

Arabic Geography and Sixteenth-Century Cartography

*Guillaume Postel and the History
of Abū al-Fidā's Manuscript*

Introduction

In a letter dated 9 April 1567, addressed to Brabantian cartographer Abraham Ortelius (1527–1598), French scholar Guillaume Postel (1510–1581) makes explicit reference to Ortelius's first-ever published chart of Asia, the *Asiae orbis partium maximae nova descriptio* (*New Description of Asia, the Widest Part of the Globe*), printed in Antwerp in 1567 (Fig. 3.1), and reprinted soon after by Donato Bertelli in Venice.¹ The letter leaves little doubt about the significance Postel attributes to Ortelius's cartographical projection of Asia:²

* This contribution collects some preliminary results of part of the project that has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 101025084, 'PostelEast'. It is a revised version of the paper presented at the workshop Travelling Matters in September 2022. I would like to thank the organizers and attendees for their feedback, which helped me revise the paper during the outgoing phase of my project at Indiana University Bloomington. Finally, I wish to thank Luisa Simonutti, who introduced me to the MS Locke c. 27, Lucia Pergreffi, Sandra Troilo, and Benedetta Vincenti, who helped me with the translation of two Latin texts, and the librarians at the Universitätsbibliothek Basel and the Bibliothèque nationale de France.

- 1 See Almagià, *Monumenta cartographica vaticana*, II, pp. 63–66.
- 2 In the transcriptions of Latin and French vernacular texts, I have silently expanded all abbreviations, standardized punctuation, and regularized spellings u/v and i/j according to modern usage. All English translations of Latin, Italian, and French vernacular texts are mine. Unless otherwise specified, words or brief phrases enclosed in square brackets in the English translations have been added to clarify the English text. In the English translations of primary sources, authors' names and works in Arabic are spelled according to the original Latin spelling.

Maria Vittoria Comacchi (PhD, 2019) is a Marie Skłodowska Curie Fellow at the University Ca' Foscari Venice and Indiana University Bloomington. Previously, she worked at the European University Institute and the University of Hamburg.

This is an open access article made available under a [CC BY-NC 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)

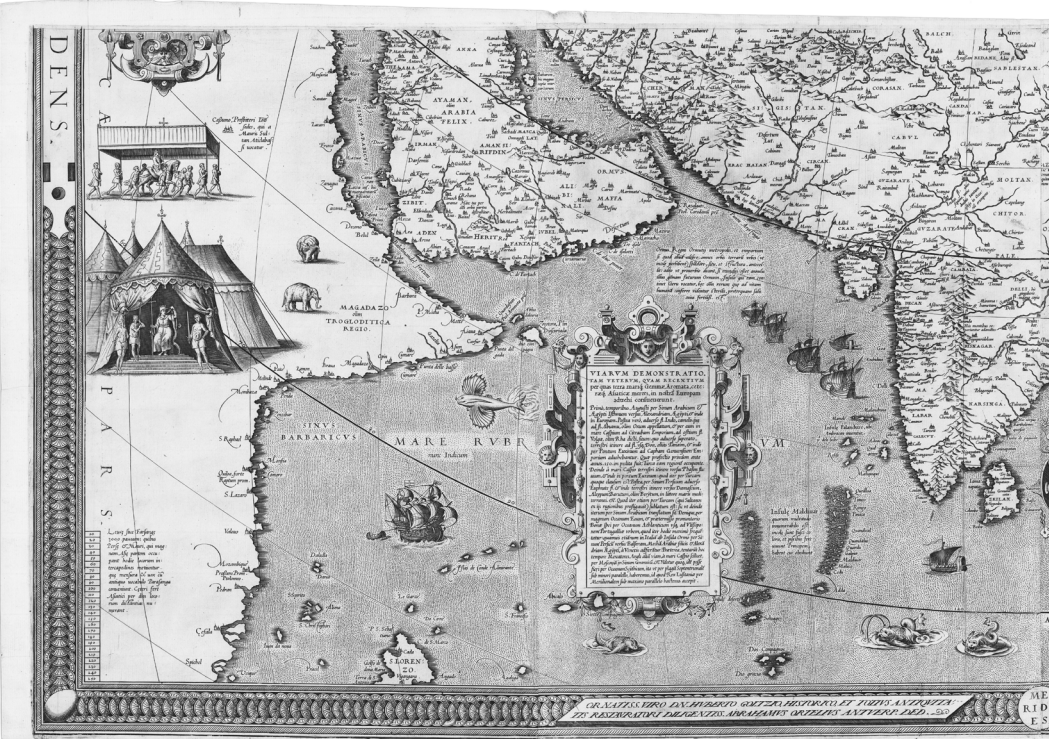
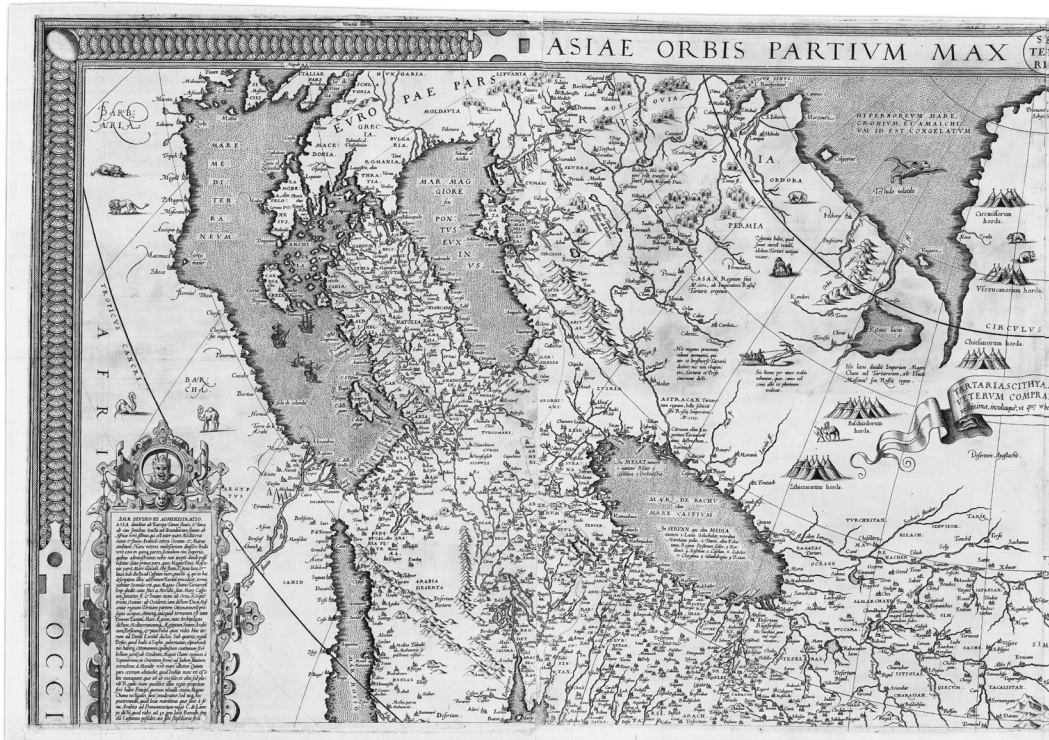


Figure 3.1. Abraham Ortelius, *Asiae orbis partium maximae nova descriptio* (Antwerp: [n. pub.], 1567), Universitätsbibliothek Basel, UBH Kartenslg AA 98–99.

Of course, I have accepted the map of Asia you edited as the most pleasing gift, my dearest, savant, and industrious Ortelius. The chart looks as I have wished for such a long time. For this reason, at some time or other, I intend to bring forth into the light a universal chart of our all northern *oikumene*, either through our own or someone else's effort.³

To a considerable extent, the leitmotiv of the letter is the difficulty of the work Ortelius undertook, although Postel corrects some mistakes that the Brabantian mapmaker made. More broadly, Postel wishes for further developments in the field of cartography in order to solve two major issues: the calculation of the corresponding length of one degree of longitude and one degree of latitude.⁴ The letter is also an occasion for Postel to remind Ortelius of the relevance of a fourteenth-century Arabic work of geography to endorse Ortelius's cartographical achievements and Postel's cosmography — here understood as the discipline 'that, thumbing its nose at etymology, does not deal only with the earth, but with all the visible universe':⁵ Here, Postel is referring to the *Taqwīm al-buldān* (*The Arrangement of Countries*, 731/1321), a Ptolemaic mathematical geography composed by the historian, geographer, and governor of Hama Ismā'il ibn 'Alī Abū al-Fidā' (672/1273–732/1331), best known in Latin Christendom as Abulfeda or Abilfedea.⁶ Postel was the first to bring a copy of this Arabic text to Europe and — we learn from the letter he sent to Ortelius — was obliged to pledge it, alongside other manuscripts, to the future Palatine elector Otto Heinrich von der Pfalz in 1555, as we shall see:

If someday I am allowed to reclaim [my books] from the library of the duke of Bavaria, Otto Heinrich, to whom I was obliged to pawn my Abilfedea with fourteen other books for 200 ducats, you will be able to fully validate the proof of my labours, your efforts, and our meticulous work through it [i.e., Abilfedea].⁷

3 'Gratissimum plane munus Orтели charissime doctissimeque et diligentissime accipi a te editam tabulam Asiae, ea plane forma qua pridem ut aveo sic meditor totius nostrae Aquilonaris partis οικουμένην universalemque chartam quandoque aut nostra aut aliena sollicitudine in lucem protrahere'. Hessels, ed., *Abrahami Ortelii epistulae*, no. 19: *Guilielmus Postellus, to Abrahamus Ortelius*, p. 42. Perhaps curiously, Postel uses here the word *oikumene* (inhabited world). For differences between maps of the known world and maps of the entire earth, see Snyder, 'Map Projections in the Renaissance', pp. 365–81.

4 See in particular Hessels, ed., *Abrahami Ortelii epistulae*, no. 19: *Guilielmus Postellus, to Abrahamus Ortelius*, p. 45.

5 Bague, *The Wisdom of the World*, p. 3.

6 In this paper, I use the words cosmography and geography in accord with the definitions, infused with ambivalences, used by the authors discussed here. For an overview, see, for example, Milanese, 'Geography and Cosmography in Italy', pp. 443–68 and Tessicini, 'Definitions of Cosmography and Geography', pp. 31–50.

7 'Si quando ex bibliotheca illa ducis Bavariae D. Otthonis Henrici, ubi ducentis aureis numis Abilfedeam nostrum cum 14 aliis voluminibus oppignerare sum coactus, licebit recuperare, erit unde et meorum laborum et tuae diligentiae assertionisque nostrae sedulitatis

This small note is significant for several reasons, the most important for our purpose here being the role Postel envisions for his copy of Abū al-Fidā's *Taqwīm al-buldān* in incorporating a transformative discourse into both cosmography and its graphic representation, cartography. Postel's claim might help us shed some light on the exemplar of the *Taqwīm al-buldān* he owned and address how sixteenth-century cosmographers and cartographers intended to use Abū al-Fidā's work. The following section will explore Ortelius's map *Asiae orbis partium maximae nova descriptio* and the criticism he advanced in his chart of Asia of Italian cartographer Giacomo Gastaldi (c. 1500–1566) as a lens for understanding the influence of Postel's scholarly endeavours and his copy of the *Taqwīm al-buldān*. In the third and fourth sections, I will look at the impact of the codex Postel purchased on sixteenth-century European geographers, cosmographers, and cartographers as well as on seventeenth-century Arabists — who replaced the former group in the study of the *Taqwīm al-buldān* — enquiring into their reading practices and reviewing and integrating literature in the field. The case of Postel's exemplar of the *Taqwīm al-buldān* and its descendants offers us the opportunity to address two main topics of *Travelling Matters across the Mediterranean*: connectivity across time and space — in particular between South and North Europe — and the dialectical relationship that written artefacts have with the context in which they are situated and used.

Meanwhile, the analysis of the sixteenth- and seventeenth-century examples of usage of either the exemplar of Abū al-Fidā's *Taqwīm al-buldān* that Postel once owned or other manuscripts that were later copied from Postel's codex will enable us to reflect on the legacy of Postel's *marginalia*. Arguably, Postel's interventions helped shape his copy of Abū al-Fidā's *Taqwīm al-buldān* into a scholarly object endowed with a specific identity that partly guided the subsequent reception of both this particular copy and the *Taqwīm al-buldān* in general. Of particular interest are the annotations that Postel himself wrote while studying his copy. In this essay, I will focus on some geographical toponyms he transcribed or translated from Arabic. Indeed, Postel's annotations that accompany the *Taqwīm al-buldān* tell us about early modern knowledge transfers in much the same way as do later copies that directly or indirectly stem from Postel's exemplar of the *Taqwīm al-buldān*. This makes Postel's annotations as relevant as the original text to understanding the burgeoning of early modern geography, cosmography, and cartography as well as the nascent early modern European Orientalism.

testimonium possis abunde confirmare.' Hessels, ed., *Abrahami Ortelii epistulae*, no. 19: *Guilielmus Postellus, to Abrahamus Ortelius*, pp. 42–43.

A Thorny Issue: Abraham Ortelius, Giacomo Gastaldi, and Abū al-Fidāʾ

Scholarship has usually depicted Ortelius as a collector and an editor of maps rather than a mapmaker.⁸ Nevertheless, he had been known as a cartographer since at least 1563, as a letter from Hungarian humanist Johannes Sambucus (1531–1584) dated 22 September 1563 testifies.⁹ Born in Antwerp in 1527, Ortelius took over the family business, trading books and prints. He started purchasing maps from various printing houses in the Netherlands and during his voyages, especially in Italy, in the 1550s.¹⁰ In 1564, he published his first map, an eight-sheet mappemonde entitled *Typus orbis terrarum* (*Image of the World*), later included in his famous world atlas, the *Theatrum orbis terrarum* (*Theatre of the World*), published by Gilles Coppens de Diest in Antwerp in 1570. The 1567 eight-sheet map of Asia — later re-edited in his *Theatrum* — was the third map Ortelius published.

It is worth noting that in the title block placed in the lower right corner of Ortelius's *Asiae orbis partium maximae nova descriptio*, the cartographer suggests that the role that Abū al-Fidāʾ's *Taqwīm al-buldān* and Guillaume Postel played in sixteenth-century European cartography might have been greater than was generally thought. Significantly, any reference to Abū al-Fidāʾ disappeared in the *Asiae nova descriptio* (*New Description of Asia*) — the re-edited version of the *Asiae orbis partium maximae nova descriptio* — in the *Theatrum*.¹¹ Equally significantly, in the 1567 map of Asia, Ortelius accuses Italian mapmaker Giacomo Gastaldi of not declaring the use he made of Abū al-Fidāʾ's treatise to draw up his maps of Asia. Meanwhile, Ortelius acknowledges Postel's merits in having been the first to bring an exemplar of the *Taqwīm al-buldān* to Europe and, more broadly, in establishing a connection between European scholars and the Arabic intellectual tradition. Finally, he completes the scholarly portrait of Postel by expressing hope for a future translation of the Arabic text by the French scholar:

Honest readers, when Giacomo Gastaldi [...] published, in Venice a few years ago, the most recent description of Asia [printing] numerous maps, though little proportionate to each other — so that you could not combine them in any way — he followed the [cosmographical] tradition of Abilfedea Ishmael, the Arabic cosmographer, whose name he deleted [from his maps]. Guillaume Postel, eminent in mathematics and well

8 See, for instance, Koeman, *The History of Abraham Ortelius*, p. 14, Mangani, *Il 'mondo' di Abramo Ortelio*, pp. 147–83, and Van den Broecke, 'Abraham Ortelius's Library Reconstructed', pp. 25–50.

9 For the letter, see Hessels, ed., *Abrahami Ortelii epistolae*, no. 13; Johannes Sambucus, *Abrahamus Ortelius*, pp. 28–30 and Koeman, *The History of Abraham Ortelius*, p. 12.

10 See Van den Broecke, *Ortelius Atlas Maps*, p. 13 and Koeman, *The History of Abraham Ortelius*, pp. 13, 17.

11 See Van den Broecke, *Ortelius Atlas Maps*, no. 6.

versed in various languages, among which Arabic, brought this author [Abilfedea] to our Europe from the Middle East. We are waiting [Postel] to interpret this author entirely one day since [Abilfedea] is helpful to everyone in the cosmographical discipline. [So far] It seems [to me] right to represent Asia, once and for all, in one single map. The chart [will be] of the greatest utility for scholars.¹²

We know that the intended target of Ortelius's polemical claim consisted of three maps of Asia that Gastaldi published in Venice between 1559 and 1561: *Il disegno della prima parte del Asia* (*Illustration of the First Part of Asia*, 1559) (Fig. 3.2), *Il disegno della seconda parte dell'Asia* (*Illustration of the Second Part of Asia*, 1561), and *Il disegno della terza parte dell'Asia* (*Illustration of the Third Part of Asia*, 1561).¹³

Gastaldi, active in Venice between 1539 and 1566, was probably one of the most important cartographers in sixteenth-century Europe. His charts of Asia and Africa were re-edited and re-published across Europe and 'shaped Western European geographic views of the Middle East far into the eighteenth century in respect to two points — the usage of oriental or orientalizing toponymy and the study of oriental sources'.¹⁴ Despite Ortelius's criticism of Gastaldi and his claim to novelty, the former's *Asiae orbis partium maximae nova descriptio* does not add anything relevant compared to Gastaldi's maps of Asia, barring the future Bering Strait — unnamed in Ortelius's map — that he had placed in the north-east of the map.¹⁵ However, in his later *Theatrum orbis terrarum*, in the *Catalogus auctorum* (*List of Authors*), Ortelius describes Gastaldi as the main source of his new chart of Asia, the *Asiae nova descriptio*, among other charts, and — more significantly — no longer mentions Abū al-Fidā'.¹⁶

-
- 12 'Asiae recentiore descriptionem, spectatores candidissimi, cum Jacobus Castaldus, [...] secundum traditionem Abilfedae Ismaelis cosmographi Arabi (quem auctorem, Gulielmus Postellus, mathematicus insignis et multarum linguarum, etiam Arabicae, callentissimus, ex medio Oriente in nostram Europam attulit; eumque integrum aliquando ab eodem in communem rei cosmographicae utilitatem, interpretatum summo desiderio expectamus) plurimis, sed sibi minime commensuratis tabulis, adeo ut nullo modo coniungi poterant, ante paucos annos, Venetiis, suppresso auctoris nomine, aediderit; placuit eadem simul hac unica tabula, in commodiorem studiosorum usum, semel ab oculis ponere.' Ortelius, *Asiae orbis partium maximae nova descriptio*.
- 13 See Almagià, *Monumenta cartographica vaticana*, II, pp. 35–37 and 63–66.
- 14 Brentjes, 'Giacomo Gastaldi's Maps of Anatolia', p. 123.
- 15 See Ortelius, *Asiae orbis partium maximae nova descriptio*. However, Ortelius's map of Asia was not the first map to depict the Americas as a separate continent. The first cartographer to name the strait as Anian Strait and give a precise representation of it was Giacomo Gastaldi, who described the strait in his short book *La universale descrizione del mondo*, printed by Matteo Pagano in Venice in 1561. For the history of the Anian Strait before and after Gastaldi, see Horodowich, *The Venetian Discovery of America*, pp. 126–33.
- 16 Gastaldi's 1561 maps of Asia were the main cartographical sources of Ortelius's maps of Asia in the 1570 edition of the *Theatrum*, including his *Asiae nova descriptio*, his chart of *Tartaria*, and two maps of the Ottoman Empire. The maps of Anatolia and Persia in the *Theatrum* are mainly based on Gastaldi's 1564 chart of *Asia Minor*. See Ortelius, *Theatrum orbis terrarum*,



Figure 3.2. Giacomo Gastaldi, *Il disegno della prima parte del Asia* (Venice: Fabio Licinio, 1559), recto leaf, Bibliothèque nationale de France, Département Cartes et plans, GE C-5777 (1-3). Reproduced with the permission of the Bibliothèque nationale de France.

Scholarship has widely debated Gastaldi's sources for his maps of Asia and questioned Ortelius's statements in his 1567 chart. As scholarship has often argued, almost all the toponyms of China and Central Asia in *Dei viaggi di Messer Marco Polo* (*Travels of Sir Marco Polo*), edited by the well-known Italian geographer Giovanni Battista Ramusio (1485–1557) and included in the second volume of his *Navigazioni et viaggi* (*Navigations and Travels*), published posthumously in 1559, can also be found in Gastaldi's maps or in the lists of ancient and modern geographical names that Gastaldi added on the verso leaf of both *Il disegno della prima parte del Asia* (Fig. 3.3) and *Il disegno della seconda parte dell'Asia*, and in the title block in the right corner on the recto of *Il disegno della terza parte dell'Asia*.¹⁷ Nevertheless, Ramusio's edition of Marco Polo's *Viaggi* cannot adequately explain a vast number of Gastaldi's Persian, Arabic, and Turkish geographical names.¹⁸

An attempt to address the issue of Gastaldi's sources was made, based on Ortelius's reference to Abū al-Fidā's *Taqwīm al-buldān* in his chart of Asia.¹⁹ Close textual analysis shows that Ramusio himself copied coordinates and place names from Abū al-Fidā's *Taqwīm al-buldān*. Prefacing his edition of Marco Polo's travelogue, Ramusio reveals much about his Arabic source and, to acquaint readers with the Asian localities described by Polo, provides a list of twenty toponyms and their corresponding coordinates that were undoubtedly taken from the *Taqwīm al-buldān*:

The longitudes and latitudes described below have been taken from the book of Sir Abilfada Ishmael. A copy of it has ended up in my hand. It is very precious to me. [The coordinates] will be used for some lands and places named in this volume. For this reason, I have published them here, [hoping that] the benevolent reader could enjoy, to some extent, the beauty [of the book] of Sir Ishmael, which has been recently brought to light by God's will.²⁰

-
- fol. Avī. For further details, Almagià, *Monumenta cartographica vaticana*, II, pp. 34–37 and 63–66, Van den Broecke, *Ortelius Atlas Maps*, pp. 47, 214, 218–20, 225, Karrow, *Mapmakers of the Sixteenth Century*, pp. 2–3, 4, 8, 85, 91–92, 243–45, 388–93, Koeman, *The History of Abraham Ortelius*, pp. 56, 63, Meurer, *Fontes cartographici Orteliani*, pp. 37–38, 87–88, 151, 213. Ortelius's *Asiae nova descriptio* can be found in Van den Broecke, *Ortelius Atlas Maps*, no. 6.
- 17 See Nordenskjöld, 'The Influence of the "Travels of Marco Polo"', pp. 396–406, Almagià, *Monumenta cartographica vaticana*, pp. 65–66, and Sezgin, *Mathematical Geography*, II, pp. 105–15.
- 18 See, for example, Almagià, *Monumenta cartographica vaticana*, II, pp. 63–66, and Brentjes, 'Giacomo Gastaldi's Maps of Anatolia', pp. 123–41.
- 19 See, for example, the analysis of Almagià, *Monumenta cartographica vaticana*, II, pp. 63–66.
- 20 'Queste longitudini e latitudini che qui sotto descriveremo sono state cavate dal libro del signore Abilfada Ismael, una copia del quale io mi ritrovo nelle mani, e tengo molto cara; e serviranno ad alcune terre e luoghi nominati nel presente volume, a questo fine pubblicate da noi, acciò che 'l benigno lettore gusti in qualche parte della beltà del libro del predetto signore Ismael, venuto divinamente in luce a' nostri tempi'. See Ramusio, *I viaggi di Messer Marco Polo*, p. 72.

We know that Gastaldi and Ramusio established a successful partnership and a long-lasting friendship. Ramusio was the secretary of the Venetian Consiglio dei Dieci, which commissioned several wall maps from Gastaldi for the Sala dello Scudo at Palazzo Ducale,²¹ and the latter drew maps for Ramusio's third volume of his *Navigazioni et viaggi* (1556). Indeed, both Gastaldi and Ramusio were part of a network that stretched well beyond mere scientific interests in cartography and geography: they were members of the Accademia Veneziana or Accademia della Fama,²² which put in place an ambitious publication plan of geographical accounts and reports — echoing the Venetian political agenda and its imperialist ideology.²³

Scholars have thus suggested that Gastaldi used the exemplar of the *Taqwīm al-buldān* that his friend Ramusio owned. More precisely, modern scholarship has argued that Postel created a Latin or Italian translation of the *Taqwīm al-buldān* and that both Ramusio and Gastaldi had access to Postel's translation and used it to name or situate places otherwise unknown to European cartographers and geographers of the time.²⁴ Nevertheless, Abū al-Fidā's geography lacks Turkish and Persian names, while these are present in Gastaldi's 1559–1561 charts of Asia. This means that the *Taqwīm al-buldān* in itself cannot stand 'as a comprehensive source for Gastaldi's cartographic work.'²⁵ As scholarship has demonstrated, he also did not use Abū al-Fidā's coordinates, employing other sources, such as modern portolans.²⁶

Moreover, although considerable scholarship has argued the opposite, Postel never (fully) translated the *Taqwīm al-buldān*. In the preface to Marco Polo's account addressed to Girolamo Fracastoro (c. 1476–1553), Ramusio claims that he was lucky enough to get 'a part of an Arabic book that a man of our times, who knows many languages, has recently translated into Latin. This book was written more than two hundred years ago by a prince of Syria, Abilfada Ishmael.'²⁷ Ramusio somehow accessed a partial translation of the Arabic treatise: he quotes a perfectly translated section from Abū al-Fidā's

21 See Gallo 'Le mappe geografiche del Palazzo Ducale di Venezia', pp. 47–113.

22 See Cosgrove, 'Mapping New Worlds', p. 81. Woodward argues that Ramusio's son, Paolo, was a member of the Accademia Veneziana; see Woodward, *Maps as Prints in the Italian Renaissance*, p. 18.

23 For an overview of the Accademia Veneziana, see Testa, *Italian Academies*, pp. 96–122. For an overview of the role of cartography and geography in the Venetian political context, see Horodowich, *The Venetian Discovery of America*, pp. 93–98.

24 See, for example, Almagià, *Monumenta cartographica vaticana*, II, pp. 63–66.

25 Brentjes, 'Giacomo Gastaldi's Maps of Anatolia', p. 129.

26 For Gastaldi's and Abū al-Fidā's coordinates, see, for instance, Sezgin, *Mathematical Geography*, II, pp. 98–115. For Gastaldi's use of modern Ottoman sources, see Brentjes, 'Giacomo Gastaldi's Maps of Anatolia', pp. 123–41.

27 Ramusio, *I viaggi di Messer Marco Polo*, p. 24. The original reads as follows: 'una parte d'un libro arabo, ultimamente tradotta in latino per un uomo di questa età ben intendente di molte lingue, composto già dugento e più anni d'un gran principe di Soria detto Abilfada Ismael [...]:

description of the Caspian Sea in a brief explanation of Polo's toponyms preceding his *Viaggi*²⁸ but complains that 'this book on geography has not been fully translated, and most of the descriptions of each province are missing.'²⁹ Postel's *De orbis terrae concordia* (*On the World Concord*, 1544) and the undated manuscript Lat. 3402 at the Bibliothèque nationale de France display attempts he made to translate Arabic, in particular the Qur'ān.³⁰ Likewise, the Arabic manuscripts he owned, including his exemplar of the *Taqwīm al-buldān*, also show that Postel made efforts to gain knowledge of Arabic.³¹ Nevertheless, his translations have cast doubts on his Arabic proficiency,³² making it difficult to ascertain the extent to which Postel would have been able to translate such a complex geographical treatise without comparing his version to previous translations, as he probably did for the Qur'ān. Among other things, a (complete) translation of the *Taqwīm al-buldān* was not yet available in 1567, as we have read in Ortelius's *Asiae orbis partium maximae nova descriptio*.

Yet, Postel's copy of Abū al-Fidā's *Taqwīm al-buldān* undoubtedly circulated among Venetian geographers and cartographers in the 1550s, when Ramusio carried out the editorial project of the *Navigazioni e viaggi* (c. 1550–1556) and Gastaldi published some of his charts of Asia, as we shall see in the next section. Thus, it is worth studying the circulation of Postel's copy of the *Taqwīm al-buldān* to assess how a medieval Arabic geographical treatise was perceived and interpreted in sixteenth-century Europe and to estimate Postel's role — usually explained in general terms — in contributing to the dissemination of this Arabic geography.

Circulation and Use of Guillaume Postel's Copy of Abū al-Fidā's *Taqwīm al-buldān* in Italy

At about the same time as Ramusio and Gastaldi were working in Venice, Guillaume Postel was active as a cosmographer, publishing his *De universitate* (*On the Universe*) in 1552 and his *Cosmographicae disciplinae compendium* (*Compendium of Cosmography*) in 1561.³³ The French scholar produced a

28 See Ramusio, *I viaggi di Messer Marco Polo*, pp. 58–59.

29 Ramusio, *I viaggi di Messer Marco Polo*, p. 25. The original reads as follows: 'questo libro di geografia non è tradotto tutto, ma vi manca la maggior parte delle commentazioni sopra ciascuna provincia [...].'

30 For this issue, see De la Cruz Palma and Planas, 'Sobre el Corán latino de Guillaume Postel', 515–39.

31 See Saliba, 'Arabic Science in Sixteenth-Century Europe', pp. 115–64, Picherot, 'Postel arabisant?', pp. 75–90, and Comacchi, 'Antiquarianism or *Ṭaḥqīq*?', pp. 338–52.

32 For an overview, see Hamilton, 'The Qur'ān as Chrestomathy', p. 214 n. 5. For early criticism of Postel's knowledge of Arabic, see, for example, the letters from Joseph Justus Scaliger to Isaac Casaubon and to Johannes Buxtorf in Botley and van Miert, eds, *The Correspondence of Joseph Justus Scaliger*, IV, p. 184, and VI, p. 591.

33 Some references to both books can be read in Lestringant 'Cosmographie pour une restitution', pp. 227–46.

significant number of cosmographical treatises and chorographical works, such as his *Descriptio Alcahirae urbis* (*Description of Cairo*, 1549). Moreover, he authored various types of charts, including the *Description et charte de la Terre sainte* (*Description and Chart of the Holy Land*, 1553) and the *Polo aptata nova charta universi* (*New Chart of the Universe Adapted to the North Pole*, 1578).³⁴

As Ortelius states in his 1567 map of Asia, the *Asiae orbis partium maximae nova descriptio*, Postel brought the first copy of Abū al-Fidāʾ's *Taqwīm al-buldān* to Europe from the Middle East. Postel's exemplar is now in the manuscript Vaticano Arabo 266 at the Biblioteca Apostolica Vaticana in Rome.³⁵ During his second journey across the Ottoman Empire between 1549 and 1551, he purchased the manuscript, presumably in Damascus, thanks to the financial support of the fourth French ambassador to the Ottoman court, Gabriel de Luetz, whose entourage Postel joined in Jerusalem in November 1549.³⁶ Soon after his excursion across the Ottoman lands, Postel headed towards Venice between 1551 and 1552. He returned there in 1554, when he abandoned the project of the Syriac New Testament in Vienna, to defend some books he had previously published before the tribunal of the Venetian Inquisition, as they were suspected of containing heresy.³⁷

As has already been mentioned, Postel extensively annotated his *Taqwīm al-buldān*. The *marginalia* that the manuscript Vat. Ar. 266 contains reflect Postel's main interests in toponyms and their coordinates, and in particular his concern with the calculation of longitude.³⁸ The *Taqwīm al-buldān* is structured in two parts: a descriptive-mathematical geography and a series of tables (*taqwīm*) with no maps. In the tables, Abū al-Fidāʾ writes the name he attributes to each locality listed on the *verso* pages, in addition to his sources, the locality's longitude, its latitude, its astronomical climate, its common name, and the vocalization for the toponym he had first provided.³⁹ In the margins of the manuscript, next to the tables, Postel annotated more than thirty Latin translations or transliterations of Arabic toponyms, mostly located on the shores of the Mediterranean, in the Arabian peninsula, and in Central Asia. As the letter to Ortelius has shown, Postel annotated the Arabic treatise in the hope of achieving a more detailed and more precise knowledge of the northern hemisphere for his cosmographical works and maps — although his interest was not merely scientific but presumptively, political.

Despite spelling and orthographic errors, it seems that Postel attempted to revise classical and Ptolemaic toponyms according to their corresponding

34 See Destombes, 'Guillaume Postel cartographe', pp. 361–71 and Milanese, 'Guillaume Postel cosmografo', pp. 45–54.

35 See BAV, MS Vat. Ar. 266, fols 1^r–125^v.

36 For further details, see the letter Postel sent to his friend Andreas Masius on the 24 February 1555: De Chauffepié, *Nouveau dictionnaire*, III, pp. 228–29.

37 For the trial, see Kuntz, *Guillaume Postel*, pp. 115–29.

38 See Comacchi, 'Antiquarian or *Tahqiq?*', pp. 338–52.

39 See BAV, MS Vat. Ar. 266, fols 1^r–125^v.

Arabic names. We might assume that he used some cartographical or geographical texts to decipher the Arabic toponyms, especially those located in Asia. Postel might have used the modern maps of Anatolia and Persia — the *Natolia, nova tabula* (*Anatolia: A New Chart*) and *Persia, nova tabula* (*Persia: A New Chart*) — that Gastaldi engraved for Pietro Andrea Mattioli's Italian vernacular edition of Ptolemy's *Geography*, printed by Giovanni Battista Pedrezzano in Venice in 1548.⁴⁰ As Sonja Brentjes has demonstrated, Gastaldi's 1548 charts offer a good repository of Westernized ancient and medieval Asian toponyms as well as a few modern Turkish names.⁴¹ At the same time, we can speculate that Gastaldi incorporated some of the toponyms that we can read in Postel's exemplar of the *Taqwīm al-buldān* in his revised and enriched maps of Asia printed between 1559 and 1561 — such as *Il disegno della prima parte del Asia* — combining Postel's copy of the *Taqwīm al-buldān* with other more up-to-date sources. This not only confirms that the *Taqwīm al-buldān* cannot explain the abundance of modern names in Gastaldi's charts of Asia, but also helps us understand the perception that the Italian cartographer had of this Arabic treatise: a — probably — limited and outdated source of geographical information. Likewise, in his preface to Polo's *Viaggi*, Ramusio seems to explicitly introduce the *Taqwīm al-buldān* as a historical source useful for reading Polo's travelogue, obtaining 'a peculiar geography of those regions of Asia and Africa known at the author's times',⁴² and also useful for acquiring 'a better knowledge of the ancient names of those cities quoted in the histories of Alexander the Great and Strabo'.⁴³

What follows here is a comparison between some *marginalia* in Postel's manuscript, Ramusio's *Dei viaggi di Messer Marco Polo*, Gastaldi's 1548 charts of Anatolia and Persia, and Gastaldi's *Il disegno della prima parte del Asia*. When looking at how place names correspond to one another, it should be remembered that some translations of Anatolian and Persian toponyms in Postel's copy of the *Taqwīm al-buldān* are annotated by a later sixteenth-century hand and that Ramusio used inconsistent spelling patterns in naming the same geographical places while editing the travel reports for the second volume of his *Navigazioni et viaggi*, including Marco Polo's travelogue.⁴⁴

40 See Gastaldi, *Natolia, nova tabula* and Gastaldi, *Persia, nova tabula*. The edition is an Italian translation of Sebastian Münster's Latin version of Ptolemy's *Geography* (1540).

41 See Brentjes, 'Giacomo Gastaldi's Maps of Anatolia', pp. 123–41.

42 Ramusio, *I viaggi di Messer Marco Polo*, p. 25. The original reads as follows: 'una geografia particular delle parti di Asia e Africa delle quali s'avea notizia a' suoi tempi [...]']

43 Ramusio, *I viaggi di Messer Marco Polo*, p. 25. The original reads as follows: 'piú certa cognizione di molti nomi antichi, citati nell'istorie di Alessandro e Strabone [...]']': The 'histories of Alexander the Great' are presumptively Quintus Curtius Rufus's *Historiae Alexandri Magni* printed in Venice around 1471 by Wendelin von Speyer.

44 For the orthographic variations encountered in Ramusio's *Viaggi* and listed in the footnotes below, see the *Lemmario* in Ramusio, *Dei Viaggi di Messer Marco Polo* [...] Edizione critica digitale.

Table 3.1. Comparison between toponyms occurring in Gastaldi's *Natolia, nova tabula*, Gastaldi's *Persia, nova tabula*, Postel's manuscript, Ramusio's *Dei viaggi di Messer Marco Polo*, Gastaldi's *Il disegno della prima parte del Asia*, and modern English names.

Gastaldi's <i>Natolia, nova tabula</i> and <i>Persia, nova tabula</i> (1548)	Postel's copy of the <i>Taqwīm al-buldān</i> (BAV, MS Vat. Ar. 266)	Ramusio's <i>Dei viaggi di Messer Marco Polo</i> (1559)	Gastaldi's <i>Il disegno della prima parte del Asia</i> (1561) ⁴⁵	Modern English names
—	Merdin ⁴⁶	Merdin, ⁴⁷ Meridin ⁴⁸	Merdin	Mardin (Turkey)
—	Cozrin ⁴⁹	—	—	Karzin (Iran)
—	Seruestan ⁵⁰	—	Serustan	Sarvestan (Iran)
Hormus ⁵¹	[ormuz] ⁵²	Ormus ⁵³	Ormus (ancient name: Armusa)	Ormus (Iran)
Setelia ⁵⁴	Attalia ⁵⁵	—	Settelia (ancient name: Attalia)	Antalya (Turkey)

Table continued opposite

- 45 For the names encountered in Gastaldi's map and listed in Table 3.1, see *Il disegno della prima parte dell'Asia*, recto leaf. The ancient toponyms are listed on the verso leaf. *Malatia* is on the verso leaf only.
- 46 BAV, MS Vat. Ar. 266, fol. 70^v. In Fra Mauro's world map, we can find the variant *Merdi*.
- 47 Ramusio, *I viaggi di Messer Marco Polo*, p. 72. The name appears in the list of places that Ramusio claims he took from the Arabic treatise. The list prefaces Polo's travelogue.
- 48 Ramusio, *I viaggi di Messer Marco Polo*, pp. 92, 95. The toponym occurs in Polo's travelogue. Variants of *Meridin* can be found in Ramusio's edition of Hayton of Corycus's *Storia dei Tartari* and *Viaggio di Iosafa Barbaro alla Tana e nella Persia* in the second volume of *Navigazioni et viaggi*. In the manuscript tradition of Polo's travel account, the same locality is also called *Meridim* and *Masa Meredimi*.
- 49 BAV, MS Vat. Ar. 266, fol. 81^v.
- 50 BAV, MS Vat. Ar. 266, fol. 82^v.
- 51 The name can actually be read in Gastaldi, *Arabia felix, nova tabula*. The map is included in Mattioli's edition of Ptolemy's *Geography*. In Fra Mauro's world map, we can find the name *Isola Hormus*.
- 52 BAV, MS Vat. Ar. 266, fol. 83^v. The annotation is not by Postel. A later sixteenth-century hand added it.
- 53 Ramusio, *I viaggi di Messer Marco Polo*, pp. 28, 102, 106, 107, 109, 269, 278, 293, 294. The toponym occurs in both Ramusio's preface and Polo's travelogue. In the manuscript tradition of Polo's account, the same place presents numerous orthographic variations, such as *Cremosor*, *Cormose*, *Formosa*, *Churmos*. In Ramusio's edition of *Viaggio di un mercante che fu nella Persia* in the second volume of *Navigazioni et viaggi*, the same locality is called *Orimes*.
- 54 Gastaldi, *Natolia, nova tabula*.
- 55 BAV, MS Vat. Ar. 266, fol. 91^v.

Gastaldi's <i>Natolia, nova tabula</i> and <i>Persia, nova tabula</i> (1548)	Postel's copy of the <i>Taqwīm al-buldān</i> (BAV, MS Vat. Ar. 266)	Ramusio's <i>Dei viaggi di Messer Marco Polo</i> (1559)	Gastaldi's <i>Il disegno della prima parte del Asia</i> (1561)	Modern English names
Capadocia ⁵⁶	Amasia ⁵⁷	—	Amasia (ancient name: Amasia)	Amasya (Turkey)
Melitene ⁵⁸	Malta Melitene ⁵⁹	—	Malatia (ancient name: Melitene)	Malatya (Turkey)
Arsingan ⁶⁰	[Arazingan] ⁶¹	Arcingan ⁶²	Arzingan (ancient name: Aziris)	Erzincan (Turkey)
Terbezonda, ⁶³ Trebsonda ⁶⁴	Trapezun ⁶⁵	Trabesonda ⁶⁶	Trebsonda (ancient name: Trapezus)	Trabzon (Turkey)
—	[Arzen] ⁶⁷	Argiron ⁶⁸	Arazen	Arzen (Turkey)
—	[malagirt] ⁶⁹	—	Malagirt	Malazgirt (Turkey)
Derbent ⁷⁰	[Derbent] ⁷¹	—	Derbent	Derbent (Russia)

⁵⁶ Gastaldi, *Natolia, nova tabula*.

⁵⁷ BAV, MS Vat. Ar. 266, fol. 92^v. This name might have been annotated by the same hand that added *ormuz*. *Amasia* also occurs in Fra Mauro's world map.

⁵⁸ Gastaldi calls the city *Melitene* in his *Tabula Asiae I* — representing the ancient Cappadocia — in Mattioli's edition of Ptolemy's *Geography*.

⁵⁹ BAV, MS Vat. Ar. 266, fol. 92^v.

⁶⁰ Gastaldi, *Persia, nova tabula*. The toponym *Arzengan* occurs in Fra Mauro's world map.

⁶¹ BAV, MS Vat. Ar. 266, fol. 93^v. This toponym is by the same hand that annotated *ormuz*.

⁶² Ramusio, *I viaggi di Messer Marco Polo*, p. 91. The toponym occurs in Polo's travelogue. In the manuscript tradition of Polo's travels, we can read similar orthographic variations, such as *Arçinga* and *Arcinga*.

⁶³ Gastaldi, *Natolia, nova tabula*. Gastaldi calls the same city *Trapez* in his *Tabula Asiae I* in Mattioli's edition of Ptolemy's *Geography*. The toponym *Trabexonda* can be found in Fra Mauro's world map.

⁶⁴ Gastaldi, *Persia, nova tabula*.

⁶⁵ BAV, MS Vat. Ar. 266, fol. 93^v.

⁶⁶ Ramusio, *I viaggi di Messer Marco Polo*, p. 89. The toponym occurs in Polo's travelogue.

⁶⁷ BAV, MS Vat. Ar. 266, fol. 93^v. A final *g* in *Arzen* has been crossed out. This toponym is in the same hand as *ormuz* and *Arazingan*. The variant *Arzeron* can be found in Fra Mauro's world map.

⁶⁸ Ramusio, *I viaggi di Messer Marco Polo*, p. 91. The toponym occurs in Polo's travelogue. However, the name might refer to today's Erzurum in Turkey.

⁶⁹ BAV, MS Vat. Ar. 266, fol. 94^v. This toponym is by the same hand that added *ormuz*, *Arazingan*, and *Arzen*.

⁷⁰ Gastaldi, *Persia, nova tabula*.

⁷¹ BAV, MS Vat. Ar. 266, fol. 97^v. This name is in the same hand as *ormuz*, *Arazingan*, *Arzen*, and *malagirt*.

We should also keep in mind that, despite some significant innovations and their claims to novelty, all these authors drew abundantly on ancient and medieval Western sources, such the famous Venetian world map (c. 1450) by Fra Mauro (c. 1400–1459/1464) — that has, among its sources, Polo’s medieval accounts of Asia.⁷² One significant result of the analysis is that most of Ramusio’s toponyms described in the preface addressed to Fracastoro and those listed before Polo’s travelogue, as well as the translation of the Caspian Sea mentioned before, were definitely taken from the *Taqwīm al-buldān* but have no parallels in Postel’s *marginalia* or works.⁷³ On the other hand, Gastaldi might have read what Postel annotated in his copy of the *Taqwīm al-buldān* in much the same way as Postel himself and the second reader of the *Taqwīm* had read the Arabic manuscript through the eyes of a cartographer using, among the others, Gastaldi’s maps. Nevertheless, evidence of Ramusio’s acquaintance with Postel’s annotations can be traced in the introduction addressed to Fracastoro, where the Italian geographer quotes from longer comments by the French scholar on Abū al-Fidā’s determination of the prime meridian.⁷⁴ Ramusio argues that Abū al-Fidā ‘does not place the first meridian [to pass] through the Fortunate Islands, like Ptolemy, but at ten degrees distance from where Ptolemy placed it, from the coasts of Africa.’⁷⁵

Circulation and Use of Guillaume Postel’s Copy of Abū al-Fidā’s *Taqwīm al-buldān* in Northern Europe

As the letter Postel forwarded to Ortelius in 1567 confirms, Postel — unable to secure financial support during the Inquisition trial — pawned his manuscript copy of the *Taqwīm al-buldān* to the duke of Bavaria and future Palatine elector Otto Heinrich von der Pfalz in 1555. Otto Heinrich purchased fifteen Arabic, Ottoman Turkish, Syriac, and Ge’ez manuscripts from Postel for 200 ducats and relocated them in the Bibliotheca Palatina in Heidelberg, as we read in a letter Postel sent to Masius on 24 February 1555⁷⁶ and in his preface to the *Cosmographicae disciplinae compendium*.⁷⁷ Postel’s reference to the *Taqwīm*

72 For Fra Mauro and Ramusio, see, for instance, Davies, ‘The Wondrous East’, pp. 215–34. For Ramusio’s sources and the medieval manuscript tradition of Polo’s *Viaggi*, see Andreose and others, ‘Le fonti di Ramusio’. For the toponyms occurring in Fra Mauro’s map listed in the footnotes below, see Falchetta, *Storia del Mappamondo di Fra’ Mauro*, pp. 143–251.

73 The translation of the Caspian Sea is neither among Postel’s annotations nor in any of his works. The corresponding Arabic text in Postel’s exemplar is BAV, Vat. Ar. 266, fols 16^v–17^r. For Ramusio’s introductory toponyms, which are not in Table 3.1, see Ramusio, *I viaggi di Messer Marco Polo*, pp. 72–73.

74 See BAV, Vat. Ar. 266, fols 9^r, 29^r.

75 Ramusio, *I viaggi di Messer Marco Polo*, p. 25. The original reads as follows: ‘nelle longitudini non comincia dall’isole Fortunate, come fa Tolomeo, ma dalli primi liti delle marine d’Africa, e dice essere differente dieci gradi di quello che fa Tolomeo.’

76 See De Chaupepié, *Nouveau dictionnaire*, III, pp. 228–29.

77 See Postel, *Cosmographicae disciplinae compendium*, 22^v.

al-buldān attests to the economic value he attached to the manuscript. His exemplar was certainly a unicum at the time, and Postel did not hesitate to value it more highly than his other Oriental manuscripts. In particular, we learn from Postel's letter to Masius in February 1555 that he had purchased the manuscript 'for sure for 60 ducats in Damascus'⁷⁸ and was likely to pawn his copy of the *Taqwīm al-buldān* to Otto Heinrich 'for 80 ducats.'⁷⁹ The duke was a renowned bibliophile: his *Kammerbibliothek* (private library) in Neuburg counted around 390 tomes, and he significantly contributed to the Palatine library with his purchases.⁸⁰

Among the Arabic exemplars of Abū al-Fidā's *Taqwīm al-buldān* that have preserved the text in its entirety, manuscript Vat. Ar. 266 at the Biblioteca Apostolica Vaticana in Rome is Postel's exemplar, as noted. This was the copy he pledged to Otto Heinrich, bounded together with that of Ibn Buṭlān (c. 458/1066) *Taqwīm al-ṣiḥḥa* (*Tables of Health*).⁸¹ After the sack of the city of Heidelberg by the Catholic League in 1622 during the Thirty Years' War, the new Catholic elector Maximilien of Bavaria seized the library and then donated it to Pope Gregory XV as 'an extraordinary proof of piety',⁸² a symbolic act of victory in confessional terms against the Calvinists. The Greek librarian at the Vatican Library, Leone Allacci, was dispatched to Heidelberg to oversee the transport of the volumes to Rome between December 1622 and July 1623. Allacci selected around 2,500 manuscripts — including, of course, Postel's codex of Abū al-Fidā's *Taqwīm al-buldān* — and 5,000 printed books. The transformation of Postel's *Taqwīm al-buldān* into an economic tool, which arose from the difficult circumstances of its owner, set the stage for its subsequent reshaping as a component within a broader collection of tokens of religious devotion. However, both these stages in the social life of the object exerted specific influences on its usages.

When the copy was in Heidelberg and in Rome, various European Arabists became interested in it. Orientalists such as Jakob Christmann (1554–1613), Sebastian Tengnagel (1573–1636), Erpenius (1584–1624), and John Greaves (1602–1652) borrowed, read, and in some cases copied Postel's exemplar.⁸³ To give an idea of the growing interest in the *Taqwīm al-buldān* and the significance that Postel's manuscript acquired between the end of the sixteenth and the first half of the seventeenth century, I will first consider the exemplars that were copied directly from Postel's codex and then its descendants:⁸⁴

78 See De Chaufepié, *Nouveau dictionnaire*, III, p. 229.

79 See De Chaufepié, *Nouveau dictionnaire*, III, p. 229.

80 See Metzger, "Ein recht fürstliches Geschäft", pp. 275–316 and Wagner and Schlechter, "Von der Neuburger Kammerbibliothek", pp. 137–54.

81 BAV, MS Vat. Ar. 266, fols 127^r–68^r.

82 Bepler, "Vicissitudo Temporum", p. 955.

83 For an overview, see Levi della Vida, *Ricerche sulla formazione del più antico fondo*, pp. 327–37 and Jones, *Learning Arabic*, pp. 17–18, 60.

84 What follows aims first at reviewing studies that describe the history of the *Taqwīm*, in particular Giorgio Levi della Vida's catalogues, and updating and merging existent data.

1. Vienna, Österreichische Nationalbibliothek, MS A.F. 5: this manuscript was extensively annotated by Sebastian Tegnagel, librarian of the Imperial Library in Vienna from 1608 to 1636. It was copied from Postel's exemplar by Ottoman prisoner Ibrāhīm Dervīş for Tegnagel between September and October 1610.⁸⁵ German Orientalist Wilhelm Schickard (1592–1635) copied and only in part translated Dervīş's copy of the *Taqwīm al-buldān*.⁸⁶ As we can read in the colophons, Schickard finished the transcription of Abū al-Fidā's tables in October 1631 and the descriptive part of the text in February 1632, now Bibliothèque nationale de France MS Ar. 2242 and MS Ar. 2241, respectively. Later, German Orientalist Siegmund Gottlob Seebisch (1669–1753) copied Schickard's codex — now Dresden, Sächsische Landesbibliothek – Staats- und Universitätsbibliothek Dresden, MS Mscr. Dresd. Eb. 379.⁸⁷

2. Cambridge, Cambridge University Library, MS Dd. 1.2: this codex was copied from Postel's manuscript by Dutch Orientalist Erpenius in 1613. As Giorgio Levi della Vida has suggested, the registers of the Bibliotheca Palatina attest that Erpenius borrowed a manuscript containing the second part of *al-Majmū' al-mubārak* (*The Blessed Collection*), the world history by Coptic historian Jirjis ibn al-'Amīd known as al-Makīn. This text was another codex Postel had pawned to Otto Heinrich in 1555, and Erpenius never returned it. It is now in Oxford, Bodleian Library, MS Marsh 309.⁸⁸ Presumably, the Dutch Orientalist borrowed Postel's exemplar of the *Taqwīm al-buldān* at the same time, aiming to prepare a Latin translation of the Arabic geography, as he confessed in a letter to Isaac Casaubon (1550–1614) in 1614.⁸⁹ Erpenius's exemplar was later read by English Orientalists John Greaves — whose hand can be recognized among the annotations in the manuscript — and Samuel Clarke (1624–1669), Edward Pococke's (1604–1691) student.⁹⁰

We know that during his stay in Rome in 1639 John Greaves also read the copy that Postel had formerly owned when the Bibliotheca Palatina was moved

Second, and more importantly, besides the mobility of written artefacts it intends to bring to the fore the similarities of reading practices between Postel, sixteenth-century Italian geographers, and seventeenth-century northern European Arabists, setting the terms for a future discussion on the origins of modern European Orientalism and the role of Renaissance Italian geographical studies.

85 For this manuscript and Tegnagel's manuscript collection and his collaboration with Ibrāhīm Dervīş, see Çelik and Petrolini, 'Establishing an "Orientalium linguarum Bibliotheca"', pp. 175–231.

86 See Ullmann, 'Arabische, türkische und persische Studien', pp. 121–26.

87 See Ullmann, 'Arabische, türkische und persische Studien', pp. 121–26 and Babinski, 'Ottoman Philology', pp. 242–43 n. 38.

88 See Levi della Vida, *Ricerche sulla formazione del più antico fondo*, p. 334.

89 For the letter, see Jones, 'The Medici Oriental Press (1584–1614)', p. 106 n. 47.

90 For Clarke's attempt to translate the *Taqwīm al-buldān*, see Hall, 'Arabick Learning', p. 151, and a letter from Wallis to Oldenburg in Hall and Boas Hall, eds, *The Correspondence of Henry Oldenburg*, pp. 232–37.

to the Vatican Library.⁹¹ Greaves had earlier purchased a sixteenth-century copy of the *Taqwīm al-buldān* in Istanbul in 1638⁹² — now Oxford, Bodleian Library, MS Greaves 2. He made some use of Postel's exemplar to edit the Arabic text, comparing Postel's copy, the copy Erpenius transcribed, his own copy, and the manuscripts that Pococke purchased in the 1630s — now Oxford, Bodleian Library, MS Pococke 196 and MS Pococke 379.⁹³ MS Pococke 379, which bears *marginalia* in Greaves's hand, was later transcribed by William Guise (c. 1653–1683) — now Oxford, All Souls College, MS 287. Notably, Greaves never mentions Postel when discussing the scholars who read the *Taqwīm* in the preface to his edition of the text, where he is the first to reconstruct the history of the *Taqwīm*'s fortune, from Ramusio to Schickard.⁹⁴

Indeed, Greaves was the first European scholar to succeed in publishing a Latin translation of Abū al-Fidā's geographical treatise, although an abridged one. His *Chorasmiae, et Mawaralnahrae [...] descriptio* (*Description of Khwārezm and Mā warā' al-Nahr*, 1650) comprises Abū al-Fidā's general description of the globe and the Asian regions of Khwārezm and Mā warā' al-Nahr. John Hudson's *Geographiae veteris scriptores graeci minores* (*Minor Greek Writers in Ancient Geography*), published after Greaves's death, includes the latter's Latin version of Abū al-Fidā's chapter on the Arabic peninsula and the corresponding Arabic text and tables, besides a reprint of Greaves's *Chorasmiae, et Mawaralnahrae*.⁹⁵ However, as Gerald J. Toomer suggests, letters to Pococke show the difficulties Greaves faced while working on the edition and translation of the *Taqwīm al-buldān* due to the discrepancies between exemplars and the corruptions of the manuscript he purchased. This led him to question the correctness of Abū al-Fidā's geographical coordinates for drawing maps.⁹⁶

The interest in Abū al-Fidā's treatise surprisingly continued in the second half of the seventeenth century. The French case of Melchisédech Thévenot (c. 1620–1692) sheds light on the legacy of Postel's copy of the *Taqwīm al-buldān* and on the intellectual complexity and broader dialectical movements of early modern Orientalism in seventeenth-century Europe in general.⁹⁷ In 1671, Thévenot wrote to the secretary of the Royal Society in London, Henry

91 See Levi della Vida, *Ricerche sulla formazione del più antico fondo*, pp. 334–35 and Toomer, *Eastern Wisdom and Learning*, p. 173.

92 See Greaves, *Chorasmiae, et Mawaralnahrae [...] descriptio*, p. Aa3'.

93 For the manuscripts Greaves used, see Toomer, *Eastern Wisdom and Learning*, pp. 28, 172–75. See also Mercier, 'English Orientalists', pp. 173–74 and Levi della Vida, *Ricerche sulla formazione del più antico fondo*, p. 334.

94 See Greaves, *Chorasmiae, et Mawaralnahrae [...] descriptio*, p. Aa3^{r-v}.

95 See Greaves, *Chorasmiae, et Mawaralnahrae [...] descriptio*, Greaves, *Abulfedae descriptio Chorasmiae*, ch. 8, pp. 1–80, and Greaves, *Abulfedae descriptio Arabiae*, ch. 9, pp. 1–76.

96 For a contextualization of the letters and Greaves' publication, see Toomer, *Eastern Wisdom and Learning*, pp. 173–75.

97 For a thorough reconstruction of Thévenot's attempt to publish and translate the *Taqwīm al-buldān*, see Dew, *Orientalism in Louis XIV's France*, pp. 81–130.

Oldenburg (c. 1618–1677), looking for manuscripts of the *Taqwīm al-buldān*.⁹⁸ Oldenburg asked the mathematician John Wallis (1616–1703) in Oxford for information about copies of the Arabic geography. Wallis reported on the exemplars that Pococke had collected and Clarke had compared and the manuscript that Greaves had purchased:

Concerning Abulfeda: where Mr Grave's copy is, I cannot tell, nor how much paines hee took about it. But Dr Pocock hath two excellent Copies of it. And Mr Clark had (before his death) taken a great deal of paines in comparing them, & other Geographers with them; in order to an Edition of it.⁹⁹

Thanks to Pococke's help, Wallis was also able to locate in Cambridge the codex copied by Erpenius, which Greaves used for his translation. Besides containing information on the exemplars of the *Taqwīm al-buldān* in England, a second letter from Wallis to Oldenburg confirms Greaves's disappointment in the *Taqwīm al-buldān*:

Since I sent away my last, I have received from Dr Pocock the inclosed Paper in Arabick & (not Latine, but) English, which therefore (because you desire it for a forraigner I have, in two blank pages, put into Latine. He tells mee that Mr John Graves's Abulfeda, (much inferiour to those copies of his,) Mr Clark had the use of, as also of that at Cambridge which had been Erpenius's, written (he thinks) by Erpenius own hand. That of Mr John Grave, he supposeth is still in the hands of his brother Dr Thomas (not Edward) Grave [...].¹⁰⁰

At the time, Thévenot was planning to produce a complete translation of the *Taqwīm al-buldān* and publish the original text in Arabic, as testified in a letter Thévenot sent to the statesman Jean-Baptiste Colbert in 1669.¹⁰¹ Overall, Thévenot's project failed. The difficulties he encountered in borrowing or purchasing copies of the *Taqwīm al-buldān* and the lack of funding to secure the printing plan, including the absence of adequate Arabic types, were the tip of the iceberg of what Nicholas Dew has called the 'fragile state of Oriental learning in Paris in the 1660s'.¹⁰² Nevertheless, as Dew shows, Thévenot obtained access to Schickard's copy of Dervīş's *Taqwīm al-buldān* — based on Postel's exemplar — and to the autograph that Jacob Golius (1596–1667) acquired during his voyages, today's Leiden, Universiteitsbibliotheek Leiden,

98 See Gallien, 'Orientalist Pococke', pp. 7–8.

99 Beeley and Scriba, eds, *Correspondence of John Wallis*, no. 247: *Wallis to Oldenburg*, 23 November/[3 December] 1671, p. 536.

100 Beeley and Scriba, eds, *Correspondence of John Wallis*, no. 249: *Wallis to Oldenburg*, 27 November/[7 December] 1671, pp. 538–39.

101 Nicholas Dew has published an extract from Thévenot's letter to Colbert: see Dew, *Orientalism in Louis XIV's France*, pp. 118–19.

102 Dew, *Orientalism in Louis XIV's France*, p. 127.

MS Or. 57.¹⁰³ It then took some years to publish a short extract — including some geographical tables — from a Latin translation of Abū al-Fidā's *Taqwīm al-buldān* in the first volume of Thévenot's *Relations de divers voyages curieux* (*Reports of Various Curious Travels*, 1663–1696).¹⁰⁴ The translation that Thévenot published was presumably made by Ibrāhīm al-Ḥāqilānī (1605–1664), and was based on an 'exemplar in the Vatican Library',¹⁰⁵ namely Postel's copy of the *Taqwīm al-buldān*.

Because of the advancement of Arabic studies in the seventeenth century, we can assume that authors such as Thévenot, Greaves, or Erpenius probably ignored Postel's *marginalia*. However, the content of Postel's comments, which reveals what drove him to acquire and read the Arabic manuscript, still reverberates in the reading practices of seventeenth-century Orientalists, as it does in the works of sixteenth-century Italian geographers. For instance, in the short *avis* (information) prefacing the extracts translated from the *Taqwīm al-buldān*, Thévenot informs readers about the significance of the Arabic geographical tradition for learning the correct coordinates of Asian localities. He goes on to praise Abū al-Fidā's *Taqwīm al-buldān* in particular, because the Arabic geographer collected 'the best data he could find in other geographies, and, above all, because he annotated the degrees of longitude and latitude for each place'.¹⁰⁶ The *Taqwīm al-buldān* was understood and used in a similar way by Greaves. As such, the criticism of Abū al-Fidā's geography later expressed by Greaves denotes that the English scholar was initially interested in the *Taqwīm al-buldān* mainly because of the coordinates of lesser known Asian regions, which he then partially used in his *Binae tabulae geographicae* (*Two Geographical Tables*, 1648).¹⁰⁷ He also used the manuscript to situate localities named in the margin of his partial translation of the *Masā'il 'Abdallāh ibn Salām* (*Questions of 'Abdallāh ibn Salām*) — now included in Oxford, Bodleian Library, MS Locke c. 27. This action is obvious, as Greaves insisted on the inaccuracy of data compared to other modern texts and thus on the uselessness of the Arabic treatise for cartographical purposes.

103 For difficulty in obtaining Golius's codex, see Dew, *Orientalism in Louis XIV's France*, pp. 113–14.

104 See Thévenot, ed., *Relations de divers voyages curieux*, pp. 18–22 and Dew, 'Reading Travels in the Culture of Curiosity', pp. 53–58. A further excerpt was published by Johann Jakob Reiske (1716–1774) at the end of the eighteenth century: see Bevilacqua, *The Republic of Arabic Letters*, pp. 163–64 and p. 287 n. 161.

105 Thévenot, ed., *Relations de divers voyages curieux*, p. 18. The original reads as follows: 'un exemplaire dans la Bibliothèque Vaticane'. For al-Ḥāqilānī, see Dew, 'Reading Travels in the Culture of Curiosity', pp. 42, 54.

106 Thévenot, ed., *Relations de divers voyages curieux*, p. 18. The original reads as follows: 'ce qu'il a trouvé de meilleur chez les autres geographes, et surtout, d'autant qu'il a marqué les degrez de longitude et de latitude de chaque place'.

107 See Mercier, 'English Orientalists', pp. 163–74.

Conclusion

The question of whether and in which ways the exemplar of Abū al-Fidā's *Taqwīm al-buldān* brought to Europe by Postel circulated and — more importantly — influenced geographical and Arabic studies can be answered. On the one hand, Postel's *Taqwīm al-buldān* enjoyed significant mobility. This arguably enhanced its significance, facilitated by extensive loans and copies, although Postel's biography and the broader context of seventeenth-century European politics also influenced this. On the other hand, since Ramusio openly declared having used the *Taqwīm al-buldān* to learn the names and coordinates of specific places in Asia described by Marco Polo, the knowledge within the *Taqwīm al-buldān* had a practical nature that was preserved over the centuries, even among seventeenth-century Orientalists. This highlights the need at the time for a concrete realization of both modern and historical maps and descriptions of Asia. Finally, the use made of the *Taqwīm al-buldān* echoes the *marginalia* in Postel's codex of the work. As these substantially confirm, the main interest in Abū al-Fidā's geography was its toponyms and coordinates, which the Arabic author had included mainly in the second part of his treatise, as well as the determination of one degree of longitude. In other words, Postel's *marginalia*, combined with his exemplar's mobility, helped shift the function of the *Taqwīm al-buldān* from mathematical geography to cartography. Here I can make two additional final points. First, the way Abū al-Fidā's *Taqwīm al-buldān* was read from Postel onwards reminds us of the state of geographical studies in Europe and the practical nature of geography and cosmography. These disciplines took advantage of the authority of existing ancient or medieval travel and geographical accounts to describe or graphically visualize the world, although the information that the treatise provided was soon considered historical, antiquarian, or inadequate in the sixteenth century. Scholarship in the field has already acknowledged the importance of recovering textual sources and extending the canon of authors, along with the relevance of geographical and cartographical innovations, in shaping the European understanding of both modern and ancient worlds.¹⁰⁸ Secondly, the interest in Abū al-Fidā's *Taqwīm al-buldān* and Postel's codex among Arabists illustrates the lasting importance of geography in early modern European Orientalism.¹⁰⁹

Nevertheless, the case of Postel's exemplar of Abū al-Fidā's *Taqwīm al-buldān* might allow us to move — paradoxically — beyond the narrow perspective of European Orientalism. As stated elsewhere, at least in the sixteenth century, there is a good deal of evidence to suggest that Postel's copy of Abū al-Fidā's *Taqwīm al-buldān* served the Ottoman geographical

108 See, for example, Grafton, *New Worlds, Ancient Texts*, pp. 50–51 and Woodward, 'Cartography and the Renaissance', pp. 3–24.

109 For this issue, see Tolmacheva, 'The Medieval Arabic Geographers', pp. 141–56.

and political enterprise, at the time of military rivalries between Ottomans and Europeans.¹¹⁰ The circulation of Postel's exemplar of Abū al-Fidā's *Taqwīm al-buldān* beyond Christian borders thus demands a broadening of the frame of references in which it is traditionally understood and an acknowledgement of the intellectual relations between Islamic and Christian cultures as forms of intellectual cross-pollinations, thereby opening out a field for further investigation.

110 The reference is here to Hajji Ahmed's *Mappamundi*, wood-crafted in Venice in 1558. For evidence on the role played by Postel's exemplar of the *Taqwīm al-buldān*, see, in particular, Mangani, 'Abraham Ortelius and the Hermetic Meaning', pp. 59–83 and Comacchi, 'Antiquarian or *Tahqiq?*', pp. 338–52.

ABSTRACT The French scholar Guillaume Postel (1510–1581) brought the first manuscript copy of Abū al-Fidā's (672/1273–732/1331) mathematical geography, the *Taqwīm al-buldān*, to Europe. The codex widely circulated among sixteenth-century geographers and cartographers as well as among seventeenth-century Arabists. This article investigates the circulation of Postel's exemplar of the *Taqwīm al-buldān*, looking at reading practices and manuscript exchanges. In particular, the article argues that Postel's annotations are consistent with many later scholars' observations on geographical data, showing that seventeenth-century Arabists shared the same interests in Abū al-Fidā's coordinates and Arabic toponyms as sixteenth-century cosmographers, geographers, and cartographers.

KEYWORDS Abū al-Fidā', Guillaume Postel, Giacomo Gastaldi, Giovanni Battista Ramusio, manuscript circulation, geography, cartography, Orientalism

Bibliography

Manuscripts

Rome, Biblioteca Apostolica Vaticana, MS Vat. Ar. 266

Primary Sources

- Beeley, Philip, and Christoph J. Scriba, eds, *Correspondence of John Wallis (1616–1703)*, III: (October 1668–1671) (Oxford: Oxford University Press, 2012)
- Botley, Paul, and Dirk van Miert, eds, *The Correspondence of Joseph Justus Scaliger*, IV: July 1601 to March 1603, VI: May 1605 to December 1606 (Geneva: Droz, 2012)
- De Chauffepié, Jacques-George, *Nouveau dictionnaire historique et critique pour servir de supplément ou de continuation au Dictionnaire historique et critique de Mr. Pierre Bayle*, III: I–P (Amsterdam: chez Z. Chatelain, 1753)
- Gastaldi, Giacomo, *Arabia felix, nova tabula*, in *La geografia di Claudio Ptolemeo Alessandrino, con alcuni comenti et aggiunte fattevi da Sebastiano Munstero Alamanno, con le tavole [...] di meser Iacopo Gastaldo [...] ridotta in volgare italiano da m. Pietro Andrea Mattiolo* (Venice: Per Giovan Baptista Pedrezzano, 1548)
- , *Il disegno della prima parte del Asia* (Venice: Fabio Licinio, 1559)
- , *Il disegno della seconda parte dell'Asia* (Venice: [Fabio Licinio], 1561)
- , *Il disegno della terza parte dell'Asia* (Venice: Fabius Licinius excudebat, 1561)
- , *Natolia, nova tabula*, in *La geografia di Claudio Ptolemeo Alessandrino, con alcuni comenti et aggiunte fattevi da Sebastiano Munstero Alamanno, con le tavole [...] di meser Iacopo Gastaldo [...] ridotta in volgare italiano da m. Pietro Andrea Mattiolo* (Venice: Per Giovan Baptista Pedrezzano, 1548)
- , *Persia, nova tabula*, in *La geografia di Claudio Ptolemeo Alessandrino, con alcuni comenti et aggiunte fattevi da Sebastiano Munstero Alamanno, con le tavole [...] di meser Iacopo Gastaldo [...] ridotta in volgare italiano da m. Pietro Andrea Mattiolo* (Venice: Per Giovan Baptista Pedrezzano, 1548)
- Greaves, John, *Chorasmiae, et Mawaralnahrae, hoc est, regionum extra fluvium Oxum descriptio, ex tabulis Abulfedae Ismaelis principis Hamah* (London: [n. pub.], 1650)
- , *Abulfedae descriptio Arabiae*, in *Geographiae veteris scriptores graeci minores*, ed. John Hudson, III: *Accedunt geographica arabica etc* (Oxford: E Theatro Sheldoniano, 1712), ch. 9, pp. 1–76
- , *Abulfedae descriptio Chorasmiae*, in *Geographiae veteris scriptores graeci minores*, ed. by John Hudson, III: *Accedunt geographica arabica* (Oxford: E Theatro Sheldoniano, 1712), ch. 8, pp. 1–80
- Hall, Rupert, and Marie Boas Hall, eds, *The Correspondence of Henry Oldenburg, v: 1668–1669* (Madison: University of Wisconsin Press, 1968)
- Hessels, John Henry, ed., *Abrahami Ortelii [...] et virorum eruditorum ad eundem [...] epistulae*, I (Cambridge: Typis academiae sumptibus Ecclesiae Londino-Batavae, 1887)

- Ortelius, Abraham, *Asiae orbis partium maximae nova descriptio* (Antwerp: [n. pub.], 1567)
- , *Theatrum orbis terrarum* (Antwerp: Apud Aegid. Coppenium Diesth, 1570)
- Postel, Guillaume, *Cosmographicae disciplinae compendium* (Basel: per Ioannem Oporinum, 1561)
- Ramusio, Giovanni Battista, *Dei Viaggi di Messer Marco Polo, Gentiluomo Venetiano* (“*Navigazioni et Viaggi*”, II, 1559), *Edizione critica digitale progettata e coordinata da Eugenio Burgio, Marina Buzzoni, and Antonella Ghersetti*, ed. by Samuela Simion and Eugenio Burgio (Venice: Edizioni Ca’ Foscari, 2015) <<https://risorse-esterne.edizionicafoscari.it/main/index.html>> [accessed 29 June 2024]
- , *I viaggi di Messer Marco Polo, gentiluomo veneziano*, in Giovanni Battista Ramusio, *Navigazioni e viaggi*, ed. by Marica Milanese, III (Turin: Einaudi, 2010)
- Thévenot, Melchisédech, ed., *Relations de divers voyages curieux, qui n’ont point esté publiés* [...]. *Nouvelle edition*, I (Paris: chez Thomas Moette, 1696)

Secondary Studies

- Almagià, Roberto, *Monumenta cartographica vaticana*, II (Vatican City: Biblioteca Apostolica Vaticana, 1948)
- Andreose, Alvise, Eugenio Burgio, and Giuseppe Mascherpa, ‘Le fonti di Ramusio e il loro trattamento nella compilazione de “I Viaggi di Messer Marco Polo”’, *Edizione critica digitale progettata e coordinata da Eugenio Burgio, Marina Buzzoni, and Antonella Ghersetti*, ed. by Samuela Simion and Eugenio Burgio (Venice: Edizioni Ca’ Foscari, 2015) <https://risorse-esterne.edizionicafoscari.it/main/intro_03.html> [accessed 29 June 2024]
- Babinski, Paul, ‘Ottoman Philology and the Origins of Persian Studies in Western Europe: the *Gulistān*’s Orientalist Readers’, *Lias*, 46. 2 (2019), 233–315
- Bepler, Jill, ‘Vicissitudo Temporum: Some Sidelights on Book Collecting in the Thirty Years’ War’, *The Sixteenth Century Journal*, 32.4 (2001), 953–68
- Bevilacqua, Alexander, *The Republic of Arabic Letters: Islam and the European Enlightenment* (Cambridge, MA: The Belknap Press of Harvard University Press, 2018)
- Brague, Rémi, *The Wisdom of the World: The Human Experience of the Universe in Western Thought*, trans. by Teresa Lavender Fagan (Chicago: University of Chicago Press, 2003)
- Brentjes, Sonja, ‘Giacomo Gastaldi’s Maps of Anatolia: The Evolution of a Shared Venetian-Ottoman Cultural Space?’, in *The Renaissance and the Ottoman World*, ed. by Anna Contadini and Claire Norton (Farnham: Ashgate, 2013), pp. 123–41
- Çelik, Hülya, and Chiara Petrolini, ‘Establishing an “Orientalium linguarum Bibliotheca” in 17th-Century Vienna: Sebastian Tegnagel and the Trajectories of his Manuscripts’, *Bibliothecae.It*, 10.1 (2021), 175–231

- Comacchi, Maria Vittoria, 'Antiquarianism or *Taḥqīq*? Guillaume Postel's Reading of Abū 'l-Fidā's *Taqwīm al-Buldān*', *Journal of Early Modern History*, 27.4 (2023), 338–52
- Cosgrove, Denis, 'Mapping New Worlds: Culture and Cartography in Sixteenth-Century Venice', *Imago Mundi*, 44.1 (1992), 65–89
- Davies, Surekha, 'The Wondrous East in the Renaissance Geographical Imagination: Marco Polo, Fra Mauro and Giovanni Battista Ramusio', *History and Anthropology*, 23.2 (2012), 215–34
- De la Cruz Palma, Óscar, and Marta Planas, 'Sobre el Corán latino de Guillaume Postel', *Rivista di storia e letteratura religiosa*, 51.3 (2015), 515–39
- Destombes, Marcel, 'Guillaume Postel cartographe', in *Guillaume Postel 1581–1981. Actes du colloque international d'Avranches, 5–9 septembre 1981* (Paris: Guy Trédaniel, 1985), pp. 361–71
- Dew, Nicholas, *Orientalism in Louis XIV's France* (Oxford: Oxford University Press, 2009)
- , 'Reading Travels in the Culture of Curiosity: Thévenot's Collection of Voyages', *Journal of Early Modern History*, 10.1–2 (2006), 39–59
- Falchetta, Piero, *Storia del Mappamondo di Fra' Mauro: con la trascrizione integrale del testo* (Rimini: Imago, 2016)
- Gallien, Claire, 'Orientalist Pococke: Brokering Across Borders, Disciplines and Genres', in *The Internationalization of Intellectual Exchange in a Globalizing Europe, 1636–1780*, ed. by Robert Mankin (Lewisburg: Bucknell University Press, 2018), pp. 1–30
- Gallo, Rodolfo, 'Le mappe geografiche del Palazzo Ducale di Venezia', *Archivio veneto*, 32–33 (1943), 47–113
- Grafton, Anthony, *New Worlds, Ancient Texts: The Power of Tradition and the Shock of Discovery* (Cambridge: Belknap Press of Harvard University Press, 1995)
- Hall, Marie Boas, 'Arabick Learning in The Correspondence of the Royal Society 1660–1667', in *The 'Arabick' Interest of the Natural Philosophers in Seventeenth-Century England*, ed. by Gül A. Russell (Leiden: Brill, 1994), pp. 147–57
- Hamilton, Alastair, 'The Qur'an as Chrestomathy in Early Modern Europe', in *The Teaching and Learning of Arabic in Early Modern Europe*, ed. by Jan Loop, Alastair Hamilton, and Charles Burnett (Leiden: Brill, 2017), pp. 213–29
- Horodowich, Elizabeth, *The Venetian Discovery of America: Geographic Imagination and Print Culture in the Age of Encounters* (Cambridge: Cambridge University Press, 2018)
- Jones, Robert, *Learning Arabic in Renaissance Europe (1505–1624)* (Leiden: Brill, 2020)
- , 'The Medici Oriental Press (1584–1614) and the Impact of its Arabic Publications on Northern Europe', in *The 'Arabick' Interest of the Natural Philosophers in Seventeenth-Century England*, ed. by Gül A. Russell (Leiden: Brill, 1994), pp. 88–108
- Karrow, Robert W., *Mapmakers of the Sixteenth Century and Their Maps: Bio-Bibliographies of the Cartographers of Abraham Ortelius, 1570* (Chicago: Published for the Newberry Library by Speculum Orbis Press, 1993)

- Koeman, Cornelius, *The History of Abraham Ortelius and his 'Theatrum Orbis Terrarum'* (New York: Elsevier, 1964)
- Kuntz, Marion Leathers, *Guillaume Postel: Prophet of the Restitution of All Things. His Life and Thought* (The Hague: Nijhoff, 1981)
- Lestringant, Frank, 'Cosmographie pour une restitution: note sur le traité "Des merveilles du monde" de Guillaume Postel (1553)', in *Postello, Venezia e il suo mondo*, ed. by Marion Leathers Kuntz (Florence: Olschki, 1988), pp. 227–59
- Levi della Vida, Giorgio, *Ricerche sulla formazione del più antico fondo dei manoscritti orientali della Biblioteca Vaticana* (Vatican City: Biblioteca Apostolica Vaticana, 1939)
- Mangani, Giorgio, 'Abraham Ortelius and the Hermetic Meaning of the Cordiform Projection', *Imago mundi*, 50.1 (1998), 59–83
- , *Il 'mondo' di Abramo Ortelio: Misticismo, geografia e collezionismo nel Rinascimento dei Paesi Bassi* (Modena: Franco Cosimo Panini, 1998)
- Mercier, Raymond, 'English Orientalists and Mathematical Astronomy', in *The 'Arabick' Interest of the Natural Philosophers in Seventeenth-Century England*, ed. by Gül A. Russell (Leiden: Brill, 1994), pp. 158–214
- Metzger, Wolfgang, "'Ein recht fürstliches Geschäft". Die Bibliothek Ottheinrichs von der Pfalz', in *Pfalzgraf Ottheinrich: Politik, Kunst und Wissenschaft im 16. Jahrhundert*, ed. by Barbara Zeitelhack (Regensburg: Pustet, 2002), pp. 275–316
- Meurer, Peter H., *Fontes cartographici Orteliani: Das 'Theatrum orbis terrarum' von Abraham Ortelius und seine Kartenquellen* (Weinheim: VCH, 1991)
- Milanesi, Marica, 'Geography and Cosmography in Italy from XV to XVII Century', *Memorie della Società Astronomica Italiana*, 65.2 (1994), 443–68
- , 'Guillaume Postel cosmografo: qualche nota sulla carta polare del 1578', in *L'Europa divisa e i nuovi mondi. Per Adriano Prosperi*, ed. by Massimo Donattini, Giuseppe Marcocci, and Stefania Pastore, II (Pisa: Edizioni della Normale, 2011), pp. 45–54
- Nordenskjöld, Adolf E., 'The Influence of the "Travels of Marco Polo" on Jacobo Gastaldi's Maps of Asia', *The Geographical Journal*, 13.4 (1899), 396–406
- Picherot, Émilie, 'Postel arabisant? Sur trois de ses manuscrits arabes conservés à Berlin' in *Guillaume Postel (1510–1581). Écrits et influence*, ed. by Paul-Victor Desarbres, Émilie Le Borgne, Frank Lestringant, and Tristan Vigliano (Paris: Sorbonne Université Presses, 2022), pp. 75–90
- Saliba, George, 'Arabic Science in Sixteenth-Century Europe: Guillaume Postel (1510–1581) and Arabic Astronomy', *Suhayl*, 7 (2007), 115–64
- Sezgin, Fuat, *Mathematical Geography and Cartography in Islam and Their Continuation in the Occident*, II: *Historical Presentation*, Part 2 (Frankfurt am Main: Institute for the History of Arabic-Islamic Science at the Johann Wolfgang Goethe University, 2007)
- Snyder, John P., 'Map Projections in the Renaissance', in *The History of Cartography*, ed. by David Woodward, III: *Cartography in Renaissance Europe*, Part 1 (Chicago: Chicago University Press, 2007), pp. 365–81

- Tessicini, Dario, 'Definitions of Cosmography and Geography in the Wake of Fifteenth- and Sixteenth-Century Translations and Editions of Ptolemy's *Geography*', in *Ptolemy's Geography in the Renaissance*, ed. by Zur Shalev and Charles Burnett (London: The Warburg Institute, 2011), pp. 31–50
- Testa, Simone, *Italian Academies and Their Networks, 1525–1700: From Local to Global* (New York: Palgrave Macmillan, 2015)
- Tolmacheva, Marina, 'The Medieval Arabic Geographers and the Beginnings of Modern Orientalism', *International Journal of Middle East Studies*, 27.2 (1995), 141–56
- Toomer, Gerald J., *Eastern Wisdom and Learning: The Study of Arabic in Seventeenth-Century England* (Oxford: Oxford University Press, 1996)
- Ullmann, Manfred, 'Arabische, türkische und persische Studien', in *Wilhelm Schickard, 1592–1635. Astronom, Geograph, Orientalist, Erfinder der Rechenmaschine*, ed. by Friedrich Seck (Tübingen: Mohr, 1978), pp. 109–28
- Van den Broecke, Marcel, 'Abraham Ortelius's Library Reconstructed', *Imago Mundi*, 66.1 (2014), 25–50
- , *Ortelius Atlas Maps: An Illustrated Guide* (Westrenen: HES, 1996)
- Wagner, Bettina, and Armin Schlechter, 'Von der Neuburger Kammerbibliothek zur "Bibliotheca Palatina": Ottheinrichs Bücher und ihre Einbände', in *Bibliotheken in Neuburg an der Donau: Sammlungen von Pfalzgrafen, Mönchen und Humanisten*, ed. by Bettina Wagner (Wiesbaden: Harrassowitz, 2005), pp. 137–54
- Woodward, David, 'Cartography and the Renaissance: Continuity and Change', in *The History of Cartography*, ed. by David Woodward, III: *Cartography in Renaissance Europe*, Part 1 (Chicago: Chicago University Press, 2007), pp. 3–24
- , *Maps as Prints in the Italian Renaissance: Makers, Distributors and Consumers* (London: The British Library, 1996)