DOI: 10.14714/CP104.1881

PEER-REVIEWED ARTICLE

How Did Early Modern Scholars Study Early Maps?

Matthew H. Edney (he/him)
University of Southern Maine / University of Wisconsin–Madison
matthew.edney@maine.edu

Skelton (1972), followed by Harley (1987), invented "the history of cartography" as a field of study with deep historical roots, giving the field an origin deep in the Renaissance, perhaps even in the Middle Ages. In doing so, Skelton imposed modern scholarly practices onto early modern scholarship, without regard for contemporary knowledge practices. This essay counters the invented tradition by exploring how early modern scholars engaged with maps from the contemporary past ("early maps"). It identifies three distinct sets of scholars whose variant agendas led them to work with early maps in markedly different ways. First, Classical historians used the Peutinger map and Ptolemy's Geography to identify locations of ancient places to improve their comprehension of Classical texts. Second, some geographers wrote histories of voyages and travels that related past routes to contemporary maps, and others wrote historical narratives of the compilation of encyclopedic texts and maps of world and regional knowledge. (This analysis requires a reconceptualization of early modern "geography.") Third, antiquaries opportunistically described and at times reproduced a variety of maps, charts, and plans that came to their attention, but without actively searching for early maps. Overall, this essay demonstrates that before 1775 there was neither a systematic approach taken to the study of early maps nor any hint of the core methodology that would be adopted by the first historiographical mode of map history as it developed after 1830.

KEYWORDS: historiography; early modern era; map history; classical historians; histories of geography; histories of discovery; antiquaries

When the leading British map librarian and historian R. A. Skelton[1] created "the history of cartography" as a field of study, he gave his putative discipline the historical depth required of any invented tradition (see Hobsbawm 1983). Skelton (1972, 63–70) specifically argued that the presence of multiple world maps within a few medieval works—notably the twelfth-century *Liber floridus* by Lambert of St. Omer, and Andrea Bianco's 1436 atlas in the Biblioteca Marciana, Venice—indicated that medieval scholars had compared early maps against each other. Because such relative comparison was a key practice of modern studies in map history, Skelton concluded that those medieval works indicated the field's great age and intellectual authority.

J. B. Harley (1987, 7–8, 10) thought that Skelton's evidence was simply too thin to support his argument. Nonetheless, Harley took Skelton's several citations of early modern work with early maps as demonstrating that the history of cartography is rooted in the Renaissance. "It is possible," Harley wrote, "to trace an increasingly systematic attention to the maps of preceding centuries" during the Renaissance. In particular, he emphasized how the printing of facsimiles of medieval manuscript maps, such as the Peutinger map of the Roman empire (Figure 1) and the "Gough map" of Britain (Figure 2), had done "the most to stimulate [the] study" of medieval maps and to "widen an appreciation of the cartography of earlier centuries" among scholars throughout the early modern era (i.e., the period from about 1450 to about 1800).

Yet Skelton's and Harley's arguments are fundamentally subverted by the fact that both the "cartography" and "history" in their field of the "history of cartography" formed only after 1775. The neologism *cartography* was twice coined without effect in about 1790 and again in 1808, before being widely adopted after 1825 for the generic practice of mapmaking (Edney 2019a, 114–20).

1. Biographical details for the many scholars discussed in this essay who studied maps as historical documents can be found at mappingasprocess.net/dramatis-personae.

Figure 1. Marcus Welser, *Tabvla itineraria ex illvstri Pevtingerorum bibliotheca quae Augustae vindel. est* (Antwerp: Johannes Moretus, 1598), address to the reader and segments A and C of this half-size facsimile of the "Peutinger map" in eight sheets. In this instance, segment C was originally bound upside down; at some point it was inverted and rebound as the second sheet in the sequence. Welser called the original map a *tabula*, i.e., parchment stretched on a frame or attached to a wooden tablet, *not* a "table" as the word has been persistently mistranslated (Talbert 2010, 3). Letterpress and two copper engravings, each 18.5 × 51 cm. Courtesy of the Biblioteca nacional España (GMM/1190); online at **bdh.bne.es/bnesearch/Inicio.do**.

Only in about 1800 did "history" begin to be used to refer both to "the past" and to the new discipline of studying the past, whether in terms of historicism—encapsulated in Leopold von Ranke's 1824 aphorism that the discipline sought to narrate the past *wie es eigentlich gewesen*, that is, "as it actually happened" or "as it essentially happened" (Wright 2003, 115–17, 120–22)—or of the more "philosophical" histories that postulated cultural and social progress through preset stages. Moreover, the institutions within which the history of cartography would be pursued—libraries generally and map libraries specifically, subject-specific academic societies, universities, and the antiquarian marketplace—are also all post-1775 creations (see Duncan and Wallach 1980; Willison 1989; Bennett 1995).

So, how did early modern scholars go about studying and using maps that possessed significance as documents from the past—i.e., "early maps"—before the modern formation of "cartography," "history," and "history of cartography"? In answering this question, I have sought to set aside the established conceptual categories of present-day scholarship, all of which are grounded in modern idealizations, and instead approach the subject without preconceptions.

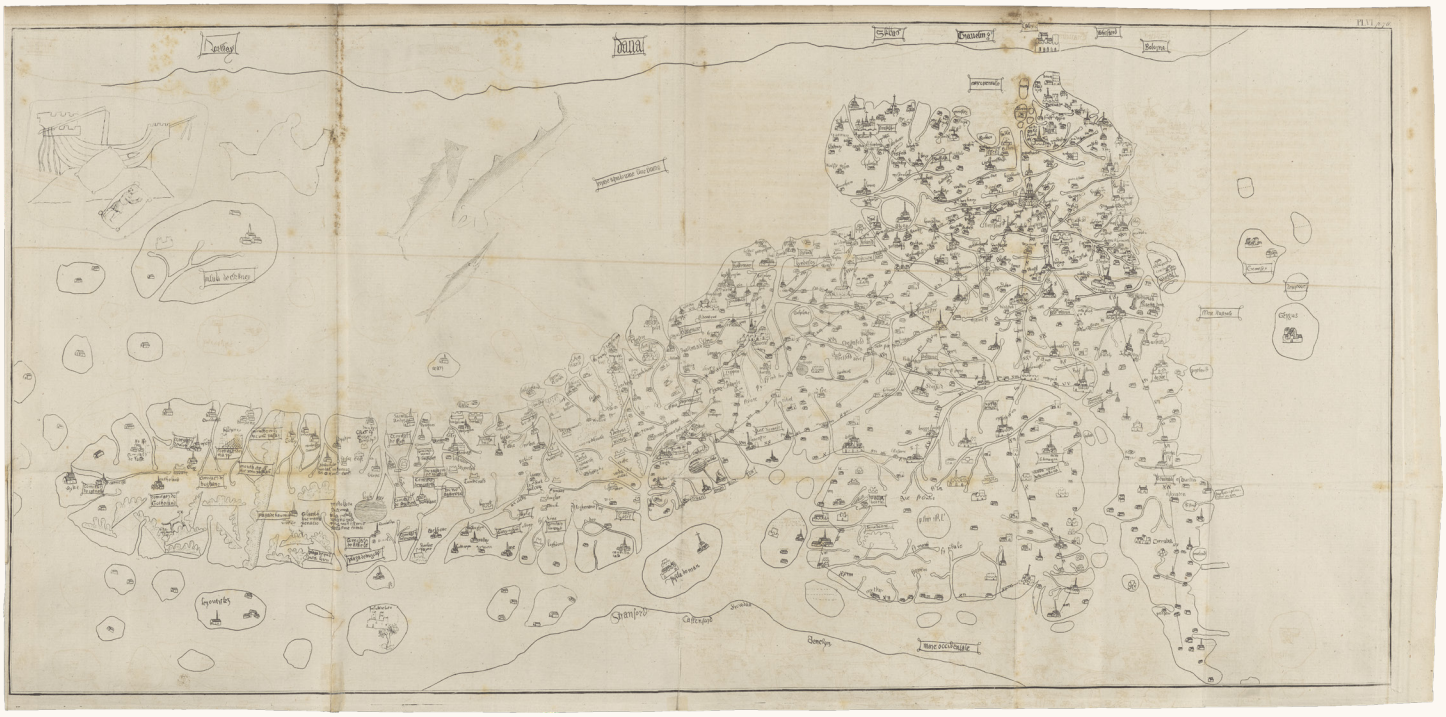

Figure 2. Untitled facsimile of a unique medieval map of Britain, first drawn ca. 1400, in Richard Gough's *British Topography* (1780a, 1: pl. vi, opp. 1:76). For the history of the "Gough map" (now at the Bodleian Library, MS Gough Gen. Top. 16) and its nine facsimile reproductions, of which this is the first, see Delano Smith et al. (2017). Copper engraving, 32 × 67 cm. Courtesy of the Osher Map Library and Smith Center for Cartographic Education, University of Southern Maine (Osher Collection 7420).

This approach is very much in line with my wider argument that what people do, even today, is mapping and not cartography, that there are multiple, distinct modes of mapping, and that on different occasions one person might participant in different modes. It is crucial in this respect to direct our attention to the practices of mapping and of scholarship, to how people do or did things, and to cease our fixation on the products of those actions (Edney 2019a, 9–49; Edney 2022b, 2024). In this case, taking an open view of the subject requires a consideration of the several ways in which mappings and the past intersected within early modern scholarship.

Two recent overviews give a broad outline of the situation: one considered how Classical historians and antiquaries used and reproduced maps from the past and also made analytic maps of the past (Edney 2019d); the other, how geographers wrote histories of geography and geographical mapping (Withers 2019). In this essay I expand and elaborate on those earlier, brief essays to consider in much more detail and with greater discernment the three arenas of early modern engagement with early maps respectively by Classical historians, geographers, and antiquaries. The result is not a comprehensive list of each and every occasion in which an early modern map scholar worked with early maps, which would be tedious, but an analysis of the ways in which the different kinds of early modern scholars variously worked with maps from the contemporary past in line with their respective intellectual agendas.

I begin by reviewing the varieties of early modern historical practice and the contemporary distinction between "historians" and several varieties of erudite scholars, which included geographers and antiquaries. I then continue with detailed accounts of the three arenas of map work, stressing how each was restricted in its practices. Two points of similarity do, however, become evident. First, both historians and antiquaries reproduced early maps in print, but they did so for markedly different reasons; by contrast, geographers did not reproduce early maps at all. Second, when early modern scholars critically assessed early maps, they compared them in absolute terms against modern maps and not, as Skelton and Harley supposed, in relative terms against each other.

I conclude with the British antiquary Richard Gough, owner and publisher in facsimile of the eponymous map (Figure 2). Skelton and Harley treated him as the exemplar early modern antiquary. Yet, by the time he was preparing his two-volume *British Topography* (Gough 1780a), the

broader intellectual currents were significantly realigning the three distinct arenas of map work and prompting new practices that would eventually turn into a recognizably modern and coherent form of map history. Gough seems to anticipate the rise of a coherent and systematic approach to "the history of cartography," which accounts for his importance to Skelton's and Harley's historiographies. Even so, systematic approaches to map history did not actually emerge until the 1830s and 1840s (Edney 2022a, 2023). Skelton and Harley were thus incorrect to assume that early modern engagements with early maps were essentially all the same and constituted the origins of the modern field.

THE PAST AND ITS STUDY IN EARLY MODERN EUROPE

"The past" was malleable in early modern Europe, or at least it was not necessarily associated with the qualities of "age" and of being "out of date." Thus, mapmakers did not necessarily dismiss old maps as being irrelevant to their concerns. For geographers in fifteenth-century Italy, medieval *mappaemundi* and Ptolemaic world maps provided equally valid approaches to cosmography and geography (see Gautier Dalché 2009; Cattaneo 2011, 2016). Later medieval practices of regional mapping became Renaissance practices, with little appreciation of difference: the regional maps of the fourteenth and fifteenth centuries became the *tabulae modernae* (modern, i.e., not Ptolemaic, maps) that were added to manuscript and printed editions of Ptolemy's Geography[2] and that then formed the foundation of Renaissance early modern regional mapping. For example, several Renaissance maps of the British Isles were derived, either directly or via one or more now lost intermediaries, from the "Gough map" of about 1400 (Figure 2) (Lynam 1950; Birkholz 2006; Millea 2007, 51–56; Barber 2007, 1590; Barber 2009, 22–24, 30–34, 54–55). In the preface to his *Theatrum orbis terrarum*, Abraham Ortelius cataloged eighty-seven known mapmakers of contemporary significance, some of whom had been active over a hundred years before (Ortelius 1570, sig. Av^{r}–Avi^{v}; Harley 1987, 11; see Karrow 1993). Overall, fifteenth- and sixteenth-century mapmakers neither perceived nor made a clear break with their medieval forebears (Meurer 1998a, 134; Gautier Dalché 2007; Woodward 2007a).

Even eighteenth-century geographers could use Classical sources for their accounts and maps of contemporary geography. Jean-Baptiste Bourguinon d'Anville (1744) used Roman itineraries to define distances between cities and towns in Italy when recalculating their latitudes and longitudes (Edney 2019b, 482), and he further argued that Ptolemy's Geography offered more and better information about the interior of northern Africa than any contemporary source (d'Anville 1759; see also Buache 1789). James Rennell (1783, 37–43) used itinerary distances recorded in Herodotus's *Histories* (440 BCE), Pliny's *Natural History* (ca. 77 CE), and latitudes from Ptolemy's Geography as fundamental sources in compiling the northern half of his 1782 two-sheet map of South Asia, not to relate contemporary to ancient geography but to create that contemporary geography (Edney 1997, 9–15, 98–104; Withers 2013).

Furthermore, "history" was *not* used as a synonym for either "the past" or the general study of the past. The ancient, medieval, and early modern practice of *historia*, from the ancient Greek ἱστορία, was the intellectual process of building up knowledge systematically from particulars to a larger understanding. *Historia* emphasized empiricism and erudition, the careful and precise attention to particulars. In this respect, *historia* did not necessarily refer to "the past." It also referred to any synchronic inventory, as in a "natural history," in which respect *historia* was a major element in the rise of natural philosophy (Woolf 1987, 17–19; Pomata and Siraisi 2005). When, in about 1300, Richard of Haldingham called his now famous *mappamundi* at Hereford Cathedral an *estoire* (history), he referred to this sense of synchronic inventory, having collapsed the past, present, and future together to enumerate Biblical and Classical conceptions of Creation (Woodward 1987, 310; Barber 2006, 21).

"History" also bore the further meaning of a diachronic story or narrative, which is to say a chronologically arranged interpretation made up from particulars. Any work that provided a narrative of a phenomenon over time could be called a "history." For example, both the *Versuch*

2. The books that appeared under the name "Ptolemy's Geography" were a diverse group of texts with little direct relationship to Ptolemy's long-lost original work; I therefore do not italicize the title.

einer umständlichen Historie der Land-Charten (Attempt at a detailed history of geographical maps) by the Swabian theologian Eberhard David Hauber (1724b) and the *Essai sur l'histoire de la géographie* (Attempt at a history of geography) by the Parisian geographer Didier Robert de Vaugondy (1755) were legitimately "histories" because they provided narratives of the development of geography and geographical mapping.

Hauber and Robert de Vaugondy might have written "histories," but no contemporary would ever have called them "historians" (*historiens*). Early modern historians *per se* were a rarified group who focused their narratives specifically on *res gestae* (things done), which is to say the affairs of state and of statesmen, emphasizing politics, war, and diplomacy. Historians varied widely in how they wrote, ranging from the more pragmatic and evidentiary scholarship modeled on *historia* to the moralistic, rhetorical, and highly literary scholarship that tended to proceed from "first principles" (Grafton 2007, 27). No historian would demean themselves by addressing mere cultural, social, or economic matters of the past.

Those historians who were especially interested in ancient history did, however, engage with maps that survived from antiquity—namely Ptolemy's Geography and the Peutinger map—so that they might correlate ancient places with modern. Doing so would allow them to interpret the spatial references in ancient texts with greater clarity and understanding. An intimately related practice was that of making maps of Classical and Biblical geographies, to assist the reading of ancient texts, the Bible, and recent histories and commentaries.

In contrast to the historians writing narratives of *res gestae* were a diverse array of scholars who emphasized erudition—the careful and precise attention to particulars—in the examination of past societies and cultures. These scholars were often mocked for being so focused on minutia that they lost sight of the human condition, as crystallized in Voltaire's maxim, "woe to details!" (Cheng 2012, 34); Voltaire further derided erudite scholars by calling them *historiographes* rather than *historiens* (Pierse 2013, 166–67). Erudite scholars included: antiquaries or topographers, as they were called in Britain, who collected and studied relics of the past and especially of specific places; *érudits*, seventeenth-century French legal scholars who traced the historical development of modern social institutions through legal codes; *Statistiker* and economists who sought hard data of significance to government officials (van der Zande 2010); philologists who analyzed the books of the Bible to determine the histories of their writing and editing; and geographers like Hauber and Robert de Vaugondy who wrote narrative histories of geographical practice.

Two particular sets of erudite scholars engaged with maps from the past. In the first place, some geographers wrote histories of geographical knowledge, whether of the voyages that had produced new knowledge or of the verbal and graphic "geographies" that had presented that knowledge. Seeking to establish geography as a practice that had remained unchanged in its fundamentals since antiquity, these histories simply ignored medieval geography. At the same time, antiquaries collected, described, and reproduced in facsimile a diverse array of relics pertaining to local and national identity; these relics included, as they were encountered, early plans of places as well as some geographical and marine maps that might be tied to certain locales. There was no attempt by any antiquary before the 1770s to actively search for maps in particular, although they willingly embraced any relic maps they did encounter. In addition to working with few geographical maps, antiquaries were different from the historians and the geographers in being interested in medieval works.

The division between historians and erudite scholars did not follow clear lines. Intellectually, erudite scholars did not hold a monopoly on the empirical study of the past, nor were historians the only scholars concerned with the human condition (Woolf 2019, 124, 143). Several individuals who made a living by making and selling maps and who seem by present-day standards to have been "geographers" were not limited by that label. For example, Ortelius and d'Anville were passionately interested in Biblical and Classical history, and they appear in this essay as Classical historians rather than as erudite scholars of geographical practice. And, as we shall see, Gough was as interested in the history of geography as he was in specifically antiquarian studies. Furthermore, the importance of antiquity to the early modern era means that all scholars generally harkened back to antiquity. All this is to say that the distinctions outlined here express different sets of map work—of mapping practices—and not the neat occupational divisions imposed by present-day labels of "historian," "geographer," and "antiquary."

Figure 3. Francesco Berlinghieri, *Tabvla qvarta de Asia*, in his *Geographia* (1482). The twenty-six regional "Ptolemaic" maps follow the structure—ten maps of Europe, four of Africa, twelve of Asia—of the medieval Byzantine text that was the exemplar for Renaissance Latin editions of Ptolemy's Geography. Copper engraving, 33.5 × 48.5 cm (printed area). Courtesy of the Osher Map Library and Smith Center for Cartographic Education, University of Southern Maine (Osher Collection); online at **oshermaps.org/map/7323.0144**.

HISTORIANS: EXPRESSING THE PAST IN CONTEMPORARY MAPS

For early modern historians, the question "where in the past?" was really a question of "where in the contemporary present?" In the commonplace Ciceronian dictum, that chronology and geography were the two eyes of history, geography was always understood as contemporary geography (Hofmann 2000; Mayhew 2003, 2010; Davis 2015, 119–22; Edney 2019d, 624–27; Forss 2023, 213). Scholars who investigated the broad landscape of the past, both secular and profane, relied on contemporary geographical maps to locate the events of history. They did not use early maps as evidentiary sources in their own scholarship, for the simple reason that no one before Edward Gibbon in the mid-1700s dared to presume to rewrite the great histories handed down from antiquity (Woolf 1987, 12–14). Rather, historians used certain early maps to identify and locate ancient sites to aid in their reading of those Classical histories.

Past and present were thoroughly commingled by scholars in the Latin West in their fifteenth- and sixteenth-century adaptations of Claudius Ptolemy's Geography, the great gazetteer of the Roman ecumene originally created in the mid-second century CE. Renaissance scholars considered the translation into Latin of one medieval Byzantine Greek manuscript of the Geography, in Florence in 1409–10, as part of the *translatio* (translation, transfer) of knowledge and power from the Classical empires to western Christendom (Piechocki 2019, 27–29). Cosmographers latched onto the cosmographical connotations of the Geography, especially in conjunction with Ptolemy's larger

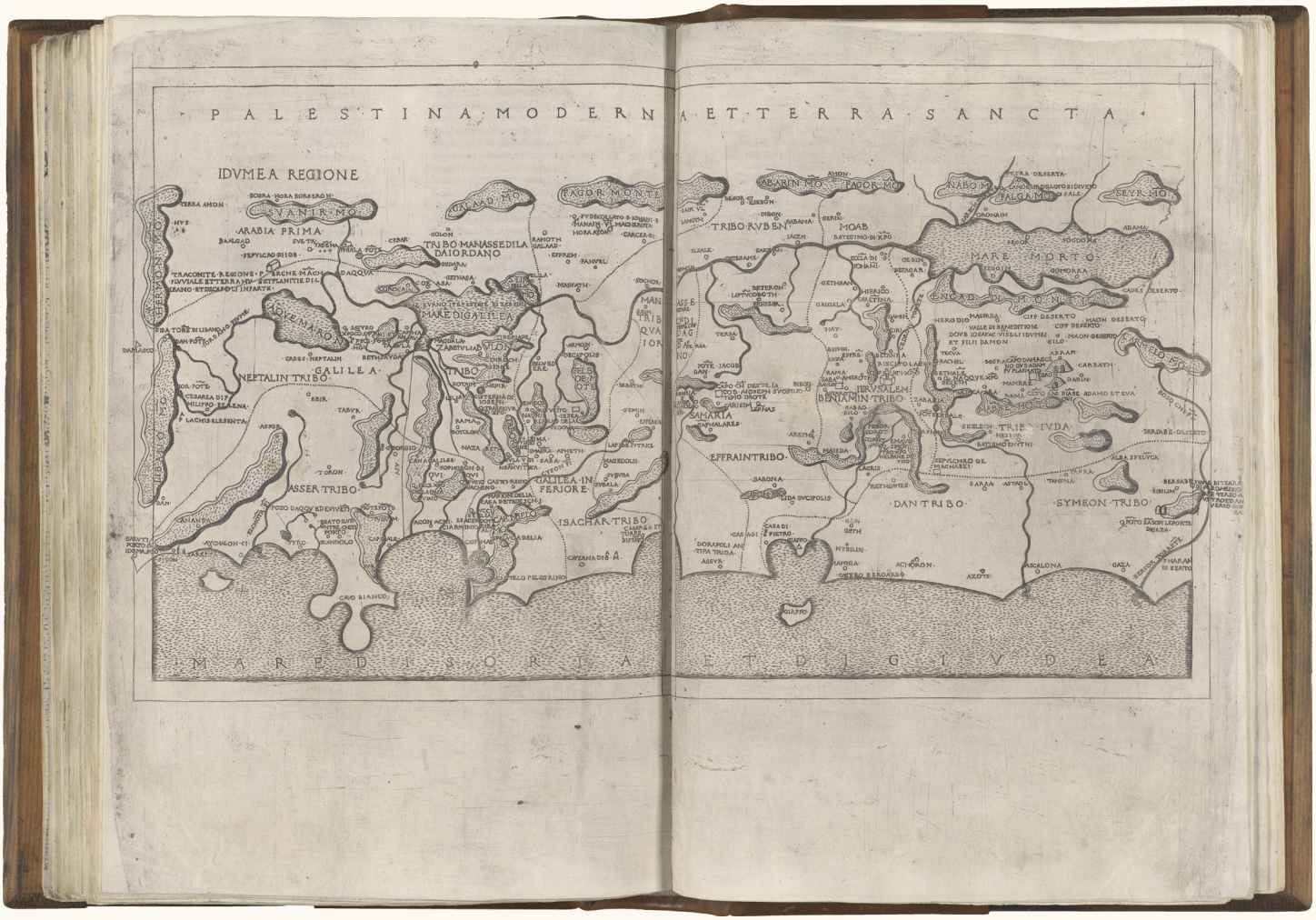

Figure 4. Francesco Berlinghieri, *Palestina moderna et Terra Sancta*, one of four *tabulae modernae* Berlinghieri added to his *Geographia* (1482). Although lacking the characteristic grid, this map, oriented with east at the top, is derived from one of a series of gridded maps first prepared in Pietro Vesconte's workshop for Marino Sanudo's *Liber secretorum* (Book of Secrets, 1320), an appeal for a new Crusade, reduced from Burchard of Mount Sion's ca. 1300 map of the Holy Land (Harvey 2012, 107–27, esp. 112, 114). Copper engraving, 28 × 48.5 cm. Courtesy of the Osher Map Library and Smith Center for Cartographic Education, University of Southern Maine (Osher Collection); online at **oshermaps.org/map/7323.0148**.

oeuvre on astronomy and astrology, and they substantially edited, augmented, and elaborated it—with many now calling it "Cosmography" (Tessicini 2011)—as part of their studies of the terrestrial sphere, which is to say not the earth *per se* but the innermost sphere of the cosmos as it was interconnected with the other spheres of the planets and stars (Shalev 2011).

Furthermore, the Geography's data and regional maps appealed to those humanists who sought to elucidate the toponyms of the Roman world. Indeed, humanists commissioned many copies of the Geography as a gazetteer, omitting Ptolemy's first book on map construction (Milanesi 1984; Gautier Dalché 2007, 2009). The pairing of maps derived from Ptolemy's data (Figure 3) with *tabulae modernae* derived from more recent materials (Figure 4) permitted humanists to compare Classical with contemporary geography and to refine their toponymic equivalences. The primarily toponymic function of the Geography was demonstrated when Gerardus Mercator (1578), wearing his humanist hat, issued his set of Ptolemaic maps accompanied only by detailed toponymic indexes; the increased availability of maps of contemporary geography made it unnecessary to pair the Ptolemaic maps with *tabulae modernae* or to include Ptolemy's text. The humanist Arnold Mylius—who had previously worked with Abraham Ortelius in creating a dictionary of Classical toponyms—appended Mercator's maps and indexes to his own incarnation of Ptolemy's Geography, but only once he had stripped away all the modern additions to leave what

Figure 5. Abraham Ortelius, *Palaestinae sive totivs terræ promissionis nova descriptio*, in *Parergon, sive veteris geograpiæ aliqvot tabvlæ* appended to his *Theatrum orbis terrarum* (Antwerp, 1595). Ortelius based this analytic map on that of Biblical and Classical geography by Tilemann Stella (Karrow 1993, 500–3). A few contemporary toponyms appear in ornate, cursive script; contemporary geographical knowledge still angled the coastline to the northeast. Hand-colored copper engraving, 34 × 45 cm. Courtesy of Yale University Libraries (BRBL_00278); online at **collections.library.yale.edu/catalog/15506345**.

he claimed was Ptolemy's original work (Ptolemy 1584; see Meurer 1998b; Gautier Dalché 2007, 363; Tolias 2011, 130). Thereafter, Mercator's maps and Ptolemy's place names were reworked for several later incarnations of the Geography between 1695 and 1730, all of which similarly treated the ancient text as a work of strictly historical and toponymic interest (Gautier Dalché 2007, 363–64; also Raidel 1737).

A second geographical source from ancient Rome was also embraced by early modern historians seeking to comprehend Classical texts: the so-called Peutinger map. The existence of this medieval derivative of a fourth-century map of the Roman empire in the form of a scroll—just 33 cm in height but 672 cm in length—had been known among humanist scholars ever since Konrad Celtis had acquired it from an unknown library in about 1500 and had given it to the Augsburg lawyer and antiquary Konrad Peutinger. Celtis had wanted Peutinger to publish the map, but it remained sequestered in Peutinger's library. The close guard mounted by his heirs only further heightened the desire among humanists for this precious yet frustratingly unobtainable relic. Several decades later, the Augsburg banker Marcus Welser (1591, opp. 17) was able to reproduce two partial drawings that Peutinger

had commissioned of the map's westernmost section; Peutinger had perhaps done so to explore the process of reproducing the whole work. Welser was then able to talk his way past Peutinger's heirs to consult the map directly. He had an artist, Johannes Moller, prepare a drawing of the map at half-size, which he sent to Ortelius in Antwerp for engraving and printing. A devoted scholar of the past, Ortelius had been trying since at least 1580 to acquire a copy of the map that he might publish. In the mid-1590s, however, Ortelius was in ill health, and he passed the drawing on to the publisher Johannes Moretus, who had it engraved in eight segments. Welser checked the proofs of the engravings against the map itself. Moretus published the final work in 1598 (Figure 1), dedicating it to Ortelius, who had not lived to see its publication (Meurer 1998a, 157–58; Talbert 2010, 10–23).

Welser's facsimile was reissued in 1619 by the Dutch theologian, historian, and geographer Petrus Bertius, although without the letterpress address, with titles newly engraved above each segment, and with two plates printed on each of four sheets of paper. Derivative facsimiles appeared in several later publications. The acquisition in 1738 of the Peutinger map by the Hofbibliothek in Vienna meant that it could be examined anew. In 1753, the Austrian poet Franz Christoph von Scheyb published an extensive study of the map and its toponyms, complete with a full-sized reproduction from a new tracing of the original. Von Scheyb's reproduction was expensive, however, and did not sell well; few copies survive (see Edney 2019d, 627, for a reproduction). Further toponymic analyses continued to be published, just without facsimiles of the map. The purpose of each study was to clarify and confirm the map's information about routes and places, to integrate that information with surviving textual itineraries, and to use the resultant data to inform texts and analytic maps of Classical geography (Talbert 2010, 23–25, 30–36). The intellectual and cultural value of the facsimiles of the Peutinger map would lead John Ogilby, who had published several important Classical texts in translation, to suggest that his own 1675 large book of maps of England's highways, *Britannia*, had been inspired by the ancient Roman map (Ogilby 1675, sig. B1r); that is, the connection between the Peutinger map and Ogilby's strip maps was historiographical, not cartographic (Clark 2013).

Having determined the locations of particular places, humanists could make their own analytic maps of the Biblical, Classical, and eventually medieval pasts. They mapped out locations from the past on maps of contemporary geography. Such empirical exercises in *historia* could then serve as the foundation of theological and philological analysis (Schramm 2014–15; Dürr 2017; Shalev 2019). Analytic maps of the past were published as wall maps, in Bibles and Biblical commentaries (Delano Smith 1990; Ingram 1993; Shalev 2004), and in comparative atlases of "classical and modern geography" (Black 1992; Black 1997, 4–26; Goffart 2003, 13–302).

The use of contemporary maps to understand the past is exemplified in the work of Ortelius in the sixteenth century and of Gibbon in the eighteenth. As a businessman, Ortelius dealt in maps and books; as a humanist and historian, he made analytic maps of the past (Meurer 1998a). He brought these commercial and intellectual threads together in 1570, in his *Theatrum orbis terrarum* (Theater of the world), a work often called the first modern atlas. Ortelius specifically understood the *Theatrum* as a contribution to historical scholarship. As he began his address to the reader,

> All will readily affirm with us how necessary is the knowledge of regions and provinces, of the seas, the location of mountains, valleys, cities, the courses of rivers, etc., for the comprehension of histories. This is what the Greeks called by the proper name "geography," and certain learned persons (rightly) call the eye of history." (Ortelius 1570, sig. Aiiij^{r}; translation based on that by Goffart 2003, 1)[3]

Starting in 1579, Ortelius added an appendix to the *Theatrum*, called the *Parergon* (Supplement). The *Parergon* contained Ortelius's own analytic maps of antiquity, in which he located ancient places on maps of contemporary geography (Figure 5). He steadily added more analytic maps to each further edition, increasing the original three maps to more than thirty by the time of his death (van den Broecke et al. 1998; Imhof 1998; also Grafton 2007, 193).

3. "Cvm omnibus perspectum satis esse credam, quanta sit cognitionis historiarum vtilitas, benigne Lector; equidem mihi persuadeo, neminem pœnè esse, modò historias primis (quod aiunt) labris gustarit, qui nesciat quàm necessaria sit ad eas rectè intelligendas, Geographiæ (quæ meritò à quibusdam historiæ oculus appellate est,) cognitio." Goffart actually translated the passage as quoted by Hofmann (2000, 99n6) from a 1572 French-language edition of the *Theatrum*; his translation nonetheless agrees with the original Latin of the 1570 edition.

Figure 6. Abraham Ortelius, *Orbis terrarum hunc typum, secundum Pomponij Melae traditionem, delineabat Ab. Ortelius 1582* (Abraham Ortelius delineated this map of the world according to the tradition of Pomponius Mela, 1582), from Mela (1582). Bertius (1628, fol. 1v) misdated Schott's edition to 1577. Copper engraving, 17 × 26.5 cm. Courtesy of the Bibliothèque nationale de France (Département des cartes et plans, GE DD-2987 (9691)); online at **gallica.bnf.fr**.

Two centuries later, Gibbon built up a large, personal collection of recently published maps to understand the spatial organization and landscape of the Roman empire. In the 1760s, for example, he used contemporary maps to refine his understanding of the route taken by Hannibal through the Alps and to understand the distribution of peoples in ancient Italy (Fernández-Armesto 1991; Abbattista 1997; Mankin 2018). Gibbon was by no means unique in his avid collecting of contemporary maps to make sense of the past. For example, Pedro Rodríguez de Campomanes built up a large map collection that underpinned his own histories of Spain (Arias 2007). More generally, the mapping of Classical and Biblical history was integral to the education of literate elites (Heffernan 2014, 6–9).

New editions of ancient geographical texts were accompanied either by maps of contemporary geography—for example, Rumold Mercator prepared a world map in two hemispheres for inclusion in a 1587 edition of Strabo's *Geography*, later reusing it in 1595 to complete his father's *Atlas* (Shirley 2001, no. 202)—or by analytic maps in which classical toponyms were plotted on contemporary geography. Such analytic maps accompanied, for example, editions of *De situ orbis* by the first-century CE Roman

geographer Pomponius Mela (Shirley 2001, nos. 8 [1492], 21 [1498], 90 [ca. 1550]; Van Duzer 2018). In the words of the title of the map of the eastern hemisphere that Ortelius prepared for Andreas Schotte's 1582 edition of Mela's text, such maps were *secundum traditionem delineabat* (drawn according to the tradition) of the Classical authorities (Figure 6).

On two occasions, however, humanists went a step further. Drawing on the written accounts of geographical features and their arrangement, they created maps that depicted the world *ad mentem*—which is to say to the mind, design, understanding, or intention of—ancient philosophers and geographers. The first occasion was Gerardus Mercator's (1578) set of Ptolemaic maps. His title for the

Figure 7. Petrus Bertius, *Orbis terrarvm ex mente Pomponii Melae delineatvs a P. Bertio* (World map from the mind of Pomponius Mela, drawn P. Bertius), in Bertius, *Geographia vetus ex antiquis et melioris notae scriptoribus nuper collecta* (1628, [map 1]). See Pastoureau (1984, 65–66), Shirley (2001, no. 321). Copper engraving, 13.5 × 15 cm. Courtesy of the Bibliothèque nationale de France; online at **gallica.bnf.fr** (Département des cartes et plans, GE FF-8132).

collection asserted that he had "corrected" and "restored" the maps *ad mentem autoris* (to the author's mind). The second occasion stemmed from Bertius's (1628) dissatisfaction with Ortelius's map for Schotte's edition of Mela (see Figure 6). Why, Bertius asked, should a map illustrating Mela's ancient geographical conceptions include the equator, tropics, parallels, and meridians, when Mela had not mentioned any of those cosmographical circles, and why show the contemporary European understanding of the extent of Africa, reaching far south of the equator, when Mela had written that the continent ended at the equatorial ocean?[4] Bertius therefore designed a new map, which he described as *ad Melæ mentem* in his explanatory text and as *ex mente. . .Melae* in its title (Figure 7). He mapped out his understanding of Mela's conception of the arrangement of one terrestrial hemisphere, with the ecumene in the northern temperate zone and the supposed continent of the Antichthones in the southern, the two continents separated by the equatorial ocean (Bertius 1628, unpaginated "Ad typum orbis a Pomponio Mela propositum"; see Hofmann 2000, 104n25).[5] Nonetheless, Bertius still used contemporary geography to give shape to the ecumene around Mela's toponyms. As with Mercator's construction of the supposedly original form of Ptolemy's maps in the Geography, Bertius's maps would be reprinted in further editions of Mela's *De orbis situ*, such as in the 1722 Leiden edition published by Jakob Grovenius. Even so, neither Mercator's nor Bertius's constructions led other early modern scholars to prepare similar analytic maps of the world, according to the mind of ancient geographers, until the 1790s.

ERUDITE HISTORIES OF GEOGRAPHICAL PRACTICE

There is a great deal of historiographical confusion over the nature of early modern geography. In the grand reconfiguration of the institutions and practices of knowledge creation around 1800, the field of geography was reconfigured as the discipline concerned with the study of the environment, humans, and their interrelations. Geographers began to define themselves as heirs to a long line of scholars who had studied human-environmental relations, even though none of them had ever called themselves "geographers" and they were never called "geographers" in their own lifetimes. When modern geographers have looked back on the history of their field, they have generally seen not profound change but continuity (see complaints by Godlewska 1989; Mayhew 2001, 2015; Lois 2018).

At the same time, when recent scholars have addressed the nature of what was called "geography" in the early modern era, they have been distracted by the insistence of early modern scholars that geography is strictly the description (γράφειν, *gráphein*, to write or describe) of the whole earth (γῆ, *gē*, earth) (Mayhew 2001, especially 387–88 regarding purist strictures; generally, see Mayhew 1998, 2011). Yet such precision is defied by the sheer variety of all those who called themselves "geographers" and of the materials they produced. Practitioners ranged from nobility to hack writers to common field workers; some were scrupulously committed to erudition whereas others were less-than-scrupulous copyists (Lenglet du Fresnoy 1741–42, 1:164; Broc 1969, 137; Godlewska 1999, 21–22; Edney 2019a, 177; Fischer and Withers 2021). Their maps and texts, which after 1650 constituted a sizeable proportion of all published works, variously entailed:

- cosmographical explanations of the distributions of the earth's features according to the relationship of the earth to the rest of the cosmos (after κοσμέω, *cosméo*, to put in order), often called "general geography" (as Varenius 1650);
- the practices of geographical mapmaking, or "mathematical geography";
- systematic atlases and "special geographies" that described the whole world, region by region;
- focused and independent accounts and maps of specific regions, or "chorographies" (after χώρα, *chṓra*, region); and

4. Mela had adhered to the early Greek tradition, based on the five Aristotelean zones, in which the earth had four symmetrically arranged land masses, one in each temperate zone in either hemisphere.

5. Bertius (1628) also provided a Ptolemaic map of the ecumene, which he subtly adjusted to emphasize how the shape of the known world was that of a short cloak, a concept that dated to Eratosthenes in the later third century BCE (see Zimmermann 2002), and a construction of the world map according to the Hellenistic philosopher, Posidonius.

- accounts of travels and voyages that were presented either individually or in curated collections.

Such diversity seems to preclude any logical definition of the scope and character of early modern geography in terms either of subject matter or of form of publication.

Pragmatically, however, early modern geography centered on two specific practices, practices that were delineated and explained through historical narratives written by self-identified geographers. The first practice was that of voyaging and navigation, which is to say how information about the world was acquired. Travelers and voyagers themselves were not geographers *per se*, but the scholars who collected, controlled, and reproduced travel and voyage accounts were. The second practice was the compilation, synthesis, and systematic arrangement of multiple sources, not only the accounts of voyages but also previous geographies and cultural traditions about the nature and organization of the world. Systematic compilation defined early modern geography. It was what geographers did, both verbally and graphically. That is, early modern geography was defined by what "geographers" did and not by what they studied.

Histories of geography explained how both practices had their origins in antiquity and more particularly in ancient Greek philosophy. Biblical origins could also be intimated, and Moses was often identified as the "first geographer." There was a profound sense that the practices of geography had remained unchanged since antiquity, a conceit sustained by the willful disregard of medieval geography. The verbal expression of systematic geography had not changed, in principle, between the Classical literary tradition that had produced Strabo's *Geography* (ca. 10 CE) and the eighteenth-century encyclopedism of Anton Friedrich Büsching's eleven-volume *Neue Erdbeschreibung* (1754–92; see Godlewska 1999, 92–96). Graphic expression had similarly remained unaltered between the mapping traditions that Claudius Ptolemy had used in the second century CE for his Geography and the great, multi-sheet maps of the eighteenth-century master geographer Jean-Baptiste Bourguinon d'Anville (see Jacob 1999). Geographical progress thus lay in the steady increase in the number of voyages, in the quantity of information, and in the improvement of systematic knowledge of the world when that information was compiled by skilled individuals.

HISTORIES OF VOYAGES AND OF NAVIGATION

Like scholars of the ancient world, editors of collections of travel narratives and voyage accounts did not engage with early maps but instead encouraged readers to relate the narratives to contemporary maps.[6] The provision of frequent toponyms and occasional latitudes permitted readers of voyage accounts to correlate the progress made by each voyage to the steady accumulation of geographical knowledge, an accumulation epitomized only by contemporary geographical maps. Early maps were simply irrelevant to the task of helping readers understand older voyages. Contemporary maps were required to demonstrate the contribution that past voyages had made to forming the contemporary archive of geographical knowledge.

The practice was established by the Venetian diplomat Giovanni Battista Ramusio in his three-volume *Della navigationi et viaggi* (1550–59), generally celebrated as the first major collection of travel narratives (Horodowich 2018, 63–88; Small 2023). The first edition lacked maps. Ramusio added three maps by Giacomo Gastaldi of the contemporary geography of Africa, South Asia, and East Asia to the second edition of his first volume, published in 1544; after a fire destroyed the wood blocks, they were replaced for the posthumous third edition (1563) by copper-engraved maps (Figure 8). Ramusio explained that the information made available by voyagers and explorers meant that these maps were manifestly superior to those derived from the Ptolemaic archive:

> To the scholars of geography.
>
> In the following three maps are described the seas according to the charts of the Portuguese navigators, and the lands in between, according to the writers contained in this first volume. They serve readers as a brief guide to what they will read, showing the situations of the rivers, mountains, cities, provinces, and principal headlands of Africa, Arabia, India, and the Moluccas. Had we wanted to have enough [maps] especially for [the travels of] Giovan Leoni, Francesco Alvarez, and all the other authors who are included here, covering only Africa, ten [maps] would [still] not have sufficed. By bringing to light the prints of the

6. Analysis of early modern histories of voyages and navigation is hindered by a poverty of historiographical accounts, as opposed to the mountain of studies of specific collections of voyages, of their editors' careers and motives, and of their intended audiences. I have been guided only by Crone and Skelton (1946), insightfully criticized and expanded by Pollock (2012), Broc (1969), and Milanesi (2010). See Edney (2020a).

Figure 8. Giacomo Gastaldi, *Prima tavola,* from the third edition (1563) of volume one of Giovanni Battista Ramusio's *Della navigationi et viaggi*. Oriented with south at the top. See Karrow (1993, 30/73, 73.1), Betz (2007, nos. 4 and 7). Copperplate, 27.5 × 39 cm. Courtesy of Yale University Library (60 1563); online at **digital.library.yale.edu/catalog/15512924**.

> provinces of China, and those of Asia and Africa described by Signor Giovan de Barros, we think that a part of modern geography is so well illustrated that it will be unnecessary to labor over the maps of Ptolemy. (Ramusio 1563, unpaginated insert)[7]

In part, this passage reads as an apology for not including more maps. Pragmatically, Ramusio would have had to include at least ten maps just to show all the details pertinent to the voyages to Africa. Ramusio also implied a critique of older maps that he made explicit elsewhere in his collection. Specifically, he dismissed maps derived from the Ptolemaic archive as "quite imperfect, in respect to the knowledge we now have of those [other] regions" (quoted by Barnes 2007, 50). The final lesson—that voyaging and exploration in the contemporary present had made all past geographies irrelevant, so that accounts of recent voyages had displaced those of ancient geography—would be repeated in an encomium to Ramusio that the publisher added to the beginning of the third edition of volume one (Ramusio 1563). Henceforth it was "no longer necessary

7. "A gli stvdiosi di geographia. | Nelle presente tre Tauole sono descritte le Marine secondo le Carte da nauicar de Portoghesi, & fra terra, secondo gli Scrittori chesi contengono in questo primo volume, accioche i Lettori si seruino di quelle, per vna breue informatione di quanto in esso leggeranno, veggendo situati i Fiumi, Monti, Città, Prouincie, & Capi principale de l'Africa, Arabia, India, & Isole Moluche, perche se noi hauessimo voluto metter particularmente quanto per Giovan Leoni, Francesco Alvarez, & tutti gli altri autori è stato descritto, solamente sopra l'Africa, dieci non hauriano satisfatto. Ma venendo in luce le stampate nella prouincia della China, & quelle sopra l'Asia & Africa descritte; & promesse per el. S. Giouan de Barros, evediamo che vna parte della Geographia moderna, sarà talmente illustrata, che poco necessario sarà l'aflaticarsi sopra le Tauole di Ptolomeo." My translation refines that offered by Barnes (2007, 50). Ramusio's statement in the second edition was repeated in later editions; this text was taken from a modern facsimile, which reproduced the third edition of 1563.

to read either Ptolemy, Strabo, Pliny, or any other of the ancient writers on geography."[8]

Similarly, the English geographer Richard Hakluyt did not reproduce early maps in his collections of voyages (Hakluyt 1582, 1589; see Skelton and Wallis 1974; Tyacke 2000, 3; Fuller 2023, 36–37). What was important for Halkuyt was the significance of voyages for the development of contemporary geographical knowledge. To that end, in his public lectures, Hakluyt compared "olde imperfectly composed" maps with maps of contemporary geography—"new lately reformed Mappes, Globes, Spheares"—to demonstrate the effects and benefits of overseas voyaging (Hakluyt 1589, sig. *2a).

From Ramusio's *Della navigationi et viaggi* (1554) and Hakluyt's *Principall Navigations* (1589) to John Green's *New General Collection of Voyages and Travels* (1745–47) and Antoine François Prévost's *Histoire générale des voyages* (1746–89; see D'Souza 2014), edited collections of voyages made no reference to old maps and mapping practices. And when the rotting wall maps in the Sala dello Scudo in the doge's palace in Venice were replaced after 1760, new and thoroughly contemporary maps were used to delineate the routes followed by Venetian voyagers, notably the Cabots and Marco Polo, to construct a nostalgic view of Venice's past glory (Milanesi 2010, 13–19).

Even scholars focused on particular voyages or eras were uninterested in early maps. In rewriting the history of Christopher Columbus and the Spanish encounter with the new world in the 1770s, for example, the prominent Scottish historian William Robertson maintained a resolutely modern spatial understanding. When he sent the British ambassador in Spain a list of the kinds of materials he desired from the Spanish archives, he made no mention of old maps; in the same vein, the ambassador's response referred only to a "fine" contemporary map of South America, by which he meant the *Mapa Geográfico de América Meridional* by Juan de la Cruz Cano y Olmedilla, published in 1775 (Black 1988, items 1b and 3; see Edney 2020a).

Dedicated histories of the development of navigation, which extended into histories of marine commerce, generally only hinted at the past development of mapmaking. For example, the anonymous essay that introduced Awnsham and John Churchill's 1704 four-volume *Collection of Voyages and Travels* referred to chart making but did so only briefly as one of several maritime practices—alongside fireships, sheathing ships' hulls with metal plates, etc.—that had been developed by the ancient Greeks and so were emphatically not modern inventions. The author opined that "Our Sea-Charts, on which later times have so much valu'd themselves, are of such antient date, that we cannot find their Original," and supported this statement by some citations to ancient authorities that seemed to refer to charts of coastal Greece as well as world maps ("Introductory Discourse" 1704, xvi).[9]

After spending up to two thirds of their contents on ancient voyaging, general histories of navigation all emphasized the one technological development that distinguished modern navigational practice and set it apart from ancient practices: the invention, supposedly in thirteenth-century Italy, of the dry magnetic compass and its adoption for Mediterranean sailing. This was an event of huge retrospective significance. By permitting mariners to know their bearing when the skies were clouded over and when they were away from the coast and its landmarks, the compass gave mariners the confidence to sail into open water. The dry compass was therefore held up as engendering Europe's fifteenth- and sixteenth-century oceanic explorations ("Introductory Discourse" 1704, xv–xvii, xvii–xxxvi; see Pollock 2012, esp. 92–95). As Daniel Defoe (1725–26, 298) put it, the magnetic compass "unty'd" the hands of mariners, who had previously been "fetter'd and manacl'd . . . by their Ignorance, not daring to venture far from the Shores," and allowed them to leave the coastline behind and to sail out into the ocean (see also Padrón 2020, 65, 68).

HISTORIES OF GEOGRAPHY

Geographers began in the mid-seventeenth century to write historical narratives of geography as the practice of compilation. In addition to justifying their field, they rooted their work in antiquity, explained how geographical information had originated, and positioned themselves at the forefront of geographical practice (Withers 2019).

8. ". . . talche non havesse fatto piu dibisogno leggere, ne Tolomeo, ne Strabone, ne Plinio, ne alcin'altro de gli antichi scrittori intorno all cosse di Geografia." Translation by Horodowich (2017, 63).

9. This anonymous essay continues to be misattributed to John Locke, a close friend of Awnsham Churchill, even though Crone and Skelton (1946, 83) conclusively demonstrated that Locke had *not* been involved in writing it; see also Pollock (2012, 81, 124, 143).

Although focused on the core geographical process of compilation, these chronologies of key geographers and their systematic works were extended to include the travelers and voyagers who created knowledge of the world, allowing them thereby to trace the steady rise in geographical information towards the contemporary present, in anticipation of its eventual perfection.

A specific subgenre of histories of geography, which offered guides to the printed maps that were available for each region, was more akin to the natural history inventory rather than the narrative. Published mostly in the later seventeenth and early eighteenth century, the guides helped an emergent public come to terms with the rapidly increasing volume of maps and atlases of uncertain quality in a still inefficient marketplace (Lubin 1678, 2–4; Coronelli 1707, 522–24; Gottschling 1711; Gregorii 1713; Lenglet du Fresnoy 1716, 1741–42; Hübner 1726; also Gatterer 1775, 113–660; even Hennicke 1831; Krünitz 1793, 89–90, listed the inventories). As histories, they gave much detailed information about early modern mapmakers, especially those by the German preachers and geographers Caspar Gottschling and Johann Gottfried Gregorii (a.k.a. Melissantes). As inventories, however, all tended to flatten the past into the present (Skelton 1972, 71; Harley 1987, 10–11; Heinz 2010, esp. 187–88; Edney and Pedley 2019b, 23–28; Török 2021).

The narrative histories of geographical compilation construed a specific process by which progress in geography was achieved. The histories of voyaging and navigation narrated the increase in numbers of voyages and the ever-greater accumulation of information. By contrast, as exemplified in the making of geographical maps, compilation was an intellectual act. Compilation required an agile mind to evaluate and reconcile different and often conflicting sources according to their cultural significance, their creators' social standing and authority, and their technical quality (Edney 1997, 96–104; Parker 2018). Compilation relied on the skills and critical attitudes of certain individuals—"positive geographers," as Didier Robert de Vaugondy (1755, 159) called them[10]—who in compiling data could create new knowledge and extirpate error. Yet even the latest works of positive geography were not perfect: "maps . . . ought to be considered as *unfinished Works*, where there will be always found many things to be corrected and added, and . . . they ought to have a kind of *floating Title* affixed to them, expressive of their imperfect State" (Blair 1768, 20, original emphasis; see Withers 2019). Progress in compiling and synthesizing knowledge of the world depended on positive geographers working with ever more and better data (Edney 2019b).

Geographical progress was therefore neither inherent to geographical practice nor was it inevitable. The sheer breadth and variety of geographical practice meant that there was plenty of room for undisciplined persons to crassly corrupt geography's progress in an effort to make money. Each step forward by positive geographers had always been offset by less scrupulous geographers who plagiarized and simplified critical works and in doing so corrupted them by reintroducing or creating mistakes and errors. Early modern histories of geography thus depicted a serrated line of progress, in which a series of critical high points were separated by periods in which gains were eroded. Progress and decline were both aspects of human nature.

Geographers referred to older works and accounts to provide context for their contemporary practices and to hint at progression over time. They depicted older works as lacking currency and relevancy, and as being outdated. In this respect, early modern histories of geography served to promote their authors' own skills in collecting, assessing, and compiling sources to create new maps of regions and the world. They presented the origins and history of chorographical and geographical knowledge of the world in a manner that bordered on the moralistic, in that it sustained Enlightenment narratives of rationality and progress. Historical work served to position practicing geographers at the forefront of progress not only by demonstrating their own positive qualities as geographers but also indicating how they themselves were engaging in the necessary critical reform. In this respect, even as they construed themselves to be practitioners of an ancient science, in the great quarrel around 1700 over ancient versus modern learning, geographers implicitly placed themselves on the side of the moderns, as demonstrating the superior achievements of the moderns over even the great triumphs of antiquity (Heffernan 2014, 8–9).

10. "C'est de la géographie positive dont je parle ici": "I speak here of positive geography."

Histories of geographical practices all began with their ancient origins.[11] Herodotus, in book two of his *Histories* (440 BCE), had placed the origins of land surveying and so geometry in ancient Egypt: the division of the land by the legendary king, Sesostris, required the property boundaries to be redefined each year after the Nile's annual flood receded. Later, Joshua, successor to the first geographer Moses, used the same practices to divide up the promised land among the twelve tribes of Israel. Early modern geographers acknowledged that those geometrical principles were first used to make maps of a chorographical or topographical nature: regional surveys were perhaps made by Sesostris after he conquered territories (Robert de Vaugondy 1755, 5), probably by the Persian and Hellenistic empires, and undoubtedly by the Romans of their imperial conquests. The British chronologer John Blair advanced the general principle that "War has been generally the Occasion of the most accurate Maps of different Countries" and elaborated it into the assertion that the Romans "as they were *the Conquerors*, so they became *the Surveyors* of the World" (Blair 1768, 7, original emphasis).

But, went the origin story, it was the Greek philosophers in the sixth and fifth centuries BCE who had first made *real* geographical maps by establishing the sphericity of the earth and then connecting terrestrial locations to both astronomical observations and geometrical calculations for latitude and longitude. Commentators variously elaborated on the contributions to geographical mapping by Anaximander, Hipparchus, Marinus of Tyre, and especially Ptolemy. The early modern practice of geographical mapping was explicitly of great antiquity: "Born, so to speak, in Egypt, like the other fine arts, one sees [geography] successively occupying the attention of the Greeks, Romans, Arabs, and the Western peoples of Europe" (Robert de Vaugondy 1755, 4).[12]

In order to maintain a direct link between ancient and contemporary geographical practice, histories of geography all skipped over medieval Western Christendom. By ignoring medieval European geographical and marine maps, they could depict geographical compilation—and especially the combining of multiple itineraries and other sources within the cosmographical framework of latitude and longitude—as a practice pursued consistently from antiquity, perhaps via the bridge of Arabic science, to the contemporary present.

The larger narrative of geography as a field grounded in antiquity is exemplified by a two-part essay by the French polymath and diplomat Antoine Augustin Bruzen de La Martinière (1722a, 1722b). La Martinière began the first part with the (presumed) topographical and chorographical mapping by Noah and his immediate descendants after the Deluge, continued with the history of voyaging and exploration in the ancient and Classical worlds, and culminated in a detailed argument that the errors in Ptolemy's great gazetteer stemmed from errors in the data that had formed the basis of Ptolemy's calculations of latitude and longitude, specifically Roman itineraries and the assumed size of the earth. Skipping over the Middle Ages in both Christian and Islamic cultures, La Martinière began his second part with the reception of Ptolemy's Geography in western Europe and the subsequent progressive development of the field through cosmographical treatises by scholars such as Sebastian Münster, Gerardus Mercator, and Bernhard Varenius, before spending the last thirty pages outlining his own plan to meet the evident need for a great geographical dictionary that would raise geography to a new level. He soon published this ten-volume *Grand dictionnaire géographique et critique*, in which he adopted a more topical structure for its prefatory history. A chronology of modern geographical dictionaries was followed by an historiographical summary of each of geography's primary subject matters: Biblical; ecclesiastical; civil and political (Classical, medieval, modern); and poetic or fabulous (La Martinière 1726).

The historiographic and reformist sensibility was also evident in the works of more marginal geographers. Writing in Boston in 1748, the strongly opinionated Scots-born doctor William Douglass sharply criticized the maps of eastern North America made earlier in the eighteenth century. The map included in Cotton Mather's *Magnalia Christi Americana* (1702) had been "composed," Douglass wrote,

11. Some commentators were relatively brief, as Varenius (1650, 7–8), Cellarius (1703, xi–xii, 3–4), and Green (1728). Others displayed their erudition more self-consciously: Gottschling (1711, 16–31) gave extensive quotations from Classical sources, in the original Greek and Latin, although he evidently followed Cellarius's enumeration of authorities; Gottschling was in turn echoed by Krünitz (1793, 90–98). See also Gregorii (1713, 10–118).

12. "Née, pour ainsi dire, en Egypte comme les autres beaux arts, on la vit successivement occuper l'attention des Grecs, des Romains, des Arabes, & des peuples occidentaux de l'Europe."

> from some old rough Draughts of the first Discoverers, with obsolete Names not known at this Time, and has scarce any Resemblance of the Country; it may be called a very erroneous antiquated Map.

Moreover,

> Capt. *Cyprian Southack's* Land-Map of the Eastern *North America* [1717], is worse; it is as rude as if done by an Indian, or as if done in those Ages when Men first began to delineate Countries; it gives no Information, but has no other bad Effect, than turning so much Paper to Waste.

As ever in such situations, the author sought to improve the situation: Douglass was working on his own, definitive map of New England that he thought would put those and other earlier works to shame (Douglass 1749–52, 1:362n).

In creating narratives of the improvement in geographical mapping, early modern geographers placed the motive for progress on the individual, positive geographer. Even as they wrote the history of the acquisition of geographical data as being one of steady accumulation, the progress made in recording and presenting those data in maps appeared neither simple nor universal. This twist was clearly expressed by the Irish geographer John Green, when still working under his birth name of Bradock Mead, in an essay on the "Present State of Geography" that he appended to his 1717 manual on geographical map projections and compilation methods. Green offered the general principle that each step forward in geographical mapmaking was undermined and perhaps even negated by human nature. The key passage is worth quoting in full:

> Geography, without Doubt, flourished long before *Ptolemy*, for (not to mention *Strabo*, *Pliny*, *Mela*, &c. who were earlier) those MAPS which go under his Name, according to his own Confession, were copy'd from others, that were made by *Marinus Tyrus,* &c. with some Improvements of his [i.e., Ptolemy's] own added. After him came those call'd the lesser Geographers; but from that time forward Geography lay dead, 'till about the fourteenth Age, that *Columbus*, by his Example, set the whole World a Travelling, and reviv'd in all Sorts of People a Passion for Geographical Studies. *Mercator* was the first of Note, and next to him *Ortelius*, that undertook to make a new Sett of MAPS, with the modern Divisions of Countries, and Names of Places; for want of which, *Ptolemy's* were grown almost useless. The Ice being broke, many follow'd his Example, and set forth MAPS, which were for the most Part, Copys of his [i.e., Mercator's]. Towards the middle of the last Age, [*Blaeu*] in *Holland*, and *Sanson* in France, publish'd New Setts of MAPS, with many Improvements from the Travellers of those Times: And whether they were thought so perfect as not to be mended, they have been copy'd ever since, with very little Variation for the better, but often for those worse, by the *English*, *Dutch*, and *French* Map-makers. Geography was just relapsing into the former Obscurity and Error out of which *[M]ercator* took it, when *Monsieur Delisle*, a *French* Geographer, undertook to disabuse the World, and put a Stop to those spurious Draughts that were daily obtruded on the Publick, by making a compleat Sett of MAPS, both of Old and New Geography, corrected and improv'd from the Surveys several *European* Nations had made of their respective Countries, the Observations of the best Travellers in all Languages, and the Journals of the Royal Societies of *London* and *Paris*: By which Performance, that Author, has in a most extraordinary manner obliged the Curious, and gain'd Credit and Applause to himself and his Country. (Green 1717, 131–32; see also d'Anville 1777, 8–13)

That is, positive geographers might have repeatedly advanced the field, and they might even have created comprehensive atlases, or "sets" of maps—which for Green constituted special geographies that systematically examined each part in turn of entire world—but everyone else was content merely to copy that critical work. Eighteenth-century practice was as bad as it had ever been: the economics of map publishing meant that it was much cheaper to copy an existing map than to create a new one, while the ignorance of the (British) public was such that "every one that can copy or engrave a MAP" could set themselves "up for a Geographer" (Green 1717, 132, 134; see Pedley 2005).

Green held that geographers, if they were going to be accorded that exalted title, had to cite their sources and justify their work. Guillaume Delisle had published some of

his own correspondence and notes on such matters (e.g., Delisle 1700, 1722). His positive successors also published separate memoirs to explain their map work: the example set by d'Anville and Jacques Nicolas Bellin was emulated by Green himself and others (Haguet 2011; Bousquet-Bressolier 2019; Edney 2019b, 2019c). These memoirs implicitly addressed the past, in that the geographers laid out the faults of previous maps, justified the use of often highly varied source materials, and explained how they had combined those sources in new and improved works (d'Anville 1777).

The memoirs advertised their authors' scholarly credentials. It was the need for self-promotion and self-justification that led Robert de Vaugondy to publish a detailed history of geography and, more especially, of geographical map-making. He prepared his *Essai sur l'histoire de la géographie* (1755) as the introduction to his *Atlas universel* (completed 1757) to counter both lingering accusations of plagiarism and severe criticism of the quality of the first maps he had prepared for his atlas. The second half of this long essay comprised a memoir explaining how he had designed the atlas as a whole and had compiled each map anew. Robert de Vaugondy used the first half to show off his erudition and intellectual understanding of the field in answer to his critics, in particular Philippe Buache, Delisle's intellectual and commercial heir. Buache responded in turn that, in preparing his historical essay, Robert de Vaugondy had relied too much on, and had given insufficient credit to, the essays by La Martinière. Robert de Vaugondy had certainly drawn on the earlier works, but he explained that his primary concern was with the history of geographical mapping and so had added much more to La Martinière's history of written geographies and cosmographies. Given these circumstances, it is not surprising that Robert de Vaugondy focused almost entirely on the astronomical and geometrical practices of geographical mapping in order to demonstrate his own skills (Robert de Vaugondy 1755, e.g., 5 [citing La Martinière] and 40–41 [close paraphrase of the earlier work]; see Pedley 1984; Pedley 1992, 50–68, esp. 53–54 and 60–61; Godlewska 1999, 33–34).

ANTIQUARIES AND THE RELICS OF LOCALITY AND NATION

Mistrustful of historians' literary, moralistic, and intellectual biases, antiquaries let material relics and textual monuments from the past speak for themselves, whether coins, weapons, grave goods, or manuscripts (Lake 2020). The collections assembled by Richard Gough exemplify the somewhat bewildering array of objects that could be used to illuminate or to conjure the past. According to the title to the catalog for their auction, Gough had collected "prints, drawings, coins, medals, seals, painted glass, paintings, pottery, brass monuments, marble fragments, Chinese and other bronzes, miniatures, seals," and other "miscellaneous antiquities" (Sotheby and Sotheby 1810). The auction did not include the extensive library of manuscript and printed books and maps that Gough had used in writing his *British Topography* (1780a) and that he had already donated to the Bodleian Library in Oxford.

Antiquaries were motivated by a variety of familial, communal, religious, institutional, and political sentiments to resurrect the past in order to celebrate the present. The hallmarks of their scholarship were an unquenchable thirst for facts about, and artifacts from, the past, generally in service of local pride, an incipient nationalism, and a nostalgia for lost glories (e.g., Cattaneo 2006, 27–30). Blending local topography, archaeology, ethnography, folklore, bibliography, and natural philosophy, antiquaries' accounts tended towards erudite history-as-inventory rather than moralistic history-as-narrative. Historians *per se* accordingly disdained antiquaries for their magpie-like acquisition of relics and facts without reference to the larger historical picture (Walters 1988, 542).[13]

As might be expected, given their concern to interrelate places and regions with parochial and national identities, antiquaries made use of contemporary regional maps and

13. George Cruikshank's satirical print, "The Antiquarian Society," (appearing before page 431 in volume 3 of *The Scourge*, June 1812) depicted a meeting of the Society of Antiquaries in which members presented worn-out and broken modern objects as if they were ancient artifacts: a weathered pig trough for a sarcophagus, a chipped and fractured chamber pot for a Roman vase, and so on. O'Donoghue (1977, no. 44) and Hewitt (2011, pl. H) reproduced the print because they thought the gentleman in the foreground with a sheaf of Ordnance papers in his pocket might have been a posthumous rendition of William Roy, the prominent military engineer and antiquary who had laid the foundations for the Ordnance Survey, of whom no portrait survives. However, the British Museum catalog (Prints and Drawings, 1868,0808.12671) notes that Cruikshank's satire referenced a recent election for the society's president; the figure, with what looks like the star of the order of the Bath on his left breast, therefore represented Lord Mulgrave, master-general of Ordnance and a member of the society (Gaimster, McCarthy, and Nurse 2007, 67).

urban and place plans. In this respect, they followed the same practices as historians who used contemporary maps to assist their understanding of the past (see part 1). Also, as historians made maps of Classical, Biblical, and modern history, so antiquaries made analytic maps of regions and places in the past. Moreover, many antiquaries surveyed and mapped specific sites of archaeological interest (Edney 2019d, 628–30; see Forss 2023).

The importance of maps and plans to antiquaries led some to provide inventories—or natural histories—of maps of particular regions. Such inventories were akin to those prepared by some geographers, but they were much more regionally focused. For example, Eberhard David Hauber compiled a long and detailed bibliography of the maps of southwestern Germany (Hauber 1724a, 1–38, 69–105, 114–22, 148–80); he also described, in a separate section, some surviving manuscript maps of the region (Hauber 1724a, 38–52, 123–37, 105–14; see Bonacker 1952, 49–50; Scharfe 1997, 23–24). A shorter instance was Bernard Erberg's (1760, 44–50) inventory of maps of Bohemia printed since the early sixteenth century, which he presented as part of his larger bibliographical account of the literature of the history and character of the kingdom. Erberg offered three classes of map: those depicting Bohemia together with neighboring provinces; maps just of Bohemia itself; and more general maps that "referred" to Bohemia.[14]

By and large, antiquaries were little different from other early modern map collectors, in that they overwhelmingly acquired maps of contemporary significance (Pedley and Edney 2019). What antiquaries expended considerable effort to recover and collect were any and all relics of the past. Relics were to be treasured because they had survived the vicissitudes of time and their value, both intellectual and monetary, accrued to their owners. In searching for relics, antiquaries did of course find and acquire less-than-recent maps that they then cherished and studied (see, e.g., Harper 2010). Yet it is evident that no antiquary made a systematic attempt to locate specifically *map* relics; they acquired them only opportunistically, as they encountered them.

Antiquaries did not scorn medieval maps, and so differed significantly from the historians and geographers who engaged with maps from the past. Classical historians were uninterested in medieval maps, other than as preserving ancient geographical knowledge, and historians of geography simply ignored medieval world and regional maps as irrelevant to, and distracting from, their arguments that the practice of positive geography was grounded in antiquity. By contrast, antiquaries' interest in giving contemporary societies a continuous and unbroken history from the remote past meant that they celebrated medieval relics as well as objects that they construed as being antiques.

To be considered a relic and to be worthy of notice—rather than appearing as just one more item in an inventory—a map needed to possess both the patina of age and some special quality that made it unique. An eighteenth-century antiquary might have accepted that the regional maps published by Abraham Ortelius in the last quarter of the sixteenth century were old but, existing in many atlases issued over several decades, they were too familiar to be considered as relics. By contrast, seemingly unique manuscripts and rare prints seemed self-evidently to be relics. As such, they warranted reproduction in facsimile, to bring their remarkable information to the notice of other, appreciative antiquaries. (Many of the antiquaries' facsimiles were identified by Santarém 1849–52, 1: xxxviii–lv, who informed Skelton 1972, 69–73.)

Some early maps were reproduced when erudite scholars printed their parent works. The French diplomat Jacques Bongars (1611), for example, brought together and printed a number of medieval manuscripts, which required the reproduction in facsimile of three *mappaemundi* and one of the fourteenth-century gridded maps of the Holy Land from Marino Sanudo's "Book of Secrets" (see Figure 4; Skelton 1972, 69; Harvey 2012, 125). Edward Bernard, Savilian Professor of Astronomy at Oxford, would have reproduced a number of early maps in about 1670, had he been able to realize his plans to reprint many early works on mathematics in some twenty volumes. One of those volumes was to be dedicated to cosmography and mathematical geography, beginning with a reprinting of Claudius Ptolemy's Geography and continuing with reproductions of other books and maps, including the now-famous "Selden map" of China (Poole 2020; see Batchelor 2014 and Nie 2019).

14. My thanks to Jitka Močičková for the reference to Erberg's work.

A few free-standing maps were reproduced specifically for their local significance. Gough (1780a) reproduced the remarkable late medieval map of Britain that now bears his name (Figure 2). Another example is the supposed medieval copy of a Roman map of Britain reproduced by the pioneering archaeologist William Stukeley (1757) and several others (Edney 2020b). While Gough and Stukeley enumerated the toponyms on the maps they reproduced, together with their modern equivalents, they addressed their facsimiles to a burgeoning nationalism. Other scholars described and reproduced maps that referenced past glories associated with their institutions, hometowns, or provinces. In his annals of the Benedictine Order, for example, the monastic chronicler Jean Mabillon (1703–39, esp. 2 [1704]: opp. 571) briefly discussed the ninth-century architectural plan of an idealized monastic establishment held by the abbey of St. Gall, which he mistook as a plan of the abbey itself; he reproduced the plan from a tracing that he had solicited twenty years earlier from the abbey's librarian (Lemaitre 2015, 76–77). The innovative terrestrial globe constructed by Martin Behaim in 1490–92 was reproduced by being projected as a double-hemisphere world map by two residents of Nuremberg: first by the geographer and astronomer Johann Gabriel Doppelmayr

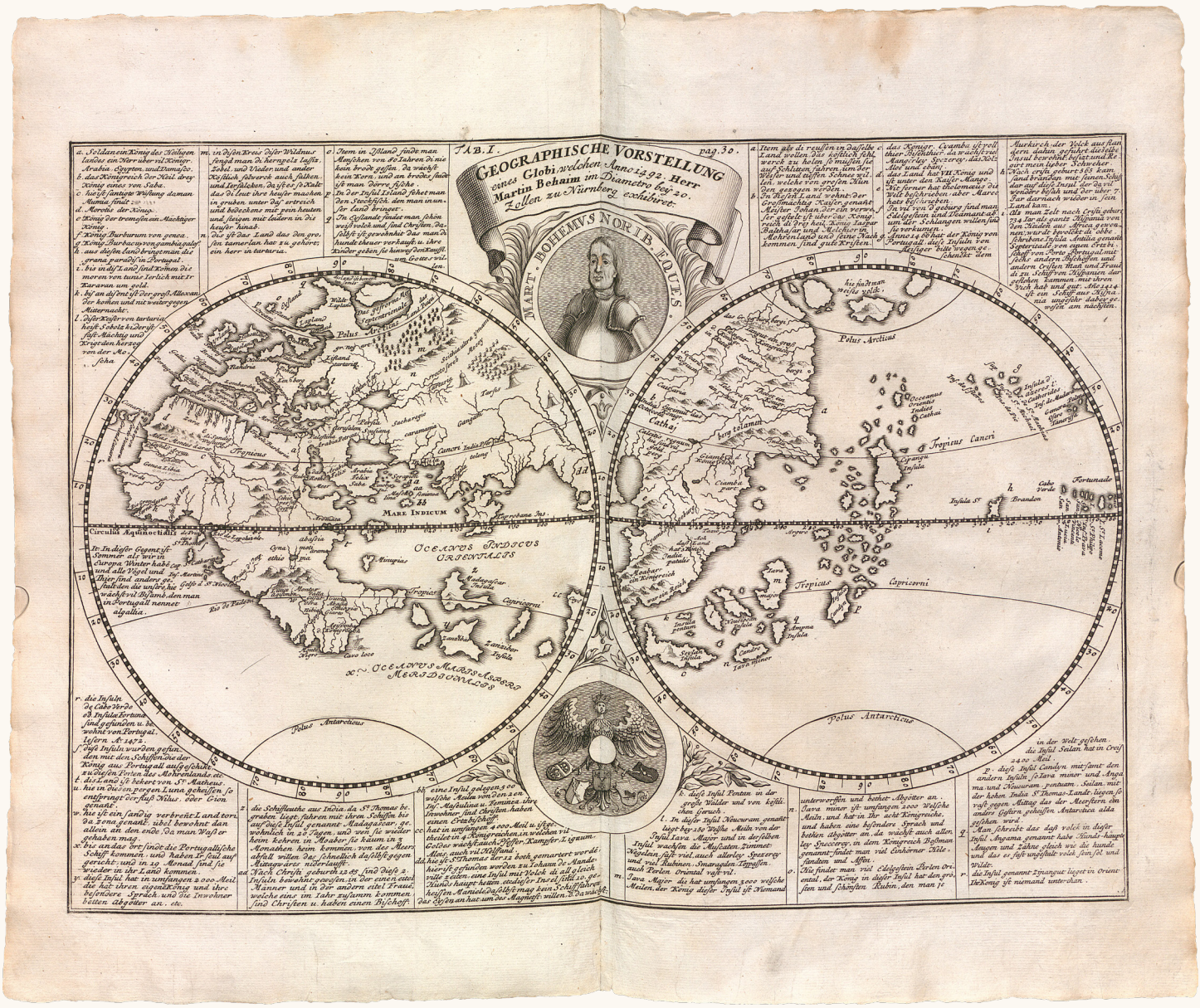

Figure 9. *Geographische Vorstellung eines Globi, welchen Anno 1492. Herr Martin Behaim in Diametro beÿ 20. Zollen zu Nürnberg exhibiret*, pl. 1 in Johann Gabriel Doppelmayr's (1730, 27–31, esp. 30) biography of Martin Behaim. Copper engraving, 30 × 41 cm. Courtesy of the Bayerische Staatsbibliothek (Hbks/M 25-1/2, Taf. 1); online at **www.digitale-sammlungen.de/en/view/bsb00083403**.

Figure 10. Giovanni Battista Nolli's reduced facsimile of Leonardo Bufalini's woodcut plan of Rome, in twenty-four sheets, published in 1551: Carlo Nolli and Francesco Monaco, . . .*Vrbis Ichnographiam a Leonardo Bufalino Ligneis formis Evulgatam Servata Proportione*. . . (Rome: Giovanni Battista Nolli, 1748). This reproduction made widely known Bufalini's large map that today survives in just two complete sets and one partial set, all of the 1560 reissue (see Maier 2007; Maier 2015, 77–118). Copper etching and engraving, 46.5 × 69.5 cm. Courtesy of the Metropolitan Museum of Art, New York (Gift of A. Hyatt Mayor, 1977; acc. 1977.661.2); online at **www.metmuseum.org/art/collection/search/358826**.

(1730, 27–31) in his history of the arts and sciences in the imperial city (Figure 9) and again by the lawyer and bibliophile Christoph Gottlieb von Murr (1778, 14–44) in his celebratory account of Behaim's career. In Venice, one antiquary briefly discussed medieval sea charts in a celebration of Venetian arts (Zanetti 1758, 2:46–48), while two monastic chroniclers described Fra Mauro's world map of ca. 1450 in their annals of the Camaldolese order of Benedictines (Mittarelli and Costadoni 1762, 7:252–56).

If the collecting of map relics was determined by cultural needs, their presentation in facsimile was aggressively direct. They were reproduced with little attempt at contextualization, explanation, or interpretation. In a late example, the London lawyer and antiquary William Robinson added a copper-engraved facsimile of a 1619 plan of the manor of Tottenham to the second edition of his history of that village (Robinson 1840, 1: opp. 1). He did not discuss the map in the book, nor did he mention or reproduce the written terrier that had accompanied and explained the original plan. Nor did he invite his readers to compare their own knowledge of a rapidly changing village with the old plan; after all, the village would not grow and merge into the expanding conglomeration of London until the 1860s, after the construction of the Great Eastern Railway (*Village London Atlas* 1986, 71, 73). That is, Robinson presented the map as a curiosity and as a parochial icon of the historical essence of the locality.[15]

15. My thanks to Peter Barber for the reference to Robinson's work.

When antiquaries did describe map relics, they especially emphasized toponyms to demonstrate the antiquity and importance of specific places. They also discussed what they found to be curious and unique features shown in the maps. In his bibliography of the maps of southwestern Germany, Hauber (1724a) indicated the curious features that could be found on each map. He also exemplified how antiquaries, focused as they were on the mapping of their home places and regions, were well attuned to how well topographical plans and chorographical maps depicted the immediate landscape. As he listed and described maps, he further detailed the "defects and flaws" in regional maps as a plea for their improvement (Hauber 1724a, 53–68, 137–47).

The manner in which eighteenth-century antiquaries could improve on older plans was highlighted by Giovanni Battista Nolli's greatly reduced reproduction of Leonardo Bufalini's pioneering 1551 plan of Rome (Figure 10) in conjunction with his own twelve-sheet map of the city, published in 1748. Nolli had diligently mapped the surviving ruins of ancient Rome and had further extrapolated from them to plot out the footprints of complete ancient buildings (Verstegen and Ceen 2013; Bevilacqua 2019). Bufalini had also mapped out the city's ruins, but without the same degree of precision, comprehensiveness, and pretension that Nolli would achieve two centuries later (Huppert 2008). With his facsimile, Nolli paid homage to his predecessor's creation of a timeless landscape and further demonstrated the progress that had been made both in mapping and in the city's fabric (Maier 2015, 117–18, 214). The basic antiquarian impulse must also be acknowledged: despite having been printed, Bufalini's plan was already so rare as to constitute a relic that deserved to be reproduced in its own right as a monument to the particular nature and character of Rome and of Roman culture.

RECONFIGURING STUDIES OF EARLY MAPS AFTER 1775

Although I used Richard Gough to introduce the subject of antiquaries and their collections, and both Skelton (1972) and Harley (1987) presented him as the quintessential antiquary of the early modern era, when it comes to his map work he is actually more properly understood as a transitional figure. While much of his map work was decidedly early modern in character, some elements revealed the influence of some of the intellectual trends that would completely recast history and geography in the following decades.

Gough devoted a substantial portion of his *British Topography* to an inventory of printed maps and charts of the counties, coasts, and roads of Britain, first of England and Wales and then of Scotland and Ireland (Gough 1780a, 1:86–112, 2:575–62, 2:765–69, respectively). Gough further publicized each of the medieval maps that he and others had already found by reproducing them, either all (Figure 2) or in part (Figure 11) and described their content in detail, listing their toponyms with their modern equivalents (Gough 1780a, 1:57–86). He also referenced many more local chorographical and urban maps throughout the two volumes. And, like his colleagues, Gough commented on the quality of printed regional maps, although he gave only a brief and imprecise blanket condemnation:

> Notwithstanding the assertions of [Emanuel] Bowen, [Thomas] Kitchen [i.e., Kitchin], and other modern makers, that their maps are framed from *actual new* surveys, there is scarce a single one which does not abound with faults: and a set of correct maps remains to be hoped for from the undertakers of surveys of counties; though it were much to be wished the abilities of some of these were more answerable to the encouragement afforded them. The same may be said of all the republishers of [the road maps by John] Ogilby.

Along the same lines, he further stated that of the sixteen thousand "general and particular" maps that he supposed to have been published since the invention of printing, "not above 1700 are originals" (Gough 1780a, 1:108–9, original emphasis).[16]

Despite its general character as a natural history, Gough's map work shaded into the realm of historians of geography. He drew on the histories of geography to create a long

16. Gough (1780a, 1:109) cited "Long's Astronomy, v. I, p. 152," but this is false: I find no such figures in Long's chapter on map projections, "Of Maps and Their Uses" (Long 1742, 1:152–64), nor elsewhere in his book. Note, however, that Büsching (1754–92, 1:36) and then Gatterer (1775, 116) had previously stated the same figures, neither citing a source.

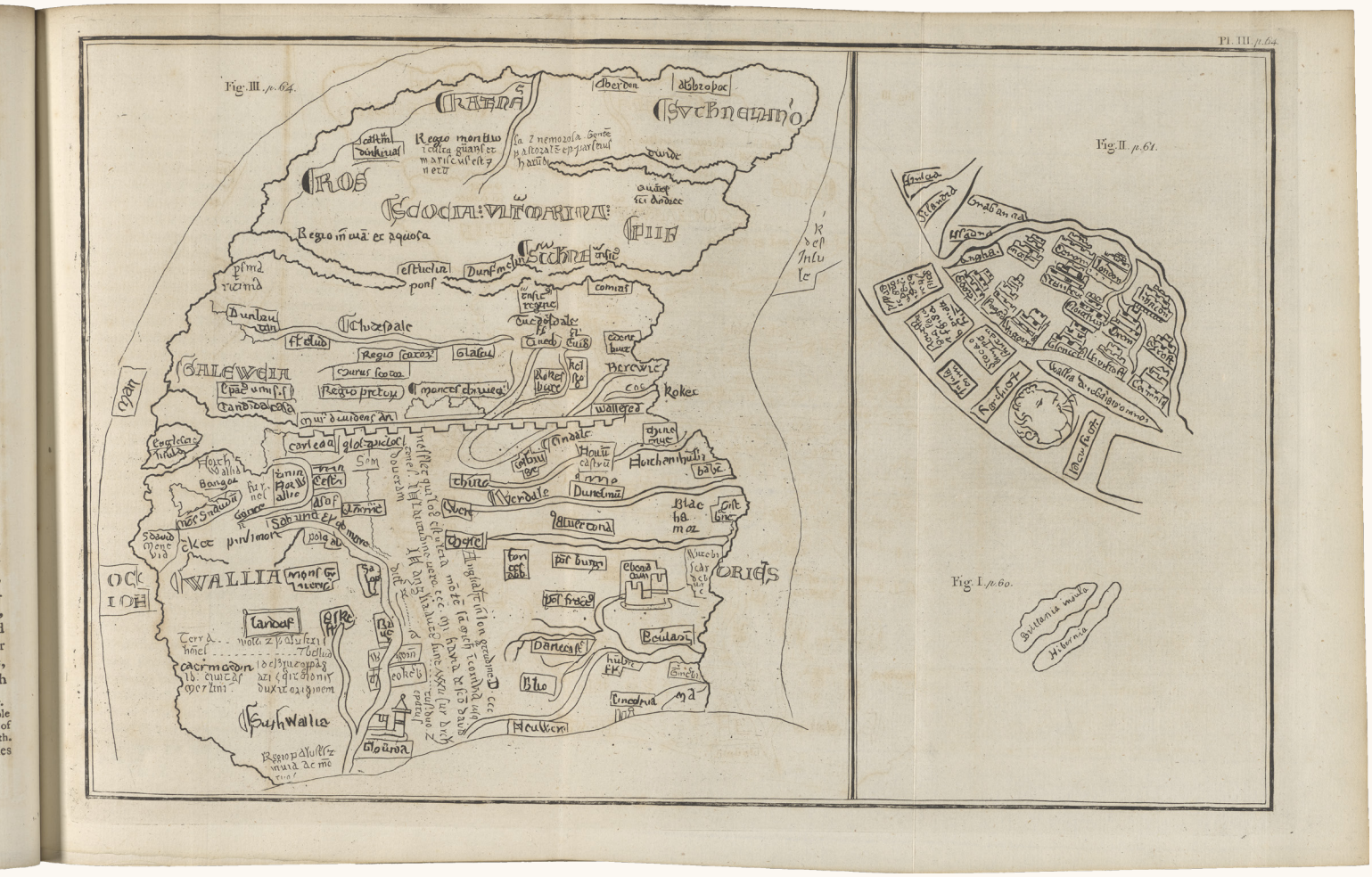

Figure 11. Richard Gough, facsimiles of Britain on three medieval English maps, in his *British Topography* (1780a, 1: pl. III, opp. 1:64). LOWER RIGHT Fig. 1: from the twelfth-century *mappamundi* now known as the Sawley Map (Corpus Christi College, Cambridge, MS 66.1) (see Harvey 1997; Hiatt 2019). UPPER RIGHT Fig. 2: from the fourteenth-century *mappamundi* in Ranulf Higden, "Polychronicon" (British Library, MS Royal 14.C.ix, fols. 1v–2r). LEFT Fig. 3: the surviving northern half of the thirteenth-century map of Britain in Matthew Paris, "Chronica maiora" (Corpus Christi College, Cambridge, MS 16, fol. v^{v}) (see Harvey 1992, map B). Copper engraving, 24 × 37 cm. Courtesy of the Osher Map Library and Smith Center for Cartographic Education, University of Southern Maine (Osher Collection 7420).

footnote, crammed with many learned citations, laying out a history of geographical maps of the world and its regions in ancient Greece and Rome; he scrupulously acknowledged that ancient references to *tabulae* might in fact have referred to written itineraries rather than to graphic maps. And Gough further mentioned the few medieval Islamic and later Japanese and Chinese maps that he possessed or otherwise knew about (Gough 1780a, 1:57–59n). In his account of the medieval maps of Britain, Gough also followed historians of geography by paying attention not only to the maps of Britain but also to how Britain was depicted in medieval world maps found in British collections. He began with the Peutinger map, which he took from von Scheyb's 1753 facsimile (Gough 1780a, 1:57–86). Indeed, Gough's publisher (I presume) brought together Gough's inventory and related materials and rearranged them into a narrative directly akin to early modern histories of geography (Gough 1780b).[17]

Gough's blending of antiquarian and geographical histories might be interpreted as an idiosyncratic phenomenon, were it not also for two further elements of his map work. First, as he confessed to an old friend and colleague, he was interested in tracing "the progress of Map-making among us" (Gough to Rev. Michael Tyson, 6 October 1770, reproduced in Nichols 1812–16, 8:668; see Walters

17. My thanks to Catherine Delano Smith for bringing the pamphlet to my attention. Lacking authorial attribution, it is known in just one cataloged impression, in the Bodleian Library.

1978, 27). Gough's quest led him to undertake a search for relevant medieval maps across several collections to which he had access. More importantly, this sentiment entailed a subtle shift from understanding geographical mapping from a practice pursued by individuals to an inherently social practice. Early modern historians of geography had understood geographical progress as the work of individual, positive geographers who worked to produce new and comprehensive atlases. In contrast, Gough took geographical progress to be more of a communal work of the British nation ("among us") and to be a marker of national sophistication.

In this brief moment, Gough revealed the influence of the "philosophical" history that postulated some underlying shape to or structure for historical progress. Beginning with the French *philosophes* who had argued that societies must pass through stages of culture, from savagery through barbarism to civilization, some eighteenth-century scholars had begun to explain the history of humanity in terms of the inevitable passage through linear sequences of predetermined stages of cultural advance. Like the new, emergent breed of historian of geography and discovery, Gough used the increase in quality and quantity of geographical knowledge as a marker of the transition of British society from one cultural stage to the next, from an apparently "barbarous Monkish system of Geography" to the more advanced and cultured mapmaking of post-medieval Europe (Gough to Tyson, 13 November 1770, in Nichols 1812, 8:668; see Edney 2020a). Furthermore, different societies might be compared and evaluated according to the cultural stages that they had respectively reached. This was the context for Gough's reference to Chinese and Japanese maps in a book otherwise addressing specifically *British* relics. He compared one Chinese map in his possession, which I have yet to be able to identify, with those of medieval Britain and concluded that "the appearance of the [Chinese] map comes nearest to the latest of our own here given, and the mountainous face of the country is better marked." So, the Chinese map represented an advance on medieval British maps but not so much of an advance, Gough implied, as to be superior to more recent British mapping (Gough 1780a, 1:59n).

Gough's act of comparing British with Chinese maps further represents a break, subtle but nonetheless significant, with previous early modern map work that compared geographical outlines and features on maps from the past to those on contemporary maps. Classical historians did so to relate ancient to contemporary toponyms to assist in the reading of Classical texts. Antiquaries similarly equated medieval toponyms to those of the contemporary present, and they further presented facsimiles of early maps and plans to permit their readers to appreciate them as relics of the local past. At the same time, historians of geography and voyages compared the information contained in voyage accounts against contemporary maps. For all these early modern scholars, the comparison of early maps and texts with contemporary maps was made in *absolute* terms, the past then compared against the world now.

By contrast, Gough's brief excursion into Chinese mapping entailed an act of *relative* comparison, by which two or more early maps are compared against each other to assess their relative situation on the trendline of geographical and civilizational progress. Eventually, starting in the 1830s and 1840s, some scholars in Paris began to undertake similarly relative comparisons of early maps to demonstrate the transition of European culture from medieval mysticism to the Renaissance rationalism; they proselytized the approach by providing large collections of facsimiles of early maps that encouraged other scholars to make the relevant comparisons for themselves and so discern the advance of European civilization. In the process, the Parisian scholars founded a major thread of map historical studies (Edney 2023). Relative comparison would continue as the basic methodology of what has often been termed "historical cartography,"[18] which is to say the tracing of the accumulation of geographical information of a region as a surrogate for the rise, increasing sophistication, and overseas transfer of Western civilization. The methodology of relative comparison is very much the work of modern map scholars and manifestly is *not* an aspect of any of the early modern engagements with maps from the past.

Yet, when R. A. Skelton (1972, 63–70) wrote the history of what he construed to be the discipline of "the history of cartography," he assumed that any juxtaposition of early maps had to entail the kind of relative comparison that he himself practiced. He could accordingly see the origins of interest in the history of cartography in the provision of multiple world maps in medieval manuscripts, an interest that would flourish in the juxtaposition of Ptolemaic maps

18. Skelton (1972, 62) sought to restrict "historical cartography" to the making of maps of the past, but the term continues in use for relative comparison and the construction of trendlines of cartographic progress.

and *tabulae modernae* in the Renaissance and in the production of facsimiles of maps from the past. J. B. Harley (1987, 7–8, 10) largely followed suit. Skelton and Harley were, however, fundamentally wrong in thinking that early modern interests in maps as historical documents were essentially the same as modern interests. Marcus Welser's 1598 facsimile of the Peutinger map (Figure 1) and Gough's 1780 facsimile of the now eponymous late medieval map of Britain (Figure 2) were made for significantly different reasons and for markedly different scholarly communities. Only with a hindsight cognizant of the importance of facsimiles to map historical practices in the nineteenth and twentieth centuries can Welser and Gough and other early modern scholars be considered to have contributed to a common intellectual pursuit.

The past itself was not consistently distinguished from the present in the early modern era, and there was no sense that either "history" or mapping constituted a single endeavor. Early modern engagements with mapping and the past played out in three main arenas of scholarship. Classical historians studied and reproduced Ptolemy's Geography and the Peutinger map, comparing the places they identified in the ancient world with their contemporary equivalents. Positive geographers wrote histories of voyaging and of the compilation of geographical maps and texts to position themselves at the forefront of a long history of progress. Antiquaries used and reproduced certain maps from the past as relics of local or national identity, presenting them in natural histories alongside all the other relics they accumulated. It is therefore nonsensical to refer to the study of "map history" or the "history of cartography" before 1800; no such coherent field of study would have been recognized.

The identification of early modern, or even medieval, origins of the "systematic" study of the "history of cartography" was not so much wishful thinking by Skelton and Harley, but a key plank of their arguments that the field constituted a long-standing intellectual practice that now deserved a prominent place in the academic firmament. In refuting their invented historiographies, I suggest that their disciplinary visions were equally invented: modern map studies, and map history more particularly, are in fact products of the profound changes in about 1800 in Western knowledge practices and institutions. Then, increasingly generic conceptions of both "history" and "map" combined with the intensification of imperial endeavors and nation formation to produce a common intellectual agenda: to understand maps from the past as markers of the rise of Western civilization as a whole and of individual nations in particular. As I have argued elsewhere, the origins of the study of map history lie the 1830s and 1840s (Edney 2022a, 2023) and not in some putative, abstract, early modern endeavor.

Finally, this essay demonstrates the importance of rejecting the idealization of "cartography" and of understanding mapping as comprising a series of modes, each defined primarily by practices. Classical historians and geographers worked primarily with world and geographical maps, not with marine charts and certainly not with more detailed plans of places. Antiquaries worked almost exclusively with chorographical maps and plans of places. This differentiation was a function of respective intellectual practices working with different spatial conceptions. The divisions between the three scholarly arenas were not hard and fast: in other aspects of their lives, antiquaries could also be consumers and producers of geographical maps; and some early geographers were also humanists who were far more interested personally in making analytic maps of the past than in making maps of contemporary geography. Even so, those overlaps should not be thought to mark some increasing unity of maps and of cartography. Rather, Gough's reconfiguration of early geographical maps as indicators not of the positive qualities of individual geographers but of the state of a society's geographical knowledge indicates that the supposed unity of modern mapping was the result of conception and ideology and not of technological change. Ultimately, our conceptual categories are not natural or self-evident representations of mapping but constructed through long practice or dramatic invention.

ACKNOWLEDGMENTS

I initially wrote this essay as a chapter for a history of map history, but it ceased to fit as that project steadily morphed into what I now call *Map: Concepts and Histories*, requiring this relocation; my first thanks to the editors of *Cartographic Perspectives* for accepting its length! In addition to the specific individuals mentioned in the notes and to the useful comments of the anonymous reviewers, I must thank Katie Parker and Louis Miller for

their comments on early versions of this essay. More generally, I am indebted to my good friend and colleague Mary Sponberg Pedley for all her insights into eighteenth-century mapping, and to all the librarians and archivists who have made early modern texts and images available for easy access online.

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