Further, once large publishing firms came to hold cultural authority (for vetting authorship, professional editing, etc.), the same man claiming to be a geographer would need to publish his works with an established publisher of scientific texts.

Yet in the seventeenth and early eighteenth centuries, neither professional training programs, nor specialist organizations, nor authoritative publishing firms existed. Geography as a distinct field of study did not exist; where it was taught in the colleges, it was considered part of applied mathematics.²²⁷ Thus the ill-defined identity of the geographer allowed atlas compilers to credibly assert multiple origins for their expertise to the same consuming public. Essentially the atlas compilers were free to assert their expertise in multiple ways. As I have shown, however, in this sample, compilers of world atlases who explicitly promoted an expert persona chose to assert expertise through one of only two means: learning by scholarship, or learning by hands-on experience; no other variation of the expert persona was discovered in the atlases under review. This suggests that in the seventeenth and early eighteenth centuries, compilers expected the atlas-consuming public to recognize and trust both routes to knowledge about the vast globe. The scholar who had studied authorities and the artisan who had long experience making maps each could, and did, credibly claim authority to present the picture of the world to an eager public. Strong sales and multiple editions of their world atlases were the successful outcome of these marketing strategies.

It is important to keep in mind that for each atlas compiler, this expertise and membership in the unofficial community of earth-describers was only one aspect of a more complex public and authorial persona. I have already described the persona of the patron's servant and the

227. The first European professorship in geography was created in 1820. See Carl O. Sauer, "Education of a Geographer," *Annals of the Association of American Geographers* 46, no. 3 (1956): 287-299.

personas of the artisanal, experienced geographic expert and the scholarly geographic expert as forms of self-presentation that were commonly deployed by commercial atlas makers in the seventeenth and early eighteenth centuries. Before turning to a case study showing how various personas could be integrated into a single self-presentation in Chapter 5, I want to highlight one unusual persona, precisely because it is unique to only one compiler and thus reveals by contrast the commonalities of the self-presentations created by the other six compilers.

The Devout Geographer: John Speed's Religious Devotion

In his *Prospect of the Most Famous Parts of the World*, John Speed presents himself as a pious Christian and his work as a Christian labor. In addition to asserting personal authority through his roles as a servant of his patrons and as a geographic expert by virtue of his scholarship, Speed invokes spiritual authority in his introductory texts as well. He presents himself repeatedly as a devout Christian with an historical paradigm that is overtly Judeo-Christian. But more important for an analysis of Speed's self-presentation are his consistent references to Christ and to events in biblical history. While these references in themselves are not unusual when compared to his contemporaries, it is striking to compare his overt religiosity with the secular self-presentations of the other seven commercial geographers address in this study.

In his address to the reader, Speed, like many writers of the time, claims that God both prepared him to produce the atlases, and worked through him: "But how the Lord then composed my mind for the Work, or rather how his own great power would be seen in my weakness, is now in some measure made manifest by raising the frame thereof to this height, which here from

the Press sheweth his aspect unto the World.”²²⁸ This long and arduous work of atlas compilation has been completed; thus the reader must recognize God’s hand in its completion. Speed’s discussions of historical events feature frequent biblical and Christian references, displaying both piety and Speed’s thorough knowledge of the Christian account of human history.

Speed also references his own death and ascent into heaven in the address’ conclusion, where he describes England as his resting place “until Christ by his Trumpet raise me thence.” The prose is followed by a biblical quotation appropriate for his patriotism and his professional endeavors, from the first Book of Chronicles 28:8: “Therefore...let us keep at seek for all the Commandments of the Lord our God, that we may possess this good Land, and leave it for an inheritance for our Children after us for ever.”²²⁹ The address is signed “Thine in Christ Jesus, John Speed.” Thus he presents himself as a pious man, a member of the brotherhood of Christ as well as a man learned in the Bible and in the history of mankind since the Creation.

The *Theatre/Prospect* is also presented as the product of a man who adheres to the Christian virtue of hard work. Speed tells the reader that the only benefit he wanted to accrue by making the *Theatre/Prospect* is a righteousness of spirit. Accordingly, he creates an implicit contrast between himself and other geographers when he writes that he was not “led by an ambitious desire to raise my station above the level of my equals” through the production of the two atlases.²³⁰ Instead, he presents himself as desiring only spiritual benefit through the process of the labor itself, referring to the conventional Christian belief that work is purifying in and of

228. John Speed, “To the Well-Affected and Favourable Reader,” in *Theatre of the Empire of Great Britain/Prospect of the Most Famous Parts of the World* (London: George Humble, 1627), n.p.

229. John Speed, “To the Reader,” n.p.

230. John Speed, “To the Reader,” n.p. Who Speed means by “equals” is not clear, since he was one of the few who had raised his station through talent and luck from obscure provincial tailor to respected London geographer; he may have considered his equals to be his fellows at the Society of Antiquaries, or he may have meant this in the Protestant sense of the equality of all believers, i.e., other righteous Christians.

itself. To create the atlases, Speed had to turn away from the corruptions of the world to focus on his good and worthy project—though the project, paradoxically, was a description of that same corrupt world. As Speed notes, even if the book fails to give satisfaction to the reader, “yet this to my self have I gained, that whilst I set all my thoughts and cogitations hereon, I had small regard to the bewitching pleasures and vain enticements of this wicked world. . . .”²³¹ Thus Speed seems to be invoking the theological notion of the *vita contemplativa*, the high calling of seclusion and withdrawal from the outside world in order to study and contemplate spiritual truth. When applied to world geography, the reference is reminiscent of Nicolas of Cusa’s description of the cosmographer, who closes himself in his study after gathering information, in order to re-create the world in a map and so becomes closer to God (quoted in Chapter 2). By focusing his attention entirely on his work, Speed’s mind and soul have profited from creating the atlas, and kept him too busy to be driven by personal ambition.

The consistency and thoroughness of Speed’s use of religious rhetoric in his self-presentation would seem unremarkable for a work produced in London in the seventeenth century, if it were not for the fact that none of the other seven compilers who were also successful commercial atlas producers invoke religion in their works to any significant extent. This is not to say Christian belief is entirely absent from successful world atlases; indeed there are occasional mentions of God-as-Creator in textual descriptions of human history and the occasional historic (i.e., biblical) map of the Holy Land, showing, for example, the path of the Exodus or the races of the sons of Noah. However, none of the other compilers references his religious belief in his paratexts, and Christian belief does not infuse the works themselves—their structure, composition, or themes—the way it does in the *Theatre/Prospect*. Thus John Speed’s

231. John Speed, “To the Reader,” n.p.

uniquely spiritual self-presentation serves to highlight the largely secular nature of seventeenth-century commercial world atlases. For English and French atlas compilers except Speed, their personal religious convictions played no role in the self-fashioning they created as a means of increasing the credibility of the atlas to its consumers.

Discussion

Chapter 3 opened by defining “self-presentation” as an interpretive historical framework that analyzes the creation of an individual’s public persona. Textual self-references and portraits are typical components of the self-presentation of authors in the early modern period, as are supplementary texts by others included in the author’s work, such as odes and elegies. These components can be analyzed for evidence about how the writer wanted his audience to perceive him, informing us about the writer’s values and the perceived values of his contemporaries. Using this interpretive framework informs our understanding of the opportunities available to and constraints on an individual who wanted to appear in a public guise.

Self-presentation can thus be viewed as a form of self-marketing, because it is undertaken in a more or less conscious attempt to increase social standing: to impress superiors; obtain access to appointments, positions, patronage, or beneficial marriages; to increase name recognition and reputation; or in other ways achieve better social or economic status. As useful as this is to describe the behavior of individuals negotiating any social setting, it is all the more meaningful when applied to early modern commercial scientific publishing. The performance of self-presentation in a competitive, commercial milieu transformed it from a strategy to improve social standing into a strategy to “sell” the self in order to sell a product. At the same time, the

performance of self-presentation in the field of science and natural knowledge in the years before science achieved cultural authority adds another layer of complexity, for the author was contributing to that cultural authority while simultaneously borrowing from it for his own benefit.

The men who created early world atlases needed professional and personal legitimacy for their works to appear trustworthy to buyers. Yet the transformation from the cultural authority of classical, biblical, and medieval geographic expertise to the authority of contemporary experience was not complete in their time. In other words, in both seventeenth-century England and France, claims to reliable natural knowledge were highly contested and unstable. This contested status complicated the atlas buyer's decision-making—how could he decide which world atlas was the best? How could he know who the real geographic experts were?—and in turn complicated the atlas compiler's task of persuading the buyer. Thus, I argue, compilers turned to multiple personas—that is, asserted multiple sources of credibility via multiple personas—to persuade potential buyers in a time when direct claims to natural knowledge were, in the case of world atlases at least, impossible for the buyer to evaluate alone. While assertions of the compiler's credibility were never the only marketing strategy employed to sell a world atlas—they were marketed for a variety of other features, cost, aesthetics, etc.—I argue that asserting the compiler's authority was the key strategy used to present a given atlas as the best among its competitors.

As Chapter 3 and 4 have demonstrated, asserting the compiler's credibility could be approached in a variety of ways. Each of the eight compilers employed self-presentation as a marketing tool within the paratexts of their world atlas or atlases examined here, as one strategy to validate his scientific and artistic geographic work as authoritative. Six of eight used the

publishing convention of the literary or cartographic dedication—most dedicated a whole work to a (potential) patron and all of them frequently included dedications to other patrons on individual maps within the atlas. Six of the eight offered themselves as geographic experts. These textual strategies must be interpreted as personas—constructed public identities—and not as simple factual statements of the compilers’ socio-economic status or educational achievement; compilers could and did assert personas that did not coincide with their real social positions.

It is important to stress that, although this chapter has examined several components common across numerous self-presentations, each atlas compiler created a unique persona and deployed it in combination with other specific strategies not examined fully above. He did so by choosing a number of possible personas through texts and images and then combining those forms into a single image for his consumers. For example, as I will describe more in Chapter 5, the sharp-tongued Robert Morden blended several identities into a unique self-presentation: association with a particular class (artisans), support from a particular merchant-patron (Thomas Goddard), affiliation with a specific intellectual group (supporters of the new learning), love of country, inclusion in the class of modern geographic experts, and exclusion from the class of the formally educated. Thus, while individual aspects of the self-presentation of the authoritative and credible atlas compiler might sound very similar to those of a competitor, no two compilers formed the same persona.

While Chapter 3 and Chapter 4 focused on three tropes common to a number of early atlas makers, other elements of self-presentation are also present in these works. John Speed’s unique self-presentation as a devout Protestant has already been discussed. Other aspects of the compiler’s public personas include such diverse qualities and associations as patriotism, cutthroat competitiveness, manual labor, and the visual arts. Linking all of these constructed

aspects of persona, in the context of these atlases, is the theme of authority—that is, who can and should make the “picture of the world.”

Reflecting the changing nature of identity in the early modern period, the three personas discussed above represent both hierarchical and horizontal self-positionings within the larger social structure of seventeenth-century London and Paris. In some ways these correspond to what Roland Mousnier and other scholars have respectively termed a “society of orders” and a “society of classes.”²³² To position oneself publicly as a client was to engage in the vertical relationship of humility and service to a superior that had characterized western European culture since the high Middle Ages. In contrast, presenting oneself as a scholar or artisanal expert reflects a horizontal self-identification with peer groups (the community of scholars and the community of merchants) that developed in the early modern urban market economy. Self-presentations that invoke both models of social positioning within the same atlas suggest the extent to which both social forms could and did co-exist and were familiar to the urban, literate population who bought world atlases. Such integrated self-presentations also suggest that some who lived outside of courtly society were able to internalize and adapt the language of clientage used by courtiers and deploy it for a very different purpose—not for garnering offices or lands, but as a commercial strategy to increase sales by asserting the credibility of the creator of the work through association with the patron.

232. The sometimes acrimonious debate over the nature of early modern French and English society stretches back to the 1940s, when Roland Mousnier posited early modern France as a society of orders, asserting the pre-eminence of vertical associations and fidelity over the individual's identification with others of the same occupation or wealth status. Marxist historians of France, most notably B.F. Porschnev in the 1960s and more recently scholars such as William Beik, have criticized Mousnier's theory, stressing the reality of interclass conflict as evidence that Frenchmen could and did identify with their socio-economic peers more than with local social superiors with whom they had old ties of service. See, for example, Roland Mousnier, *Problèmes de stratification sociale: deux cahiers de la noblesse pour les Etats Généraux de 1649-1651* (Paris: Presses Universitaires de France, 1965) and William Beik, *Absolutism and Society in Seventeenth-Century France* (Cambridge, U.K.: Cambridge Univ. Press, 1985). Works such as the atlases discussed here seem to demonstrate that the two systems of identity co-existed, at least among urban Frenchmen and Englishmen.

The above analysis demonstrates that atlas compilers living in the same time and place were led to adopt a similar range of personas as marketing strategies. This suggests that those particular sources of authority were broadly accepted by the consuming public in both France and England in the seventeenth and early eighteenth centuries. Note, however, that one of the three personas I described has, in fact, no direct connection to the content knowledge or cartographic skill that was required to assemble and edit a world atlas. The persona of the patron's servant was commonly deployed by authors of a wide variety of publications outside of geography and even outside the sciences, as well as by writers of personal and political correspondence. In many of those publications, the writer-servant was in fact either already a client in a patronage network, or was seeking direct patronage for letters, the arts, or political position.

In the case of atlas compilers such as Robert Morden and Alexis-Hubert Jaillot, the construction of a client image in published works had a markedly different purpose—that is, a commercial purpose. In some cases there is no evidence that the compiler enjoyed any direct patronage support during his career; in other cases, compilers benefitted from some protection, endorsement or support from a social superior, such as a teaching appointment, stipend, or official title by the royal house. Yet in all cases the compilers earned the majority of their financial support through commerce, not clientage.

The evidence of atlas texts strongly suggests that the reality of a compiler's client position (or lack of position) within a patronage network was largely immaterial to his use of a client persona in marketing his atlas. As a commercial product, the world atlas' purpose was to make a profit for its compiler, author, and/or publisher. It was designed to be sold, and the assertions the atlas made about its maker were a crucial part of that design. The assertion of a

strong persona as a patron's favored servant, even when misleading, drew on the high social prestige and credit that client status commanded as a cultural value into the eighteenth century, even though other systems of impersonal social status had already weakened the traditional power of the system of patronage. That is, the prestige associated with being part of a patronage system continued well after the importance of cultural patronage had started to wane, and commercial atlas makers exploited that prestige.

It may seem puzzling that two dissimilar personas—the scholar, or expert by virtue of study, and the artisanal expert by virtue of experience—were plausibly deployed by men who generally had the same socio-economic status and the same education and training; and who were living not only contemporaneously, but within the same neighborhoods, sometimes even related to one another. I suggest that this was made possible by the unique status of the atlas compiler in the seventeenth and early eighteenth centuries. As discussed earlier, the particular identity of the “geographer” was still new and unformed in the seventeenth century, as was the concept of the “expert.” The compilers placed stress variously on their experience or their formal learning to promote their expertise. This suggests that the atlas-buying public of seventeenth-century Paris and London had not yet formed a consensus on the nature of geography—whether it was a craft requiring hands-on experience or a scholarly endeavor based on an aggregation of classical, biblical, medieval, and Renaissance knowledge. Compilers were thus operating at the beginning of this new professional identity. The variety of their backgrounds reflects the lack of an accepted path of training necessary for membership in the group of geographers, a problem that included the ongoing difficulty of placing geography fully within either the humanities or the natural sciences.

Even by 1721, this study's end point, "geographer" was still an ambiguous category, capturing in one term university-trained mathematicians and astronomers; historical study; armchair scholars writing local history; antiquarians producing geography as an aid to historical study; artisanal publishers who happened to specialize in maps, atlases and/or globes; and writers looking to produce a new text to sell to a consuming public eager for information on foreign lands. This ambiguity of identity located the atlas compiler in a unique position vis-à-vis the artisan rank, a well-defined group of which he was (almost) always a member; and vis-à-vis the scholarly class, a much more nebulous social category.

I argue that world atlas compilers plausibly adopted personas as both scholars and experienced mapmakers because they were simultaneously artisans and scholars. As I have stressed before, compilers did not write all their atlas texts and create all their atlas maps. They aggregated prior knowledge—put varied sources together, edited pieces of existing works and modified them using other works. In essence the compiler was an intermediary between geographic writers and astronomers, and the reading public. To fulfill this role, the compiler needed esoteric content knowledge, familiarity with geographic and astronomical scholarship, and a facility with at least a few of the vernacular languages and the essential mathematics of mapmaking that put him above most of his fellow book printers and publishers. His literacy and other advanced skills mark him as above the rank and file of artisans. Other publishers, even those who specialized in scientific works, could print an author's work without understanding its content; while the atlas compiler was not merely typesetting but creating a new product. That is, it is the compilation and editing process itself that I believe critically distinguishes atlas makers from the majority of book producers.

At the same time, commercial atlas makers were not scholars in the usual early modern sense. With a few exceptions, they were not Latin-literate. They lacked formal education and training, and were not university men. They worked with their hands, belonged to a guild, and had to compete to earn a living in the marketplace, all of which distinguish them from many of those we would call scholars of the seventeenth century. Thus the compiler occupies a unique place in his social world, simultaneously part of two separate social statuses. This unique position may explain why an individual compiler could choose to project a persona embodying the traits, knowledge, and sources of authority attributed to either status.

Lastly, are any differences discernible between the self-fashioning of English and French compilers? There is substantial overlap between the two groups, to be sure, and there is no particular component of the personas that was exclusively deployed by French or English compilers. However, two trends can be distinguished. The self-fashioning of the French compilers was more likely than those of the English to invoke patronage and scholarship in their paratexts to give the atlas credibility (not counting dedications on individual maps, which all atlas makers used). All four French atlas compilers discussed in this study offered lengthy dedications of their world atlases to a named patron, including three to the king. In contrast, only two of four English compilers dedicated entire world atlases, one to the king. The French throne granted the title of *géographe du roi* to numerous geographers at one time, and was more likely to provide tangible financial support to its favored mapmakers. The strong trend toward royal dedications by French compilers may suggest that in the seventeenth century, the traditional system of political and cultural patronage that was strengthened under the Bourbon monarchs represented a more powerful cultural authority and credibility among the atlas-buying public than the contemporary patronage system did among English consumers.

The three personas analyzed above were common to a number of atlas compilers. However, they are not the only personas we find projected in early world atlases. In the following chapter, I turn to an extended discussion of the complex self-presentation created by English world atlas compiler Robert Morden.

CHAPTER 5

THE SELF-PRESENTATION OF ROBERT MORDEN

The previous chapters presented an analysis of the three compiler personas most often found in my sample of successful commercial world atlases, and the social-cultural milieu which made them possible and apparently desirable personas. As frequently as they were deployed, however, the three described in Chapter 3 and Chapter 4 were not the only personas created in seventeenth-century world atlases; many others appeared less frequently. Nor was one persona ever deployed in isolation. Indeed, a close examination of atlas frontmatter, dedications, map texts, and backmatter shows that atlas compilers interwove a considerable range of public poses to assert their authority and promote sales.

To show how this range of public poses worked in practice, this chapter offers a case study that explores the complex self-presentation of Robert Morden. First, I suggest the wide range of identities, postures, and claims available to atlas compilers hoping to project a self-image as a trustworthy bookmaker. Second, I try to convey a sense of how those identities, postures, and claims appearing in many early English and French world atlases (of which Morden's is one particularly vivid example) were layered together into an aggregate self-presentation.

Morden's rich and complex presentation of himself to his buyers makes for interesting reading on its own, yet this chapter offers the reader a sense of what the seventeenth-century

atlas buyer would have encountered when he browsed the first pages of a display copy in a print shop, as its compiler struggled to appear highly credible in the eyes of that potential buyer. I examine at length Morden's claim to be a reformer, not merely a producer, of geographic knowledge; his artisan persona; and his patriot persona. First I will briefly review the two core aspects of his public persona that were described in Chapter 3 and Chapter 4: his claim to geographic expertise by virtue of his work experience, and his self-portrayal as a patron's servant, depicting himself as part of a traditional patronage relationship in an effort to promote his commercial success.

An artisan by birth and trade—recall that Morden was a member of the Weavers Company—he could not make a claim to formal education in astronomy and geography, and, as described in Chapter 2 and Chapter 3, there were no means of formal education in mapmaking in his time. Instead of trying to mask his lack of academic training, Morden chooses to admit it openly, an admission that is quickly belied by Morden's assertion of his expertise through experience.

In fact, the primary message of his Address to the Reader is that he is undoubtedly an expert in geographic knowledge, deserving of the reader's trust by virtue of his experience as a mapmaker. He promotes his familiarity with many sources of modern geographic information, and with the projection and printing of maps and globes. To demonstrate his thorough knowledge of modern and ancient geography, Morden lists those respected geographers whose works are his principal sources, including Pliny, Ptolemy, and Strabo along with Gerhard Mercator, Abraham Ortelius, Sebastian Münster, and his own contemporaries in Paris, Pierre Duval and Nicolas Sanson.

In this way Morden shows the potential atlas buyer that despite his lack of university learning, he is an expert on classical and modern geography—so much so that he is not merely compiling a world atlas, but correcting all previous geographic knowledge, an important aspect of his self-presentation that I examine below. Thus Morden crafts a persona as an expert due to his diligent, honest work experience as a literate artisan who has spent a lifetime comparing extant geographies and compiling new, improve, ever more accurate maps.

Morden was equally eager for readers to perceive him as having important supporters. In Chapter 3, I described Robert Morden’s self-presentation as a loyal patron’s servant. The several editions of *Geography Rectified* contain dedications to Thomas Goddard, a supportive merchant and potential patron, in formulaic patronage language. Following authorial convention, Morden protests his modesty and lack of worth to produce the atlas and then lavishes praise on Goddard for, in part, not delighting in receiving praise. In addition to his admirable character, Goddard’s knowledge of the world beyond Britain and his “encouragment [sic] and assistance” in the production of *Geography Rectified* is mentioned as further reason for Morden to “shelter [the atlas] under the Patronage” of Goddard’s name. His reference to the nature of Goddard’s support is vague, and he does not ask Goddard for any specific reward—indeed, although we can speculate that Goddard loaned Morden money up front to finance the production of the atlas, there is no external evidence confirming Goddard’s identity or showing that Goddard was more than a commercial patron of Morden’s shop and perhaps a friend.

As discussed in Chapter 3, this ostensibly private patronage letter is particularly interesting for analysis of Morden’s complex self-presentation precisely because of its public nature, included at the beginning of the multiple editions of this commercial world atlas. Like other atlas compilers who included dedications in their atlases or on individual maps within the

atlas, Morden is communicating a specific persona on two levels, to two audiences—that is, to the potential patron, and to the public of atlas buyers. By including the dedication in each edition of his most popular work, Morden deployed the consistent persona of a humble, hard-working servant hoping to please his munificent supporter.

Morden as Virtuous Tradesman

In addition to the loyal client and the geographic expert, Morden also crafted a strong persona as a virtuous tradesman, through his identity as an artisan and also his identity as a humble shopkeeper. Like the persona of the geographic expert to which is related, this is a persona of internal validity—that is, one in which the geographer tried to convince buyers of his authority to create a world atlas by virtue of something internal to himself (as opposed to an authority that came from an outside agent). It is a persona claiming authority from a source quite different from patronage or content expertise; it derives from a claim by the individual to possess certain personal characteristics and values—honor, virtue, a strong work ethic, honesty, all qualities characteristic of the ideal virtuous artisan of the seventeenth century—and to lack others—an advanced education, the luxury of wealth. The persona is thus less tangible than expertise, and less demonstrable than the favor of a patron. It is closely related to the strong associational identity that early modern craftsmen necessarily formed with their company or guild, as I discuss below.

The popular cultural valuation of shopkeeping and the artisan trades was in flux in both France and England during the period of this study, moving from a traditionally negative view to a more positive one as commerce increasingly became the “business of the nation” with the

growth of trade and colonial enterprises. This change in popular and prescriptive attitudes towards work and the business of selling is in part what allowed Morden to create this particular persona as a marketing device. In turn, his deployment of this persona is evidence for the positive view of artisans and shopkeepers that compilers expected their customers to have.

To comprehend the impetus to create a persona of a virtuous artisan-shopkeeper requires understanding the outlines of artisan culture in the early modern period. Historians of economics, labor, popular culture, and class mentalities have created hundreds of monographs elucidating artisan work, family life, and social life in Europe in the medieval and early modern periods. Although a full treatment lies outside the scope of this study, below I outline what scholars have identified as the major cultural values and attributes associated with skilled urban workers and shopkeepers.

Geography, being a field of both theory and practice, holds an unusual place in early modern labor and production—that is, in the compilation and printing of maps, pilot books, globes, and geographic textbooks, along with dividers, compasses, and various astronomical and navigational instruments. By the seventeenth century geography as a field of knowledge had come to hold dual positions in France as well as England: partly the domain of the scholar, requiring facility with multiple languages, familiarity with biblical and classical authors, knowledge of astronomical observation and complex mathematical formulae; yet equally the domain of the shopkeeper or master who supervised the workshop technician skilled in engraving, typesetting, operation of the printing press, binding, and color washes. The cultural validity of both these positions made it feasible for world atlas compilers to offer both scholarly and artisanal personas as strategies to make their work more credible in the judgment of potential readers.

In neither France nor England were there urban or royal regulations addressing the labor status of mapmakers and map sellers specifically. Their work was subsumed under the labor group of printers and/or engravers. In London, most map sellers (and booksellers and printers) belonged to either the Weavers Company or to the Stationers Company. It was illegal to be involved in the printmaking trade—which included the crafts of engraving, map printing, and bookmaking—without membership in one of the guilds that controlled it.²³³

In Paris, as Mary Sponberg Pedley has shown, the legal situation for those involved in the map trade was different, and considerably more complicated, for reasons dating back to the first legislation on the printing press.²³⁴ The engravers of Paris were not required to belong to any company; yet there existed a *Communauté de Maître-Imprimeurs en Taille-Douce* (Company of Master Copperplate Printers), to which most engravers belonged. It was a professionally prudent choice, since the law did require all engravers use the presses of a *maître-imprimeurs* to make prints of their work, and the *communauté* granted members both professional status and the ability to make their own copperplate prints. In contrast, all Parisian letterpress printers (which included booksellers) had to belong to the letterpress guild. Laws separated the engravers from the letterpress printers. That is, no engraver was permitted to own or operate a printing press; and no letterpress owner was permitted to print engravings.²³⁵

233. Cyprrian Blagden. *The Stationers' Company: A History, 1403-1959* (Palo Alto, CA: Stanford Univ. Press, 1977), 19-33.

234. Pedley, *The Commerce of Cartography*, 103-104.

235. This posed an obvious dilemma for the makers of scientific works that required both illustration and texts because they would have to be printed in separate parts then bound. Parisian-made world atlases were in fact much less likely than London-made atlases to contain texts with the maps. The engravers had the advantage over the letterpress printers because texts could be engraved as well as images; but the letterpress could not produce copperplate images. The regulations explain why a number of French atlases contain engraved (rather than letterpress) texts, a solution that lengthened production times and increased production costs but meant that the entire atlas could be produced in the same shop. See the discussion in Christine Petto, *When France Was King of Cartography*, 144-148.

More important for the current study than the atlas compilers' specific guild memberships and labor regulations is the status they shared as artisans, a simple term that belies a complex and varied set of traditions and identities of pre-modern European urban labor. For whatever else they were or wanted their customers to think they were—whatever guild or communauté they did or did not belong to—the men who produced the commercial world atlases of Paris and London in the seventeenth and early eighteenth centuries were artisans.

The Honorable Artisan in Early Modern Europe

Like the nebulous term “middle class,” “artisan” is a complex and insufficient catch-all term eluding easy definition. Conventionally, scholars of early modern Europe have used the term to designate skilled workers who manufactured goods by hand and were members of guilds or companies. But more recent research has shown that many skilled workers were not guild members, and that those who we label artisans differed widely in income, skill, and literacy—consider the difference in private life and work conditions between the prosperous master printer with many literate, skilled employees and a complex universe of business transactions, to the unlettered shoemaker's apprentice, both of them artisans. If the boundaries are difficult to define, however, it remains true that none of the eight world atlas compilers studied here belonged to the elite to whom they dedicated their atlases; but neither did they belong to the class of unskilled wage workers they may have employed as shopkeepers.

James Farr argues that to men and women of Europe in the Middle Ages and early modern era, the term meant not a type of work so much as a specific identity: “Artisans from the late Middle Ages well into the nineteenth century were defined and defined themselves not

primarily as producers as their labels may suggest, but rather as members of an *état*, a rank or ‘degree,’ a *Stand*. They designated themselves (and were so designated by the authorities) by occupational label not just because this described what they did (it often did not), but rather because it signaled status...²³⁶ Morden provides a good example of Farr’s point; he was proud member of the Weavers Company, yet never practiced weaving or a related trade. As I show below, Morden (as well as mapmakers not examined in the present study) not only defined himself by his artisan identity, but also deliberately promoted it, with its associated values, as a means of establishing authority as an atlas compiler.

Of the many values associated with artisanal identity and culture, the value of honor and honorability as an artisan and guild member is perhaps the most salient and the most enduring, for it subsumes all other characteristics of the good artisan. Honorable status is what separated the skilled worker—whether journeyman or master—from the large class of unskilled urban laborers, the tradeless, and the much larger ranks of peasants. In an era when clear boundaries between ranks in a narrowly hierarchical social order were of great importance, it was vital to artisan identity to not be confused with laborers or the urban poor. The artisan was a specialist in a certain field; he had respectability. Other workers did not, and were hence beneath him. As Farr explains, “Honor was society’s measure of social standing in the hierarchy as it was a marker of personal self-esteem. At both levels, honor was a paramount social value that enforced standards of accepted conduct and measured an individual’s actions and worth against a norm recognized by peers, superiors, and inferiors.”²³⁷ Most importantly, most artisans had verified

236. James R. Farr, *Artisans in Europe, 1300-1914* (Cambridge, UK: Cambridge Univ. Press, 2000), 4.

237. *Ibid.*, 6.

social standing and prestige of membership in a recognized community of respectable men: the craft guild or company.

Although the guild systems of the seventeenth century varied widely from place to place and from craft to craft, in general its structures are well known and do not need repeating here. Regardless of the specific craft being protected, guilds or craft companies generally took responsibility for regulating production, controlling training, protecting the perceived economic and political rights of members, and even for policing the actions of its members. Thus the artisan was both an enforcer of proper conduct and someone who could be himself disciplined by the community for wrongful behavior.

Being honorable had meanings beyond the guild as well. It means fulfilling the obligations and roles incumbent on one's artisan status. An honorable artisan was a craftsman who performed his familial, professional, civic, and religious duties, in short, a virtuous and honest man, as demonstrated by the motto of Morden's Worshipful Company of Weavers of London: "Weave Truth with Trust" (Figure 30). He ran a solvent business with his family and apprentices, earning enough profit to pay employees and support the family. He also maintained discipline and order within the household, provided moral and occupational training for his apprentices, and arranged good marriages for his children. Farr notes that this cluster of values was pre-modern in its origin, and was undergoing change during the early modern period: "Competing during the early modern centuries, then, were two world views of work. One, which we have called premodern or traditional, emphasized work as a degrading activity, but one that served primarily moral purposes and was structured upon the principles of hierarchy and discipline. The other view no doubt rings more familiar to modern ears since this newer view of

work saw it as productive energy in a market economy.”²³⁸ As engaged as Robert Morden was in the market economy of mid-seventeenth century London, it is noteworthy that he availed himself of the pre-modern association of artisan status with strong moral purpose.



Figure 30. “Weave Truth With Trust”: the honor of artisans in the motto of the Worshipful Company of Weavers of London, of which Robert Morden was a member. Accessed July 26, 2013. <http://www.weavers.org.uk>.

238. Ibid, 18.

Frequently overlapping with the status of artisan in the seventeenth century was the status of shopkeeper. It is important not to confuse the shopkeeper with the merchant. Although both engaged in trade, the shopkeeper was distinguished from the merchant in general by the smaller volume and local geographic scale of his business affairs. Perhaps more importantly for this discussion, the merchant did not produce the goods he sold, whereas a shopkeeper often did, working as both artisan master and business owner. Merchants were also protected by the often-powerful merchant guilds or companies, but there were no general retail companies or guilds for the shopkeeper in part because of the varied nature of the work and type of goods sold.

Thus “shopkeeper” is, for the early modern period, a job description rather than an institutionalized identity like that of the artisan. And, whereas the artisan was by the seventeenth century considered a respectable member of the urban classes, shopkeepers still faced a strong traditional prejudice dating back to the Middle Ages. Nancy Cox has described this prejudice in the early modern period: at the “top of the hierarchy of virtue” was “the landed gentleman. Property in land was widely seen as giving its owner independence and opportunities for public service...In this line of thought, the interests of land and nation coincided. By contrast, trade was seen as less admirable, depending on profit and opportunism, with its participants necessarily governed by self-interest.”²³⁹ The shopkeepers’ use of credit, still likened to the sin of usury, and the profit motive brought opprobrium on shopkeepers, even while eager customers provided a strong demand for the staples and luxury goods being sold.

Shopkeepers and their advocates argued against these prejudices, asserting the enormous value that retail brought to a nation. These defenses posited shopkeepers and merchants as

239. Nancy Cox, “‘Beggary of the Nation’: Moral, Economic, and Political Attitudes to the Retail Sector in the Early Modern Period,” in *A Nation of Shopkeepers: Five Centuries of British Retailing*, ed. John Benson and Laura Ugolini (London: I.B. Tauris, 2002), 36-37.

necessary middlemen—between countryside and town, between the kingdom and foreign nations, and between the manufacturer and the consumer. One example of a sustained defense of the virtue of shopkeepers is *The Complete English Tradesman*, which Daniel Defoe published in 1726 (Figure 31). Concerned that England’s shopkeepers and tradesmen are becoming unable to compete in business due to a lack of understanding of the principles of the virtuous trader, Defoe praises the value of hard work and diligence in business: “Nothing can give a greater prospect of thriving to a young tradesman, than his own diligence...without application, nothing in this world goes forward as it should.”²⁴⁰ Defoe, an insistent advocate for the increase in foreign trade as a certain means of enriching the kingdom, makes an impassioned case for the long-term benefits to Englishmen brought by merchants and shopkeepers, whose desire to advance through hard work brought necessary and desirable goods into the hands of their fellow citizens.

Thus, an early modern artisan master and shopkeeper could expect respect from peers and inferiors by virtue of his good standing in the artisan rank, which gave him an honorable social status in a hierarchical society. If he owned his own shop and sold his own products and perhaps those of other craftsmen (as bookseller-publishers frequently did), at the same time he could expect to encounter some suspicion and antagonism by virtue of his desire to make a profit. This is the complex and unstable cultural position faced by the men who created and tried to sell world atlases. Popular attitudes towards business, labor, and the value of trade changed dramatically over the course of the century, as economic changes and the growth of a capitalist system dependent on production of consumer goods for trade wrought substantial positive change in how the artisan and shopkeeper’s work was valued.

240. Daniel Defoe, *The Complete English Tradesman: In Familiar Letters...* vol. 1, (London: Charles Rivington, 1726), 56.

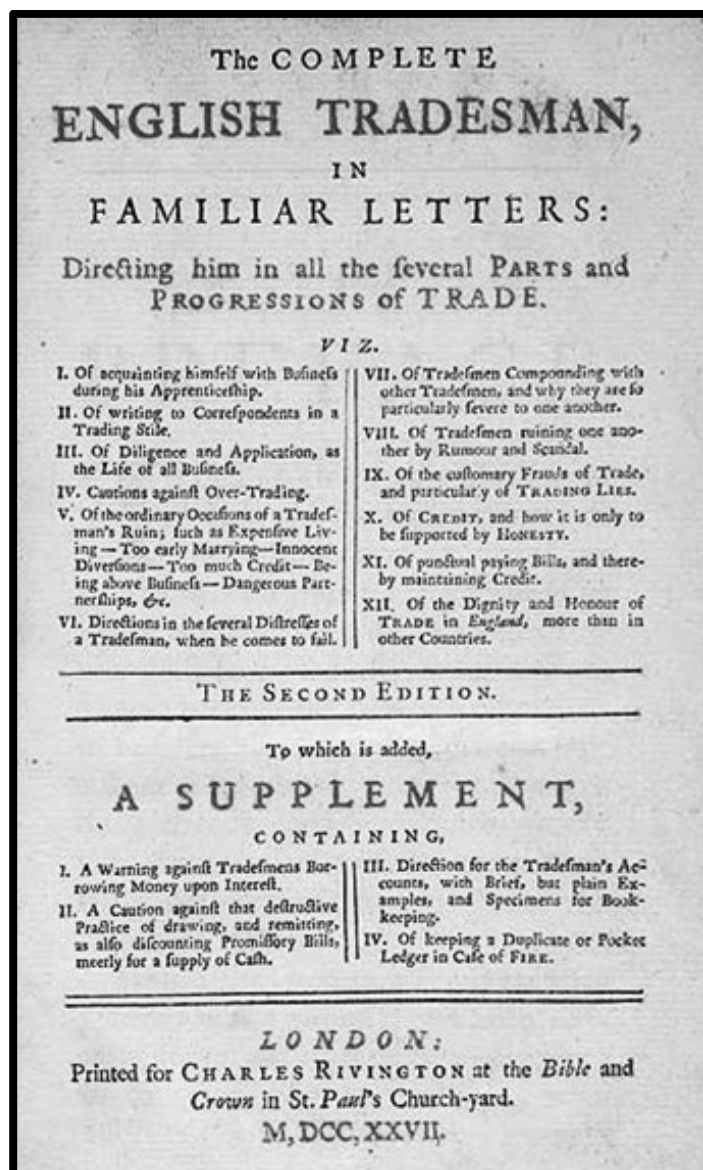


Figure 31. The virtue and crucial importance of artisans and shopkeepers to the nation's economy were the subject of numerous works in the early eighteenth century, such as Daniel Defoe's *The Complete English Tradesman* (London: Printed for Charles Rivington, 1727) (second edition, shown here) (first edition 1726); and his *Humble Proposal to the People of England for the Encrease of Their Trade* (London: Printed for Charles Rivington, 1729). Reference 8247.de.5. (British Library, London, UK).

It may be impossible to over-emphasize the importance placed on social rank and the social hierarchy in early modern Europe. Although many scholars refer to the seventeenth century as the “first modern century,” in many ways its institutions and cultural values were carried forth largely unchanged from the sixteenth century. One of those values was the attribution of real differences in virtue and worth to men of different social ranks. Thus it is perhaps unexpected to find literate artisans, working in a field historically associated with learning and university men, not only embracing but promoting their rank of tradesmen as a means of persuading buyers of their credibility, instead of making rather than claims of belonging to a higher social rank by virtue of association or education. Yet in fact several atlas compilers did exactly that kind of promotion.

Robert Morden fashioned a persona as a shopkeeper and tradesman in his multi-edition *Geography Rectified*. Instead of choosing a persona that elevated his social status, Morden presents himself to the atlas reader as a hard-working and virtuous laborer. In his preface to the reader for the second edition, Morden describes himself as having been led to republish the work by university scholars and other gentlemen: “...But the kind Reception it [i.e., the first edition, 1680] found from several Worthy and Learned Gentlemen, more especially that Influence that it received from the two most Learned Universities of the World, Oxford and Cambridg [sic], hath once more drawn me upon the Horizon of publick View, not as a Master, but as a poor Labourer...”²⁴¹ As always, Robert Morden’s self-presentation is multilayered. In this one sentence, written specifically for potential atlas buyers and placed on the second page of the frontmatter, Morden accomplishes both a boastful claim about the worth of his atlas *Geography*

241. Robert Morden, “To the Reader,” in *Geography Rectified*, 2nd ed., (London: Robert Morden and Thomas Cockerill, 1688), n.p.

Rectified, and an ostensibly modest denial of his role in making it so—even though he is the author and compiler.

In Chapter 3, Morden was shown to have presented himself as a geographic expert by virtue of his experience making maps and globes. His decision here to mention the approbation of university men suggests that even though he could not himself claim to be highly educated, he respected the learning of other men, a respect noted in other areas of his personal texts. It also suggests that Morden believed it was worthwhile to use their “kind Reception” as a potentially effective marketing strategy since learned men presumably would have the expertise to judge good geographic works. Simultaneously he places himself outside (and below) their rank, to the point of denying his status as a master artisan (“not as a Master, but as a poor Labourer”). Even as he draws out this metaphor, he does not specify of what, exactly, he is not a master. Morden was in fact a master, member of the Weavers Company, and employed laborers and apprentices in his shop. The implication is that he is not a master at creating atlases.

Yet several sentences later he asserts the opposite. He links the process of atlas compilation to constructing a building and elaborates on the metaphor of being a laborer: “. . .but as a poor Labourer, carrying the Carved Stones, and the polished Pillars of the more skilful Architects to set them in my mean Fabrick. I have indeed laid my building upon other mens foundations; for who in this Subject can do otherways [sic]?”^{242,243} It is clear that this extended metaphor on the lowly status of building laborer is meant to impress on the reader not that Morden (and his work) is in fact unworthy of respect, but rather the opposite. Morden wants the

242. “Fabrick: a shop or work-house wherein any thing is framed; the art of framing or making, building, or proportioning. It is most commonly used for a building or a thing artificially made.” Definition in Thomas Blount, *Glossographia: Or, a Dictionary* (London, 1656); reprinted in *English Linguistics, 1500-1800*, no. 153 (Menston, U.K.: Scholar Press, 1969).

243. Robert Morden, “To the Reader,” in *Geography Rectified*, 2nd ed., n.p.

reader to recognize the enormous effort that he has expended to create his “building,” the atlas, and stress the labor involved in reading, collating, and compiling the “stones” and “pillars” created by others—i.e., the maps, globes, and writings of earlier geographers—into a logical, ordered, and complete structure. While he was, in reality, above the social rank of a construction laborer as a master Weaver, it is nonetheless significant that the persona he is asserting is one of a craftsman, a man who finishes his fabrick with much weary toil.

It is notable that Morden did not create this particular metaphor, but plagiarized it from his predecessor, tailor-turned-scholar John Speed. In 1627, Speed offered the same persona as hard-working laborer in his preface to the reader of his world atlas, *A Prospect of the Most Famous Parts of the World* (bound with his national atlas of Great Britain). While associating the creation of a book with the construction of a building was not unusual in the early modern period, in this case Morden uses almost exactly the same words as Speed.

In the opening page of “To the well-affected and favourable reader,” Speed describes the humility with which he approached the creation of the atlas, acknowledging his debt to prior scholars and noting that “it may be objected that I have put my sickle into other mens Corn, and have laid my Building upon other mens Foundations, (as indeed who can do otherwise, especially in a Subject of this nature, seeing that the Wisest of Kings witnesseth, *that there is nothing new under the Sun*;)...”²⁴⁴ The last sentences of the preface continue the theme of construction labor: “And applying my self wholly to the frame of this most goodly Building [i.e., the earth], [I] have as a poor Labourer carried the carved Stones and polished Pillars, from the hands of the more skillful Architects, to be set in their fit places...”²⁴⁵ Morden’s plagiarism of

244. John Speed, “To the Reader,” n.p.

245. Ibid.

Speed's words is apparent. Speed's *Prospect* had, in fact, been republished in 1676, making it still relatively new by the time Morden wrote his own preface—notably, without Speed's biblical reference and with no mention of Speed—in 1688. It was certainly a work with which Morden would have been quite familiar, and the borrowed imagery is a testament to the influence John Speed retained among London's geographers, over fifty years after his death.

Morden promotes himself not only as a hard-working laborer, but also as a humble and hard-working shopkeeper. In fact, he uses his shopkeeper's identity to explicitly ask the reader to excuse the faults of *Geography Rectified* due to the burdensome circumstances under which he was compelled to work. Yet he also asks the reader to appreciate all the more what an accurate and thorough work it is, given the many demands and interruptions Morden faced during the months of compiling his atlas-building. In the Preface, he reiterates the difference between himself and scholars: "And yet I know this wants the Helps and Advantages of a more Learned Pen," and goes on to suggest that "indeed it ought to have been freed from those frequent avocations and disturbances that attend a publick Shop and Trade. These were in truth too great disadvantages for the rendring [sic] a Book of this nature so compleat and perfect, and of so constant and regular a stile as might be expected from others, whose quiet doors, and unmolested hours afford no such Distractions."²⁴⁶ Morden's message is that a work such as *Geography Rectified* would be an important and difficult accomplishment for anyone who enjoyed "unmolested hours," but how much more of an accomplishment is the same work created under the daily obligations incumbent on a craftsman with family, customers, employees and other publishing projects requiring his attention.

246. Morden, "Preface," *Geography Rectified*, n.p.

These examples show Robert Morden's attempts to present a persona as a hard-working tradesman. The artisan held not only an economic and occupational position in early modern Europe, but also a moral one; the term defined morality and character as much as it defined the skills and trade practiced by a man of a certain economic status, as a host of virtues such as honesty, frugality, and piety came to be associated with the hard-working, virtuous artisan. Yet Morden's complex self-presentation included personas even beyond those of the patron's servant, the geographic expert, and the artisan.

Morden as English Patriot

Morden created several other personas as marketing strategies to persuade the potential buyers of his atlas that he was an authoritative and credible world atlas maker. One of these personas is that of an English patriot.²⁴⁷

Like John Speed, Morden is better known today as a geographer of England than as a world atlas compiler, despite the commercial success that led him to release *Geography Rectified* in no fewer than four editions, along with his *Atlas Terrestris* and other works of global scope. He corrected and re-engraved a series of English county map plates for a new edition (1695) of the venerable sixteenth-century English atlas *Britannia*, following in the footsteps of the great Renaissance English geographer and antiquarian William Camden (1551-1623) and also, of course, in the footsteps of John Speed (Figure 32).²⁴⁸ Morden's best-known work is the series

247. The "patriot" in Morden's time bore positive connotations of commitment and sacrifice to one's countrymen. Morden's contemporaries, lexicographers John Wilkins and William Lloyd, defined a patriot as "Lover of one's Nation; Benefactor [sic] of one's Nation" in *An Alphabetical Dictionary...* (London: Samuel Gellibrand, 1668); their competitor Elisha Coles similarly defined it as "Benefactor or Lover of his Countrey [sic]" in *An English Dictionary* (London: Samuel Crouch, 1676).

248. The *Britannia* with Morden's updated maps appeared with a preface by Edmund Gibson, Bishop of Lincoln, that

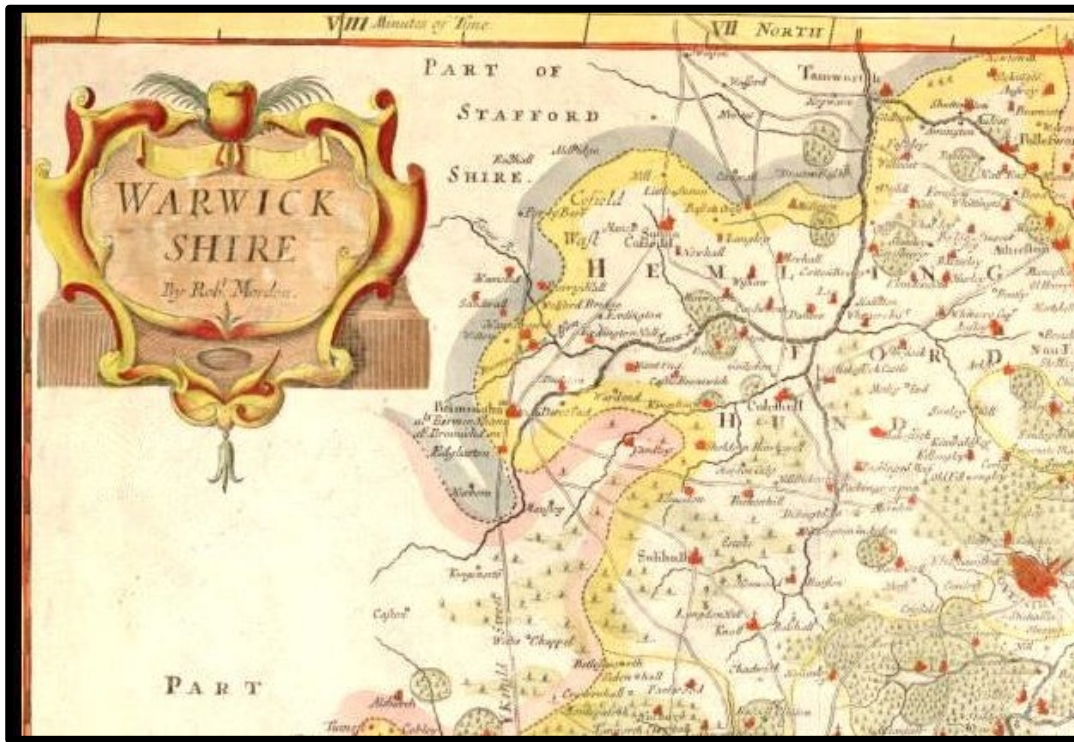


Figure 32: Detail from map of Warwickshire, by Robert Morden, in *Camden's Britannia newly translated in English, with large additions and improvements* (London: Printed by F. Collins, for A. Swalle, 1695). RM.274704. (Institut Cartogràfic de Catalunya, Barcelona, Spain). Accessed July 26, 2013. <http://cartotecadigital.icc.cat/>.

of small British county maps (the so-called “Miniature Mordens”) that appeared in *The New Description and State of England* (first edition 1701) (Figure 33).²⁴⁹

described Morden's role in the process of updating and re-engraving the maps of the 1637 Hole-Kip edition: “And that nothing might be wanting to render [the maps] as complete and accurate as might be, this whole business was committed to MR. ROBERT MORDEN, a person of known abilities in these matters, who took care to revise them, to see the slips of the Engraver mended, and the corrections, returned out of the several Counties duly inserted. Upon the whole, we need not scruple to affirm, that they are much the fairest and most correct of any that have yet appeared.” The *Britannia* with Morden's maps was re-issued in 1701, 1722, 1753, and 1772. See William Camden and Edmund Gibson, *Camden's Britannia, newly translated into English....* (London: F. Collins, 1695).

249. Robert Morden, *The New Description and State of England, Containing the Mapps of the Counties of England and Wales, in fifty-three copper-plates, Newly Design'd, Exactly Drawn and Engraven by the Best Artists...* (London: Printed for Robert Morden, 1701).



Figure 33. Patriotic maps: Map of Nottinghamshire, one of the “miniature Mordens,” by Robert Morden in *The New Description and State of England, Containing the Maps of the Counties of England and Wales, in fifty three copper-plates...* (London: Printed for Robert Morden, 1701). Reference 579.d.28. (British Library, London, UK).

Morden presents himself as a proud Englishman in the texts of both his English and world atlases, a pride accompanied by Morden encouraging his fellow Britons to the study of geography (and implicitly, therefore, encouraging browsers to purchase the volume). His address “To the Courteous Reader” of *The New Description and State of England* praises England’s many beauties: “Be not mistaken, England may Glory to be as full of natural Wonders, Rareties, and Excellencies, as any other country under the Sun. It becomes not the Inhabitants to be ignorant of them, nor to be unmindful of, nor unthankful to that kind Providence, that has cast them upon such a blessed shoar, where all things combine together, and contribute to render them Truly Happy.”²⁵⁰ In the first section of *The New Description*, “A General Account of England &c”, Morden describes Great Britain as “the most Noble, most Fruitful, most Excellent, and most Blessed island of the world, not only in regard of its Soil, Situation, Climat[sic], and other natural Conveniencies[sic], but also in respect of its brave, valiant, beautiful, skilful[sic] and industrious inhabitants; and also in respect of its wholsom[sic] and good Laws...”, while England in particular is said to be the “most fruitful, the wealthiest, and the most convenient for the Habitation of Mankind...”.²⁵¹ Similar language appears throughout the descriptive texts about the kingdom.

What was the reason for this effusive praise of the country’s glories? Without discounting an honest expression of the geographer’s values, a geographer’s praise of the virtues of his homeland and countrymen became, when used to market a map collection of the homeland such as the *New Description*, a strategic appeal to the (assumed) shared patriotic sentiment of those fellow subjects. Certainly part of Morden’s strategy to promote the value of his atlas was

250. Morden, “To the Courteous Reader,” in *The New Description and State of England* , n.p.

251. Morden, “A General Account of England &c.,” in *The New State and Description of England*, n.p.

presenting himself to the reader as a fellow patriot. As Leslie Cormack and Christine Petto have demonstrated, the practice of geography in the early modern period was frequently imbued with patriotic sentiment. The connections are manifold; at the simplest level, there is the geographer who creates maps and geographic texts, and perhaps is also involved in antiquarian pursuits, for love of country. This is as true for national geographies as it is for chorographies. Sixteenth- and seventeenth-century geographic texts about the writer's native land, like those by Morden quoted above, are typically subjective and sentimental. Florid adjectives praise the natural beauty, pleasant climate, abundant natural resources, excellent government, virtue and industry of the inhabitants, etc.²⁵² In fact, in world and regional atlases, the conventions for describing the geographer's native land were so widely followed that it is possible to identify a writer's nationality simply by comparing how different nations are described.

In world atlases, the display of patriotic fervor was often also manifested as criticism of a rival nation; for example, it is typical of English, Dutch, and French world atlas texts of the seventeenth century to offer critical descriptions of the government, religion, or virtues of the other two countries, reflecting the ongoing cultural and commercial rivalries among them that periodically erupted into warfare. The translation of texts into one's mother tongue was another opportunity to display patriotic values to potential readers. For example, Morden's contemporary Ferrand Spence translated the Frenchman Pierre Duval's world atlas *Geographia universalis* into English in 1685. In his "Englischer's Preface to the Reader," Spence mentions that he has redacted Duval's texts on France, and expanded Duval's texts on the British colonies. By way of justification Spence offers his attempt to honor the glory of his native England:

252. See the extended discussion of patriotism in English chorography in Stan Mendyk, "Early British Chorography," *Sixteenth Century Journal* 17, no. 4 (1986): 459-481.

For, though no one, in strict Justice, has such a Right over another Man's Work, as may Authorize and Priviledg [sic] him to change and alter what he please, yet...I hope I may have the English Reader's pardon, especially since 'tis for the Glory of our Common Mother, whose Reputation and Honour we ought not only to defend with our Swords and Pens, but to propagate to the utmost borders of the Universe.²⁵³

Spence even alleges that Pierre Duval would approve of the changes that have been to his work, if he were English: "And the Author, I suppose, will think no injury done him; for if he had been an Englishman, he wou'd have Writ so."²⁵⁴ Thus the compilation and translation of geographic atlases presented opportunities for promoting one's patriotic fervor, and even for using that patriotism to justify admittedly questionable decisions such as altering another man's writing.

Yet early modern geography and patriotism have a more complex association beyond simple love of country. The practice of geography could be conceived as a patriotic endeavor in itself, that is, as serving the homeland by describing it. Before the beginning of European overseas expansion in the mid-sixteenth century, the primary reason to study world geography was academic, to improve the student's understanding and recall of classical, modern, and biblical history (*historiae oculus geographia*, "geography is the eye of history"); geography was not part of formal university curricula. As discussed in Chapter 2, by 1600, the primary purpose for studying the geography of the world beyond England's shores had been transformed. University students were exposed to courses in geography, both mathematical and descriptive, in order to increase the "power that came with information, measurement, and classification," power that the government and merchants could use to increase England's political and economic strength. In short, the universities and the monarchy encouraged geographic study in

253. Ferrand Spence, "Englisher's Preface to the Reader," in Pierre Duval, *Geographia Universalis: The Present State of the Whole World...Written Originally at the Command of the French King for the use of the Dauphin, by the Sieur DuVal, Geographer in Ordinary to His Majesty; And made English, by Ferrand Spence* (London: H. Clark, 1685), n.p.

254. Ibid.

order to foster geographic control—that is, to engage geography in the project of developing an overseas empire (Figure 34).

First, geography informed the professional practice and policy decisions of those university students who went on to public positions in government and the trading companies.

Secondly, it established a vision of a world ripe for exploitation by an England that was



Figure 34: Maps such as this one of the English colonies abroad helped established both imperial visions and real empire among the gentry of England. Detail from Robert Morden's *A New Map of the English Empire in America* (first published in 1695), as revised by John Senex for his *A New General Atlas* (London: Daniel Browne, 1721). 97-6118. (Map Division, New York Public Library, New York, NY).

promoted as superior in technology, organization, and virtue to the nations to be subjugated; in other words, the study of geography provided the vision of empire that was necessary for the creation of that empire in reality. This vision promoted patriotic sentiment as a motivation for colonial and imperial exploitation of foreign lands. Leslie Cormack focuses on the principles and practice of geographies (mathematical, descriptive, and chorographical) within the English university before 1620. Yet the patriotic persona offered by Robert Morden, an uneducated artisan working after 1670, suggests that her argument for the primarily imperialistic mission of English geographic inquiry has validity up to the turn of the eighteenth century.

In the first edition (1680) of *Geography Rectified*, Morden's dedication to Thomas Goddard asserts his patriotic persona by condemning what he sees as the fashionable popular bias against reading native English books and maps in favor of foreign-made productions. His condemnation occurs in a passage where Morden is offering a defense of the atlas, which he says he fears will be subjected (unfairly, of course) to harsh public criticism; in other words, he suggests that readers may criticize the atlas merely on the grounds that it was produced by a fellow Englishman. Morden frames this defense by explaining to Goddard why he is choosing to "shelter [the atlas] under the Patronage of your Name." Morden criticizes men of wealth and education who do not patronize talented English artisans such as himself by praising Goddard's generosity, contrasting it with "the Humour of some English Men (to the prejudice of as ingenious a Nation as any in the Universe) to despise what is done by their own Country[']s hand," who "can think nothing worth but what is drawn by some Outlandish or Titulado pen."²⁵⁵ By critiquing this xenophiliac view, Morden shows a patriot's defense of his country while

255. Morden, dedication of *Geography Rectified*, n.p.

simultaneously proclaiming the value of English maps and the virtue of those who patronize their production.

By the time of the second edition in 1688, Morden's sentiment had expanded to encompass an explicitly patriotic purpose and audience. In his address to the reader, Morden names his intended readership: the rank of the gentry. Morden writes:

...And all this after many years experience, not only in making and projecting of Globes, Maps, &c. but also in examining and comparing of the Relations, Discoveries, Observations, Draughts, Journals and Writings, as well of the Ancient as Modern Geographers, Travellers, Mariners, &c. wherein I had taken much pains and spent much time; tho' to my own profit I have done nothing: Only may this be but useful and acceptable to the young Gentry and Scholars of England, and I am sure of this one Advantage that I shall have many the less an idle hour to account for.²⁵⁶

He mentions the gentry again at the conclusion of the address. There he portrays himself as their servant, co-opting the same language of humility and service that defines clientage letters and that Morden himself uses in his dedication to Thomas Goddard. He states that while the atlas is small, he hopes that it will at least satisfy his readers as an introduction to more comprehensive works by respected geographers. The address continues: "the Encouraging Gentry of England have been so often imposed upon by pretenders to Mapping, that I despair of making any Proposals, and consequently of ever doing them. And indeed 'tis now time for me to provide for a better Estate, where there will be better Rewards for the true and faithful service of/Your most obedient and humble servant/Robert Morden."²⁵⁷ Thus Morden identifies the profit of the gentry as the entire purpose for his work, denying that he has performed it for his personal gain and

256. Morden, "To the Reader," in *Geography Rectified*, n.p.

257. Ibid.

claiming he will be satisfied that the book fulfilled its purpose if the young gentry find it worthwhile.

In the process of praising his intended audience, Morden is not merely flattering the egos of his readers; he is promoting a self-identity as an English patriot, and expecting to benefit from the choice made by English atlas buyers to support the work of their fellow Englishman.²⁵⁸ This was a reasonable strategy; despite the fashionable disdain for native goods Morden noted among some of his countrymen, Nancy Cox has shown that in early modern English trade in general, the “products of British manufacture and the commonwealth of people were both generally perceived as part of ‘publick good.’ As such, each was given recognition and accorded respect in treatises and debates.”²⁵⁹ Thus Morden was trying to tap into the gentry’s perceived love of country and to stoke their desire to support British producers in order to support the country as a whole. He also identifies the gentry as supporting mapping projects more generally, a statement which, while encouraging future support, was not mere flattery.

Unlike the case of France under Louis XIV, the English monarchs offered only occasional and modest financial support to surveying and national mapping projects, along with bestowing on some geographers royal titles that did not include a stipend. The majority of support for surveying and other cartographic endeavors came from individual patrons and publication subscriptions—that is, from the ranks of gentlemen and the nobility. That support was critical to underwrite the costs of surveying, drafting, research, writing, compiling, engraving, and printing of new maps. Without it, artisan-shopkeepers of modest means like Morden, who did not possess the capital to invest in large scale projects alone, could not have

258. Scholarship on the deployment of patriotic sentiment in advertising and marketing in the early modern period is scarce, as is the study of retail marketing strategies in the seventeenth century generally.

259. Nancy Cox, *Perceptions of Retailing in Early Modern England* (London: Ashgate, 2007), 21.

produced the enormous output of maps, plans, surveys, and descriptions that supported the development of the strong centralized government and the beginnings of an overseas empire.

As discussed in Chapter 2, the gentry were far from the only consumers of cartographic products in seventeenth-century England. Atlases found buyers among merchants (like Goddard), lawyers, physicians, bureaucrats, military officers, and men of other literate specialties as well. In fact, the prefaces of a number of world atlases proclaim with grandiose inclusiveness that all professions, from mechanics to princes, can potentially benefit from the purchase and study of atlas content. Yet Morden chose a different marketing strategy; aware of his dependence on the financial support of the English gentry for his commercial survival, he chose to present himself as a patriot honoring only gentlemen, separating them from other classes.

Morden's conflation of "young Gentry and Scholars of England" is not without justification. Lawrence Stone and others have shown that about half of university students in the seventeenth century were from gentry families.²⁶⁰ It is the sons of the gentry who received formal training in geography in order to prepare them for positions in the English bureaucracy, where they were to oversee exploration, colonization, and the exploitation of natural resources in the colonies. The growing state bureaucracy needed men with expertise in the political, economic, and geographic aspects of empire, and universities modified the traditional liberal arts curricula to meet that need. The bachelors and masters became the new geographers—experts in trade, finance, manufactures, agriculture, or naval operations, they needed to understand the political and commercial layout of Europe and the colonized world, and applied their geographic training to a range of governmental functions. Thus Morden's choice to identify gentlemen as his

260. See Lawrence Stone, "The Educational Revolution in England, 1560-1640," *Past and Present* 28: 41-80, for a breakdown of the origins of English university students.

audience supports Cormack's identification of the gentry rank as the targeted students and practitioners of geography within the English university.

In promoting his patriot persona to readers, Robert Morden was, once again, following the precedent set half a century earlier by the renowned John Speed. In fact, Speed's influence on Morden was significant. I have discussed John Speed earlier in this study, examining his self-presentations as a geographic scholar and as a patron's servant. The first edition (1627) of Speed's *A Prospect of the Most Famous Parts of the World* was sold bound together with a new edition of his bestselling *Theatre of the Empire of Great Britain*. This combined publication in folio featured several introductory texts which assert Speed's deep patriotism.

Speed offers a self-image as a geographer whose genuine love of country motivated him to the work of creating an atlas. He presents himself as a great lover of the British Isles—its history, its landscapes, its government and its rulers. Speed uses this explicit love of country deliberately to help establish his authority as an atlas-maker, to justify and explain his work to fellow patriots. The dedication to King James I was discussed in Chapter 3 as evidence of Speed's self-presentation as a loyal client; but this "most Loyal Subject" expresses his devotion to his native country frequently in the other introductory texts. The lengthy text "To the Well-Affected and Favourable Reader" opens with a long disclaimer on the compiler's unworthiness to prepare the book. In itself this modest claim sets the work firmly within early modern writing conventions. Sixteenth- and seventeenth- century publications often feature such disclaimers, part of the self-presentation of humility used by many writers wishing to gain the sympathy of readers for their toil.

He then justifies his daring to create the book by invoking a patriotism so intense that it rendered him senseless of the burden of its creation: ". . .neither can I for my heedless

presumption alledge [sic] any excuse, unless it be this, that the zeal of my Countries glory so transported my senses, as I knew not what I undertook...²⁶¹ Of England itself he waxes spiritual and poetic, likening it to Paradise and asking the reader's forgiveness for his flowery praise of "...our native Land. Whose beauty and benefits, not afar off, as Moses saw Canaan from Pisgah, but by my own travels through every Province of England and Wales, mine eyes have beheld: and whose Climate, Temperature, Plenty and Pleasures, make it to be as the very Eden of Europe (pardon me I pray, if affection pass limits)...²⁶² Continuing with a description of England's rich agricultural and pastoral resources, Speed fondly reiterates its Eden-like quality: "...briefly, every Soil is so enriched with Plenty and Pleasures, as the Inhabitants think there is no other Paradise, in the Earth but where themselves dwell."²⁶³ He references the "endured miseries" his homeland has suffered from "Forrain or home-bred Conspirators" but from which it has now been freed.²⁶⁴ This is a reference both to the immediate historical situation in the years following the Anglo-Spanish War (1585-1604) and the attempted invasion by the Spanish Armada in 1588; it also no doubt refers to the numerous internal rebellions and conspiracies that emerged at the end of Elizabeth I's reign in 1603. However, historian Speed is also invoking the unity and peace forged by the Tudor and Stuart dynasties following the disastrous civil wars of the fifteenth and early sixteenth centuries.

Finally, Speed returns to the patriotic theme at the very end of the address, invoking the metaphor of homeland-as-mother. He refers to his atlases "which I here offer upon the Altar of Love to my Country, and wherein I have held it no Sacriledge [sic] to rob others of their richest

261. Speed, "To the Reader," n.p.

262. Ibid.

263. Ibid.

264. Ibid.

Jewels [i.e., the works of previous geographers] to adorn this my most beautiful Nurse, whose Womb was my Conception, whose Breasts were my Nourishment, whose Bosom my Cradle, and Lap (I doubt not) shall be my bed of sweet Rest, till Christ by his Trumpet raise me thence.”²⁶⁵

Thus the atlas-maker repeatedly justifies his atlas publication through reference to his own loyalty and love of his country and its rightful leaders.

Speed’s self-presentation blends elements of patriotism with elements of the virtuous, hard-working artisan; Morden’s does the same. Comparing the two identities, the most striking difference between Speed’s patriotism and that of later compilers such as Morden is his overt religiosity—Speed’s patriotism is inseparable from his Protestant faith, while Morden offers no hint of religious belief or motivation in his patriot persona (or anywhere else).

Robert Morden, John Speed, and even Ferrand Spence all crafted personas as patriot-geographers, men undertaking enormous scholarly projects at enormous personal cost for the ultimate benefit of their beloved country. Morden and Speed also, as described in Chapter 3, offered personas as patron’s servants. How does the patriot persona differ from that of the patron’s servant?

One of the characteristics of the early modern period that links it to the medieval period is the personal nature of loyalty. In Chapter 3, I gave several examples of atlas makers claiming a strong personal bond with someone who belonged to the royal family, and pledging a lifetime of personal service, loyalty, and gratitude. For medieval Europeans, service to their country was the same as service to the monarch. By the seventeenth century, this clear hierarchical loyalty was challenged by a developing sense of the nation as a political entity made up of citizens.²⁶⁶ The

265. Ibid.

266. For example, John Kersey’s *The English Dictionary, or a Compleat Collection of the Most Proper and Significant Words...* (London: Henry Bonwicke, 1702) defines a nation as “the people of a Country.” In this chapter I use the anachronistic terms patriotism and nationalism as distinct phenomena, following David A. Bell’s definition of

scholarly debates on the timing and nature of the emergence of nationalism in the early modern period are too complex and contested to outline here; what can be agreed upon is patriotism is essentially a horizontal attachment, not a vertical association.

Patriotism as deployed by Robert Morden and others is distinguished from the hierarchical loyalties of a patron-client relationship with a person with political or cultural authority precisely because the object of patriotism is not any individual but an abstraction called the country. A patriot does not serve his country because he is loyal to the monarch; he serves the monarch because he is loyal to his country. Thus while Morden claimed loyalty and service to the merchant Thomas Goddard, he also claimed loyalty to the English nation. This use of patriotic sentiment as a marketing strategy suggests that Morden (and Speed and Spence) believed that his readership identified as Englishmen, loved their native land, and would be inclined to support the geographic products of a fellow patriotic countryman over competing foreign-made products.

There is no reason to assume that the love and national loyalty expressed by Morden, Speed, and others was only a marketing ploy and did not reflect any true sentiment. The patriotic language they use is conventional, even formulaic, and often sounds overblown; but that does not mean that it did not reflect sincere feeling. At the same time, however, constructing a patriotic persona was clearly a promotional commercial strategy—one that may shed light on the commodification of national sentiment in the early modern period, an area as yet neglected by scholars. Historians still locate the beginning of the commercial revolution in the eighteenth

patriotism as “an emotional attachment to a place thought of as ‘home’”, and nationalism as “a program to build a sovereign political community grouping together people who have enough in common...to allow them to act as a homogeneous, collective person”; David A. Bell, *The Cult of the Nation in France: Inventing Nationalism, 1680-1800* (Cambridge, MA: Harvard Univ. Press, 2001), 20. For the now-standard work on the development of British national sentiment and British identity up to and after the Act of Union in 1707, see Linda Colley, *Britons: Forging the Nation, 1707-1837* (New Haven, CT: Yale Univ. Press, 1992). For France, see Bell’s *The Cult of the Nation in France*.

century, but seventeenth-century artisan atlas producers, like Morden, lived and worked within a well-established commercial economy.²⁶⁷ Competition flourished in publishing and scientific instruments; and despite periodic warfare among the three, a book printed in France, England, or Holland might be found in bookshops in any of the three countries. Translators such as Ferrand Spence were in high demand, preparing new editions of all genres of literature and freely nationalizing foreign works, adapting them to maximize appeal to their countrymen. Still, it is clear from the effusive patriotic prose found in many world atlases that compilers such as Morden and Speed were writing for a national audience, rather than foreigners, who formed only an incidental readership. When creating their descriptive texts and prefaces, compilers were trying to create legitimizing self-presentations that consumers in their own country would find persuasive, including the assertion of a patriotic identity.

Next I turn to a discussion of a related persona that adds yet another layer to Robert Morden's complex and vivid self-presentation: that of the geographic reformer.

Morden as Geography's Reluctant Reformer

Aspects of a reformer identity appear frequently in the personal texts included in Morden's atlases. Intended to bolster his credibility with his commercial audience, the geographic reformer persona afforded Morden the opportunity to criticize his commercial rivals (even while, in many cases, borrowing their work) by claiming geographic and cartographic knowledge so superior to theirs that he could with authority correct their works. Related to but

267. For an overview of eighteenth-century consumerism in England, see John Brewer, Neil McKendrick, and John H. Plumb, *The Birth of a Consumer Society: the Commercialization of Eighteenth-Century England* (Indianapolis: Indiana Univ. Press, 1982); for the case of France, see Daniel Roche, *L'Histoire des choses banales: Naissance de la consommation (XVIIe-XIXe siècle)* (Paris: Fayard, 1997).

distinguished from Morden's simpler "geographic expert" persona, the reformer is a loftier self-presentation, not putting Morden on a par with his contemporaries as a result of his long experience in mapmaking, but indeed asserting that he is superior to all other mapmakers in knowledge. As I show, this persona is framed within a speciously modest self-presentation of a man reluctantly forced by love of the truth to publish his atlases. To give context to the reformer persona, Morden's themes are examined in parallel with those of a work by one of Morden's contemporaries, the somewhat mysterious felon mapmaker John Green.

Throughout the editions of *Geography Rectified*, Morden asserts that the purpose of the atlas is his desire to amend and perfect geography as a useful science. He constructs this justification in several ways, starting, of course, with the title itself. The atlas' full title is:

Geography Rectified, or A Description of the World, in all its Kingdoms, Provinces, Countries, Islands, Cities, Towns, Seas, Rivers, Bays, Capes, Ports; Their ancient and present Names, Inhabitants, Scituations, Histories, Customs, Governments, etc. As also their Commodities, Coins, Weights and Measures, compared with those at London. Illustrated with above sixty new Maps. The whole Work performed according to the most accurate Discoveries of Modern Authors.

In a period when "New Atlases" and "New Descriptions" and "New Systems" of geography abound, Morden's work stands out for being marketed not for its novelty—which, even when true, has no necessary link to accuracy—but for its (purportedly) accurate description of world geography. The title promises an atlas with more correct, not newer, information than that offered by other available works. Whereas other atlas makers often altered the title of an atlas as it passed into a new edition, presumably hoping the new title would find more customers, all editions of Morden's world atlas retain the same primary title.

Morden presents himself as a reformer at length in the “Address to the Reader” in the first edition. He begins by explaining that the nature of geography itself, like that of history, demands continual revision and updating. He states that the modern author “must needs have a great Advantage beyond [all earlier writers], by adding the Experience of his own Time to the perusal of what was formerly attained unto; more especially in History and Geography; for though in the Axioms, Theorems, and Propositions of Logick, Philosophy Mathematicks, &c. that which was once Truth, remains so for ever; yet in History there is a necessity of Continuation, and in Geography of Alteration from time to time.”²⁶⁸ He concludes that it “is a Boldness justifiable by Truth to affirm that all former Geographies diligently compared with the more accurate Observations and Discoveries of late years are greatly Defective and strangely Erroneous.”²⁶⁹ Phrasing these assertions as being readily apparent, Morden wants to reassure the unconvinced reader of the propriety of altering received wisdom; at the same time, his use of “rectified” in the atlas’ title suggests that he felt potential buyers would be attracted to an atlas composed of newly corrected geographic data, one that made previous works obsolete.

Lest the reader not yet be convinced of Morden’s superior knowledge and better maps, the address goes on to list numerous examples of corrections Morden has made to the toponyms and locations of many regions and cities, and describes how he has “inserted more than 20 New Maps of Countries, some yet never extant in any Geography before; As also many Cities, Towns, Islands, Rivers, with the Ancient and Modern Names, with many other Improvements, which were omitted in the former.”²⁷⁰

268. Morden, “To the Reader,” in *Geography Rectified*, n.p.

269. Ibid.

270. Ibid.

In the second edition (1688), Morden chose to extend his argument. No longer does he ask the reader to rely only on his assertions of the need to rectify geography; Morden now references the authoritative names of two well-established geographer-astronomers. These are Edward Wright, author of *Certaine Errors in Navigation*;²⁷¹ and “the ingenious” and well-known Edmund Halley. Both men had established reputations as careful astronomers and had published numerous tracts on mathematical geography. Wright (1561-1615) was one of the late sixteenth-century Cambridge students described by Leslie Cormack who studied mathematical geography and went on to employment under the crown as geographer, surveyor, and maritime explorer. Though it provided a wealth of information for ship navigators, his *Certaine Errors* (1599) is best known now as the first publication to explain the use of Gerhard Mercator’s eponymous map projection (1569) and the projection’s unprecedented usefulness for simplifying the plotting of navigational courses as a straight line. Mercator had published his world map based on his invented projection in order to simplify trans-ocean navigation, but he did not publish instructions for navigators to employ the projection in their work. It was Wright’s publication that, three decades later, allowed practical use of Mercator’s breakthrough in applied mathematics by giving navigators the calculations necessary to plot their courses. Morden’s contemporary, astronomer Edmund Halley (1656-1742), though still early in his career in 1688, was already a Fellow of the Royal Society and had published Isaac Newton’s *Philosophiae Naturalis Principia Mathematica* at his own expense in 1687. He was famed for his improvements to existing star maps and his meteorological and climate observations.

271. Edward Wright, *Certaine Errors in Navigation*.

How does Morden use the names of these illustrious men to buttress his self-presentation as a geographic reformer? He deploys Wright and Halley's names explicitly to support his assertion of the dangerous inadequacies and errors of existing maps:

...all former Geographies diligently compared with the more accurate Observations and Discoveries of late years, are greatly defective, and strangely Erroneous. And that I may not be thought singular in my assertion, see what the Industrious Mr. Wright said in his Correction of Errors in Navigation [sic]; where he tells us, That the Longitude of Places would well deserve both Labour and Cost. And tho the Rectification of them were more a busie and expensive work, than profitable; yet most worthy and necessary to be labored in, as without which all Charts, Maps, Globes, and all other Hydrographical and Geographical Descriptions cannot be freed from many intricate absurdities wherewith they are now every where pestered and perplexed ...²⁷²

After giving several examples of inaccurate longitudes corrected by Wright, Morden adds, "And the Ingenious Mr. Hally [sic] tells us in one of his Philosophical Transactions, That the Dutch Maps were out more than 10 Degrees..."²⁷³ With the unfortunate truth of the inaccuracies of modern maps confirmed by the authoritative words of Wright and Halley, Morden moves on to a lengthy list of examples of erroneous geographies, all of which he claims to have corrected in the present volume.

Echoing the reformer persona again at the very end of the address to the reader, Morden tries to ensure that the reader is left with a strong impression of his superior knowledge and the great necessity for his accurate maps. He ends the 1680 edition's address by staking his very reputation on the significant benefit his rectified maps will provide the reader, whom he claims is in danger of being misled by the competition's maps. In defending the small size of the atlas (it was published in quarto), Morden ends by noting "...I am Confident it may be sufficient to

272. Morden, "To the Reader," in *Geography Rectified*, n.p.

273. Ibid.

demonstrate the Necessity of New Maps, and the great Errors of the Old; for Wise Men cannot but find the difference when compared together, to whose Judicious and Experimental knowledge I shall stand or fall, aiming at nothing more than the Rectification of Geography, a Work much desired by/Robert Morden.”²⁷⁴ Perhaps wanting to contain his readers’ expectations, however, Morden amends this comment in the 1688 edition: “I am Confident it may be sufficient to demonstrate the great Errors of the Old Maps, and the Necessity of New and Larger; but this is not to be performed without a greater Stock than I am Steward of,” an admission that the completion of a perfect geography ultimately lies beyond Morden’s ability.²⁷⁵

In the previous section, I discussed Morden’s self-presentation as an English patriot. That patriot persona is closely linked to his self-presentation as a geographic reformer. As I discussed, by the end of the sixteenth century the cultural perception of geography had altered from a closed, scholastic field to one that promised immediate and tangible advantages to whatever nation harnessed world geographic data successfully in the pursuit of economic power. Thus Morden’s claim to publish a “geography rectified”—in fact, a geography with maps more comprehensive and accurate than any others available—offered obvious benefits to the English government as it engaged in a global struggle for empire against France and the Netherlands. His identification of the young English gentry, those who would be bureaucrats in the English imperial government and needed the best information available, as buyers of the atlas reinforces the connection Morden wanted buyers to make between the atlas and England’s status as a world power.

274. Ibid.

275. Morden, “To the Reader,” in *Geography Rectified* (1688), n.p.

Throughout his lengthy critique of the “intricate absurdities” found in “all former Geographies,” Robert Morden makes an implicit distinction between ancient and modern geographical information. All are inaccurate, but Morden spares the ancient and medieval geographers from his criticism. In the address to the reader, he lists the great ancient geographers whose work is summed up in *Geography Rectified*, including Strabo, Pliny, and Ptolemy, along with the “Nubian Geographer,” i.e., Muhammad al-Idrisi.²⁷⁶ On the surface this is somewhat surprising. Since the maps and geographies of the ancient world were more fractured, incomplete, and inaccurate than those of the sixteenth and seventeenth centuries, Morden, who was certainly aware of this, could have been justified in attacking their value even more strenuously than he attacks works of his contemporaries. This would also suit his persistent emphasis on the value of maps produced with the results of the latest astronomical and eyewitness information available.

Yet the geographies of ancients are either ignored in Morden’s texts, or mentioned as “reverend Observations,” sparing them from the venom he directs at early modern geographers. The commercial context in which Morden was working may offer an explanation of his decision. Whatever the ostensible purpose for the personal texts Morden includes in the various editions—informational, dedicatory, and instructional—in fact the primary purpose of all the texts was marketing the book. By 1680, new publications in the vernacular or in Latin of Strabo, Pliny, and Ptolemy were rare; even the universities were using modern redactions, such as Varenius’ *Geographia generalis*, to teach ancient history. Thus Morden had no reason to fear losing sales to re-publications of the ancient authors, and hence little reason to denigrate their worth to increase his profits. Indeed, he mentions Strabo, Pliny, and Ptolemy in his address as a means of

276. Muhammad al-Idrisi is the famed Arab geographer (1099-1154) who served at the court of Roger II of Sicily.

marketing those few authorities who were still revered even in Morden's time, two centuries after the discovery of the New World.

However, when it comes to the publications against which his atlas would compete, those by his contemporaries, Morden eagerly goes on the attack. He accuses other mapmakers of carelessness, giving numerous examples of the errors found in the popular maps of specific rival mapmakers. For example, he devotes considerable space in the address to the reader to an attack on the world maps available for sale from his competitors. In doing so, he denigrates not just most world maps, but in fact all world maps previously made as needing rectification: "For as to all the Maps of the Earth that I have yet seen, they are so false and imperfect, that I was obliged to alter many places in Europe 3 degrees of Latitude, and more than 5 in Longitude."²⁷⁷ Errors in longitude, in the century before the invention of maritime chronometers made its precise calculation at sea possible, were common before the mid-eighteenth century, and longitude errors were widely acknowledged as an intransigent problem of seventeenth-century mapmaking (see p.67-68). However, mariners had always been able to fix latitude by sighting the stars, so the criticism of "all the Maps of the Earth" having faulty latitudes is particularly harsh. But Morden doesn't end his enumeration of corrections there; he adds, "[I was obliged]...to make Asia and America wholly New, and to rectifie Africa more than 10 degrees; To insert divers Countries, Cities, Towns, &c. which were wholly omitted by others....," among other specific changes major and minor.²⁷⁸

Thus Morden offers a number of assertions of the lack of adequate maps available to the public—that is, Morden's customers—offering his own and other experts' observations as

277. Morden, "To the Reader," in *Geography Rectified*, n.p.

278. *Ibid.*

evidence. He uses this assertion of faulty existing maps and descriptions to underpin an authorial persona for himself of a needed geographic reformer. He describes an urgent need; then presents himself as possessing the knowledge and skills to fill that need, and thereby rescue English politics and trade from the major risks inherent in trusting flawed maps.

In an earlier section I described Morden's presentation of himself as a humble shopkeeper, and as the loyal and obedient servant of his would-be patron, Thomas Goddard. Morden invokes the same humble persona to persuade the reader that the compilation of *Geography Rectified* was not merely a commercial decision—the decision of an artisan-shopkeeper to create a new product to sell at a profit—but rather was an endeavor its author was forced to undertake by his own morality. The catalyst for this endeavor was the author's overwhelming love of truth. This is where Morden makes perhaps his most vigorous self-presentation as a reformer of knowledge, galvanized by his desire to disseminate geographic truth to overcome all personal and professional barriers to that goal.

On the same pages that Morden asserts himself as a careful reformer with superior knowledge and superior skill in mapmaking, he also takes pains to not appear boastful, a rhetorical strategy calculated to impress the buyer both with the author's expertise and his modesty, even when the two are in seeming contradiction. In keeping with the artisan humility discussed earlier, Morden at times emphasizes his inability to single-handedly reform all of geography, making his atlas less the final word in geographic truth and more an important contribution to the field and a call to others to produce a perfect geography. For example, he presents this humble demeanor in the first edition within the Epistle Dedicatory to Thomas Goddard. There he excuses the imperfections of the atlas by admitting that "'tis not the Industry of one Age that can rectifie and compleat the Ataxie of Geography, nor the work of any one

Man, that of Coins, Weights, and Measures,” thus engaging in one of Morden’s many calculated contradictions: he is geography’s reformer, something he admits that no one man can claim to be.²⁷⁹ Early in the address to the reader, Morden openly asks for “Pardon for the Audacity of this Attempt, Humbly acknowledging a work of this Concernment and Difficulty in its self, did well deserve the Conjunction of many Heads and Hands; and surely more advantagious[sic] had it been unto Geography to have fallen into the endeavours[sic] of some able Advancers, that might have performed it unto the Life, and added Authority thereto.”²⁸⁰ Towards the end of the address, following the flurry of modest statements emphasizing his artisan status as discussed earlier, Morden’s corrected geography becomes little more than a stepping-stone for those new to the study of maps when he describes it as a “helpful introduction” to the “more Voluminous Tracts” of the leading lights of geographic practice, such as Ortelius, Blaeu, Mercator, and even Ptolemy, on whose works Morden has constructed his own.

These occasional modest proclamations, outnumbered as they are by Morden’s more frequent categorical statements about the faulty science of existing maps, is closely related to another important dimension of this self-presentation: that Morden is a reluctant reformer. He presents a narrative in which he created *Geography Rectified* at considerable personal expense, as he is at pains to reiterate to the reader; but, he adds, he is essentially being compelled to publish the atlas out of his great love for the truth. The motivation to impart that geographic truth to his readers trumps considerations of personal reputation and retail profits.

He first makes the case for his reluctance and motivation in the dedication to Thomas Goddard. In the 1688 edition’s Epistle Dedicatory, Morden repeats the excuse from the 1680

279. Morden, “Epistle Dedicatory,” in *Geography Rectified*, n.p.

280. Morden, “To the Reader,” in *Geography Rectified*, n.p.

edition for the work's imperfections (“‘tis not the Industry of one Age that can rectifie and compleat the Ataxie of Geography”), and adds: “For I have this, I will not say to justifie, but to excuse at least my boldness and forwardness, that if I had known these things to have been but tolerably performed by others, I had neither troubled my Reader, nor mis-spent my own time about the Rectification of them...”²⁸¹ His rhetoric continues to inflate in the reader address that follows, in which Morden presents himself as a martyr to the cause of truth in geographic description: “For I am not ignorant of the discouragement of Contradiction, of the difficulty of disswasion[sic] from radicated Beliefs, of what cold requitals some have found in their redemptions of Truth, and how ingenious discoveries have been dismissed with Obloquie and censured with Singularity.”²⁸²

He even claims that he harbored no plans to publish the atlas: “...I had taken much Pains and spent much Time in preparing for such a work. Yet it was not my Intendment to have appeared upon the Horizon of Publique Veiw[sic], had not the great stir and Abuses of many Ignorant pretenders forced me to this undertaking.”²⁸³ Thus Morden, an artisan with a busy shop and many dependents, wants the reader to believe the highly implausible claim that he spent hours producing an atlas only for the personal satisfaction of achieving a perfect world geography. Morden claims to fear contradiction and condemnation of his atlas by others who are unable to change their “radicated Beliefs” in the face of new truths and “ingenious discoveries,” although he leaves the specific impetus for this feared public censure unstated. He wishes that others with more cultural authority to pronounce on geographic topics would have recognized

281. Morden, “Epistle Dedicatory,” in *Geography Rectified*, n.p.

282. Morden, “To the Reader,” in *Geography Rectified*, n.p.

283. Ibid.

and fulfilled the need for a rectified geography. But since no one else appears ready to perform the task, Morden states that he became persuaded to fill the need himself.

This vague anxiety of censure and ridicule might seem to better suit those practitioners of seventeenth-century Copernican astronomy and the experimental sciences—with theories and philosophies contrary to received wisdom and hence controversial—more than it suits Morden’s genre of largely descriptive, text-heavy atlases. Morden could reasonably fret about competitors criticizing discrete data, such as the situation of specific places. But despite his rhetoric, Morden’s maps presented no content, style, or geographic theories that would cause controversy. Yet Morden’s rhetoric of the fear of condemnation by the ignorant suggests he was trying to elevate himself to a place alongside those contemporary natural philosophers who were challenging classical and medieval cosmologies and rejecting received wisdom that did not coincide with modern observations.

In the second and third editions of the atlas, Morden again turns to lofty language as he presents himself as sacrificing his time and risking his reputation for the sake of a true geography. His address to the reader in both editions begins: “So great was the attempt of my first Essay, in the publishing of my *Geography Rectifi’d*, that for my heedless presumption I can alledg no excuse, unless, that the zeal of my love for its Truth, so transported my senses, and I considered not the weight I undertook. And therefore I again crave pardon for the audacity of that Attempt.”²⁸⁴ Here the self-deprecating statements that routinely appear in the frontmatter of books of the era transform into a positive statement of Morden’s overwhelming love for his field of expertise and his passion to understand and spread the truth for its own sake. His human reason—that distinguishing faculty so critical to the theoretical foundations of early modern

284. *Ibid.*

natural philosophy—should have prevented him from taking on such an enormous task. Yet, he says, he made powerless by the emotional state brought on by his personal zeal to promote the truth.

Morden's self-presentation as a scientific reformer was calculated to resonate with his particular audience, echoing as it does many of the ideas of the New Philosophy current among educated Londoners in the 1680s. As discussed in Chapter 4, half a century before Morden began publishing, the natural philosopher and statesman Francis Bacon had advocated for a rationalized approach to investigating the natural world, in which no first principles and no received wisdom would be left unexamined. Essentially he envisioned an entirely new science built from the group up, in which only reason, observation and the accretion of facts would drive the creation of interpretive systems. Although Bacon's goal was a state-sponsored and state-organized system of experimental philosophy, it was also an approach that stressed the value of plain, vernacular writing and the free sharing of ideas and experimental results.²⁸⁵ This put the ability to engage in the improvement of natural knowledge within the reach of the interested layman, the artisan and the skilled tradesman.

Ideally, reformist geographers like Robert Morden, committed to high standards of accuracy, tediously gathered information and filtered it through reason in order to sift, compare, include and omit data, for the greater purpose of creating the most accurate maps and descriptions possible for practical use. In fact, it is no coincidence that geography was one of the first fields of knowledge to be significantly influenced by Baconian principles. In the early modern period, descriptive geography became a science of observation and verified testimony, as the ancient, biblical and medieval theories that had driven geographic thought in the absence of

285. Geographer Dalia Varanka has written at length about the influence of Baconian-style prose on the texts in geographic atlases; see her dissertation, "Editorial and Design Principles."

reliable information found fewer and fewer adherents. This fit well into a Baconian model for reformed science: as new information was gathered and verified by reliable sources, corrections and additions were made in more or less linear fashion, in small, discrete steps: discoveries, surveys, soundings, improved astronomical observations, eyewitness accounts, etc. Debates certainly existed, but even as they hinged on the comparative worth of competing authorities, debates in geography did not have the potential for causing the deep antagonism and strong advocacy seen in the explanatory and experimental sciences.

Looking at Morden's reformist self-presentation as a marketing strategy is revealing. It is certainly true that geographic knowledge was slowly becoming more accurate and more comprehensive over the course of Morden's career. Yet more importantly for this study, Morden saw the reform aspect of his work as a feature that his buyers would find desirable in the atlas product. He therefore deliberately promoted a persona of a scientific reformer in his atlases. Clearly he believed that many of his potential buyers did not seek unaltered classical or medieval works but valued up-to-date maps and descriptions. Selling the atlas to university students, merchants, and administrators meant satisfying a market that demanded accuracy in plotting and description of contemporary overseas lands, lands there were being evaluated for their potential to help enrich the nation. Other mapmakers working in Morden's time sought to fill the needs of other customers, for example, providing decorative wall maps and globes, or creating maps for use in the study of history. Morden wanted his potential buyers to believe that they could not obtain the correct data they needed from the beautifully drawn but outdated Dutch or French maps, or from the carelessly compiled English maps, and to believe that his were the most suited to their needs.

Morden was not the only mapseller of his time who promoted a reformer self-presentation. Fellow London-based mapmaker John Green (c.1688-1757, born Bradock Mead in Ireland) likewise presented a geographic work using the trope of rectifying and making geography more perfect and thus more useful.²⁸⁶ His *The Construction of Maps and Globes* (1717) is essentially an instruction manual. Like Morden, Green used rich, immediate language and memorable phrases to assert his authorial identity as a reformer of geographic writing and mapmaking. Green was not writing for the gentry or the public of map buyers, however. In fact Green's treatise is targeted to other geographers, calling for a reformation of the practice of mapmaking to produce useful, true maps and an end to the laziness and greed that he asserts was driving geographic production. Although Green's treatise has not yet received the scholarly attention it deserves, below I briefly examine aspects of the frontmatter and appendix of *The Construction of Maps and Globes* that resonate with the authorial persona of the reluctant reformer found in Morden's *Geography Rectified*.

Instead of criticizing practicing mapmakers indirectly to customers as Morden does, Green attacks them directly in the third and final section of *The Construction of Maps and Globes*, "An Appendix wherein the Present State of Geography is consider'd; being a Seasonable Enquiry into Maps, Books of Geography, and Travel." The appendix is a 70-page treatise—one might call it a diatribe—admonishing contemporary geographers to the better performance of their industry. He calls for an end to the publication of "those spurious Draughts" that are "daily

286. John Green is one of early modern Europe's more colorful map personalities. Irishman Bradock Mead moved from Dublin to London the year *The Construction of Maps and Globes* appeared (1717), and in 1728 was briefly imprisoned for attempting to defraud an Irish heiress of her fortune. On his release he assumed the name John Green, and spent the rest of his life producing maps and other geographical products, becoming well respected for his conscientious map compilation methods and his careful acknowledgment of his map sources. See William Press Cumming, *British Maps of Colonial America* (Chicago: Univ. of Chicago Press, 1974), 45-47; G.R. Crone, "Notes on a neglected Eighteenth Century Geographer and Cartographer," *Imago Mundi* 6 (1949): 85-91; and G.R. Crone, "Further notes on Bradock Mead, Alias John Green, an Eighteenth Century Cartographer," *Imago Mundi* 8 (1951): 69-70.

obtruded on the Publick,” being merely copies of old maps whose information has long since been known to be inaccurate.²⁸⁷ He continues by noting that: “...the Map-makers still continue to impose Copies from the Old MAPS upon the World, to the Dishonour, as well as Prejudice of Geography. The Design therefore of the ensuing Treatise, is to admonish our Map-makers of these Abuses, and to endeavour a Reformation in Geography, by inciting Travellers and Geographers to Care and Diligence in making and collecting their Geographical Observations.”²⁸⁸ Thus, like his contemporary Morden, Green criticizes mapmakers for producing false maps, but unlike Morden, Green’s purpose is to persuade them to change their methods.

The *Construction of Maps* is dedicated to “Samuel Molyneux, Esq., Secretary to his Royal Highness the Prince.”²⁸⁹ To Molyneux, natural philosopher and fellow of the Royal Society, Green justifies the publishing of his guide to cartography as a necessity for the integrity of geographic practice: “The Abuses of negligent and unskilful Geographers, had long since made something of this Kind necessary, in order to put a Stop to those spurious Maps and incorrect Books [i.e., atlases] which were daily publish’d by them, and continu’d more and more to involve Geography in Error and Contempt.”²⁹⁰ If Robert Morden’s concern was the dissemination of the truth, John Green’s concern is the protection of the reputation of geography itself.

287. John Green, “Appendix, Wherein the present State,” 132.

288. Ibid.

289. Samuel Molyneux (1689-1728), FRS, served several years in Parliament in addition to serving as Lord of the Admiralty (1727-1728). His contributions to astronomy include observations of stellar parallax that led to the discovery of the aberration of light.

290. John Green, dedication of *The Construction of Maps and Globes*, n.p.

In a chapter called “Some Observations upon our Modern MAPS and Map-makers,”

Green’s rhetoric is given free rein:

The World has of late Years swarm’d with MAPS, and those with Errors...I do not blame our geographers for Publishing faulty MAPS (for we may despair[sic] of seeing a truly Perfect one of any Country) but because they are not less faulty than they are; for tho’ it can’t be expected a MAP should be more exact, than the Discoveries of the Times will admit, yet it might be expected as exact complete as those Discoveries would make it. And therefore it is, I think, the Geographers are to blame, who let Errors pass, which they might, with a little Pains, have Corrected.²⁹¹

Thus Green shifts the blame for all those faulty and dangerous maps from the paucity of good information to the geographer who fails to avail himself of the best sources and to take pains to compile the best maps he possibly can.

Like Morden, Green’s reformer persona requires that he present himself as an excellent judge of good and bad maps, part of a self-presentation of being truthful and superior in knowledge that is presented through contrast with those who are ignorant and willingly present false data. Unlike Morden, however, Green speaks explicitly to the identity of a geographer, distinguishing the true geographer from the mapmaker: “The Truth is, every one that can copy or engrave a MAP, sets up for a Geographer, and having done that, thinks the Property is transferr’d, and accordingly calls himself the Author. But methinks, an Amanuensis may as well call himself the Author of a Book.”²⁹² In other words, merely possessing skill in copperplate engraving or in draughtsmanship is not sufficient to make a geographer; Green’s point here reaffirms the lack of a professional identity for geographic practitioners in the seventeenth and eighteenth centuries described in Chapter 4, when the absence of standardized training and a

291. John Green, “Appendix, Wherein the present State,” 133-134.

292. Ibid, 134-135.

consensus of skills made it possible for men of many backgrounds to claim the identity of an expert geographer. Although others, such as Herman Moll, also critiqued the products of their contemporaries, as described in Chapter 4, Green's is an unusually sustained appeal to his fellow mapmakers—not to his customers—to help bring about a truly reformed geography. The whole work is, in fact, an instruction manual for mapmakers, not a geographic text, and includes not only the mathematics of cartographic plotting and projection, but also advice for avoiding common errors and improving the reader's own maps.

Green continues, "What can be a greater Blemish to a Geographer's Character, than his copying erroneous MAPS, when he may have correct to follow? As if he did not know the Difference."²⁹³ These publications, in Green's view, are worse than merely inaccurate; they are known to be so by their compilers, and the fact that they are published anyway is a stain on the moral standing of those compilers. Green goes beyond the criticisms of Robert Morden to state explicitly that other mapmakers publish maps they know are outdated and without value, out of laziness and greed. "The Publishers of such MAPS," he writes, "seem'd to understand their own Interest better than Geography, and took Pains more for their private Advantage than the Benefit of the Publick; whilst the Science daily suffer'd, and lost by one MAP the Improvements Ages had been gathering."²⁹⁴ Again, Green's invocation of the harm to the public echoes Morden's indignation at the fraud thus perpetrated on unsuspecting map buyers: "It is to be fear'd, our MAP-makers have seldom any Interest in View but their own, which may be one Cause why their MAPS are copy'd from the Old, and without Care; tho' if they rightly consider'd, the Publick Advantage is their private, and where they now sell one MAP, they would sell many, if

293. Ibid, 142.

294. Ibid, 133-134.

they were correct; for then they would be bought by those that delight in them, for Use, as well as Ornament.”²⁹⁵ In fact, Green goes even farther in his whistleblowing: “But MAPS are not always exact Copys [sic] of others, there are some which seem to be patch’d up with a piece out of one, and a piece out of another, without any Judgment or Care: for the Map-maker often thinks himself oblig’d to make Alterations from others, that something New may appear in what he Publisheth.”²⁹⁶ As noted in Chapter 1, novelty of content was one of the major promotional points for early modern world atlases. Buyers seem to have responded well to claims that such-and-such a number of the atlas’ maps were newly drawn, after the latest observations; yet what buyers could not feasibly do was to compare published maps or map sources to ascertain which of the supposedly novel maps were in fact new. Green’s claims are a perhaps predictable outcome of that commercial situation: in the compilation of maps, errors were often introduced deliberately, so that the seller could claim that the map is new, thereby, according to Green, dealing an insult and grave injustice to the field of geography.

Lastly, Robert Morden’s self-presentation as a man reluctant to expose his work to the public finds an echo in Green’s *The Construction of Maps and Globes*. In the preface, Green suggests that although he had recognized the need for a “reformation in geography” long ago, he had hoped “it would not be long before something more compleat upon the Subject would come out, than what has hitherto appear’d; but seeing no Sign of what might have been reasonably expected, rather than so necessary a Work should be left undone, I was tempted at last to expose the following Sheets to the Publick, which were penn’d only for my own private Use, as a Help

295. Ibid, 149.

296. Ibid, 135-136.

to the Memory.”²⁹⁷ Certainly his claims of modesty strike the reader as hollow, given his willingness to condemn broadly the massive cartographic output of his competitors.

Green disparages, but does not name, other geographers who have shirked their responsibilities to the public by failing to produce an accurate and updated world geography: “But we can expect no better [than poorly compiled maps], when Men that are capable decline the Task, and leave it to those to perform, who little or nothing of the matter.”²⁹⁸ These anonymous, capable men have left the way open for ignorant and grasping competitors to fill bookshops and profit unjustly from the public’s desire for new maps.

Thus John Green’s major contentions about contemporary geographic practice help illuminate the self-presentation of Robert Morden. While other seventeenth- and early eighteenth-century mapmakers called for the improvement of maps and atlases, only Green comes close to Morden in producing a complete authorial persona with rich and colorful rhetoric. Both men promote themselves as judges of good maps and so expert in their knowledge that they can determine the value and deficits of any map. Morden’s and Green’s goals can be distinguished, however. Morden is consciously marketing his atlas through the multiple personas constructed in the frontmatter, using those texts that readers could browse prior to purchase in order to convince the reader of his authority as the atlas compiler. In Green’s case, the call for a reformed geography is the final third of a professional text—it is the message of the work itself, that is, rather than a promotional tactic. Morden presents himself as the reformer of world geography, while Green is the instructor who wants to teach others how to make maps and encourages others to perform the reformation he justifies. For Green, the reformation of

297. John Green, preface to *The Construction of Maps and Globes*, n.p.

298. John Green, “Appendix, Wherein the present State,” 135.

geography must be the widespread effort of many men, who need to be taught so that they will not simply rely on copying erroneous prior maps. In other words, John Green wants a new body of accurate, appropriately referenced geographic works to be created; compare this to Robert Morden, who claims to be taking on the task of rectification himself, the lone reformer swimming against the tide of ignorant mapmakers and faulty maps. And while both authors agree that the public is ill-served by faulty maps, Morden explicitly ties the need for accurate maps to the benefit of the nation materially through improvement in trade, while Green is more concerned with the English reputation for arts and learning rather than national prosperity.

Thus Robert Morden constructed a complex self-presentation as a geographic reformer. It served as just one of several personas he deployed in his world atlas to convince the potential buyer that to purchase *Geography Rectified* was to purchase the work of a trustworthy, authoritative, and virtuous atlas compiler who was compelled to seek out and publish the truth no matter the personal cost. Morden believed that his customers valued modern, scientifically produced, accurate maps and descriptions, and he deliberately produced texts that appealed to that desire. Since reliable geographic sources were always a major problem for world atlas makers, constructing the “geographic reformer” self-presentation was perhaps the perfect stratagem to help Morden overcome that barrier. Adopting this persona allowed him to criticize his commercial rivals and present himself as superior to them, while also allowing him to use the “correct” aspects of their imperfect works in his own products.

While many geographic texts of the period state categorically that geography is useful to men of every station and occupation, Morden chose to emphasize the practical applications of geographic knowledge for the improvement of trade and issues of state. The emphasis suggests that Morden found, or hoped to find, his customers among those whose occupations and interests

lay with the increase of national trade and the success of English foreign policy (itself inextricable from national trade policy). These men—the ones who needed and used maps, the educated and cosmopolitan, the bureaucrats, the military men, the men of the trading companies, university men, lawyers, merchants—were also those most likely to be familiar with Baconian thought and the new conceptual frameworks taking hold among practitioners of natural philosophy.

Thus Morden's self-presentation as a reformer seeking to amend the body of geographic knowledge that such men needed in their careers could carry a double marketing appeal. First, Morden offered accurate geographic data by which to plan policy and colonial ventures. Second, this vital data was provided by a virtuous man who understood, as they did, the need to question received wisdom and constantly strive to improve prior knowledge for practical reasons. He presents himself as a long-suffering advocate for the truth who was willing to sacrifice profit and his personal reputation by doggedly insisting on publishing only the most modern and accurate data in his moral commitment to the "Redemption of Truth."

Discussion

Smart, scrappy, ambitious, and opinionated—atlas compiler Robert Morden was an active participant in the keenly competitive world of London geographic publishing. His niche commercial strategy—to offer a variety of books and resources aimed at the student and middling-income London consumer market rather than trying to please buyers with a wide range of income and book needs—allowed him to operate successfully for a quarter of a century. Morden occasionally engaged in publishing partnerships, a common solution to the high cost of

engraving and printing maps, but for the most part he ran an independent business. Competition from other London-based mapmakers and also from London booksellers who imported Dutch and French maps kept map prices fairly low in the last decades of the seventeenth century. The modest prices Morden received for his atlases, maps, and globes, coupled with the high costs of production of even a small map, meant that he was never wealthy. The map publishing business was a buyers' market, where success meant each competitor had to find promotional strategies to set himself apart from his rivals.

Some of those competitors emphasized in their advertising messages assets and strengths that Morden lacked. What kinds of claims could Morden not reasonably make to appeal to buyers? To start, unlike a number of his contemporaries, Morden was not a geographer to the king, though there were always several mapmakers with that title under Charles II (r. 1660-1685) and James II (r. 1685-1688). Nor did Morden have any other royal appointment to promote, such as tutor in the royal household, or employment with the crown-sponsored trading companies, either of which would also increase his credibility as a geographer. Morden's shop was modest and served customers of middling means, not the elite, so he did not produce large, luxury editions that would enable him to advertise artful engravings and decorative elements, or extensive reference aids and supplemental content. Nor was he from a family of respected mapmakers, so he could not rely on inherited reputation and clientele. Lastly, his geographic knowledge was entirely secondhand: Robert Morden seems to have never traveled far from London, and he did not perform astronomical observations. What, then, were the promotional strategies available to Morden as he tried to attract customers for his world atlases, British atlases, and other cartographic products? The two most plausible strategies were to advertise the

value of his products—modest prices for high quality—and to present himself as a more credible authority than the producers of superficially similar products.

He does in fact reference reasonable charges for his advertised products, stating that in producing his works he tried to keep the size of books small in order to keep prices low. Yet this was not his primary strategy for attracting customers. As this case study has shown, Morden also chose to use a number of related self-presentations to establish his geographic good name. Unable to benefit commercially from the favor of political authority, family reputation, or firsthand knowledge, Morden instead crafted a complex and multilayered set of five authorial personas: patron's servant; expert by virtue of experience; virtuous artisan; patriot; and reformer of geography. Morden interweaves these different identities throughout the editions of his world atlas, *Geography Rectified*, and in his other works, such as his *The New Description and State of England*. The works were published across two decades, yet Morden's self-presentation remains fairly consistent throughout his body of work. Scholars of early modern self-presentation have shown that individuals often adopted and discarded personas as their professional status changed, essentially re-inventing public identities as their careers waxed and waned. In contrast to this, Morden, whose relatively stable career operated in a commercial rather than a patron-network milieu, was able to craft an integrated self-presentation fairly early in his career. This suggests that he saw no need to modify it over the years.

Each persona was crafted to appeal to a different value on the part of the buyer. Only one of those five personas bolsters credibility using an existing authority external to the writer (that is, borrowing legitimacy from another agent); the other four derived from Morden himself. Only two of the five, the geographic expert and the reformer, were related to the content of his work, the other three—patriot, artisan, and client—being in fact incidental to geography, authorial

identities that Morden's contemporaries in other publishing fields would have also been able to use.

The one persona derived from an external authority was Morden's self-presentation as a loyal patron's servant. As discussed in Chapter 3, Morden chose to print his dedication letter to Thomas Goddard in all editions of *Geography Rectified*, revising it occasionally. Ostensibly a private communication between client and patron, the letter was in fact a paratext appearing before the atlas proper whose purpose was establishing for the reader a way to interpret the validity of the rest of the book. Morden essentially borrows Goddard's good name in order to establish his own by advertising to the reader that Goddard personally knows, respects, and supports Morden's work, lending the credibility of his name as a respected merchant to Morden's product.

All of Morden's other personas rely on establishing an authority derived from Morden himself, including his persona as a virtuous artisan. Morden worked outside of an artisanal family network, which was atypical for a seventeenth-century map publisher in London. However, he leveraged his artisanal status into a strong persona as a tradesman, a socio-economic identity that in late seventeenth-century London carried cultural associations with hard work, modesty, and strong moral values. As head of a household that included a spouse, children, servants, apprentices, and journeymen, the moral, diligent artisan master was necessary for the maintenance of social order. Morden created his complex persona in part by "confessing" his lack of education—showing readers his honesty—and by making numerous references to his humility and lack of leisure hours due to the demands of running a publishing shop. This persona was calculated to appeal to the middling-income men who formed most of Morden's customers. Coming to Morden's shop showed they were in the market for a comprehensive, yet

manageably-sized and moderately-priced world atlas; Morden hoped to appeal to their presumed view that a hard-working, virtuous artisan would produce a good product at a reasonable price.

Morden's persona as a geographic expert was closely related to that of the tradesman. Unlike some of his competitors, Morden was not a scholar and could not claim formal training in the sciences that underpin geography—astronomy and mathematics. This meant he was reliant on the cartographic projections made by other mapmakers instead of being able to create his own. But what Morden could and did claim was expertise in world geography as the result of his many years of experience reading and comparing different authors. In this case, the hard-working artisan had a store of useful, practical knowledge built up the way a master of any trade built knowledge—first as apprentice, then as journeyman, and finally as an independent producer—which he used to create products to sell for a fair profit. In a culture that valued the expertise brought by experience over received wisdom when it came to practical knowledge, Morden reiterates his lack of advanced learning in his world atlas, but always returns to this basic assertion of his authority to create a world atlas.

The fourth persona examined in this case study is that of the English patriot. With this self-presentation, Morden appealed to potential customers who shared his love of country with numerous references to England and its natural wonders and resources. In his second addition, Morden furthers this appeal by specifically naming the English gentry as his primary audience. As the men who filled positions as government bureaucrats, trading company officers, and merchants in England's early colonial period, the gentry were indeed the logical audience for the no-frills cartographic presentation of *Geography Rectified*, and Morden does not hesitate to appeal to their class identity as national leaders in marketing his atlas. In the later seventeenth century, London's bookshops offered many geographic works produced abroad, primarily in

France and Holland, England's commercial, political, and colonial rivals and frequent opponents in war. French and Dutch atlases competed in the same shelves with others by English authors. Recognizing this competition, authors such as Morden were careful to emphasize in their frontmatter not only their English nationality, but also their patriotism. In this way, they hoped to appeal to a shared patriotic sentiment, and perhaps also to the consumer's sense that an English-made atlas would serve his purposes better than a foreign-made atlas.

The fifth persona discussed above is that of the geographic reformer. While related to Morden's persona as a geographic expert, the reformer identity concerns more than geographic knowledge. It is crafted as a virtuous and self-sacrificing role Morden has willingly taken on for the greater good. Claiming that all world geographies then available are deeply flawed and therefore dangerous for anyone relying on them, Morden states that while he was reluctant to take on the enormous and thankless task of reforming the field, he decided he must do so and therefore spent years comparing and evaluating existing sources in order to compile *Geography Rectified*. Despite the many barriers and limitations of time and money that he faced, Morden asserts, he was simply compelled by his overwhelming love of truth to attempt the reform and correction of the entire body of geographic knowledge. Thus beyond asserting himself as an expert, Morden asserts himself as a man of integrity and a philosophical love of truth, willing to sacrifice his time and resources and overcome many barriers for the improvement of a vital area of human knowledge, for the benefit of his fellow Englishmen.

This case study of Robert Morden's complex self-presentation has shown that atlas compilers could access a number of forms of cultural authority as a cohesive strategy to market their works as credible and trustworthy. In the highly competitive commercial milieu of seventeenth-century geographic book publishing, authors needed to create ways to distinguish

their books from those of their rivals. While this could be done in a number of ways, perhaps the most salient way for comprehensive scientific works such as the world atlas was the author's attempt to claim authority to compile an accurate "picture of the world." As shown above, authority could be claimed from sources both external and internal to the compiler, and it did not need to relate to the author's content expertise or his professional success, such as holding a royal title. Indeed, the compiler's character, virtue, class status, beliefs, and the status of his associates and supporters were as likely to be deployed as was the compiler's content knowledge and the book's features in order to convince potential buyers of the value of the atlas for sale. Each aspect of the compiler's entire persona can be examined separately; this case study is meant to demonstrate how each aspect could be combined into a rich and multi-layered whole, maintained across the atlas' paratexts and across new editions. Authority sold atlases in the seventeenth century, but compilers had to create their own authority in an era before the professionalization of geographic and cartographic practice established accepted norms of training and practice; at the same time, however, the lack of such norms allowed many men to identify as geographers and practice mapmaking as a trade. It was up to the atlas compiler, in other words, to use personas in conjunction with other promotional tactics to communicate credibility to the reader by making claims for his expertise as well as his virtue.

CONCLUSIONS:
REDEMPTIONS OF TRUTH

When a buyer entered a book shop in mid-seventeenth-century Paris intending to purchase a world atlas, he faced a myriad of choices. Besides the perennially popular *Theatrum Orbis Terrarum*, still in print in multiple languages after seven decades, there were atlases created by French, English, Dutch, Germanic, and even Italian compilers. He could choose a folio colored atlas, a mid-range work, or a cheap, octavo scholastic atlas with simply drawn maps and no binding. Some of the choices were genuinely novel works, with newly compiled maps; others claimed to be new but in reality were simply reprints (authorized or not) of much older works, while still others were poorly executed compilations of plagiarized maps taken from many sources. Even after narrowing down his choices to those that fit his budget, which world atlas should he choose? Which would provide the best features, the most up-to-date maps and geographic information? How to compare among comparable consumer choices?

This study is intended to contribute to the scholarly understanding of early modern France and England during a period of profound transition in the forms of cultural authority, the trust that individuals place in a person, institution, or form of knowledge as a credible source of moral or worldly truth. The previous chapters led the reader through the origin and development of the world atlas in European history. This was followed by an examination of aspects of

marketing the world atlas in the long seventeenth century that focused on the construction of claims of authority by atlas compilers.

Examining the strategies by which the makers of commercial geographic atlases presented themselves and their works to potential buyers is a helpful way to understand cultural authority in seventeenth-century Europe for two reasons. First, the background and careers of world atlas compilers in London and Paris crossed social, economic, and intellectual boundaries, since compilers simultaneously labored in both scholarly and artisanal social universes. This means that their self-presentations could assert a unique form of cultural authority by combining sources of legitimacy that crossed the usual cultural divides. Second, the work the compilers performed was essentially editorial in nature rather than original (that is, comprising aggregation of the known, rather than discovery) and the world geographic claims that atlases made were, by nature, not directly verifiable by the reader. Compilers' self-presentations therefore asserted cultural authority by locating the compiler as an intermediary between ancient and modern geographic authorities on the one hand, and the early modern consumer-reader on the other.

This study grew out of the fact that the geographic book market was highly competitive and commercial promotional efforts already well developed by the mid-seventeenth century in both France and England. The long publishing lives and multiple editions of the bestselling atlases, along with the frequent appearance of totally new works, show that consumers in Paris and London wanted and could afford to buy atlases, yet that fact begged the question of how, exactly, those men selling atlases sought to attract buyers in a highly competitive marketplace of what was (with the exception of scholastic atlases) essentially a luxury item.

As Adrian Johns and others have described, early modern readers created strong demand for books, a demand that artisans, scholars, shopkeepers and merchants moved quickly to fill

with literally thousands of new publications each year. Yet at the same time, readers were well aware of the intractable problem of publishing piracy. This, as Johns shows, made them skeptical of the claims a book made about its author and publisher, and hence about its content.

While non-fiction works generally faced this credibility issue, it was greatly amplified in the case of world atlases because of the esoteric, multilingual, and broad scope of knowledge that atlas compilation required. That reader browsing in the Paris bookshop had no way to verify the content of world atlases himself, and he also would have known that compilers themselves had no way to verify most sources by their own personal observation—indeed compilers like Herman Moll tried to foster consumer wariness by offering harsh critiques of the falseness of competing atlas works. Thus one of the world atlas' major marketing issues became the establishment of the compiler's competence to act as an editor, sifting through multiple contradictory geographic sources and compiling the best into a coherent whole worthy of purchase.

Of course addressing the credibility or authority problem was not the only concern of those hoping to sell world atlases in a crowded market. My research suggests that marketing the commercial world atlas in seventeenth-century London and Paris comprised three general strategies: promoting the book's features and composition; promoting the reliability of the atlas' sources; and promoting the authority of the compiler. Investigating the origins and workings of this third strategy has been the primary subject of this study, examining how compilers asserted different aspects of their status, situation, training, and character as promotional strategies in the paratexts of their atlases. I argue that promoting the authority of the compiler involved the deployment of several basic personas (or self-presentations); this study has presented a typology for the three most common personas constructed in the works of eight of the most commercially successful atlas compilers of the long seventeenth century. In addition to identifying the three

common personas, however, this study has been equally concerned with unraveling specific cultural contexts that made those self-presentations possible. Those contexts gave the compilers flexibility in how they chose to present themselves and allowed for the deployment of unique self-presentations despite the fact that all of the compilers lived and worked in proximity of time and place. Below I will suggest that those cultural contexts are the windows through which the workings of cultural authority can be perceived.

Chapter 2 outlined the historical development and intellectual origins of these universal geographic books that found so many buyers in the bookshops of London and Paris. The development of the atlas' history is traced from the world geographies of the Alexandrian age by Ptolemy and Strabo, whose works were each the foundation of a branch of geographic thought in the west. Chapter 2 then referenced the medieval descriptions of coasts and islands made by mariners that served as practical navigation guides for sailing Mediterranean waters. A more immediate and influential predecessor was the Renaissance cosmography of the fifteenth and sixteenth centuries, intellectual and religious compendia of world knowledge encompassing astronomy and both sacred and human history. I then elaborated on the development of the three distinct branches of geography. Mathematical geography followed from the work of Ptolemy, an applied science using geometry and astronomy to describe the earth quantitatively and solve navigational problems. Descriptive geography traces its emergence to Strabo, and emphasizes the human and the qualitative—history, government, religion, ethnography, botany, zoology, etc., and in the early modern period was typified by travel narratives. The third branch, chorography, focuses on the local, emphasizing families, towns, property, and local history. Chapter 2 linked these branches to the emergence of the first modern, commercial atlases by Abraham Ortelius and Gerhard Mercator in the late sixteenth century: two collections of

geographic maps, consciously ordered and prepared as a single work with a title page. Ortelius' *Theatrum Orbis Terrarum* and Mercator's *Atlas* distilled the three branches of geography as well as all of the mathematical, practical, and descriptive predecessors of the atlas family tree and gave both a name and a conventional format to the world atlases of the seventeenth and eighteenth centuries.

After introducing the analytical concept of self-presentation, Chapter 3 described the state of the retail book market in seventeenth-century England and France, emphasizing the variety of geographic publications that served as competitors to the world atlas. Chapter 3 next discussed two related historical developments: the emergence and forms of advertising in the publishing field; and two, the endemic problems of piracy and plagiarism that led to widespread consumer distrust of printed works. As I show, world atlas compilers addressed this commercial dilemma by asserting their authority to be compilers through creation of a self-presentation. The rest of Chapter 3 and Chapter 4 provided results of an analysis of the self-presentation of eight world atlas compilers. I presented and gave examples of the three common personas offered in world atlases: that is, the persona of the patron's servant (Chapter 3); the persona of the geographic expert by virtue of scholarship (Chapter 4); and the artisanal persona of the expert by virtue of hard work and experience (Chapter 4). The patron's servant persona draws on the traditional importance of patron-client relationships in medieval and early modern England and France, essentially borrowing the credibility and respect given to the patron for the benefit of the client. In many cases the patron claimed (or desired) is the king or a member of the royal family. Chapter 4's examination of the scholarly expert persona showed that some compilers claimed the authority to create a world atlas based on their erudition and the years of study of ancient and modern geographic sources, even when the compiler asserting this expertise was relatively

unschooled. In contrast, the artisanal geographic expert asserted his legitimacy through his hard work and years of experience actually creating the physical products of geography: maps, globes, and scientific instruments.

Because my examination of the marketing strategy of the compiler's persona broke down each self-presentation into individual components in Chapter 3 and Chapter 4, I provided an alternate perspective in Chapter 5. The final chapter offers a case study—an in-depth analysis of just world atlas compiler, the successful artisan Robert Morden. I reviewed evidence for his persona as the loyal servant of his patron, Thomas Goddard; and for his persona as an expert in world geography. I then presented evidence for three other personas Morden deployed to assert his credibility as an atlas maker. First, I examined Morden as a virtuous artisan, embodying the morality and characteristics of a hard-working shopkeeper and family man. Next, I looked at Morden as a loyal English patriot, the lover of his country who praises its features and inhabitants above all others. In this persona, Morden presents himself as compelled to create geographic works out of love of country, a claim I compared with that of another English geographer-patriot, Ferrand Spence. Lastly, Chapter 5 discussed Morden's persona as a reformer of past geographic works; a running theme in Morden's paratexts is the false and inaccurate nature of all previously published geographies, and Morden's consequent burden of toil and sacrifice in order to provide Englishmen with correct maps and geographic data. I compared this persona with that found in the works of John Green, a contemporary reforming mapmaker.

* * *

The atlas compiler preparing to write the personal texts that would introduce and frame his atlas' maps and descriptions faced a number of choices. How should he present himself to potential atlas buyers? What would catch the browsing reader's attention? Should the compiler compare himself with other successful atlas makers, at the risk of losing a buyer to the atlas makers he praises? Or rely on critiquing his commercial rivals, promoting his own atlas product by contrast? Should he mention any social superiors of whom he is a client, perhaps by dedicating the work to that patron? Perhaps he should stress his piety, his dedication to his craft, his modesty, or his loyalty to his country. Or instead of these strategies, should he emphasize the comprehensive nature of his geographical knowledge and the quality of the maps?

This study shows how a number of successful world atlas compilers chose to answer these questions, by identifying three personas of authority that they commonly deployed. Each self-presentation is an aggregation of various traits, values, and statuses, and no two compilers crafted the same self-presentation. Yet this begs a question: What led two men to create different self-presentations when they had similar social standing, education, and occupation, and lived in the same city in about the same period? This study has attempted to answer this question by seeking specific, salient cultural factors that allowed for the development of varied personas.

The Identity of the Geographer

One critical cultural factor, the geographer identity in early modern England and France, partially explains the specific self-presentations that atlas compilers deployed. While geography comprised both descriptive and mathematical branches, its primary concern—description of the earth in text and graphic—remained the same across methodological approaches. As discussed in

Chapter 4, the term “geographer” (“geographe”) was well established in English and French in the sixteenth century, as was the general base of knowledge held by such a person. Leslie Cormack has shown that in the seventeenth century, the study of geography was still seeking a firm place among the traditional disciplines in formal university curricula, but circles of geographic study existed at multiple schools. Recognizing the potential of such experts to assist in the administration of the kingdom and in the education of current and future rulers, the monarchs in France and England and elsewhere began naming men to the position of royal geographer—men whose responsibility it was to produce maps, charts, and globes for use by the royal family and also by the royal administration.

Yet if it was well known that a “geographer” is someone who studies the earth and its features, the geographer did not, in the sixteenth or seventeenth century, exist as a professional identity. There was no formal academic training that produced a geographer, no institutionally-defined boundaries of mastery of the field. There were no guilds to lend credence to a man’s claim to be a geographer, and no forms of certification or professional associations that confirmed authentication of knowledge and distinguished the armchair geographer from a true expert. In short, anyone could claim to be a geographer, and the men who adopted that public identity did come from a variety of backgrounds and educational attainments. In fact, the professionalization of geography would not be achieved until well into the nineteenth century.

Contributing to this lack of professionalization is, I argue, the dual social existence held by geographic book producers held in early modern Europe. As social historians such as Robert Darnton have reminded scholars, a book publication was a craft product in the seventeenth century, with publishers undifferentiated from other mechanical crafts (such as smiths, weavers, painters, and instrument makers), and printing practitioners were, like other artisans, required to

belong to one of the craft guilds. At the same time, however, a book was fundamentally a different product from clothing or beer or barrels, because to make a book required literacy, to have one foot, so to speak, in the educated world of reading, writing, and ideas. In short, a book in the seventeenth century—regardless of its subject matter—existed in the overlap between the world of the mechanic and the world of the scholar. This was certainly the case for a geographic book such as a world atlas. Instead of simply printing a text provided by a writer, the atlas publisher compiled, arranged, and edited the book from many sources, an achievement of higher order than printing and one that required mathematics, graphic skill, and language abilities. How does this dual social existence relate to the delayed professionalization of geography? I suggest that the literacy and content knowledge required by geography put it too far outside the bounds of early modern artisanal practice to allow it to be treated as a craft; yet because it involved the mechanical skills of printing, engraving, and drawing, it was at the same time too much an artisanal practice to attain the status of an elite profession on the order of theology, medicine, or law. Because the seventeenth-century world atlas existed in both scholarly and artisanal worlds at the same time, so too did the atlas compiler himself necessarily belong to both of those worlds—a fact that influenced the decisions compilers made when crafting their self-presentations.

As I argued in Chapter 4, the lack of a stable, coherent professional identity for geographic practitioners helped shape atlas-makers' self-presentations by providing them flexibility in asserting their claims of geographic knowledge and legitimacy. Because there was no single, culturally accepted way to become a geographer, an atlas compiler had the freedom to choose the aspects of his status, training, and personal traits he wanted to promote as legitimizing his claim to geographic authority. That is, the unique nature of each self-presentation examined

in the previous chapters derived in part from the latitude afforded by the absence of a professionalized geographer identity. The dual artisanal and scholarly nature of atlas production in particular also contributed to the variety of self-presentations, by allowing atlas compilers to credibly attach themselves to the cultural values of either the learned class or the mechanic and shopkeepers' class, or both. It also allowed them, as I discussed in Chapter 4, to claim expertise in geography in two ways—through the artisanal and mechanical claim to expertise through experience; and through the scholarly claim to expertise through comprehensive study. Thus both the dual nature of the atlas product itself as a scholarly work and a craft product, and the amorphous nature of the geographer identity in the seventeenth century, lent to atlas compilers the means to craft personas and self-presentations that were particular to the individual.

Sources of Cultural Authority

Another factor that influenced the possibilities for self-presentation involves the nature of cultural authority in early modern England and France. As historians have shown, cultural authority does not necessarily derive from political, military, ecclesiastical, or economic power; and indeed, sometimes a person who wields none of those forms of power holds considerable cultural authority. It may derive from, or depend on, any number of characteristics, values, achievements, experiences, or other traits of the person. What is salient for understanding the self-presentations discussed in Chapters 3-5 is that the sources of a person's cultural authority can derive (or can be claimed to derive) from sources both internal and external to the authoritative agent.

External sources of cultural authority are those that are not under the control of the person, but which lend him credibility by his membership in a group or by the approbation of someone who already has cultural authority. In the case of seventeenth-century atlas compilers, legal rank and socio-economic class are two possible external sources. Compilers could potentially assert their knowledge of the truth by virtue of their rank; for example, as Steven Shapin has shown for early modern scientists, claiming the rank of gentleman was part and parcel of establishing one's credibility as an observer of natural phenomena. Or they could stress their class and occupational status, as I showed in Chapter 5 in the case of Robert Morden, who repeatedly asserted his trustworthiness as a geographic expert by emphasizing his status as an artisan-shopkeeper. Other external sources include family ties, university ties, and religion, where belonging to or being affiliated with a respected group or institution provides the agent with personal authority and credibility. Since the compilers discussed in this study came from rather humble roots and were not university-educated, none used either of those sources of cultural authority; and, as discussed at the end of Chapter 3, only John Speed, the earliest of the English world atlas compilers, produced an atlas emphasizing his religion. However, the most commonly deployed external source of cultural authority was that of the patron-client relationship.

As I showed in Chapter 3, most compilers chose to announce their relationship with a patron. They did so in the frontmatter of the atlas, either through a dedication page, a letter addressed to the patron, or by mentioning his support in the address to the reader. Deploying the name of a respected social superior—essentially borrowing from the esteem and trust in which the patron was held by society—was a simple but effective means of establishing oneself as a credible authority on geography, even when the patron himself had no expertise on the subject

(which was usually the case). Judging by the frequency of patron's names in atlas promotion and individual map promotion, a patron's support of a particular atlas compiler was one of that compiler's best claims to credibility among potential consumers (along with being itself a bid for new or continued patronage support). Thus while a number of external resources existed to lend cultural authority, the seventeenth-century atlas makers discussed here were limited in those they could feasibly exploit.

In contrast, internal sources of cultural authority derive from the agent's own characteristics, values, and accomplishments. The agent attaining cultural authority from internal sources does not bask in the reflected glow of another person or institution's authority, so to speak, but at the same time, those internal sources are under his control and he has freedom to independently shape them as he wishes. In the case of world atlas compilers, Chapters 3-5 showed this flexibility at work in the self-presentations discussed. Compilers employed a number of internal sources, including experience, education, and personal virtues. Robert Morden, for example, stressed his personal virtues and values—honest, hardworking, self-sacrificing, responsible—while also placing emphasis on the authority he earned by his years of experience in making maps. Others, such as Alexis-Hubert Jaillot, stressed their expertise and credibility as atlas makers through their years of study and scholarship, not, notably, as result of university education (an external source of cultural authority) but through independent scholarship. Thus internal sources could call attention either to an aspect of the agent's professional life (his experience) or his personal character and virtues (inborn traits).

I suggest that the variety of self-presentations deployed by atlas compilers derives in large part from the opportunities offered by the nature of cultural authority in their time. It was possible to claim to be an authoritative presenter of geographic truth by calling attention either to

one's personal characteristics or to one's external connections to other authorities, or to both. Thus atlas compilers seeking to present themselves as credible to buyers had great flexibility and maneuverability in choosing which elements to stress to their readers. Given their lack, in general, of affiliation with institutions or groups possessing cultural authority—these were, for the most part, artisans and shopkeepers with no family name, no elite rank, and no office—the possibility of deriving professional legitimacy from their personal character and work experience let them shape effective individual personas that helped them succeed in the highly competitive marketplace of geographic publishing.

Patronage Values in a Commercial Milieu

A final cultural context that shaped the self-presentations examined in the previous chapters is the continuing cultural authority of client status in the seventeenth century. In Chapter 3, I described the persona of the loyal patron's servant, which borrowed from the authority inherent in the patron to establish the credibility of the client-compiler. What makes patronage language a factor allowing for the development of individual self-presentations is the specific context of its deployment. As I discussed, the use of patronage references in world atlases was not simply the compiler speaking to his patron—it was in fact the transformation of the values of a traditional political-economic system into a commercial marketing strategy. Patronage relations had developed in the late medieval period as the primary means by which a social superior rendered artistic-literary support to a social inferior in exchange for loyalty and service. This structure of power was a relationship of support and approbation that lent credibility from the patron to the client, in addition to direct and tangible support.

Formulaic as they were, patronage letters and dedications generated in this system were not incidental, but critical, to the establishment and maintenance of a patron-client relationship. In the period preceding widespread commercial publishing, patronage communications were relatively private documents, meant for only a few eyes. However, while the traditional system of cultural patronage remained an important source of support for artists and writers into the eighteenth century, it came to co-exist in the late sixteenth and early seventeenth century with commercial publishing and a culture of anonymous consumption based in cities and towns. Those patronage documents that were once seen by a few could now be included in commercially published books and seen by hundreds of readers who existed outside the patronage system and had no personal connection to either the client or the patron. In this way, patronage documents took on an entirely new meaning in the seventeenth century, giving book producers a means of promoting their works by including ostensibly private letters and dedications to patrons in a product meant to be sold to an anonymous public. In other words, patronage as a legitimizing institution retained strong positive associations – given the frequent use of patronage references in world atlases, atlas buyers were apparently not skeptical of the patron's favor as a source of credibility.

While they were certainly not the only book producers to do so, world atlas compilers readily availed themselves of these new promotional possibilities, transforming the cultural legitimacy traditionally given to respected patrons into a marketing strategy to sell world atlases by connecting the atlas compiler with one or more respected men of authority. When deployed as part of self-presentation, patronage relations offered substantial commercial credibility, even though patronage had become less salient as a means of supporting intellectual works with the rise of an anonymous consumer culture.

Comparing French and English Self-Presentations

This project was conceived as a comparative, cross-cultural study of self-presentations between French and English atlas makers—an effort to extract the potential value of seeing “what isn’t there” by comparing the same historical phenomenon across multiple cultures. Seventeenth-century English and French atlas compilers operated in dissimilar intellectual and patronage contexts, with French mapmaking being much more a state-sponsored endeavor than English mapmaking, as the French crown had more money to support map projects and geographers. They also operated in dissimilar commercial contexts, with the French book publishing industry and consumerism in general lagging behind that seen in England. Thus cross-cultural differences were sought between the self-presentations of the two groups of atlas compilers (including compilers whose works are not considered in depth in this study). Several apparent patterns of difference were identified among the French and English in terms of training, occupational background, and court access: French atlas makers were more likely to have direct access to the royal court and to have formal training in mathematics. Differences were also noted among the atlases themselves. For example, French atlases were more likely than English atlases to note a patron’s name on the title page, more likely to include plain-style maps, and more likely to bear a title emphasizing the global nature of the atlas’ contents.

Yet my analysis showed that these cross-cultural distinctions did not carry over into the personas crafted by English and French compilers. The experienced geographic expert and the scholarly geographic expert were both found in French and English self-presentations. So too was the persona of the loyal patron’s servant, despite the fact that cultural patronage remained a more important system in France throughout the long seventeenth century than it did in England.

No persona was identified that was unique to either English or French compilers. The correspondence among French and English atlas compilers' self-presentations resulted, I suggest, from those same shared cultural factors discussed above that shaped the self-presentations: the absence of a stable definition of "geographer," the internal and external nature of the sources of cultural authority, and the continuing status accorded to patron's clients even after the emergence of an anonymous consumer culture. The several cultural contexts that I believe most influenced the development of the personas identified were, in fact, common to the intellectual and occupational contexts in which both English and French world atlas compilers worked, and led to the deployment of quite similar personas across cultures.

Another factor contributing to the similarity of English and French self-presentations concerns the long shared heritage of the atlas. In Chapter 2, I discussed the development of the descriptive and mathematical branches of geography, and the major predecessors of the modern atlas genre such as the Renaissance cosmography and Ptolemy's *Geographia*. These intellectual origins were in no way culture-specific, and indeed the history of the modern atlas' historical development is told for Western Europe as a whole, encompassing as it does innovations that were Italian, French, English, Germanic, and Flemish. Finally, it is important to bear in mind the routine exposure each culture had to the cartographic products of the other, as well as to the products of other Western and Central European countries. In other words, an atlas compiler in Paris or in London could locally find his sources in available maps and atlases (or translations of works) by mapmaking houses of the Netherlands, France, and England, and to a lesser extent, of Spain and Italy. Indeed, despite the individual differences among world atlases, the cosmopolitan nature of the atlas industry and the profound influence of Ortelius and Mercator manifested in

the development of a single recognizable atlas form, and consequently, I argue, to a similarity of promotional strategies including the self-presentation of the atlas compiler.

Avenues for Further Research

The current study is limited both in geographic and chronological scope and does not claim to have exhausted the topic of cultural authority and promotion of map products in early modern England and France. It was limited to the investigation of only one form of atlas promotion of three major forms identified. Indeed, a number of avenues for further research have presented themselves that could not be pursued in this study.

In order to more thoroughly understand how maps and atlases were promoted in early modern Europe, investigation of the other two forms of promotion—the sources of the atlas, and the features of its composition—are needed. The geographic sources that were used ranged from the most ancient writings to contemporary travelers' accounts. Although I detected a shift over the course of the seventeenth century away from classical authorities to a more exclusive use of modern sources, no atlas consulted for this project confined itself to using only sources less than a century old. Instead there seems to have been a gradual shift away from using the content of classical and biblical sources for general geographies, instead using them only for compiling historical and sacred historical maps, and for ethnographic descriptions. In no atlas I consulted were the Bible or Church authorities used as a primary source of geographic data, except by the evangelical John Speed. Indeed one of the recurrent themes of cartographic advertisement is the modernity and novelty of the sources used in a product's compilation. As a promotional strategy, this suggests that map buyers had a strong preference for updated, modern maps based on the

“latest observations,” to use the phrase that appears so frequently in publications. Yet the promotional emphasis on the compiler’s authority, and the emphasis on the features of the atlas, suggests that while buyers demanded updated maps, the modernity of maps alone was insufficient as a marketing strategy. Certainly a broader investigation of other atlas products will flesh out the realities of consumer demand and mapmaker response.

Another avenue for inquiry concerns atlas compilers’ responses to contemporary intellectual debates. Atlas compilers seem by and large to have avoided making proclamations in their atlases about the intellectual controversies that engaged cosmographers and geographers. However, their engagement with such controversies in commercial atlases—for example, by including one source and omitting another to implicitly present an opinion on an issue of debate—has not yet been examined in detail for what it can tell us about the vulgarization of scientific questions in the seventeenth-century. Several atlases, for example, include a schematic of the Copernican heliocentric system; but frequently the Ptolemaic and Tychean systems are shown as well, essentially allowing the reader to judge for himself among the world system models. For the most part, the universal system is not addressed in world geographic description beyond confirming the “the earth is a ball,” hardly an issue for debate after 1600. Other controversies, such as the size of the southern continent, the proximity of California to Asia, the precise shape of the earth, and the location of the terrestrial paradise, receive infrequent consideration in the pages of seventeenth-century world atlases.

Following the publication of Ortelius’ *Theatrum Orbis Terrarum* (1570) and Mercator’s *Atlas* (1595), the atlas genre quickly spread across western and central Europe. While the basic format and adoption of the term “atlas” name made it possible to identify the atlas across cultures, the atlas’ evolution within specific cultural contexts deserves additional investigation.

Although no substantive differences were found in this study between French and English compiler self-presentations in promotional texts, patterns of difference in atlas composition and purpose may well exist. More research on the atlas “family tree” (discussed in Chapter 2) should help identify any culturally-specific influences on early modern atlas-making.

If there were three branches of the geographic project in Western Europe (mathematical, descriptive, and chorographic), it is likewise true that there were three types of predecessors of the true atlas: mathematical and geometrical (such as Ptolemy’s *Geographia*); functional and based on observation (such as portolans); and descriptive and human-centered (such as cosmographies and travel memoirs). In a sense, the quantitative geometrical nature of mathematical geography, emphasizing generalities—abstraction, categorization, and models—is the antithesis of the qualitative nature of descriptive geography, which focuses on the specific: humanity, human interaction with the environment, differences, and the marvelous. It is well accepted by scholars that Abraham Ortelius and Gerhard Mercator invented the modern atlas genre and profoundly influenced its subsequent development, but more research needs to be done to identify the specific processes of their influences. For example, one avenue for qualitative research suggested by the current study is whether Abraham Ortelius, the antiquarian artisan and map illustrator, was more influential on subsequent descriptive geography than Gerhard Mercator, the university-trained mathematician, and if Mercator had more influence on subsequent mathematical geography. It may be possible to take that avenue of inquiry further and identify how the branches affected the development of the atlas genre in specific cultures, perhaps by tracing the kind of geographic education received by atlas makers or their proximity to the values and intellectual trends of courtly or university milieux.

This study has, in essence, been an investigation of the problem of trust in a period before universities, professional associations, and reputable publishers made it relatively easy for a reader to trust in a published scientific book. The idea for this investigation came from the challenges I faced as a college educator trying to instill in students a critical stance towards internet-based historical information, and the related questions about the operation of trust and authority that the challenge raised. Similar to the explosion in printed works made possible by the development of the seventeenth-century print industry, a dramatic increase in the amount of information available to non-specialists resulted from the development of the internet in the 1990s. As technologist Geoffrey Bilder and others have pointed out, both eras witnessed similar outcomes from the lack of an infrastructure to help users verify trustworthiness in publishing, in the context of anonymous commerce and the potential for profit.²⁹⁹

These outcomes include the problem of piracy, author and publisher impersonation, plagiarism, and the intractable problem of credit these practices created for users wanting to sort valid data from junk data. Just as world atlas compilers sought means of asserting their credibility to map and describe the features and peoples of the world three centuries ago, so too have owners of websites tried to develop strategies to assert their legitimacy and authority in a highly competitive and largely unregulated publishing environment. The mechanisms of establishing cultural authority developed by publishers including atlas makers in the seventeenth century—and the strategies for promoting that trust to both assure and lure the buyer—are in some ways quite different from those developed by internet site owners around the turn of this century. Yet the basic problems of legitimacy, lack of authority-conferring entities, and consumer mistrust that led to the development of those mechanisms are remarkably similar. The

299. Geoffrey W. Bilder, "In Google We Trust?," *Journal of Electronic Publishing* 9, no. 1 (2006), accessed November 17, 2011, doi: 10.3998/3336451.0009.101.

purpose of this dissertation has been to contribute to a deeper understanding of those processes of cultural authority and its relationship to the historical development of consumer society.

This study has also demonstrated the untapped potential value of atlases for historical scholarship, as world atlases remain undervalued and underused as cultural historical sources. Books of maps were produced in specific historical circumstances by specific historical persons, for the benefit of the maker and his buyer or patron. The commercial atlas maker made choices in presentation, style, content, language, structure, and promotion, for the purpose of making a profitable product. In doing so he implicitly documented the changing values of his contemporaries, and the cultural development of early modern commerce and consumption.

More than documenting the history of exploration, more than cataloging Europeans' information and misinformation about the physical world, the early modern world atlas served to connect individuals—authorities, compilers, sellers, buyers, readers. To borrow a phrase from art historian Michael Baxandall, an early modern map is the deposit of a social relationship—or, in the case of a commercially-produced atlas, of multiple social relationships. The buyer demanded and the compiler supplied, and although sparse evidence for reception makes it necessary to try to read the buyer's demand between the lines of the map, so to speak, the values shared by buyer and seller are not beyond the historian's reach. The world atlas, more than a national atlas, also connected individuals in other ways—to a shared cultural imagination, to the shape of the world and the possibilities of trade, to the wonders of natural phenomena, and to the limits of human knowledge, represented by dashed lines and blank spaces on the body of atlas maps. Lastly, the atlas connected the reader to the fulfillment of his desire to, in a phrase, hold the world in his hands.

APPENDIX

BIO-BIBLIOGRAPHIES OF PRINCIPAL ATLAS COMPILERS

ABBREVIATIONS

BIAA	Bibliothèque de l'Institut d'Art et d'Archéologie, Paris
BL	British Library, London
BLM	Maps Reading Room, British Library, London
BNF	Bibliothèque Nationale de France, Paris
BNCP	Département des Cartes et Plans, Bibliothèque Nationale de France, Paris
BNI	Département des Imprimés, Bibliothèque Nationale de France, Paris
CHAN	Centre Historique des Archives Nationales, Paris
Clark	Clark Rare Book Library, University of California, Los Angeles
LC	Library of Congress, Washington, DC
LCGM	Geography and Maps Room, Library of Congress, Washington, DC
MCNP	Minutier Central des Notaires de Paris, Centre Historique des Archives Nationales, Paris
NYM	Maps Division, New York Public Library, New York, NY
Past	Entry in Mireille Pastoreau, <i>Les Atlas français: XVIe-XVII siècles: Répertoire bibliographique et étude</i> (Paris: Bibliothèque Nationale de France, 1984)
PRO	Public Records Office, London
YUL	Yale University Library, New Haven, CT

JEAN BOISSEAU

OCCUPATION

Mapmaker, publisher, engraver, map colorist, print merchant

BIOGRAPHY

Very little archival evidence has been found that informs us about Jean Boisseau's life and career. Born around 1600 (Inv. du fonds français, 394), and active until at least 1659, Boisseau's exact years of birth and death, his family, marriage if any, and children, if any, are unknown.

CAREER

Boisseau first appears in the Paris archives as “maître enlumineur” and specialized in coloring maps and maritime charts (Fleury, 62). He later published a number of maps and other geographic works, usually copying or modifying the maps of others rather than compiling his own. Boisseau produced the first world atlas published in French, although again the maps were not his own, being copied from the *Atlas* of Gerhard Mercator and Henricus Hondius. He also published books on a variety of topics, including heraldry and history in addition to geography.

ACTIVITIES

- 1635 First use of his title “enlumineur de roy pour les cartes géographiques” (title variations: “...pour les cartes orographiques”; “...pour les cartes maritimes et géographiques”]
- 1643 Publishes first world atlas to appear in French (*Trésor des cartes géographiques*)

ADDRESSES

- 1635 Au bout du pont de bois près le Palais, à l'enseigne du Solleil Levant
- 1636[-1657] En l'Isle du Palais a la Fontaine de Iouvence Royale
- 1657-1659 A Paris, chez l'auteur, ruë de Seine, au Fauxbourg S. Germain, à la fleur-de-Lys d'or

MAJOR PUBLICATIONS

- 1637 *Théâtre des Gaules* [Past BOISSEAU II]
 Example: BNCP—Ge. DD 1147 (1642 ed.)
 Other Editions: Re-issued 1642
- Chronologie contenant l'ordre et succession des pappes, empereurs et principaux roys de l'Europe*
 Example: BNI—FOL-G Piece-21
- 1640 *Géographie ecclésiastique*
 Example: BNCP—GE AF PF-206 (622)
- 1641 *Description de tous les ordres militaire*
 Example: BNI—Gr. FOL-G PIECE-15
 Other Editions: Re-issued 1649
- Généalogie contenant l'origine, progrès et avancement de la royalle...famille*
 Example: BNF—FOL-LM3-382
- 1641-1647 *Théâtre géographique du royaume de France* (republication of Jean Leclerc's atlas) [Past LECLERC I]
 Example: BNF—FOL-L8-1A/B
- Topographie françoise...par Cl. Chastillon* (i.e, Claude de Châtillon, 1559-1616) [Past CHATILLON I]
 Example: BNI—Res. L15-7
 Other Editions: Re-issued 1655 chez Louis Boissevin
- 1643 *Table generale des longitudes et latitudes des villes plus renommées du monde*
 Example: BNCP—Ge D-12549
- Trésor des cartes géographiques des principaux estatz de l'univers* (republication of *Atlas Minor* by Mercator-Hondius) [Past TRESOR]
 Example: GM—G1015.B593 1643
 Other Editions: Re-issued 1653 chez Louis Boissevin; re-issued 1659 chez Nicolas Picart; re-issued 1667 chez Claude Jollain
- 1648 *Théâtre des citéz* [Past BOISSEAU I]
 Example: BIAA—Rés. Fol. Est. 154.
- Itinéraire, ou Table alphabétique contenant les noms et situations des choses plus considérables décrites sur le plan...de Paris*
 Example: BNI—LK7-5994

1658-1659 *Promptuaire armorial et général*
Example: BNI—FOL-V-622 (1)

REFERENCES

Fleury, Marie-Antoinette. *Documents du Minutier central des notaires de Paris: peintres, sculpteurs et graveurs au XVIIe siècle, 1600-1650*, vol. 1. Paris: S.E.V.P.E.N., 1969.

Pastoureau, Mireille. "Jean Boisseau." In *Les Atlas français: XVIe-XVIIe siècles: Répertoire bibliographique et étude*. Paris: Bibliothèque Nationale de France, 1984: 67-73 and 497-500.

Weigert, Roger-Armand. *Inventaire du fonds français du Cabinet des Estampes, graveurs du XVIIe siècle*, vol. I. Paris: Bibliothèque Nationale de France, 1939: 393-394.

NICOLAS DE FER

OCCUPATION

Mapmaker, map merchant

BIOGRAPHY

Born in Paris in 1646, Nicolas de Fer was the younger son of Antoine de Fer (d. 1673), print merchant and *enlumineur des cartes géographiques*, and Geneviève Hourlier (d.1690). He married Anne Hus (d.1717), with whom he had three daughters: Marguerite-Geneviève, Marguerite, and Marie-Anne, all of whom married engravers. After a career spanning five decades, Nicolas de Fer died in Paris, October 25, 1720.

CAREER

Prolific and highly successful as a map producer and map merchant, Nicolas de Fer published a body of works including over 600 sheet maps and 16 atlases, as well as globes, armillary spheres, and prints. He specialized in thematic maps of current affairs, armed conflicts, and military fortifications, an emphasis explaining his connection to the royal house as royal geographer to the Dauphin.

ACTIVITIES

- 1659 Apprenticed to Louis Spirinx, copperplate engraver (Paris) (MCNP—Etude LXVI, numero 142, 8 mai 1659)
- 1669 Publishes first map (“Canal du Midi”)
- 1673 Returns to the family shop on Quai Horloge on the death of Antoine de Fer
- 1687 Becomes proprietor of family shop on Quai d’Horloge in 1687 on his widowed mother’s retirement (MCNP—Etude CVIII, numero 205, 8 novembre 1687)
- 1690 Named *géographe du grand dauphin*
- 1702 Named *géographe du roi d’Espagne*
- 1711 On death of the dauphin, named *geographe du roi d’Espagne* and *géographe du roi de France*
- 1720 Named *géographe ordinaire de Sa Majesté catholique*

ADDRESS

1687-1720 Dans l'Isle du Palais, sur le Quai de l'Horloge à la Sphere Royale

FORTUNE

1687 An inventory of the family print shop “à la Sphere Royale” on Quai de l'Horloge included “*marchandises en taille douce, estampes, cartes de géographie, planches de cuivre gravées...spheres, globes, armoires, comptoirs, corps de tiroirs, tablettes, montres a l'estalage et généralement tout ce qui depend du négoce dont se mesle ladite veuve de Fer* [i.e., Nicolas de Fer's mother Geneviève Hourlier]” (MCNP—Etude CVIII, numero 205, 8 novembre 1687). Inventory taken after Nicolas de Fer's death counted 5598 sheet maps, 150 copies of *Petit et Nouveau Atlas*, 200 copies of *Introduction a la géographie*, and 50 copies of *Forces de l'Europe*. This estate was divided equally among his adult daughters. His sons-in-law Guillaume Danet and Jacques-François Bénard continued to issue maps and atlases for the next twenty years or so. Bénard's son eventually lost his stock to creditors in 1751, but Danet's son Debois published from Nicolas de Fer's stock until about 1760.

MAJOR PUBLICATIONS

- 1690 *Les Costes de France* [Past FER VIII]
Example: BNF—Micro M- 3771
- 1693-1697 *Les Forces de l'Europe ou descriptions des principales villes (Introduction à la fortification)* [Past FER IX]
Example: BNI—Res G-V-461
Other Editions: Re-issued 1702 chez Pierre Mortier; re-issued 1726 chez Pieter van der Aa
- 1696 *Le Théâtre de la Guerre dans les Pays Bas* [Past FER XIII]
Example: BNCP—Ge.DD. 1307-1308
- 1697 *Petit et Nouveau Atlas* [Past FER XII]
Example: BLM—C39.b.2
Other Editions: Re-issued 1705 and 1723
- 1700-1705 *Atlas Curieux* [Past FER I]
Example: BNCP—GeDD 1219
Other Editions: re-issued 1717

- 1701 *Cartes et descriptions générales et particulières pour l'intelligence des affaires du temps* [Past FER V]
Example: BNI—FOL-O-16
- 1702 *Cartes nouvelles et particulières pour la guerre d'Italie* [PAST FER VI]
Example: BNI—G-635
- 1705 *Le Théâtre de la guerre dessus et aux environs du Rhein*
[Past XIV]
Example: BNI—G-3213
Other Editions: Re-issued 1722
- 1708 *Introduction à la Géographie* [Past FER XI]
Example: BNI—G.9495
Other Editions: Re-issued 1717
- Les Beautés de la France* [Past FER IV]
Example: BNI—GE DD-586 (BIS,30)
Other Editions: Re-issued 1724
- 1709 *Atlas ou recueil de cartes géographiques* [Past FER II]
Example: LC—G1015.F4 1728
Other Editions: Re-issued 1728
- 1710 *Les Frontières de France et des Païs Bas* [Past FER X]
Example: BNCP—Ge.DD. 1218
- [1698] *Le Théâtre de la guerre en Allemagne* [Past FER XV] [counterfeit]
- [1695] *Atlas Royal* [Past FER III] [counterfeit]
Other Editions: re-issued 1699-1702

REFERENCES

Moreland, Carl and David Bannister. *Antique Maps*. 3rd ed. London: Phaidon, 1993.

Pastoureau, Mireille. "Nicolas de Fer." In *Les Atlas français: XVIe-XVIIe siècles: Répertoire bibliographique et étude*. Paris: Bibliothèque Nationale de France, 1984: 167-217.

ALEXIS-HUBERT JAILLOT

OCCUPATION

Sculptor, engraver, map publisher

BIOGRAPHY

Born 1632 in Saint-Oyan, Franche-Comté, Jaillot was the son of Jean Jaillot and Etiennette Fournier. His brother Pierre-Simon Jaillot (1630-1681) was *sculpteur du roi*, member of the Academie Royale de Peinture et Sculpture 1661-1672, and a Jansenist pamphleteer. The brothers, trained in ivory and wood sculpture in Franche-Comté, moved to Paris in 1657. Alexis-Hubert married Jeanne, daughter of the important map publisher and *enlumineur du reine*, Nicolas Berey, January 11, 1664 (Registre de St-Andre, Paris); the couple had four surviving children: François Hubert-Joseph, b.c. 1671, later *conseiller du roi* and *procureur du roi en la maitrise des eaux et forets et en la capitainerie des chasses de Fontainebleau*; Bernard Jean Hyacinthe (1673-1739), *géographe du roi*; Louise-Hortense; and Jean-Baptiste. Jaillot's grandson Bernard-Antoine Jaillot (d. 1749) was also a map publisher. After Jeanne's death (November 1, 1675), Jaillot married Charlotte Orbane (April 26, 1676), and had three more children: Charlotte-Hiacinthe; Marie-Anne; and Claude. The archive of the Couvent des Grands-Augustins records Jaillot's burial November 2, 1712. He is listed in the deaths registry (Paroisse St-Andre-des-Arts) as *géographe du roi et ancien marguiller*.

CAREER

Trained in sculpting, Jaillot did not begin working in geographic publishing until his marriage into the map-publishing Berey family of Paris. He went on to become a well-known map and atlas publisher, creating works with exquisite engraved maps, cartouches, and lettering. He eventually held three royal titles with stipends, including *géographe du roi*.

ACTIVITIES

- | | |
|-------------|---|
| 1657 | Moves to Paris with brother Pierre-Simon Jaillot |
| c. 1660 | Becomes maître of Académie de Saint-Luc, Paris |
| Before 1665 | Works as sculptor in ivory for Intendance des Batiments until marriage to Jeanne Berey (1664) introduces him to geographic publishing |
| 1665 | Named <i>sculpteur du roi</i> |

- 1667 After the death of Berey père (1665) and Berey fils (1667), Jaillot and his wife acquire the map shop and Berey stock at “Aux Deux Globes.”
- 1671 Unsuccessfully sued by Parisian mapmaker Pierre Duval for piracy concerning several maps compiled by Duval for Jaillot’s deceased father-in-law (1671) [*Factum pour Me Pierre Duval, géographe ordinaire du roi... contre Hubert Jaillot, marchand de taille-douce*, BNF—Inv. F. 21258 (52)]
- 1674 Enters arbitration with Sanson family. Jaillot’s major contribution to French cartography was re-engraving and re-printing many maps produced chez Nicolas Sanson in partnership with Sanson’s sons after 1670. The partners entered into judicial arbitration over mutual claims of failure to comply with contract terms for the publication and modification of several maps (MCNP—XV-243, 22 janvier 1674; and XV-244, 14 mars 1674). The Sanson-Jaillot partnership survived this conflict but dissolved after 1686.
- 1678 Named *sculpteur et geographe ordinaire du roi*
- 1686 Named *geographe du roi* with *brevet du roi* promising annual stipend of 600 livres (CHAN—O¹ 30, folio 247)

ASSOCIATES

- Guillaume (1633-1703) and Adrien Sanson (1639-1718), Paris, 1669-1680’s
- Pierre Mortier (1661-1711), Amsterdam, 1692-1711

Note: Possibly Mortier’s only connection to Jaillot is counterfeiting Jaillot’s work. French-born Mortier published in Amsterdam Jaillot’s *Atlas nouveau* in Amsterdam [Past JAILLOT ID (1692) and JAILLOT IE (1696)]. Pastoureau notes that it is possible that Mortier did so with Jaillot’s and Guillaume Sanson’s permission, but to date no document has established such an arrangement and Mortier’s atlases are assumed to be counterfeits.

ADDRESS

- 1676-1712 Joignant les Grands-Augustins aux Deux Globes. This was the same shop his father-in-law had rented from the Couvent des Grands-Augustins.

FORTUNE

Jaillot had accumulated considerable real estate holdings before his first marriage. The marriage contract (1664) declares Jaillot in possession of property valued at 5760 livres (MCNP—Etude CVI, 10 février 1664). Jeanne Berey’s dowry was 2654 livres. His second marriage was even more lucrative: daughter of a wealthy parfumeur, Charlotte Orbane brought a dowry of 8000

livres (MCNP—Etude CVI, numero 49, 15 avril 1676). The posthumous inventory of Jaillot's business estimated his fortune at 27,920 livres tournois (MCNP—Etude XI, numero 425, 31 juillet 1714). Some of the Berey-Jaillot map stock was acquired after Jaillot's death by Gilles Robert de Vaugondy (1688-1786), one of France's most important cartographers of the eighteenth century. The maps were reprinted in Robert de Vaugondy's *Atlas universel* (Paris, 1757). The remaining Berey-Jaillot map stock was re-printed by Jaillot's son and grandson and eventually about 8000 maps and plates were dispersed through public auction (March 27, 1781). Several maps were purchased and reprinted by other mapmakers, including Jean-Claude Dezauche (fl. 1780-1838) and Louis-Charles Desnos (1725-1805).

MAJOR PUBLICATIONS

- 1681 *Atlas nouveau contenant toutes les parties du monde...* [Past JAILLOT I]
 Example: BNF—Estampes XF-17-FOL
 Other Editions: Re-issued 1684, 1689, 1692; re-issued chez Pierre Mortier 1690/92 and 1696
- 1693 *Le Neptune françois, ou Atlas nouveau des cartes marines* (“*revue et mis en ordre par Jean-Dominique Cassini et Charles Pene et autres*”)
 Example: BNCP—Ge. DD 4796 (79)
 Other Editions: Re-issued chez Pierre Mortier 1693; re-issued chez Jacques-Nicolas Bellin 1753
- 1695 *Atlas françois* [Past JAILLOT II]
 Example: BNCP—Ge. DD 1280]
 Other Editions: Re-issued 1696, 1698, 1700, 1702, 1724
- 1708 *Liste générale des postes de France*
 Example: BNF— Tolbiac 8-L23-1
 Other Editions: Reprinted and updated frequently chez Jaillot 1721-1786

REFERENCES

- Actes d'état-civil d'artistes français...Extraits de registres de l'Hôtel-de-Ville de Paris*, edited by Henri Herluison. Geneva: Slatkine Reprints, 1972: 190, 400.
- Dictionnaire critique de biographie et d'histoire*, s.v. Jaillot, Alexis-Hubert. Paris: Henri Pion, 1867: 701.
- Jaillot, Jean-Baptiste-Michel Renou de Chauvigné. *Catalogue des cartes géographiques des sieurs Jaillot, géographes ordinaires du Roy* (Paris: chez Jaillot, 1752). Institut Cartogràfic de Catalunya. Accessed July 26, 2011. <http://cartotecadigital.icc.cat/cdm/singleitem/collection/monregions/id/211/rec/1>.

- Pastoureau, Mireille. "Alexis-Hubert Jaillot." In *Les Atlas français: XVIe-XVIIe siècles: Répertoire bibliographique et étude*. Paris: Bibliothèque Nationale de France, 1984: 229-288.
- Roland, François. "Alex-Hubert Jaillot, géographe du roi Louis XIV, 1632-1712." In *Mémoires de l'Académie des Sciences, Belles-lettres et Arts de Besançon*. Besançon: Académie des Sciences, Belles-lettres et Arts, 1918: 46-76.
- Weinshenker, Anne Betty. "Simon Jaillot: Sculptor, Pamphleteer, Outcast." In *Orthodoxy and Heresy in Eighteenth-Century Society*, edited by Regina Hewitt and Pat Rogers. Lewisburg, PA: Bucknell University Press, 2002: 154-175.

ALLAIN MANESSON MALLET

OCCUPATION

Military engineer, mathematics instructor, mapmaker

BIOGRAPHY

Born around 1630 in Paris, Allain Manesson Mallet was trained in mathematics by Philippe Mallet (fl.1645-1666), a mathematician, military engineer, and writer who was probably his uncle. Philippe Mallet is Allain's only certain relative; no archival records document his parentage or his marriage or children, if any. Mallet died in 1706 in Paris; no known probate records document the disposition of his estate.

CAREER

Military engineer-turned-instructor Mallet was a favorite of the Marquis de Vauban, whose influence seems to have helped bring Mallet to the attention of Louis XIV and secured him a teaching position in the royal household. Mallet published only three known works. He was neither a shopkeeper nor a publisher of the works of other authors. While he published his first work, *Les Travaux de Mars*, himself, his remaining two publications were issued and sold by others.

ACTIVITIES

- | | |
|-----------|--|
| Youth | Taught mathematics by Philippe Mallet
Becomes musketeer in army of Louis XIV, where he learns ballistics and fortifications |
| 1663-1668 | Claimed to have served in army of Alphonse VI of Portugal as fortifications engineer, later sergeant-major in the artillery and fortifications inspector, although no documentation of this service has been found in Portuguese military records |
| 1668 | Named by Louis XIV <i>maître de mathématiques des pages de la petite écurie</i> on return to France |
| 1671 | Issues first publication, on practice of military defense |
| 1674 | Praised in letter from Vauban to the Marquis de Louvois: "...Pendant le voyage que je viens de faire, j'ai trouvé à la Rochelle un homme illustre et de grande réputation que je cherchais depuis longtemps [...]. Il dessine très bien, entend fort |

bien la guerre et la fortification et écrit bien” [Albert de Rochas d’Aiglun, *Vauban, sa famille et ses écrits* (1910). Geneva: Slatkine, 1972: 102].

ASSOCIATES

- Philippe Mallet d’Abbeville, mathematician (1606-1679)
- Sébastien Le Prestre, Marquis de Vauban (1633-1707), *ingénieur du roi* and *marechal de France*

ADDRESS

1671 Proche le grand portail Saint Sulpice

MAJOR PUBLICATIONS

- 1671 *Les Travaux de Mars ou la Fortification nouvelle tant régulière qu’irrégulière*
[Past : MALLET II]
Example: BNF—RES-V-2276/2277]
Other Editions: Re-issued as *Les Travaux de Mars ou l’art de la guerre* in 1685, 1686 and 1691
- 1683 *La Description de l’univers* [Past : MALLET I]
Example: BNF—8-Z-Le Senne-4867
Other Editions: Re-issued 1685, 1686
- 1702 *La Géométrie pratique, divisé en quatre livres* [re-issue of Philippe Mallet’s book]
Example: BNF—8-Z-Le Senne-4868

REFERENCES

D’Orgeix, Emilie. “Alain Manesson Mallet (1630-1706): portrait d’un ingénieur dans le sillage de Vauban.” *Bulletin du comité français de cartographie* 195 (March 2008): 64-74.

Pastoureau, Mireille. “Allain Manesson Mallet.” In *Les Atlas français: XVIe-XVIIe siècles: Répertoire bibliographique et étude*. Paris: Bibliothèque Nationale de France, 1984: 309-323.

HERMAN MOLL

OCCUPATION

Engraver, mapmaker, publisher

BIOGRAPHY

Moll was born around 1654, probably in Germany. The exact date and place are uncertain; Moll's biographer Dennis Reinhartz and map historian Sarah Tyacke suggest Germany, possibly Bremen, as his birthplace; other scholars believe he may have been born in the United Provinces, as Moll is both a Dutch and German surname. As a young man he immigrated to London where he spent the rest of his life. His family and his wife's name and family are likewise unknown. He had one surviving heir, Henderina Amelia Moll. After a career spanning more than half a century, Moll died in London September 22, 1732 [*Gentleman's Magazine* II (XXI) (1732): 979].

CAREER

Moll became well-respected in London for the artistic design and skillful engraving of his maps. Not himself a printer, instead his career entailed compiling and engraving maps and atlases which he sold from his own shop. He associated with a number of London's intellectual élites, and even found himself mentioned by name in his friend Jonathan Swift's *Gulliver's Travels*, for which he created maps of Swift's imaginary lands.

ACTIVITIES

Youth	Trains in engraving
Before 1678	Immigrates to London from Germany (possibly from the United Provinces)
1678	Works as engraver for Moses Pitt's <i>English Atlas</i>
1670s-1680s	Engraves maps for geographical works by Sir Jonas Moore, John Seller and Charles Price, and John Adair
1681	Maps of Europe and America appear in Sir Jonas Moore's <i>A New System of the Mathematicks</i>
1688	Opens independent shop at Vanley's Court

1690s	Engraves maps for Christopher Browne, Robert Morden, and Philip Lea
1695	First known independent work (<i>Thesaurus Geographicus</i>) is published
1697-1703	Produces maps and illustrations for William Dampier's <i>New Voyage Round the World</i>
1701	Produces small county maps of England and Wales for Robert Morden's <i>New Description and State of England</i> , 1701; issues revised and enlarged edition under his own name in 1708 as <i>Fifty-Six New and Accurate Maps of Great Britain</i>
1710	Produces first pocket globes
1719	Produces maps for first edition of Daniel Defoe's <i>Robinson Crusoe</i> ; perpetuates popular misconception that California is an island long after other mapmakers corrected their maps, in re-issues of <i>Thesaurus Geographicus</i> and <i>Atlas Minor</i>
1720	Produces maps for Josiah Burchett's <i>Remarkable Transactions at Sea</i>
1724-1727	Produces maps for Defoe's <i>A Tour Thro' the Whole Island of Great Britain</i>
1726	Produces maps of imaginary lands for publication in first edition of Jonathan Swift's <i>Gulliver's Travels</i>

ASSOCIATES

- William Stukely (1687-1765), physician and antiquarian
- Jonathan Swift (1667-1745), author and satirist
- Daniel Defoe (1659-1731), author and journalist
- Philip Lea (c.1660-1700), map printer
- Robert Morden (c.1650-1703), mapmaker
- Christopher Browne (d. after 1737), mapmaker

ADDRESSES

1688-1691	In Vanley's Court in Black Fryers
1691[-1710]	Corner of Spring Garden Charing Cross and in Westminster Hall
1710-1732	Over against Devereux Court in the Strand/between Temple Bar and St. Clemens Church in the Strand

FORTUNE

- 08/03/1732 Moll's will left all his worldly goods "in the Kingdom of Great Britaine and Germany or elsewhere" to his sole surviving child, Henderina Amelia (PRO Probate 11/654/251). His will does not provide for separate disposition of his cartographic stock.

MAJOR PUBLICATIONS

- 1695 *Thesaurus Geographicus, or, A Compleat Description of the Earth, Collected with Great Care by Several Hands...*
Example: LC—G114.T41
- 1701 *A System of Geography*
Example: BL—10005.h.11
- 1705 *A History of the English Wars in France, Spain, Portugal...*
Example: BL—Gen Ref 599.k.19(3)
- The History of the Republick of Holland, from its first foundation to the death of King William*
Example: Clark—DJ155.H67*
- 1707 *A Description of All the Seats of the Present Wars of Europe*
Example: LC—D281.5.D4 Pre-1801 Coll
- Twenty-four New and Accurate Maps of the Several Parts of Europe*
Example: BLM—C.24.b.25(1)
Other Editions: Re-issued in multiple editions through 1727
- 1708 *Fifty-Six New and Accurate Maps of Great Britain, Ireland and Wales*
Example: BLM—C.24.b.25(2)
- 1709 *The Compleat Geographer, or, The Chorography and Topography of All the Known Parts of the Earth*
Example: BL—568.i.9
Other Editions: Re-issued 1723
- Atlas Manuale: Or, a New Sett of Maps of All the Parts of the Earth*
Example: LC—G1015.M6.1709 Vault
Other Editions: Re-issued 1723

- 1711 *A View of the Coasts, Countries, and Islands within the Limits of the South-Sea-Company*
 Example: BL—Gen Ref 978.h.31
 Other Editions: Re-issued 1712
- 1711-1717 *Atlas Geographicus; or, A Compleat System of Geography* (serial)
 Example: LCGM—G1015.A745 1711 Vault
- 1708-1720 *The World Describ'd; or, A New and Correct Set of Maps*
 Example: BLM—C.4.TAB.17
 Other Editions: Re-issued 1730, 1740, 1760
- 1715 *A New and Exact Map of the Dominions of the King of Great Britain on ye Continent of North America* [the so-called “Beaver Map”]
 Example: BLM—70410.(2)
 Other Editions: Re-issued multiple times 1726-1740
- 1721 *Thirty-two New and Accurate Maps of the Geography of the Ancients* (alt: *Geographia Antiqua Latinorum et Graecorum*)
 Example: BLM—C.27.a.31
 Other Editions: Re-issued 1726, 1732, 1739, 1749, 1755, c.1770, and c.1795
- 1724 *A New Description of England and Wales*
 Example: BL—G.1290
 Other Editions: Re-issued as *A Set of Fifty New and Correct Maps of England and Wales*, 1724-1726; re-issued under original title, 1728, 1739, 1747, 1753
- 1725 *A Set of Thirty-six New and Correct Maps of Scotland*
 Example: BL—118.b.1
- 1727 *Atlas Minor, or, A Set of Sixty-two New and Correct Maps of All the Parts of the World*
 Example: BLM—C.21.b.3 (1729 ed.)
 Other Editions: Re-issued 1729, 1732, 1736, 1745, 1763, 1770
- 1728 *A Set of Twenty New and Correct Maps of Ireland*
 Example: BLM—C.24.c.14

REFERENCES

- Bracher, Frederick. “The Maps in Gulliver's Travels.” *Huntington Library Quarterly* 8 (1944/45): 59-74.
- Dictionary of National Biography*, s.v. Moll, Herman. London: Smith, Elder & Co., 1894-1897.

- Reinhartz, Dennis. *The Cartographer and the Literati: Herman Moll and His Intellectual Circle*. Lewiston, NY: Edwin Mellen, 1997.
- Rostenberg, Leona. *English Publishers in the Graphic Arts, 1599-1700*. New York: Burt Franklin, 1963: 68-74.
- Stukeley, William. *The Family Memoirs of the Rev. William Stukeley, M.D.*, vol. 1. London: Surtees Society, 1880: 98, 134.
- Tyacke, Sarah. "Map-Sellers and the London Map Trade, c.1650-1710." In *My Head Is A Map: Essays and Memoirs in Honor of R. V. Tooley*, edited by Helen Wallis and Sarah Tyacke. London: Carta Press, 1973: 64-78.
- Tyacke, Sarah. "Herman Moll." In *London Map-Sellers, 1680-1720*. Tring: Map Collector Publications, 1978: 123.

ROBERT MORDEN

OCCUPATION

Map- and globe-maker, map merchant, instrument maker

BIOGRAPHY

Morden was probably born 1645-1650, though no certain record of his birth is known; parish registers for London for the period give several possibilities of various guild members surnamed Mordent and Mordaunt (common alternate spellings) who may have been his father. He was a member of the Weavers Company and must have been made free of his apprenticeship by 1666; Company apprenticeship records are not extant for the period before 1666, but the end of his apprenticeship is not recorded in records for the period after 1666.

Morden lived his entire life in London. Before 1669 he married Mary (d. 1690, London), with whom had seven children. The St. Christopher-le-Stocks parish registers show that when Morden died in August 1703 he was survived by his wife and five of his seven children. Morden was buried August 25, 1703 at St. Christopher-le-Stocks, London [The Register Book of the Parish St. Christopher-le-Stocks (FHL Q Book 942.1/L1 V26ch)].

Surviving on his death were Mary Morden, b. 1674; Tabitha Morden, b. 1680; Edward Morden, b. 1682. Other children: Thomas Morden, 1670-1671; Thomas Morden , 1673-1677; Robert Morden, 1676-1683; Rebecca Morden, 1679-1683.

CAREER

Robert Morden created and sold a variety of maps and globes, and served as distributor for the works of a number of other mapmakers. Although he was modestly successful, Morden's works do not rank among the best engraved or compiled maps of the period. However, he found a commercial niche producing cheap cartographical products, including (besides atlases and geographical texts) pedagogical maps, pocket globes, and playing cards. He worked in partnership with a number of leading London mapmakers.

ACTIVITIES

Youth	Apprenticed in Weavers Company of London, possibly to Joseph Moxon (1627-1691), royal hydrographer; freed by 1666
1676	Publishes first-known set of maps as playing cards

09/14/1678 Petitions crown (with William Berry) for license to publish world maps [Calendar of State Papers Domestic: Charles II, 1678 (1913): 386-441. Accessed November 14, 2011. <http://www.british-history.ac.uk/report.aspx?compid=57987>.

1683 Begins long publishing partnership with former apprentice Philip Lea

ASSOCIATES

- William Berry (fl. 1671-1708), map- and print-maker, publishing partner, 1671-1678
- Thomas Cockerill (fl. 1674-1699), printer, publishing partner, 1680-1700
- Philip Lea (c.1660-1700), apprenticed to Morden in 1675, then occasional publishing partner, 1683-1700
- Herman Moll, fl. 1688-1732, mapmaker, engraver, publishing partner, 1701-1703
- Robert Greene (d.1688), mapmaker, commercial partner, 1673-1675
- Christopher Browne (d. after 1737), mapmaker, commercial partner, 1688-1701
- Robert Anderson (fl. 1668-1696), mathematician, author, 1690-1696
- Abel Swall (fl. 1665-1699), translator, publisher, commercial partner, c.1698

ADDRESSES

1669 At the Atlas in New Cheapside

1671-1703 At the Atlas in Cornhill/Near the Royal Exchange in Cornhill

FORTUNE

09/13/1703 Morden's will is recorded in Admin. Act. Book, Prerogatory Court of Canterbury, 1703 f. 176; Probate 6/79 (administered by son Edward Morden).

MAJOR PUBLICATIONS

Author/Contributor

1673 *New Map of the English Plantations in America* (with William Berry)
Example: YUL—Rare, Morden 1673 (Cab E)

1676 *A Mapp of England and Wales* [set of playing cards depicting the Counties] (with William Berry)
Example: BLM—C.24.aa.11 (1680 edition)
Other Editions: Re-issued as *A Pocket Book of All the Counties of England & Wales*, 1680; re-issued as *A Brief Description of England & Wales*, 1750

- 1680 *Geography Rectified, or a Description of the World*
 Example: BLM—C.21.bb.5
 Other Editions: Re-issued 1688, 1693, 1700
- 1683 A New Terrestrial Globe (with William Berry and Philip Lea)
 Example: BLM—*920.(69) (Globe gores)
- 1690 *A Book of the Prospects of the Remarkable Places in and about the City of London* (with Philip Lea)
 Example: BLM—C.27.a.26
- 1695 [Maps in] *Camden's Britannia*, transl. Edmund Gibson
 Example: LC—Rare DA610.C168
 Other Editions: Re-issued 1715, 1722, 1730, 1753, 1772
- 1700 *Atlas Terrestris*
 Example: BL—C.39.a.13
- 1701 *The New Description and State of England*, 1701 [the so-called “Miniature Mordens”]
 Example: BL—Gen Ref 579.d.28
 Other Editions: Re-issued 1704; re-issued by Herman Moll as *Fifty-six New and Accurate Maps of Great Britain*, 1708; re-issued 1720-1738 as *Magna Britannia et Hibernia*
- 1702 *An Introduction to Astronomy, Geography, and Navigation and other Mathematical Sciences*
 Example: BL—Gen Ref 530.d.27
- [Maps in] *The Geographical Grammar*, by Patrick Gordon
 Example: BL—Gen Ref 1578/5224
 Other Editions: Re-issued 1708

Publications for other authors

- 1685 *A Map of ye English Empire in ye Continent of America*, by Walter Hinneman
- 1688 *Fortification and Military Discipline*, by Capt. J.S.
- 1696 *The Making of Rockets Experimentally and Mathematically Demonstrated*, by Robert Anderson
- 1696 *To Cut the Rigging and Proposals for the Improvement of Great Artillery*, by Robert Anderson

1698 *Britannia, or the Kingdom of England and the Dominion of Wales*, by John Ogilby

REFERENCES

Dictionary of National Biography, s.v. Morden, Robert. London: Smith, Elder & Co., 1894-1897.

Rostenberg, Leona. *English Publishers in the Graphic Arts, 1599-1700*. New York: Burt Franklin, 1963: 68-74.

Tyacke, Sarah. "Map-Sellers and the London Map Trade, c.1650-1710." In *My Head Is A Map: Essays and Memoirs in Honor of R.V. Tooley*, edited by Helen Wallis and Sarah Tyacke. London: Carta Press, 1973: 64-78.

Tyacke, Sarah, "Robert Morden." In *London Map-Sellers, 1680-1720*. Tring, U.K.: Map Collector Publications, 1978: 123.

JOHN SENEX

OCCUPATION

Engraver, map and globe publisher

BIOGRAPHY

Senex was baptized November 24, 1678 in Ludlow, Shropshire, England. He was the son of John Senex, gentleman of Ludlow, and Marie Senex. In 1721 he married Mary Wilcox (b.c.1700-December 1755) (see Deposition of Mary Senex). He died December 30, 1740, in London [Gentlemen's Magazine XI (1) (1740): 50].

CAREER

Senex's 40-year career included achievements as a mapmaker, globemaker, engraver, and also as publisher of maps and books by other authors, some of them well-known figures in natural philosophy as well as freemasonry. He published works on natural philosophy but also current events and religious topics. Senex also created his own maps, globes, atlases, and other geographical works, alone and in partnership with several of London's leading mapmakers.

ACTIVITIES

- | | |
|------------|--|
| 07/01/1695 | Apprenticed to Robert Clavell (organizer of the Term Catalogues, master of the Stationers Company 1698-99; d. 1711) in the Stationers' Company, London |
| 1702 | Opens independent business and first publication appears |
| 1703 | Enters into partnership with Charles Price and Jeremiah Seller making maps, globes, and navigational instruments |
| 03/04/1706 | Made free and becomes full member of the Stationers Company (Binding Book of Apprentices, Register of Freemen, 1706) |
| 1717-1727 | Engraves illustrations for annual London almanacs |
| 1720 | Presents paper on new global projection to House of Commons |
| 1727 | Named Grand Warden of the Freemasons |
| 07/04/1728 | Named Fellow of the Royal Society |

- 04/1732 Commissioned to provide map and written opinion on the claims of Pennsylvania colony in its protracted legal boundary dispute with Maryland colony
- 05/04/1738 Reads paper to Royal Society on preparation of celestial globes
- 1740-1755 Widow Mary Senex continues the map and globe business
- 1752 Mary Senex gives a deposition to the Royal Chancery in London during the protracted legal dispute between the Penn family and Lord Baltimore over the correct boundary between the colonies of Maryland and Pennsylvania, attesting that the handwriting and signature of an opinion purportedly written by her late husband about the correct boundary line were indeed those of John Senex.

ASSOCIATES

- Ephraim Chambers, 1680-1740 (apprentice then publishing partner, 1713)
- John Theophilus Desaguliers, natural philosopher (1683-1744)
- Edmund Halley, mathematician (1656-1742)
- John Maxwell, mapmaker (publishing partner, 1710-1724)
- Charles Price, land surveyor and mapmaker, c. 1665-1733 (publishing partner, 1703- 1710)
- Jeremiah Seller, son of mapmaker John Seller, fl. 1698-1705 (publishing partner, 1703-1705)
- William Whiston, 1667-1752 (assistant to Isaac Newton, theologian, author of tracts on natural philosophy)

ADDRESSES

- 1702 Against St. Clement's Church in the Strand
- 1703-1706 Against Fleece Tavern in Cornhill
- 1705 At Hemlock-Court, near Temple-Bar
- 1707-1710 At Price House in Whites-Alley, Coleman Street
- 1710-1721 At the Globe in Salisbury Court, Fleet Street
- 1721-1740 Against St. Dunstan's Church, Fleet Street

FORTUNE

- 1740-1755 Senex's will left all his estate to widow Mary (PRO Probate 11/708/52) who continued the business until her death after 1755. A broadsheet catalogue was published in 1749: *A Catalogue of Globes, Maps etc. made by the late John Senex FRS and continued to be sold by his Widow, Mary Senex*. [London: Mary Senex, 1749 (BLM—CC.5.a.143)]. In 1749 Mary Senex presented a letter to the Royal Society of London (published in the *Philosophical Transactions*), that promoted the Senex globes still for sale in her shop. Mary closed the business in December

1755 and the Senex stock was dispersed by public sale. Most of the globe gores and globe equipment were purchased by James Ferguson (1710-1776), limner and lecturer from Scotland who then established himself as a globe manufacturer in the Strand, London. Major buyers of Senex's map copperplates were publisher Robert Sayer (1725-1794) and instrument maker Benjamin Martin (1704-1782).

MAJOR PUBLICATIONS

Authored maps and publications

- 1708 *Map of France*, by C. Price, J. Senex, and J. Maxwell
Example: BLM—K.Top.56.26
- The Universal Geographer; or, Compleat Atlas containing all the Known Countries in the World*
Example: BLM—CC.5a.187 (1764 ed.)
Other Editions: Re-issued 1725; new edition by Robert Sayer, 1764
- 1710 *Proposals for a New Sett of Correct Mapps* [by Charles Price and John Senex]
Example: BL—Gen Ref 1240.k.9.(15)
- 1711 [Atlas] [20 maps bound without title]
Example: BLM—148.e.2
- A Correct Map of Ireland* [by Charles Price, John Senex, and John Maxwell]
Example: BLM—148.e.2.(5)
- 1714 *The English Atlas* [by Charles Price, John Senex, and John Maxwell]
Example: BLM—150.e.3
- A New Map of Great Britain, corrected from the observations communicated to the Royal Society at London*
Example: BLM—*1125.(6)
- 1716 *Sacred Geography, contained in Six Maps*
Example: BL—Gen Ref 118.e.7
- 1718 *A Treatise of the Description and Use of Both Globes*
Example: BL—Gen Ref 1568/8383

- 1719 *An Actual Survey of All the Principal Roads of England and Wales...by John Ogilby, Esqr...and now improved, very much corrected, and made portable by John Senex*
 Example: BLM—C.24.b.9
 Other Editions: Originally published by John Ogilby (1600-1676) as *Britannia*, 1675; Senex's edition appeared in numerous re-issues through 1780
- 1720 *A New Globular Projection: The Authors of the New Globular Projection humbly desire to represent to this Honourable House, etc. (being a recommendation of the New Globular Projection)* [by Messrs J Senex, Wilson, and J. Harris]
 Example: BL—Gen Ref (S.P.R.)357.b.3.(55)
- 1721 *A New General Atlas*
 Example: NYM— G1015.b.S57 1721
- A Treatise of Painting, by Leonardo da Vinci, translated from the original Italian* [by John Senex]
 Example: LC—Rare ND1130.L6.1721
- 1725/1728 *A Map of the World corrected from the observations communicated to the Royal Societys [sic] of London and Paris*
 Example: BLM—177.c.2.(1)
- Map of Africa with dedication to Sir Isaac Newton*
 Example: LCGM—G8200.1725.S4
- 1730 *A New and Correct Globe of the Earth*
 Example: LCGM—G3170.1730.S4 Vault
- 1732 *A Map of Pensilvania, Maryland & Three Lower Countys [sic], included in True copies of I. The agreement between Lord Baltimore and Messieurs Penn..., dated 10 May 1732*
 Example: LC—Rare F152.B19
- 1735 *A Short Account of the First Settlement of the Provinces of Virginia, Maryland, New-York, New-Jersey, and Pennsylvania, by the English*
 Example: LC—Rare E191.H28.1735
- 1738 *A New Map or Chart of the Mediterranean Sea*
 Example: BL—Maps 1073.(20)
- 1739 *A New Map, or Chart in Mercator's Projection, of the Western or Atlantic Ocean*
 Example: BLM—*977.(5)

1740 *A Catalogue of Globes and Maps made and sold by John Senex, fellow of the Royal Society at the Globe against St Dunstons Church, in Fleet Street, London* [publisher's catalog]
Example: BLM—CC.5.a.558

Publications for other authors

1707 *Miscellanea Curiosa: Being a Collection of Some of the Principal Phenomena in Nature, by the Royal Society* [edited by Edmund Halley]
Example: BL—Gen Ref 959.d.1-3

1712 *A Scheme of the Solar System...founded on Sr. Isaac Newton's wonderful discoveries by Wm. Whiston*
Example: BLM—148.e.3.(1) (1730 issue)
Other Editions: re-issued 1730

Geography Anatomiz'd: or, The geographical grammar, by Pat. Gordon
Example: BL—Gen Ref 531.c.35 (1722 Senex edition)
Other Editions: First edition 1693; corrected and enlarged by Senex in 1722; re-published in nineteen editions and multiple re-issues through 1754

1715 *Description of the Passage of the Shadow of the Moon, by Edmond Halley*
Example: BLM—*23.(4)
Other Editions: Re-issued 1723, 1724

1718 *A Voyage into the Levant...done by Mr Senex in three volumes* [by Joseph Pitton de Tournefort]
Example: BL—Gen Ref 979.k.9-11

1723 *The Constitutions of the Freemasons containing the History, Charges, Regulations, etc.* [by James Anderson]
Example: BL—1124.k.28.(1)

1727 *The Elements of Euclid...by William Whiston*
Example: BL—Gen Ref 1608/2138

1728 *Atlas Maritimus & Commercialis; or, A General View of the World* [by Nathaniel Cutler, Edmund Halley, Daniel Defoe et al]
Example: BLM—C.11.a.5

The Elements of Universal Mathematics, or Algebra [by Willem Jacob 'sGravesande]
Example: BL—Gen Ref RB.23.a.28580

- 1734 *A Course in Experimental Philosophy, adorn'd with 32 copperplates* 1 [by John Theophilus Desaguliers]
Example: BL—Gen Ref 536.i.11
- 1763 *Atlas Coelestis, containing the following hemispheres wherein are carefully laid down all the stars in Mr. Flamstead's catalogue* [by Robert Sayer]
Example: BLM—C.12.f.2
NB: This atlas collects many of John Senex's celestial maps; it is not known if Senex ever published an *Atlas Coelestis*; see Nick Kanas' discussion of the publishing politics of celestial mapping among Senex's contemporaries in *Star Maps*, p.172-4, 205-6.

REFERENCES

- Dictionary of National Biography*, s.v. Senex, John.
- Kanas, Nick. *Star Maps: History, Artistry, and Cartography*. New York: Springer, 2007.
- Millburn, John R. *Benjamin Martin: Author, Instrument-Maker and Country Showman*. Leyden: Noordhoff, 1976: 102-3.
- Senex, John. "A Contrivance to make the poles of the diurnal motion in a Celestial Globe pass round the Poles of the Ecliptic" (May 4, 1738). *Philosophical Transactions of the Royal Society of London* 40, no. 447 (1741): 203-4.
- Senex, John. "Opinion on the Articles of Agreement." In *Breviate in the Boundary Dispute between Pennsylvania and Maryland* (Court of Chancery, London, 1753). Pennsylvania Archives, Second Series, vol. 16. Philadelphia: Edwin Meyers, 1890: 448-449.
- Senex, Mary. "A Letter from the widow of the late Mr. John Senex, F.R.S., to Martin Folkes, Esq; President of the Royal Society, concerning the large Globes prepared by her late Husband and now sold by Herself" (January 17, 1748/9). *Philosophical Transactions of the Royal Society of London* 46, no. 493 (1752): 290-292.
- Senex, Mary. Deposition concerning John Senex's opinion on the articles of agreement (1752), in *Breviate in the Boundary Dispute between Pennsylvania and Maryland* (Court of Chancery, London, 1753). Pennsylvania Archives, Second Series, vol. 16. Philadelphia: Edwin Meyers, 1890: 574.
- Tyacke, Sarah, "John Senex." In *London Map-Sellers, 1680-1720*. Tring: Map Collector Publications, 1978: 123.
- Tyacke, Sarah. "Map-Sellers and the London Map Trade, c.1650-1710." In *My Head Is A Map: Essays and Memoirs in Honor of R.V. Tooley*, edited by Helen Wallis and Sarah Tyacke. London: Carta Press, 1973: 64-78.

JOHN SPEED

OCCUPATION

Tailor until about age 50; then antiquarian, historian, and geographer

BIOGRAPHY

Speed was born in Farndon, Cheshire County, England, in 1542. He was the son of John Speed (b.1526), member of the Merchant Taylors Company of London and Elizabeth Cheynye (b.1530). In 1567 the family relocated to London, and In 1572 Speed married Susanna Draper (1558-March 28, 1628), daughter of Thomas Draper, esq., of London (b. 1520). They had eighteen children, of whom eight survived of adulthood, including John Speed (1595-1640), physician. He died July 28, 1629, and was buried in the church of St-Giles-without-Cripplegate, City of London.

CAREER

The career of late Renaissance geographer Speed is unusual among early atlas compilers. Today one of the best-known English geographers, Speed was neither a printer nor an engraver nor a mathematician. He was an evangelical tailor who became a self-taught antiquarian, which led him to the study of geography. In 1595 he published his first map, a large wall map of Canaan. This map brought Speed to the attention of the statesman and poet Fulke Greville, Lord Brook, who became Speed's patron. Through Greville's influence Speed received an appointment at Customs House, freeing him from manual labor and giving him the resources to pursue his historical and geographical studies. Though he was not prolific, most of his maps and antiquarian works appeared in multiple editions and were quite popular. Speed enjoyed royal favor as well, and his map of Canaan and his biblical genealogies were included in every edition of the King James Bible from 1611-1638.

ACTIVITIES

- c. 1567 Family moves to London
- 09/10/1570 Admitted to Merchant Taylors Company of London
- 1572-1592 Rents tenement from Merchant Taylors Company in Moorfields, London; worked as a tailor
- 1592 Leases tenements in St-Paul's Churchyard

- 1595 Publishes first map, of Canaan
- 1598 Becomes client with stipend of Sir Fulke Greville (1554-1628), Baron Brook, poet, dramatist, and treasurer of the Royal Navy
- 06/01/1598 Presents maps of England to Elizabeth I and is appointed to position of Customs Waiter with room at Customs House by Elizabeth I (Calendar of State Papers, Domestic: Elizabeth, 1598-1601, vol 267: 62. Accessed December 30, 2011. [http:// www.british-history.ac.uk/report.aspx?compid=61210](http://www.british-history.ac.uk/report.aspx?compid=61210)).
- 1606 Granted a coat of arms by order of James I
- Joins fledging Society of Antiquaries of London
- 10/31/1610 Receives a ten-year patent to print and insert his Genealogies, a reduced version of his wall map of Canaan and gazetteer into every edition of the King James Bible (patent extended to 1638)
- 1611 First editions appear of his two most famous works, *Theatre of the Empire of Great Britaine* and *History of Great Britaine*
- Map of Canaan and genealogies appear in front matter of first edition of King James Bible
- 1613 Retires (age 61) from office of attendant on the king

ASSOCIATES

- William Camden (1551-1623), antiquarian and historian, compiler of the English county atlas *Britannia* (1586)
- Sir Fulke Greville, 1st Baron Brooke (1554-1628), patron, writer, treasurer of the Royal Navy, chancellor of the Exchequer
- Jodocus Hondius (1563-1612), Flemish mapmaker and engraver
- John More (d. 1592), theologian of Norwich
- Hugh Broughton (1549-1612), theologian and Hebraist

MAJOR PUBLICATIONS

- 1592 *The Genealogies Recorded in the Holy Scriptures*
 Example: BL—C.35.I.11
 Other Editions: Re-issued multiple editions 1611-1636

- 1595 Fourteen-sheet wall map of Canaan
Example: BLM—*695.(2) (1611 ed.)
Other Editions: Re-issued 1611, 1651
- 1611 *The history of Great Britaine under the conquests of ye Romans, Saxons, Danes, and Normans...from Julius Caesar to our most gracious soveraigne King James*
Example: BL—201.i.7
Other Editions: Re-issued 1614, 1623
- The Theatre of the Empire of Great Britaine* (folio)
Example: BL—G.7884 (folio)
Other Editions: FOLIO: Re-issued 1614, 1616, 1623, 1627, 1631, 1646, 1654 by Sudbury and Humble; re-issued 1662 by Roger Rea; re-issued 1676 by Bassett and Chiswell; amended and printed 1708 by Henry Overton; re-issued 1770 by Cluer and Dicey. OCTAVO (so-called *Miniature Theatre*): issued 1619 by Pieter van den Keere, Amsterdam; enlarged and re-issued 1627, 1646, 1662, 1665, 1668, 1676
- 1615 *A Description of England and Wales*
Example: BL—C.175.i.19
- 1616 *A Clowd of Witnesses, and they the Holy Genealogies of the Sacred Scriptures*
Example: BL—1350.a.17
- 1627 *A Prospect of the Most Famous Parts of the World Together with all the Provinces, Counties and Shires, contained in that large Theater of Great Brittaines Empire*
Example: BLM—C.7.e.13
Other Editions: Re-issued 1631, 1646, 1650, 1662, 1676

REFERENCES

- Campbell, Gordon. *Bible: The Story of the King James Bible*. London: Oxford UP, 2011: Appendix 2.
- Dictionary of National Biography*, s.v. Speed, John. London: Smith, Elder & Co., 1894-1897.
- Moreland, Carl and David Bannister. *Antique Maps*. 3rd ed. London: Phaidon, 1993: 148-150.
- Rebholz, Ronald. *The Life of Fulke Greville, First Lord Brooke*. Oxford: Clarendon Press, 1971.
- Speed, Thomas. *Records and Memorials of the Speed Family*. Louisville, KY: Courier-Journal Job Printing Company, 1892: 7-18.

BIBLIOGRAPHY

Primary Sources

- Actes d'état-civil d'artistes français...Extraits de registres de l'Hôtel-de-Ville de Paris*, edited by Henri Herluison. Geneva: Slatkine Reprints, 1972.
- Bacon, Francis. *The Advancement of Learning*. Oxford, U.K.: Oxford University Press, 1974.
- Belleforest, François. *La Cosmographie universelle de tout le monde.../auteur en partie Munster, mais beaucoup plus augmentée, ornée et enrichie par François de Belle-Forest*. Paris: Nicolas Chesneau, 1575.
- Blount, Thomas. *Glossographia: Or, a Dictionary*. 1656. Reprint in *English Linguistics, 1500-1800*, no. 153. Menston, U.K.: Scolar Press, 1969.
- Boisseau, Jean. *Topographie française, ou representation de plusieurs villes, bourgs...du royaume de France...par Cl. Chastillon*. Paris: chez Jean Boisseau, 1641-1647.
- Boisseau, Jean, *Théâtre des Gaules ou descriptions générales et particulières de toutes les provinces du royaume de France*. Paris: chez Jean Boisseau, 1642.
- Boisseau, Jean and Isaac Dumas de Fores. *Trésor des cartes géographiques des principaux estatz de l'univers/La Clef de la géographie*. Paris: chez Jean Boisseau, 1643.
- Camden, William and Edmund Gibson. *Camden's Britannia, newly translated into English*. London: F. Collins, 1695.
- Coles, Elisha. *An English Dictionary*. London: Samuel Crouch, 1676.
- De Fer, Nicolas. *Les Forces de l'Europe ou descriptions des principales villes (Introduction à la fortification)*. Paris: chez Nicolas de Fer, 1693[-1697].
- De Fer, Nicolas. *Petit et nouveau atlas*. Paris: chez le Sieur de Fer, 1697.
- [De Fer, Nicolas]. *Atlas royal à l'usage de Monseigneur le doc de Bourgogne contenant les cartes géographiques de toutes les parties du monde*. [Counterfeit edition of Alexis-Hubert Jaillot's *Atlas nouveau*]. Amsterdam: Pierre Mortier, 1699.

- De Fer, Nicolas. *L'Atlas curieux: ou Le Monde représenté dans des cartes générales et particulières de ciel et de la terre*. Serial publication. Paris: chez Nicolas de Fer, 1700-1705.
- De Fer, Nicolas. *Atlas ou Recüeil de cartes géographiques dressées sur les nouvelles observations de Mrs de l'Academie Royale des Sciences*. Paris: chez Nicolas de Fer, 1709.
- De Fer, Nicolas. *Introduction à la géographie avec une description historique sur toutes les parties de la Terre*. Paris: chez Nicolas de Fer, 1717.
- Defoe, Daniel. *The Complete English Tradesman: In Familiar Letters...* vol. 1. London: Charles Rivington, 1726.
- Defoe, Daniel, Nathaniel Cutler, and Edmund Halley. *Atlas Maritimus & Commercialis; or, A General View of the World*. London: J. Senex, 1728.
- Duval, Pierre. *Cartes de géographie reveües et augmentées de leurs divisions et villes capitales* [sic]. Paris: chez Antoine de Fer, 1657.
- Duval, Pierre. *Cartes de geographie les plus nouvelles et les plus fideles, avecque leurs divisions régulières, suivant les mémoires de P. Du Val*. Paris: chez Pierre Duval, 1667.
- Duval, Pierre. *Geographia Universalis: The Present State of the Whole World... Written Originally at the Command of the French King for the use of the Dauphin, by the Sieur DuVal, Geographer in Ordinary to His Majesty; And made English, by Ferrand Spence*, trans. Ferrand Spence. London: for H. Clark, 1685.
- Fleury, Marie-Antoinette. *Documents du Minutier central des notaires de Paris: peintres, sculpteurs et graveurs au XVIIe siècle, 1600-1650*, vol. 1. Paris: S.E.V.P.E.N., 1969.
- Green, John. *The Construction of Maps and Globes*. London: T. Horne, 1717.
- Hakluyt, Richard. *Voyages and Discoveries*, edited by Jack Beeching (New York: Penguin, 1985).
- Jaillot, Alexis-Hubert. *Atlas nouveau contenant toutes les parties du monde*. Paris: chez Hubert Jaillot, 1681.
- Jaillot, Alexis-Hubert. *Le Neptune françois, ou Atlas nouveau des cartes marines*. Paris: chez Hubert Jaillot, 1693.
- Jaillot, Alexis-Hubert. *Atlas françois contenant les cartes géographiques...* Paris: chez Hubert Jaillot, 1698.
- Jaillot, Alexis-Hubert. *Liste générale des postes de France*. Paris: chez Jaillot, 1721.

- Jaillet, Jean-Baptiste-Michel Renou de Chauvigné. *Catalogue des cartes géographiques des sieurs Jaillet, géographes ordinaires du Roy* (Paris: chez Jaillet, 1752). Institut Cartogràfic de Catalunya. Accessed July 26, 2011. <http://cartotecadigital.icc.cat/cdm/singleitem/collection/monregions/id/211/rec/1>.
- Journal of the House of Commons, vol. 12, 1697-1699 (1803), 11-12. Accessed March 7, 2011. <http://www.british-history.ac.uk/report.aspx?compid=39512>.
- Kersey, John. *The English Dictionary, or a Compleat Collection of the Most Proper and Significant Words*. London: Henry Bonwicke, 1702.
- Mallet, Allain Manesson. *Les Travaux de Mars ou la Fortification nouvelle tant régulière qu'irrégulière*. Paris: chez Allain Mallet, 1671.
- Mallet, Allain Manesson. *Description de l'univers*. Paris: chez Denis Thierry, 1683.
- Mallet, Allain Manesson. *La Géométrie pratique, divisé en quatre livres*. Paris: Annison, 1702.
- Mercator, Gerhard. *Atlas, sive cosmographicae meditationes de fabrica mundi et fabricati figura* Dusseldorf: Albert Busius, 1595.
- Moll, Herman. *Thesaurus Geographicus, or, A Compleat Description of the Earth Collected with Great Care by Several Hands...* London: for Abel Swall and Timothy Child, 1695.
- Moll, Herman. *A System of Geography; or a New & Accurate Description of the Earth, in all its Empires, Kingdoms and States*. London: for Timothy Childe, 1701.
- Moll, Herman. *Twenty-four New and Accurate Maps of the Several Parts of Europe*. London: Herman Moll, 1707.
- Moll, Herman. *Atlas Manuale: Or, a New Sett of Maps of All the Parts of the Earth*. London: for A. and J. Churchil, 1709.
- Moll, Herman. *The Compleat Geographer, or, The Chorography and Topography of All the Known Parts of the Earth*. London: for Awunsham and John Churchill, 1709.
- Moll, Herman. *The World Describ'd; or, A New and Correct Set of Maps*. London: J. Bowles, 1709.
- Moll, Herman. *Atlas Geographicus; or, A Compleat System of Geography*. London: John Nutt, 1711.
- Moll, Herman. *Map of Spain*. Sheet map. London: Herman Moll, 1711.
- Moll, Herman. *A New and Exact Map of the Dominions of the King of Great Britain on ye Continent of North America*. Sheet map. London: Herman Moll, 1715.
- Moll, Herman. *A New Description of England and Wales, with the adjacent islands*. London: for H. Moll, 1724.

- Moll, Herman. *Atlas Minor, or, A Set of Sixty-two New and Correct Maps of All the Parts of the World*. London: Thomas Bowles, 1727.
- Morden, Robert. *Geography Rectified: or a Description of the World, in all its Kingdoms, Provinces, Countries...* London: for Robert Morden and Thomas Cockeril, 1680.
- Morden, Robert. *The Present State of His Majesties Isles and Territories in America*. London: for H. Clark, 1687.
- Morden, Robert. *Geography Rectified: or a Description of the World, in all its Kingdoms, Provinces, Countries...* 2nd ed. London: for Robert Morden and Thomas Cockerill, 1688.
- Morden, Robert. *Geography Rectified: or a Description of the World, in all its Kingdoms, Provinces, Countries...* 3rd ed. London: for Robert Morden and Thomas Cockerill, 1693.
- Morden, Robert. *The New Description and State of England, Containing the Mapps of the Counties of England and Wales, in fifty-three copper-plates, Newly Design'd, Exactly Drawn and Engraven by the Best Artists*. London: for Robert Morden, 1701.
- Morden, Robert. *An Introduction to Astronomy, Geography, and Navigation and other Mathematical Sciences made easie by the description and uses of the cœlestial and terrestrial globes*. London: Robert Morden, 1702.
- Morden, Robert and William Berry. *A Pocket Book of all the Counties of England and Wales* [set of playing cards depicting the Counties]. London: Robert Morden, 1680.
- Morden, Robert and Philip Lea. *A Book of the Prospects of the Remarkable Places in and about the City of London*. London: R. Morden and P. Lea, 1690.
- Nicolas of Cusa, "Compendium, Ch. XIII." In *Opera Omnia XI*, trans. Victoria Morse, History of Cartography Project, Department of Geography, University of Wisconsin. Accessed April 2, 2012. <http://www.geography.wisc.edu/histcart/broadsht/brdsht7.html>.
- Ortelius, Abraham. *Theatrum Orbis Terrarum*. Antwerp: Gilles Coppens de Diest, 1570.
- Senex, John. *The English Atlas, consisting of thirty-one maps...* London: J. Senex and J. Maxwell, 1714.
- Senex, John. *A New General Atlas, containing a Geographical and Historical Account of all the Empires, Kingdoms, and other Dominions of the World...* London: for Daniel Browne, 1721.
- Senex, John. *A Catalogue of Globes and Maps made and sold by John Senex, fellow of the Royal Society at the Globe against St Dunstons Church, in Fleet Street, London*. Publisher's catalog. London: John Senex, 1740.
- Senex, John. "A Contrivance to make the poles of the diurnal motion in a Celestial Globe pass round the Poles of the Ecliptic" (May 4, 1738). *Philosophical Transactions of the Royal Society of London* 40, no. 447 (1741): 203-4.

- Senex, John. *An Actual Survey of All the Principal Roads of England and Wales...by John Ogilby, Esqr...and now improved, very much corrected, and made portable by John Senex*. London: for M. Senex, 1742.
- Senex, John. "Opinion on the Articles of Agreement." In *Breviate in the Boundary Dispute between Pennsylvania and Maryland* (Court of Chancery, London, 1753), 448-449. Pennsylvania Archives, Second Series, vol. 16. Philadelphia: Edwin Meyers, 1890.
- Senex, Mary. "A Letter from the widow of the late Mr. John Senex, F.R.S., to Martin Folkes, Esq; President of the Royal Society, concerning the large Globes prepared by her late Husband and now sold by Herself" (January 17, 1748/9). *Philosophical Transactions of the Royal Society of London* 46, no. 493 (1752): 290-292.
- Senex, Mary. Deposition concerning John Senex's opinion on the articles of agreement (1752). In *Breviate in the Boundary Dispute between Pennsylvania and Maryland* (Court of Chancery, London, 1753), 574. Pennsylvania Archives, Second Series, vol. 16. Philadelphia: Edwin Meyers, 1890.
- Speed, John. *The History of Great Britaine under the conquests of ye Romans, Saxons, Danes, and Normans...from Julius Caesar to our most gracious soveraigne King James*. London: H. Hall and J. Beale, 1611.
- Speed, John. *The Theatre of the Empire of Great Britaine: Presenting an Exact Geography of the Kingdomes of England, Scotland, Ireland, and the Iles adjoining...* London: J. Sudbury and Georg Humble, 1611.
- Speed, John. *Theatre of the Empire of Great Britaine, with A Prospect of the Most Famous Parts of the World*. London: George Humble, 1627.
- Speed, John. *A Prospect of the Most Famous Parts of the World*. London: for John Dawson, 1631.
- Speed, John. *A Prospect of the Most Famous Parts of the World*. London: for M. and S. Simmons, 1662.
- Speed, John. *The Theatre of the Empire of Great Britaine, with A Prospect of the Most Famous Parts of the World*. London: for Thomas Bassett and Richard Chiswell, 1676.
- Speed, John. *The Theatre of the Empire of Great Britaine* (1676), edited by R. A. Skelton. Facsimile edition. Amsterdam: Theatrum Orbis Terrarum Limited, 1991.
- Wilkins, John and William Lloyd. *An Alphabetical Dictionary*. London: Samuel Gellibrand, 1668.
- Wright, Edward. *Certaine Errors in Navigation* (London: Valentine Simms and W. White, 1599).

Secondary Sources

- Akerman, James. "On the Shoulders of a Titan: Viewing the World of the Past in Atlas Structure." PhD diss., Pennsylvania State University, 1991. ProQuest (AAT 9127291).
- Alexander, Amir. *Geometrical Landscapes: The Voyages of Discovery and the Transformation of Mathematical Practice*. Palo Alto, CA: Stanford University Press, 2002.
- Allen, Bryce, Jian Qin, and F.W. Lancaster, "Persuasive Communities: A Longitudinal Analysis of references in the Philosophical Transactions of the Royal Society, 1665-1990." *Social Studies in Science* 24 (1994): 279-310.
- Alpers, Svetlana. *The Art of Describing: Dutch Art in the Seventeenth Century*. Chicago: University of Chicago Press, 1983.
- Arber, Edward. *The Term Catalogues, 1668-1709 A.D.* London: Edward Arber, 1903-1906.
- Ash, Eric. *Power, Knowledge, and Expertise in Elizabethan England*. Baltimore: Johns Hopkins University Press, 2004.
- Bannister, Mark. "The Crisis of Literary Patronage in France, 1643-1655." *French Studies* XXXIX (1985): 18-30.
- Barchas, Janine. "Prefiguring genre: frontispiece portraits from 'Gulliver's Travels' to 'Millenium Hall'." *Studies in the Novel* 30 (1998): 260-286.
- Baynton-Williams, Ashley. "Treacle and Vinegar: Publisher's Adverts." *Map Forum* 6 (1999). Accessed February 3, 2007. <http://www.mapforum.com/06/6issue.htm>.
- Beik, William. *Absolutism and Society in Seventeenth-Century France*. Cambridge, U.K.: Cambridge University Press, 1985.
- Bell, David A. *The Cult of the Nation in France: Inventing Nationalism, 1680-1800*. Cambridge, MA: Harvard University Press, 2001.
- Berger, Jr., Harry. *Fictions of the Pose: Rembrandt against the Italian Renaissance*. Palo Alto, CA: Stanford University Press, 2000.
- Berkvens-Stevelinck, Christiane. *Le Magasin de l'univers: The Dutch Republic as the Centre of the European Book Trade*. Amsterdam: Brill, 1992.
- Bermingham, Ann, ed. *The Consumption of Culture 1600-1800: Image, Object, Text*. New York: Routledge, 1995.
- Biagioli, Mario. *Galileo, Courtier: The Practice of Science in the Culture of Absolutism*. Chicago: University of Chicago Press, 1983.

- Bilder, Geoffrey W. "In Google We Trust?" *Journal of Electronic Publishing* 9, no.1 (2006). Accessed November 17, 2011. doi:10.3998/3336451.0009.101.
- Blagden, Cyprian. *The Stationers' Company: A History, 1403-1959*. Palo Alto, CA: Stanford University Press, 1977.
- Bowen, Margarita. *Empiricism and Geographical Thought: From Francis Bacon to Alexander von Humboldt*. Cambridge, U.K.: Cambridge University Press, 1981.
- Bracher, Frederick. "The Maps in Gulliver's Travels." *Huntington Library Quarterly* 8 (1944/45): 59-74.
- Brewer, John and Roy Porter, eds. *Consumption and the World of Goods*. London: Routledge, 1993.
- Brewer, John, Neil McKendrick, and John H. Plumb. *The Birth of a Consumer Society: the Commercialization of Eighteenth-Century England*. Indianapolis: Indiana University Press, 1982.
- Broc, Numa. *La géographie de la Renaissance, 1420-1620*. Paris: Bibliothèque Nationale, 1980.
- Brotton, Jerry. *Trading Territories: Mapping the Early Modern World*. Ithaca, NY: Cornell University Press, 1997.
- Brown, Gregory S. *A Field of Honor: Writers, Court Culture and Public Theater in French Literary Life from Racine to the Revolution*. New York: Columbia University Press, 2002.
- Burke, Peter. *The Fabrication of Louis XIV*. New Haven: Yale University Press, 1992.
- Campbell, Gordon. *Bible: The Story of the King James Bible*. London: Oxford University Press, 2011.
- Campbell, Mary Baine. *Wonder and Science: Imagining Worlds in Early Modern Europe*. Ithaca, NY: Cornell University Press, 1999.
- Clapp, Sarah L. C. "The Beginnings of Subscription Publication in the Seventeenth Century." *Modern Philology* 29 (1931): 199-224.
- Colley, Linda. *Britons: Forging the Nation, 1707-1837*. New Haven: Yale University Press, 1992.
- Conley, Tom. *The Self-Made Map: Cartographic Writing in Early Modern France*. Minneapolis: University of Minnesota Press, 1996.
- Corfield, Penelope. *Power and the Professions in Britain, 1700-1850*. London: Routledge, 1995.
- Cormack, Lesley. *Charting an Empire: Geography at the English Universities, 1580-1620*. Chicago: University of Chicago Press, 1997.

- Cosgrove, Denis. *Apollo's Eye: A Genealogy of the Globe in the Western Imagination*. Baltimore, MD: Johns Hopkins University Press, 2001.
- Cox, Nancy. "'Beggary of the Nation': Moral, Economic, and Political Attitudes to the Retail Sector in the Early Modern Period." In *A Nation of Shopkeepers: Five Centuries of British Retailing*, edited by John Benson and Laura Ugolini, 26-51. London: I.B. Tauris, 2002.
- Cox, Nancy. *Perceptions of Retailing in Early Modern England*. London: Ashgate, 2007.
- Crane, Nicolas. *Mercator: The Man Who Mapped the Planet*. New York: Henry Holt, 2003.
- Crane, Susan. *The Performance of Self: Ritual, Clothing, and Identity during the Hundred Years War*. Philadelphia: University of Pennsylvania Press, 2002.
- Crone, G.R. "Notes on a neglected Eighteenth Century Geographer and Cartographer." *Imago Mundi* 6 (1949): 85-91.
- Crone, G.R. "Further notes on Bradock Mead, Alias John Green, an Eighteenth Century Cartographer." *Imago Mundi* 8 (1951): 69-70.
- Cumming, William Press. *British Maps of Colonial America*. Chicago: University of Chicago Press, 1974.
- Dahl, Edward H. "The Original Beaver Map: De Fer's 1698 wall map of America." *Map Collector* 29 (1984): 22-26.
- Dainville, François de. *La géographie des humanistes: les jésuites et l'éducation de la société française*. Paris: Beauchesne, 1940.
- De Hond, Jan. "Cornelis de Bruijn (1652-1726/27): A Dutch Painter in the East." In *Eastward Bound: Dutch Ventures and Adventures in the Middle East*, edited by Geert Jan van Gelder and Ed de Moor, 51-81. Amsterdam: Editions Rodopi, 1994.
- Delano-Smith, Catherine and Roger Kain, *English Maps: A History*. Toronto: University of Toronto Press, 1999.
- Dictionary of National Biography*. London: Smith, Elder & Co., 1894-1897.
- Dictionary of Scientific Biography*. New York: Charles Scribner, 1970-1990.
- Dictionnaire critique de biographie et d'histoire*. Paris: Henri Pion, 1867.
- D'Orgeix, Emilie. "Alain Manesson Mallet (1630-1706): portrait d'un ingénieur dans le sillage de Vauban." *Bulletin du comité français de cartographie* 195 (March 2008): 64-74.
- Dym, Jordana. "The Familiar and the Strange: Western Travelers' Maps of Europe and Asia, ca. 1600-1800." *Philosophy and Geography* 7, no. 2 (2004): 155-191.

- Earle, Peter. *The Making of the English Middle Class: Business, Society, and Family Life in London, 1660-1730*. Berkeley: University of California Press, 1989.
- Edgerton, Samuel. *The Heritage of Giotto's Geometry: Art and Science on the Eve of the Scientific Revolution*. Ithaca, NY: Cornell University Press, 1991.
- Edson, Evelyn. "Bibliographic Essay: The History of Cartography." *Choice* 38, no. 11/12 (2001): 1899-1909.
- Elliott, John H. *The Old World and the New, 1492-1650*. Cambridge, U.K.: Cambridge University Press, 1970.
- Fairchilds, Cissie. "The Production and Marketing of Populuxe Goods in Eighteenth-Century Paris." In *Consumption and the World of Goods*, edited by John Brewer and Roy Porter, 228-248. London: Routledge, 1993.
- Farr, James R. *Artisans in Europe, 1300-1914*. Cambridge, U.K.: Cambridge University Press, 2000.
- Ferdinand, Christine. "Constructing the frameworks of desire: How newspapers sold books in the seventeenth and eighteenth centuries." *Prose Studies: History, Theory, Criticism* 21 (1998): 157-175.
- Foucault, Michel. *The Order of Things: An Archaeology of the Human Sciences*. New York: Random House, 1970.
- Fox, Alistair. "The Complaint of Poetry for the Death of Liberality: the Decline of Literary Patronage in the 1590s." In *The Reign of Elizabeth I: Court and Culture in the Last Decade* edited by John Guy, 229-257. Cambridge, U.K.: Cambridge University Press, 1995.
- Gaskell, Philip. *A New Introduction to Bibliography*. New York: Oxford University Press, 1972.
- Geison, Gerald. *Professions and the French State, 1700-1900*. Philadelphia: University of Pennsylvania Press, 1984.
- Genette, Gérard. *Paratexts: Thresholds of Interpretation*, trans. Jane E. Lewin. New York: Cambridge University Press, 1997.
- Gillies, John. *Shakespeare and the Geography of Difference*. Cambridge, U.K.: Cambridge University Press, 1994.
- Godlewski, Anne. *Geography Unbound: French Geographic Science from Cassini to Humboldt*. Chicago: University of Chicago Press, 1999.
- Goffart, Walter. *Historical Atlases: The First Three Hundred Years, 1570-1870*. Chicago: University of Chicago Press, 2003.

- Goffman, Erving. *The Presentation of Self in Everyday Life*. 1959. Reprint, New York: Penguin Books, 1990.
- Grafton, Anthony. *New Worlds, Ancient Texts: The Power of Tradition and the Shock of Discovery*. Cambridge, MA: Harvard University Press, 1992.
- Greenblatt, Stephen. *Marvellous Possessions: the Wonder of the New World*. Chicago: University of Chicago Press, 1992.
- Greenblatt, Stephen. *Renaissance Self-Fashioning: From More to Shakespeare*. Chicago: University of Chicago Press, 1980.
- Grew, Raymond. "The Case for Comparing Histories." *American Historical Review* 85 (1980): 763-778.
- Griffin, Dustin. *Literary Patronage in England, 1650-1800*. Cambridge, U.K.: Cambridge University Press, 1996.
- Grivel, Marianne. *Le Commerce de l'estampe à Paris au XVII siècle*. Geneva: Librairie Droz, 1986.
- Hahn, Roger. *Anatomy of a Scientific Institution: The Paris Academy of Sciences, 1666-1803*. Berkeley: University of California Press, 1971.
- Harley, J.B. and David Woodward, eds. *The History of Cartography*, vol. 1. Chicago: University of Chicago Press, 1987.
- Harley, J.B. *The New Nature of Maps: Essays in the History of Cartography*. Edited by Paul Laxton. Baltimore: Johns Hopkins University Press, 2001.
- Hazard, Paul. *La Crise de la conscience européenne*. Paris: Boivin, 1935.
- Headrick, Daniel R. *When Information Came of Age: Technologies of Knowledge in the Age of Reason and Revolution, 1700-1850*. New York: Oxford University Press, 2000.
- Holmes, Geoffrey. *Professions and Social Change in England, 1680-1730*. Oxford, U.K.: Oxford University Press, 1981.
- Hunter, Michael. *Establishing the New Science: the Experience of the Early Royal Society*. Woodbridge: Boydell Press, 1989.
- Israel, Jonathan. *The Dutch Republic: Its Rise, Greatness, and Fall, 1477-1806*. Oxford: Clarendon Press, 1995.
- Jacob, Margaret. *The Cultural Meaning of the Scientific Revolution*. Philadelphia: Temple University Press, 1988.
- Johns, Adrian. *The Nature of the Book: Print and Knowledge in the Making*. Chicago: University of Chicago Press, 1998.

- Kanas, Nick. *Star Maps: History, Artistry, and Cartography*. New York: Springer, 2007.
- Karrow, Robert J. *Mapmakers of the Sixteenth Century and Their Maps: Bio-bibliographies of the Cartographers of Abraham Ortelius*. Wittnetka, IL: Speculum Orbis, 1993.
- Kent, Dale V. *Cosimo de Medici and the Florentine Renaissance*. New Haven: Yale University Press, 2000.
- Kettering, Sharon. *Patrons, Brokers, and Clients in Seventeenth-Century France*. New York: Oxford University Press, 1986.
- Kettering, Sharon. *Patronage in Sixteenth and Seventeenth Century France*. Aldershot, U.K.: Ashgate, 2002.
- Koeman, Cornelius. *The History of Abraham Ortelius and His Theatrum Orbis Terrarum*. Lausanne: Sequoia, 1964
- Koks, Frans. "Abraham Ortelius: Theatrum Orbis Terrarum." Accessed November 14, 2009. <http://memory.loc.gov/ammem/gmdhtml/gnrlort.html>.
- Konvitz, Josef. *Cartography in France, 1660-1848: Science, Engineering, and Statecraft*. Chicago: University of Chicago Press, 1987.
- Korshin, Paul J. "Types of Eighteenth-Century Literary Patronage." *Eighteenth-Century Studies* 7 (1974): 453-473.
- Krass, Michael. "Big Hair: A Wig History of Consumption in Eighteenth-Century France." *American Historical Review* 111, no. 3 (2006): 631-659.
- Kugler, Martin. *Astronomy in Elizabethan England, 1558 to 1585: John Dee, Thomas Digges, and Giordano Bruno*. Montpellier: Université Paul Valéry, 1982.
- Leary, Mark. *Self Presentation: Impression Management and Interpersonal Behavior*. Boulder, CO: Westview Press, 1996.
- Livingstone, David. *The Geographical Tradition*. Oxford, U.K.: Blackwell, 1992.
- Locke, John. *The Works of John Locke*, vol. 3. London: Thomas Tegg, 1823.
- Lunbeck, Elizabeth and Suzanne Marchand, eds. *Proof and Persuasion: Essays on Authority, Objectivity, and Evidence*. Belgium: Brepols, 1996.
- Maćzak, Antoni. *Travel in Early Modern Europe*. Oxford, UK: Blackwell, 1995.
- Martin, Henri-Jean. *Livre, pouvoirs et société à Paris au XVII^e siècle, 1598-1701*, 3rd ed. Geneva: Librairie Droz, 1999.
- May, J.A. "The Interpretation of Ptolemy in the Renaissance." *Tijdschrift voor Economische en Sociale Geografie* 73, no.6 (1982): 350-361.

- McClendon, Muriel, Joseph P. Ward, and Michael MacDonald, eds. *Protestant Identities: Religion, Society, and Self-Fashioning in Post-Reformation England*. Palo Alto, CA: Stanford University Press, 2000.
- McGhee, Robert. *The Last Imaginary Place: A Human History of the Arctic World*. Chicago: University of Chicago Press, 2007.
- McKendrick, Neil and John Brewer. *The Birth of a Consumer Society: the Commercialization of Eighteenth-Century England*. Bloomington: Indiana University Press, 1982.
- Mendyk, Stan. "Early British Chorography." *Sixteenth Century Journal* 17, no. 4 (1986): 459-481.
- Millburn, John R. *Benjamin Martin: Author, Instrument-Maker and Country Showman*. Leyden: Noordhoff, 1976.
- Monmonier, Mark. *Rhumb Lines and Map Wars: A Social History of the Mercator Projection*. Chicago: University of Chicago Press, 2004.
- Moreland, Carl and David Bannister, *Antique Maps*. 3rd ed. London: Phaidon Press, 1993.
- Mousnier, Roland. *Problèmes de stratification sociale: deux cahiers de la noblesse pour les Etats Généraux de 1649-1651*. Paris: Presses Universitaires de France, 1965.
- Mousnier, Roland. *The Institutions of France under the Absolute Monarchy*. Chicago: University of Chicago Press, 1979.
- Mukerji, Chandra. "A New World Picture: Maps as Capital Goods for the Modern World System." In *From Graven Images: Patterns of Modern Materialism*, 70-127. New York: Columbia University Press, 1983.
- Neuschel, Kristin. *Word of Honor: Interpreting Noble Culture in Sixteenth-Century France*. Ithaca: Cornell University Press, 1989.
- New Catholic Encyclopedia*. New York: Robert Appleton Co., 1911.
- Newman, Ann. *Cultural Capitals: Early Modern London and Paris*. Princeton, NJ: Princeton University Press, 2011.
- O'Hara, Kieron. *Trust: From Socrates to Spin*. Cambridge, U.K.: Icon Books, 2004.
- Parry, J. R. *The Age of Reconnaissance: Discovery, Exploration, and Settlement, 1450-1650*. Berkeley: University of California Press, 1982.
- Pastoureau, Mireille. *Les Atlas français, XVI-XVII siècles: Répertoire bibliographique et étude*. Paris: Bibliothèque Nationale de France, 1984.
- Peck, Linda Levy. *Consuming Splendor: Society and Culture in Seventeenth Century England*. Cambridge, U.K.: Cambridge University Press, 2005.

- Pedley, Mary Sponberg. *The Commerce of Cartography: Making and Marketing Maps in Eighteenth-Century France and England*. Chicago: University of Chicago, 2005.
- Petto, Christine. *When France Was King of Cartography: The Patronage and Production of Maps in Early Modern France*. Lanham, MD: Lexington Books, 2007.
- Philips, Philip J. *List of Geographical Atlases in the Library of Congress*. Washington, DC: Government Printing Office, 1909[-1992].
- Piper, David. *The Image of the Poet: British Poets and Their Portraits*. Oxford, U.K.: Clarendon Press, 1982.
- Ptolemaeus. *Cosmographia* (1478). Facsimile. Edited by R. A. Skelton. Amsterdam: Theatrum Orbis Terrarum Limited, 1966.
- Pumfrey, Stephen and Frances Dawbarn, "Science and Patronage in England, 1570-1625: A Preliminary Study." *History of Science* 42 (2004): 137-188.
- Purver, Margery. *The Royal Society: Concept and Creation*. London: Routledge, 1967.
- Rebholz, Ronald. *The Life of Fulke Greville, First Lord Brooke*. Oxford: Clarendon Press, 1971.
- Redner, Harry. *The Ends of Science: An Essay in Scientific Authority*. Boulder, CO: Westview Press, 1987.
- Reinhartz, Dennis. *The Cartographer and the Literati: Herman Moll and His Intellectual Circle*. Lewiston, NY: Edwin Mellen, 1997.
- Richmond, Charles and Paul Smith, eds. *The Self-Fashioning of Disraeli, 1818-1851*. Cambridge, U.K.: Cambridge University Press, 1999.
- Roche, Daniel. *L'Histoire des choses banales: Naissance de la consommation (XVIIe-XIXe siècle)*. Paris: Fayard, 1997.
- Roland, François. "Alex-Hubert Jaillot, géographe du roi Louis XIV, 1632-1712." In *Mémoires de l'Académie des Sciences, Belles-lettres et Arts de Besançon*, 46-76. Besançon: Académie des Sciences, Belles-lettres et Arts, 1918.
- Rostenberg, Leona. *English Publishers in the Graphic Arts, 1599-1700*. New York: Burt Franklin, 1963.
- Sauer, Carl O. "Education of a Geographer." *Annals of the Association of American Geographers* 46, no. 3 (1956): 287-299.
- Shapin, Steven. *A Social History of Truth: Civility and Science in Seventeenth-Century England*. Chicago: University of Chicago Press, 1995.
- Sherman, William. *John Dee: The Politics of Reading and Writing in the English Renaissance*. Amherst, MA: University of Massachusetts Press, 1995.

- Shirley, Rodney. *Maps in the Atlases of the British Library: A Descriptive Catalogue, c.850-1800*. London: British Library, 2004.
- Shoemaker, Peter W. *Powerful Connections: The Poetics of Patronage in the Age of Louis XIII*. Cranbury, NJ: Associated University Presses, 2007.
- Silverberg, Robert. *The Realm of Prester John*. Athens, OH: Ohio University Press, 1996.
- Smith, Jonathan M. "State Formation, Geography, and a Gentlemen's Education." *Geographical Review* 86, no.1 (1996): 91-100.
- Smith, Steven R. "The London Apprentices as Seventeenth Century Adolescents." *Past and Present* 61 (1973): 149-161.
- Sobel, Dava. *Longitude: The True Story of a Lone Genius Who Solved the Greatest Scientific Problem of His Time*. New York: Walker & Co., 1995.
- Speed, Thomas. *Records and Memorials of the Speed Family*. Louisville, KY: Courier-Journal Job Printing Company, 1892.
- Stanislawski, Michael. *Autobiographical Jews: Essays in Jewish Self-Fashioning*. Seattle, WA: University of Washington Press, 2004.
- Steinberg, Sigfrid H. *Five Hundred Years of Printing*. 4th ed. London: The British Library, 2001.
- Stevens, Henry N. *Ptolemy's Geography: a Brief Account of All Printed Editions down to 1730*. London: Henry Stevens, Son, and Stiles, 1908.
- Stone, Lawrence. "The Educational Revolution in England, 1560-1640." *Past and Present* 28 (1964): 41-80.
- Strabo. *The Geography*, vol. I, trans. Horace Jones. Cambridge, MA: Harvard University Press, 1960.
- Stukeley, William. *The Family Memoirs of the Rev. William Stukeley, M.D.*, vol. 1. London: Surtees Society, 1880.
- Sturdy, David. *Science and Social Status: The Members of the Académie des Sciences, 1666-1750*. New York: Boydell Press, 1995.
- Sykes, Sir Percy. *Sir John Chardin, Travels in Persia, 1673-1677*. New York: Dover Press, 1988.
- Taylor, E.G.R. *Mathematical Practitioners of Tudor and Stuart England*. Cambridge U.K.: Cambridge University Press, 1954.
- Terrall, Mary. *The Man Who Flattened the Earth: Maupertuis and the Sciences in the Enlightenment*. Chicago: Univ. of Chicago Press, 2002.

- Thrower, Norman J.W. *Maps and Civilization: Cartography in Culture and Society*, 2nd ed. Chicago: University of Chicago Press, 1999.
- Trevelyan, Raleigh. *Sir Walter Raleigh*. New York: Macmillan, 2004.
- Turnovsky, Geoffrey. *The Literary Market: Authorship and Modernity in the Old Regime*. Philadelphia: University of Pennsylvania Press, 2009.
- Tyacke, Sarah. "Map-Sellers and the London Map Trade, c.1650-1710." In *My Head Is A Map: Essays and Memoirs in Honor of R.V. Tooley*, edited by Helen Wallis and Sarah Tyacke, 64-78. London: Carta Press, 1973.
- Tyacke, Sarah. *London Map-Sellers, 1660-1720: A collection of advertisements for maps placed in the London Gazette 1668-1719 with biographical notes on the map-sellers*. Tring, Hertfordshire, U.K.: Map Collector Publications, 1978.
- Van den Broecke, Marcel. *Ortelius Atlas Maps*. Houten, the Netherlands: HES Publishers, 1996.
- Van den Broecke, Marcel, et al. *Abraham Ortelius and the First Atlas: Essays Commemorating the Quadricentennial of His Death, 1598-1998*. Houten, the Netherlands: HES Publishers, 1998.
- Van den Broecke, Marcel. "Ortelius' Theatrum Orbis Terrarum (1570-1641). Characteristics and development of a sample of *on verso* map texts." *Netherlands Geographical Studies* 380. Utrecht, the Netherlands: University of Utrecht, 2009.
- Van der Heijen, H.A.M. "Phillipus Cluverius and Dutch Cartography: An Introduction." *Quaerendo* 32, no. 3-4 (2002): 222-244.
- Van der Krogt, Peter. "Amsterdam Atlas Production in the 1630s: A Bibliographer's Nightmare." *Imago Mundi* 48 (1996): 149-160.
- Van der Krogt, Peter. *Koeman's Atlantes Neerlandici*. Houten, the Netherlands: HES Publishers, 1997-2000.
- Van Gent, Rob H. "De hemelAtlas van Andreas Cellarius: Het meesterwerk van een vergeten Hollandse kosmograaf." *Caert-Thresoor* 19 (2000): 9-25.
- Van Waarden, Johannes A. "Episcopal Self-Presentation: Sidonius Appollinaris and the Episcopal Election in Bourges, AD 470." In *Episcopal Elections in Late Antiquity*, edited by Johan Leemans et al (555-561). Berlin: De Gruyter, 2011.
- Varanka, Dalia. "Editorial and Design Principles in the Rise of English World Atlases, 1606-1729." PhD diss., University of Wisconsin, Milwaukee, 1994. ProQuest (AAT 9502920).
- Voss, Paul T. "Books for Sale: Advertising and Patronage in Late Elizabethan England." *Sixteenth Century Journal* 29 (1998): 733-756.

- Waquet, Françoise. *Latin or the Empire of a Sign*, trans. John Howe. New York: Verso, 2003.
- Watelet, Marcel. *Gérard Mercator, cosmographe: le temps et l'espace*. Brussels: Fonds Mercator Paribas, 1994.
- Weigert, Roger-Armand. *Inventaire du fonds français du Cabinet des Estampes, graveurs du XVIIe siècle*, vol. I. Paris: Bibliothèque Nationale de France, 1939.
- Weinshenker, Anne Betty. "Simon Jaillot: Sculptor, Pamphleteer, Outcast." In *Orthodoxy and Heresy in Eighteenth-Century Society*, edited by Regina Hewitt and Pat Rogers, 154-175. Lewisburg, PA: Bucknell University Press, 2002.
- White, Robert C. "Early Geographic Dictionaries." *Geographical Review* 58, no. 4 (1968): 652-659.
- Whitfield, Peter. *New Found Lands: Maps in the History of Exploration*. New York: Routledge, 1998.
- Wiles, Roy M. *Serial Publication in England before 1750*. Cambridge U.K.: Cambridge University Press, 1957.
- Wilford, John Noble. *The Mapmakers*. New York: Knopf, 1981.
- Withers, Charles W.J. "Reporting, Mapping, Trusting: Making Geographical Knowledge in the Late Seventeenth Century." *Isis* 90, no. 3 (1999): 497-521.
- Woodward, David. "The Techniques of Atlas Making." *Map Collector* 18 (1982): 2-13.
- Woodward, David, ed. *Art and Cartography: Six Historical Essays*. Chicago: University of Chicago Press, 1987.
- Woodward, David. *Maps as Prints in the Italian Renaissance: Makers, Distributors and Consumers*. London: British Library, 1996.
- Zwicker, Steven N. "The Reader Revealed." In *The Reader Revealed*, edited by Sabrina A. Baron, 11-17. Washington, DC: Folger Shakespeare Library, 2001.