Sacred Geography, Antiquarianism and Visual Erudition:  
Benito Arias Montano and the Maps in the Antwerp Polyglot Bible

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ABSTRACT: The final volume of the Polyglot Bible, edited by Benito Arias Montano and printed in Antwerp by Christophe Plantin, was published in 1571–1572. Forming part of the Bible’s Apparatus, the volume contains a number of essays, illustrations and maps by Montano relating to questions raised by the biblical text. Montano’s maps were a product of his philological training in Oriental languages and exegesis, his profound interest in antiquarianism and geography and his practice of visualizing and tabulating knowledge. He designed his maps both as study aids and as devotional-meditative devices. Moreover, the maps reflect his wider philosophical outlook, according to which Holy Scripture contains the foundations of all natural philosophy. Montano’s case encourages us to re-examine early modern Geographia sacra in the light of the broader scholarly trends of the period.

KEYWORDS: Sixteenth century, sacred geography, antiquarianism, visual culture, early modern Catholicism, Counter-Reformation, maps and religion, maps of the Holy Land, Bible maps, Bible publishing, biblical scholarship, Benito Arias Montano, Christophe Plantin, Antwerp.

The Council of Trent (1545–1564), that pillar of the Counter-Reformation, marked the beginning of the spectacular ecclesiastical career of Benito Arias Montano (1527–1598) (Fig. 1).1 Poet laureate, member of the Orden Militar de Santiago, Doctor of Theology, Orientalist, and a leading biblical scholar, Montano was chosen by Bishop Martín Pérez de Ayala to join the Spanish delegation to the third session of the Council (1562–1564), where he won praise for his interventions on communion and marriage. For Montano, however, the Council was not only about re-enforcing Catholic doctrine and fighting heretics, but also about scholarly exchange. During his stay in Trent he was able to examine ancient coins, buy and translate Hebrew books from Istanbul, and obtain a map of Canaan. Later, Montano used this map to illustrate the Apparatus sacer of the famous Antwerp Polyglot Bible, printed under Philip II’s auspices by Christophe Plantin, of which Montano was the chief editor. While in itself trivial, Montano’s encounter with a map while at a gathering representing the summit of the Catholic world opens a window on to the broader question of maps and religion in early modern Europe.

Abraham Ortelius’s ‘Catalogus auctorum’ in his celebrated Theatrum orbis terrarum (1570), that invaluable ‘Who’s Who’ of late sixteenth-century
cartography, demonstrates that early modern mapmakers were deeply involved in religious activities and scholarship. Like others in Plantin's circle, Ortelius was strongly committed to the mystical and pietistic ideals of the Family of Love. As Giorgio Mangani has shown, Ortelius's affiliation was reflected in his use of the heart-shaped projection, which encompassed Christian charity with Neo-stoic ideals. Others in the 'Catalogus auctorum', such as Jacob Ziegler and Sebastian Münster as well as Montano himself, were theologians, philologists and historians. Modern scholarship, however, has still not comprehensively addressed the complex ways in which cartography operated within religious and scholarly contexts.

Catherine Delano-Smith and Elizabeth Ingram in their survey of maps in Bibles in the sixteenth century paved the way for new kinds of questions on cartography and religion in the early modern period. Although their focus was on a specific genre in a single century, Delano-Smith and Ingram made it clear that it is by no means obvious how maps function in such religious contexts as theology and biblical exegesis, and that the question requires further historical investigation, which would take into account the wider currents that mapmakers and their readers were navigating. Delano-Smith and Ingram's bibliographical survey was based on some thousand printed sixteenth-century Bibles, of which only 176 include maps. It revealed that maps never appear in Bibles printed in Catholic countries such as Spain, Portugal and Italy, and rarely in Latin or French Bibles printed in France. They were thus able to conclude that 'the history of maps in Bibles is part of the history of the Reformation'. According to the authors, the humanistic aspect in Protestantism, emphasizing the literal over the allegorical, 'is perhaps the key factor that explains why maps were felt by so many Protestant publishers to be useful adjuncts to printed Bibles'.

Francesca Fiorani, writing about the Galleria delle carte in the Vatican, extended the argument by claiming that the Galleria project, which was completed in 1581, was in fact a Catholic cartographic response to the Protestant use of maps in Bibles.

The striking quantitative finding that the inclusion of maps in Bibles was a predominantly Protestant practice puts Montano's maps in a particularly interesting light. Thus Montano's approach and the reasons for the inclusion of maps in the Apparatus of the Polyglot Bible deserve closer attention. Fortunately for us, Montano recorded many of his thoughts on the creation and understanding of maps and images in the text of the Apparatus.

The aim in the following pages is to explore further, by focusing on Montano's contribution to biblical mapping, the still largely uncharted terrain of religion and cartography and to try to extend and nuance Delano-Smith and Ingram's thesis. Rather than attributing the spirit of mapping to a general Protestant ethic, I am attempting to reconstruct the ways in which maps, visual erudition and biblical scholarship interacted in Montano's world and to open up the notion of geographia sacra to take account of additional elements in early modern intellectual life. I also emphasize the role of the contemporary culture of antiquarianism, and particularly interest in Jewish antiquities, which cuts across the religious divide, and which I see as essential to the integrated interpretation of
Montano’s maps and illustrations. Finally, I show that Montano’s thoughts on biblical geography lay within a broader movement of pious philosophy that attempted to harmonize knowledge of the natural world with Scripture. All these elements in Montano’s work, I am arguing, may be as significant as his Catholic belief for the understanding of his cartographical work.

Montano in Plantin’s Press

The story of the Antwerp Polyglot Bible has been told many times, and the process of its creation is well documented (Fig. 2). The idea had originated with Plantin, perhaps under the influence of the Orientalist and mystic Guillaume Postel, and was first mentioned in Plantin’s letter to Andreas Masius of February 1565. Plantin was persuaded to embark on such a massive project by the rarity of the previous great polyglot edition, Cardinal Pedro Ximenes’s Complutensian (completed 1517, published 1520–1522). Plantin recruited a group of scholars and managed to obtain German Protestant patronage. In the event, though having been forced to print anti-Catholic material during the outbreak of Calvinist iconoclasm in 1566, Plantin eventually decided to apply for Catholic patronage for the Polyglot in order to save both his own reputation and that of his printing house in the eyes of Philip II. Once the king, and his secretary Gabriel de Zayas, had granted permission for the project, Plantin was informed that Benito Arias Montano, the King’s chaplain, would supervise the project.

After a tortuous sea journey, Montano reached Antwerp on 17 May 1568 to take charge of one of the most ambitious printing projects of the time. In Antwerp he spent seven incredibly productive years on the Polyglot, making some of his most intimate friends during this time. Plantin, the leading printer of the second half of the sixteenth century, greatly admired his industrious new editor who, he noted, ‘beside his nobility and rank, [was] not only so accomplished in the knowledge of Hebrew, Aramaic, Syriac, Greek, Latin and various other languages, but also endowed with supreme modesty, prudence, [and] love of God’. Montano aimed to produce an authoritative Bible edition in five languages, which would be supported by a weighty Apparatus sacer, complete with various reading aids. The project involved the concerted and prolonged work of experts in Oriental languages and biblical scholarship, including Masius, Postel’s students (the brothers Guy and Nicolas Lefèvre de la Boderie), and Franciscus Raphelenghius (Plantin’s son-in-law). After two years, Montano’s team of scholars and Plantin’s proofreaders, with the collaboration of the Doctors of the Faculty of Theology in Louvain, had the biblical texts ready for typesetting. The Old Testament—in Hebrew, the Latin of the Vulgate, the Greek of the Septuagint, and Aramaic—filled four large folio volumes. The fifth volume contained the New Testament in Greek, Latin and Syriac. Montano then moved on to prepare the Apparatus, which would take up another three volumes. The idea of a scholarly apparatus was not new. The old Complutensian had
already offered its readers a volume of reading aids, including Greek, Hebrew and Chaldean dictionaries and a Hebrew grammar. As the practice of studying the Holy Scriptures in their original languages became more usual during the sixteenth century, other sophisticated tools for precise reading were published, such as biblical name indexes. Montano, however, furnished his Polyglot with a selection of study aids unprecedented in quantity and comprehensiveness. In the *Apparatus* volumes one finds, besides dictionaries and grammars for Hebrew, Syriac and Greek, also a literal Latin translation of the Old Testament, copious indices and various methodological essays on translation.

For Volume Eight, the final volume both of the *Apparatus* and the entire edition, Montano composed a number of learned treatises that add up to a complete ethnography of the ancient Hebrews. Montano summarized and elucidated what was then at the forefront of biblical scholarship and, in his view, of scholarship at large. He also included the four maps with which we are concerned here—a map of the world (*Orbis tabula*), Canaan at the time of Abraham (*Terra Canaan Abrahae tempore*), the land of Israel divided among the twelve tribes (*Terra Israel in tribus undecim distributa*), and Jerusalem at the time of Solomon (*Antiqua Ierusalem*)—and about ten antiquarian illustrations of architectural details, biblical monuments, and liturgical vestments and artefacts.

The Polyglot did not prove to be the powerful implement of Counter-Reformation propaganda that Philip II had envisioned. Imbued with Erasmianism—minimizing doctrinal differences by presenting conflicting scriptural texts alongside one another, and emphasizing philological accuracy as a necessary condition for deciphering the Holy Writ—the new edition was profoundly ecumenical. Indeed, from its early stages onwards, the Polyglot was attacked by theologians who thought it damaged the authority of the Vulgate, and who were enraged by Montano’s reliance on rabbinical and a few Reformed sources. The fiercest of the critics was the Spanish León de Castro, who was highly influential in Rome and almost succeeded in having the work banned, despite its having been approved in 1572 by Pope Gregory XIII. With hindsight, Castro may have had a point. It is now known that Plantin and his circle, many of whom were acquaintances of Montano, were probably affiliated with of the Family of Love, a pietistic sect that promoted outward conformity to established religion with intense spiritual devotion and an indifference to dogma. As Ben Rekers notes, perhaps over enthusiastically, ‘it was an irony of fate that [Philip’s] monument of the Counter-Reformation should be so entirely opposed, in nature and in spirit, to the principles of Trent’ since ‘[a]lmost all its collaborators were on the borderline between orthodoxy and heresy’.

Alastair Hamilton is more cautious about labelling the Polyglot a Familist project, although he does concede that it was influenced by the ideals of concord and irenicism.

**Montano as an Antiquary**

The treatises, maps and illustrations in Volume Eight of the *Apparatus* are a clear testimony to Montano’s antiquarian interests. The maps, in particular, served him as a means of conveying antiquarian knowledge. They are a product of the encounter between Montano’s training in scholastic theology and Oriental philology and his deep humanist interest in visualizing knowledge, tabulation and measurement. While modern students of Montano have recognized his use of precise philological methods, they have generally neglected his antiquarian sensibilities and interests. In fact, Montano brought not only philological tools to his new Bible edition, but also an engagement with material evidence and a deep interest in architectural detail and theory and in chorographical and geographical description. It is significant that when, in 1593, Franciscus Raphelenghius, a former member of the Polyglot’s team who had by that time converted to Calvinism, published in Leiden nine of Montano’s treatises, including the original maps and illustrations, he gave them the title *Antiquitates Iudaicae*. Strictly speaking, Montano’s maps are not maps in a Bible; they were an integral part of a learned antiquarian treatise. In the *Apparatus* of the Polyglot Bible, they are separate from the biblical text; in the 1593 edition, the biblical text is absent altogether.

In his seminal essay of 1950, Arnaldo Momigliano laid the basis of our understanding of early modern antiquarianism. He argued that the study of classical antiquity from the fifteenth to late seventeenth centuries took two forms. On the one hand, historians proper, following Livy and Polybius, commented on political events and the
moral lessons to be drawn from them. On the other hand, antiquaries, following Herodotus and Varro, surveyed the material remains of past cultures, compared those relics with texts, and gave synchronic descriptions of ancient societies. It is the antiquaries who laid the foundation to much of what we think of as modern historical methodology. Momigliano also noted that the study of Scripture was different from the study of antiquarianism in the way it relied on internal criteria for establishing the bona fides of the text. Compared with the availability of Greek and Roman antiquities, there was in the sixteenth century little epigraphic and archaeological material relating to the Bible. Yet in Montano’s case we can clearly discern a real effort to incorporate antiquarian methods and topics into the study of biblical and Jewish antiquities. In selecting the title *Antiquitates Iudaicae* for his 1593 edition, Montano was not only imitating Josephus, but also participating in the general culture of description that had emerged in fifteenth-century Venice and Rome.

For early modern antiquaries, no remnant of the past seemed unimportant, and no subject unworthy of consideration. Seeking to establish the social, legal and cultural structure of past societies, they used various ways to organize their material. The more systematic-minded followed Flavio Biondo and his classical model Varro and structured their descriptions according to the four different kinds of *antiquitates*: *publicae*, *priva-tae*, *sacrae* and *militares*. Montano did not use Biondo’s fourfold division but retained the thematic principle. In the *Apparatus* he devoted individual treatises to geography, architecture, liturgy, weights and measures, body gesture and chronology. Like Antonio Agustín, a leading antiquarian and Spanish churchman (whom he must have met in Trent), Montano was deeply interested in ancient coins and historical metrology (Fig. 3). Like the long succession of Roman antiquarians who used ancient regional catalogues to reconstruct Rome’s historical divisions, Montano faithfully reconstructed the division of the Holy Land into tribal lands as described in Joshua.

Early modern antiquarianism is also defined by visuality. Antiquaries were not only using visual sources for historical inquiry, but also presented their finds, whether topographical, numismatic or epigraphic, in visual form. Writing from Seville in 1590, Montano complimented his friend Ortelius:

> That image after Lucretius which you sent me commends the most elegant artist, both the designer, as well as the engraver in copper. Like other evidence, it reveals how discerning your mind is. For you, with your erudite eyes, select the best in every art.

Montano’s notion of ‘erudite eyes’, helps us rediscover some of the qualities of early modern learning of which sight has been lost today. Despite their different backgrounds and careers, Montano and Ortelius were both immersed in classical and biblical texts on the one hand, and in images and artefacts on the other. The republic of letters, of which both were dedicated citizens, was a network in which coins, prints, miraculous stones, gems and maps were avidly collected and often exchanged. Visual and material objects were as important as learned discourses and textual scholarship. Thus, Montano’s world was not just...
that of the Catholic exegete, and his maps, therefore, need to be addressed from this broadened perspective.

**Visual Erudition and Geography**

From an early stage of his education Montano had been deeply interested and well versed in architecture, art and images, and he retained these interests throughout his life. His penchant for maps, globes, and mathematical instruments is well documented. Indeed, in their first exchange of letters, Plantin offered to buy for Montano globes by Gerard Mercator, maps and mathematical instruments. Montano’s correspondence with Ortelius reveals much about his preoccupation with maps and geographical material. In 1575 Montano was obliged to go Rome to defend his Polyglot. Despite his business in the Vatican, he found the time for other diversions, about which he wrote to Ortelius:

> There is here a distinguished friend of mine, J. B. Raimundi, a lecturer in the mathematical arts in this academy, who besides the study of letters also paints and writes remarkably, and he makes the most elegant mathematical globes I have ever seen. He has a very beautiful copy of a map of China from the Portuguese legate. I have asked him to make me a light and easy, yet reliable copy. I will send it to you once I obtain it from the man, for your use and that of the public—as you know, this region is most worthy of knowing.

Raimundi was one of the leading Orientalists of the day, and from 1583 was the director of the Typographia Medicea in Rome, a major centre for printing in Oriental languages. He too had devised an ambitious plan for his own edition of a polyglot bible, in which he intended to include, besides the original Greek and Hebrew texts, and the standard Greek, Latin and Aramaic translations, the Arabic, Persian, Ethiopic, Armenian, Coptic and Slavonic versions. Raimundi’s plan eventually materialized some three decades after his death, albeit in a less comprehensive form, as the Paris Polyglot (1645). Whereas it would be uncommon today to find biblical scholars and expert Orientalists discussing maps and globes as a matter of course, from the point of view of sixteenth- and seventeenth-century scholars it would have been normal and obvious to move between profane maps and sacred texts.

An example of the way friendship and geographical scholarship went hand in hand is found in Ortelius’s dedication of his map of ancient Spain. The map was published by Plantin in the fourth supplement to Ortelius’s Theatrum (1590). The dedicatory inscription in the cartouche in the bottom left corner, conventionally modelled as a classical monument, reads: ‘1586. To the great theologian Sir Doctor Benito Arias Montano, a man distinguished for his mastery of languages, his experience of affairs, and his integrity of character, from A. Ortelius in friendship and loyalty’. The map gave Montano great pleasure and pride, and he wrote to Ortelius: ‘I told you earlier that this map of ancient Spain, elaborated by you, is always before my eyes with your most pleasant image, which I carry with me wherever I go’. As a token of his gratitude Montano promised to ‘reserve a beautiful bezoar stone chosen by you, with a few other gems, or stones of extraordinary effectiveness’. In 1587, at Plantin’s request, Montano wrote a preface to the Spanish translation of Ortelius’ Theatrum, which was dedicated to the crown prince, the future Philip III. He later offered Ortelius his advice and help with updating the map of Spain.

All these examples show the extent to which Montano, a biblical scholar, was attracted to, and immersed in, geography and cartography. More importantly, they demonstrate the socio-intellectual environment of this kind of geographical fascination. We should bear these points in mind as we move to examine Montano’s own maps.

**‘Nehemias’ and the Map of Jerusalem**

The map of Jerusalem, which accompanies ‘Nehemias’, the treatise dealing with ancient Jerusalem in Volume Eight, is not of Montano’s own design but was based on a map by Peter Laickstein, a Dutchman who had made a pilgrimage to the Holy Land in 1556 (Fig. 4). Although the original has been lost, Laickstein’s map is known from a number of celebrated editions issued later on in the century. Of particular interest is the passage in Montano’s text which introduces Montano’s version of Laickstein’s map, for it offers the modern reader a remarkable glimpse into religious education and practice in the first half of the sixteenth century, when Montano would have been a schoolboy.

In his preface to ‘Nehemias’, Montano nostalgically recalls his beloved teacher of letters and religion, Iago Vasquez Matamoro:

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Fig. 4. A plan of *Antiqua Ierusalem*, based on Peter Laickstein’s map but with a corrected representation of the Temple, accompanies Montano’s ‘Nehemias’ in volume 8 of the Antwerp Polyglot. (Reproduced with permission from the Department of Rare Books and Special Collections, Princeton University Library, Ex 5145.1569f.)

After he already busied his youth with various wanderings, he was driven by great desire, and attacked by sorrow that he had let slip that best and most powerful of all, the journey to Palestine in Syria, which, on account of piety, is often taken by many Christians...

Montano then points out that, once in Palestine, Vasquez began an extensive project of description and observation:

With such an elegant spirit, and endowed and learned in so many arts, and having travelled diligently and carefully the whole region which stretches between Jaffa and the Jordan, and from Damascus to Beer-Sheva, and blessed with an acute intellect, skilled in identifying true antiquities and discerning them from the later fables of those living there, whatever he saw he noted down exactly, and described either in words, the autograph of which he gave me as a gift in pledge of friendship, or in maps [*tabulis*] that he depicted. Upon his return to Extremadura, Vasquez produced multiple copies of what Montano described as highly esteemed *tabulae* relating to the sacred monuments in the Church of the Holy Sepulchre and Bethlehem.
Vasquez had taught Montano the rudiments of drawing and, more important for our purposes in the present context, often told the eagerly listening young boy about the landscape and sites of the Holy Land, so that as an adolescent, Montano could quickly evoke each of the sacred sites. He also received from Vasquez an elegant image of Jerusalem, printed on cloth and carefully coloured, which greatly helped him in the study of Scripture.

Recommending his method to the serious student of the Polyglot, Montano explained how Vasquez encouraged him to combine biblical and antiquarian studies

first taught by this excellent man’s demonstrations, then having observed many things in the reading of the Holy Scripture, and then noted in other authors what may be useful for understanding the principles of topography, I saw to the gathering of a demonstration of the state of ancient Jerusalem, the knowledge of which, I think, will be no less useful than pleasant to the students of the sacred disciplines . . .

Montano made one significant change to the design of Laickstein’s map. He replaced Laickstein’s depiction of Solomon’s Temple as a ziggurat by his own detailed architectural plan, itself based on another of his treatises in Volume Eight, the ‘Exemplar’, a study of sacred architecture (Figs 5 and 6). Montano’s correction of the original design again shows his insistence on visual accuracy and faithful reconstruction of ancient monuments.

‘Chanaan’, ‘Chaleb’ and the Maps of the Holy Land

Montano’s strict historicism is also manifest in his chorographical description of the Holy Land. While most contemporary descriptions were not particularly careful as regards chronology and correct historical stratification, Montano insisted on separating his account of the Holy Land into two treatises: in ‘Chanaan’, the land before its conquest and redistribution by Joshua is discussed, and in ‘Chaleb’, the structure of the subsequent Israelite settlement is explained. Each treatise is accompanied by a richly detailed map which follows the principle of historical specificity.

The two maps arguably form the most important representation of biblical geography produced in the later sixteenth century before the publication of Christiaan van Adrichem’s *Theatrum Terrae Sanctae* in 1590 (which in itself is indebted in many respects to Montano). In terms of coverage, Montano’s map of Canaan reaches as far as Mesopotamia (to illustrate the Patriarchs’ wanderings), while the map of Israel zooms in on Canaan itself, carefully divided into the tribal territories and marked with the route of the Exodus (Fig. 7). The Canaan map is exceptional in the sincere yet incomplete effort to provide place names in Hebrew script, such as Moab (מואב) and Egypt (מצרים). Montano’s Hebraistic sensibilities appear in other details as well, such as the grove drawn by *kiryat yearim* (עיר יריחו), that is, the City of Woods. Montano even tells us how he obtained a map of Canaan in Trent from a learned Mantuan, very knowledgeable in Hebrew, who had commissioned it at a great cost. Montano’s own map of Canaan is based on this Tridentine map, which he annotated and augmented with a descriptive text in order to facilitate the understanding of biblical toponymy.

In ‘Chaleb’, the treatise describing the repartition of the land, Montano uses in fact three descriptive aids: an ‘Elenchus’, or alphabetical index of biblical toponymy with scriptural references; a textual description; and a map (Fig. 8). Montano explains that the motive for such a detailed approach is to help Bible readers to overcome the difficulty of reaching the ‘simple’ sense of the text, and thereby to let them access the arcane, ‘blissful’ teachings which it contains.
Fig. 6. Montano, in his *Templi iconographia*, made an effort to reconstruct the historic building as it stood in Solomon’s day, while using the technical language of contemporary architectural theory. From Montano’s treatise ‘Exemplar’ in volume 8 of the Antwerp Polyglot. (Reproduced with permission from the Department of Rare Books and Special Collections, Princeton University Library, Ex 5145.1569f.)
Fig. 7. Tabula terrae Canaan Abraham temporum. Montano’s map of pre-conquest Canaan, exceptional in the use of Hebrew lettering, is in his ‘Chanaan’, volume 8 of the Antwerp Polyglot. (Reproduced with permission from the Department of Rare Books and Special Collections, Princeton University Library, Ex 5145.1569f.)
Fig. 8. Terrae Israel . . . in tribus undecim distributa accuratissima. Montano’s map of Israel, divided into eleven tribal territories and including the route of the Exodus, from his treatise ‘Chaleb’ in volume 8 of the Antwerp Polyglot. (Reproduced with permission from the Department of Rare Books and Special Collections, Princeton University Library, Ex 5145.1569f.)
Once a basic picture of the land has been formed, the door to higher reflections opens. Montano’s own musings on the higher meaning of biblical geography emerge from his prefaces to the treatises. The prefaces set the mode for contemplating each map’s subject and place the Holy Land in a providential framework.

In the preface to ‘Chanaan’, Montano insisted on the extraordinary power of nature in pre-conquest Canaan, a fact all the more remarkable given the land’s small size: ‘it has (to make its measure comply with the standard of geography) no more than sixty miles in length, and forty in width’.52 Benito Arias, whose self-appointed sobriquet ‘Montano’ acknowledged the landscape of his birthplace, Fregenal de la Sierra, attributed Canaan’s unique fecundity to its mountainous nature. The land’s mountains, he speculated, made its surface fourfold the area below, and this explained how it supported thirty-one kingdoms. The uneven landscape was also effective for the procreation of all species because the heat, by which all are begotten and supported, is caught between the caves and the entrails of the mountains and increases variety and fertility. Bubbling springs, minerals, trees, plants, all abound in Montano’s Canaan, which is always under God’s eyes (he is here referring to Deuteronomy 11:12). The land was designed for sweet and pleasant life, which should be spent in perpetual worship and love of God. Yet, Montano continued, the fortunate inhabitants of this best of all lands, first the Canaanites, then the Israelites, abused their privilege and, as it were, drowned in the river of their wealth. Here Montano is indirectly arguing against Michael Servetus and Sebastian Münster, who had denied, in different ways, the fertility of the Holy Land.53 Montano is also inviting reflection on the miraculous nature of the Israelites’ conquest of the land of Canaan, which, he noted, took place in too short a time for anybody to have been able to walk across the country, let alone conquer its fortified towns and fearsome inhabitants.54 Montano’s maps of Canaan and Israel let us consider the ways in which description and interpretation, image and text work in a complementary fashion. It is clear that the maps do not carry providential messages in themselves.55 Yet Montano’s method of exegesis systematically incorporates the maps. Initially, they are required for assisting the reader to establish the literal historical sense of the text. Ultimately, however, they call for reflection on the providential meaning of the landscape. As Delano-Smith and Ingram themselves explain, the maps in Geneva editions of the Bible, especially the Exodus map, had doctrinal messages to carry. Thus, while Protestants did not have a monopoly, as it were, on the literal sense of Scripture, they were quite seriously engaged in some kind of allegorical exegesis. As Richard Muller notes, ‘None of the exegetes—Luther, Oecolampadius, Melanchthon, and Calvin—wanted to lose the flexibility of reference available to the allegorical method: the text must be able to speak to the Church’.56 Maps, it would seem, had a literal and an allegorical function in both Protestant and Catholic biblical scholarship.57

Biblical maps were conceived as, and intended to be used as, devotional images. As Walter Melion shows in a perceptive study of the maps of sacred geography in the Parergon (a section of historical maps that appeared with the Theatrum from 1579 onward), Ortelius’s maps were tied together by the notion of pilgrimage. In functioning as an invitation to the reader to embark on an imaginative pilgrimage in the footsteps of holy men, from Abraham to St. Paul, the maps in the Parergon were devotional and meditative devices modelled on the rhetorical form of ductus.58 Melion also points to Montano’s Humanae salutis monumenta (1571) as a direct source of Ortelius’s use of maps in this way. The Monumenta contains seventy-one figurative images, all devised by Montano, each of which is accompanied by a short caption and a poem, and each of which conveys a moralistic message.59 Thus, for example, Montano’s image for Joshua chapter 18, verses 2–10, Terrae distributae, which shows the leaders of the tribes of Israel poring over a large map, is an emblem of the benefits accruing to those who bear their pilgrimage with patience (Fig. 9).60 Melion’s argument is reinforced by Montano’s own words in the Polyglot. As we have seen in the discussion of ‘Nehemias’, the map of Jerusalem that Vasquez gave to Montano was used to invoke the notion of pilgrimage in a manner not unlike that of Ignatius of Loyola’s Spiritual Exercises, or in a secular context the vicarious travel promoted by works such as Braun and Hogenberg’s Civitates
Fig. 9. Joshua and his generals poring over a map of the Promised Land. The image is taken from a collection of odes by Montano and matching engravings by various artists on biblical themes. The division of the promised land—note the dotted boundary lines outlining the tribal territories—appears under the heading ‘Perseverantiae exitus,’ the fruit of perseverance. Montano, *Humanae salutis monumenta* (Antwerp, Plantin, 1571), sig. F2. (Reproduced with permission from the Department of Rare Books and Special Collections, Princeton University Library, Ex 2949.129.)
orbis terrarum (1572). In ‘Chaleb’ Montano explicitly wrote that his own map of Israel was intended to serve as a replacement for pilgrimage for those who could not travel and enjoy the memory of actual places.61 Hence, the emblematic engravings in the Monumenta and the scholarly map were thought of and used in similar ways as a means of reflection, particularly on the theme of actual and metaphorical pilgrimage. The conjunction of the two kinds of images was made explicit by Plantin in his lavish folio Bible of 1583, where he printed many images in the manner of the 1571 Monumenta together with Montano’s maps of the Antwerp Polyglot. Some of the plates of this edition were then used for the 1583 quarto Monumenta.62 While the erratic flux of plates and images from one edition to another (and across confessional frontiers) should often be attributed to commercial considerations, it seems that for Montano and Plantin (a major producer of scholarly as well as emblem books), the two kinds of images, the emblem and the map, were two points on the same spectrum of graphic illustration. 63

Pious Science: Montano’s World Map

Another treatise in the Apparatus, entitled ‘Phaleg’, deals briefly with the repopulation of the post-diluvial world. The treatise describes the Earth hierarchically—from the continents to countries and then to their geographical details—and thus echoes influential contemporary cosmographies such as those by Peter Apian, Johannes Honter and Guillaume Postel, who were themselves following the classical model.64 However, as much as Montano borrows from classical sources for his geographical description of the globe, he makes a conscious effort only to use information taken from the Holy Scriptures, and his ornate map for the treatise ‘Phaleg’ shows a similar tension between the classical and scriptural (Fig. 10).65 Inasmuch as the double-hemispheric map depicted modern discoveries, it was a conventional geographical map. Its toponymy, however, is based exclusively on the Bible (Genesis 10).66 Unlike the map of Canaan, Montano’s world map is lettered throughout in Hebrew, including the cardinal directions in the frame, as if to underline the primacy of biblical information. Montano’s world map, in short, is a visual demonstration of the breadth of his conception of geographia sacra: a geography that is global in scope and founded on the Holy Scriptures.

The methodological statements contained in the preface to ‘Phaleg’ are important for placing Montano’s world map and concept of sacred geography in a wider theological framework. Like other scholars and churchmen at the time, Montano was attempting to walk a fine line between natural philosophy and theology without completely renouncing either one or the other. In other words, Montano was struggling to assure the status of Scripture as a complete encyclopedia of human knowledge without denying the truths found in pagan and modern philosophies. Like Francisco Vallès (1524–1592), one of Philip II’s physicians and author of De sacra philosophia (1587), Lambert Danheu (1530–1595), the Genevan Calvinist author of Physica christiana (1576–1580), and many others from different religious backgrounds, Montano used his literal hermeneutics and his philological tools in an attempt to prove the unity of human knowledge.67 Hence his wide programme of ‘pious’, or ‘Mosaic’ geography. As in the case of architecture, where he maintained that classical architectural ideals were derived from those revealed in Scripture, in ‘Phaleg’ also Montano argued that sacred geography held the essential truths for understanding the contemporary world.

In the same treatise, Montano recorded a conversation he had with Augustinus Hunaeus, one of the Louvain theologians with whom he collaborated for the Polyglot. According to Montano, Hunaeus said that ‘He who enters a house twice and thrice, or even lives in it continuously, cannot grasp its full form as the Architect does, who knows the principles of its construction in a thorough way, and each of its parts, from the floor to the roof’.68 So, for Montano and Hunaeus, only God, architect of the world we inhabit, is capable of properly describing the world, and geographical information, shared with humanity through the Scriptures, is thus of the utmost importance. Sacred geography is needed by everyone: doctors, merchants and soldiers can learn from it about customs, rites, religion, matters private and public, ways of war and peace, trade and even vestments.69 The Scriptures enable one to account for traditional enmity or harmony between peoples, according to their biblical genealogy, or to realize, for example, why the Greeks and Romans, the sons of Japheth, excel in philosophy and eloquence.70
Fig. 10. Montano's *Sacra geographia*, the double-hemisphere map of the world, showing the distribution of the descendants of the three sons of Noah—Shem, Ham and Japheth—(Genesis 10), in his treatise 'Phaleg', in volume 8 of the Antwerp Polyglot. (Reproduced with permission from the Department of Rare Books and Special Collections, Princeton University Library, Ex 5145.1569f.)
The centrepiece of Montano’s pious world geography is the identification of the biblical gold-bearing region of Ophir with Peru in the New World: ‘None of the Greek and Latin authors whose writings came through to our time wrote anything, . . . which, if carefully examined, could be compared with those that Moses expressly wrote on the land of Ophir’. Montano provided philological proof for his claim, alluding to the biblical verses which relate to the building of Solomon’s Temple ‘and the gold was the gold of Parvaim’ (2 Chronicles 3:6), which, in his view, must refer to Ophir, the source of Solomon’s gold (1 Kings 9:28). With the aid of some Hebraic acrobatics, Montano interpreted Parvaim as ‘double Peru’, which on his world map he clearly placed on the western littorals of the two continents of the New World. The identification of the New World in general with the biblical Ophir went back to Columbus, and the more specific theory that Peru was Ophir had already been suggested by Postel, but it was Montano who provided the philological proof, bringing into action his talents as a Hebraist. Montano’s Ophir, as Gliozzi explains, was a shared resource—it was the traditional source of wealth for many peoples, as if by providential design—and Montano’s version of the theory was at best ambiguous if intended as a defence of Spanish monopolistic claims on the resources of the New World.

The reception of Montano’s theory was on the whole negative. Ortelius, his close friend, was polite enough to bestow lavish praise in his Sy- nonymica Geographica on Montano’s erudition, only to declare himself unconvinced by Montano’s argument. Other authorities, such as Joseph Scaliger and José de Acosta, who was particularly interested in the origins of the natives of the New World, were also critical of the Peru-Ophir identification. In the final analysis, though, it would seem that Montano was more interested in strengthening the status of Scripture than in either justifying Spanish exploitation or solving the problem of the origins of the American Indians. What excited him was the realization that Scripture is pregnant with clues, the meaning of which may be discovered in the future, not the discoveries themselves. In his view, while Holy Scripture contained the essential truths for understanding the natural world, it was this understanding that in turn facilitated our penetration of the arcane meanings of the Scriptures. In Montano’s preface to the Itinerary of Benjamin of Tudela (1575)—a work he had obtained from a Venetian friend in Trent and translated from the Hebrew—he clearly stated these priorities: ‘What fruits mortals normally gain from the opening up of lands, beyond what is obvious from experience, I have amply demonstrated in my Geographia sacra’. The fruits referred to are the deeper theological knowledge and the insight into Scripture that overshadow more obvious benefits such as political and scientific progress.

Montano’s Geographia sacra carries the same message as is found on the walls and ceilings of the Escorial Library, of which he was the first librarian. The magnificent fresco cycle was finished in 1595. It was painted by, among others, Pellegrino Tibaldi, who worked according to a programme attributed to Montano. The cycle presents the seven Liberal Arts on the vaults, flanked by Theology and Philosophy on each end of the hall. Similarly, Montano’s sacred geography insists on the compatibility of pagan wisdom with revealed wisdom, and on the unity of knowledge.

Sacred Architecture: Noah’s Ark

So far, I have attempted to demonstrate that Montano’s maps played an active role in his scholarship. In his skilfully layered exegesis, the literal and the arcane meanings of Holy Scripture are revealed through a complex interplay of text and image. In the final section of this paper, I turn to Montano’s architectural designs to expose the same principles in operation. The exercise encourages us to study early modern maps within a spectrum of contemporary illustrated material and to expand our interpretation of maps beyond the narrowly geographical. To this end, I shall concentrate on Montano’s understanding of sacred architecture and his reconstruction of Noah’s Ark. In a series of perceptive essays, the historian René Taylor treated the Neoplatonic and Hermetic inclinations of the builders of the Escorial royal monastery, paying particular attention to the beliefs of the Jesuit Juan-Bautista Villalpando. Villalpando was the author of an influential reconstruction of Solomon’s Temple as described in the prophet Ezekiel’s vision, for which he also compiled
a map of Jerusalem.81 For Taylor, Montano, a critic of Villalpando’s visionary architecture, was the Jesuit’s negative image:

Ostensibly [Montano’s] main objection to the Jesuit’s reconstruction was on the grounds that the building described by Ezechiel had nothing to do with the Temple built by Solomon, as described in the Book of Kings and in other sources. The truth, however, was that they were men of utterly divergent outlook. Arias Montano was a rationalist in the humanistic tradition. His interests lay in the fields of textual criticism and exegesis . . . In this sense he stands close to Erasmus, whose approach to biblical and patristic studies was largely his own. He therefore can have felt scant sympathy for the mystical proclivities of the Jesuit.82

Montano was not just the cold-blooded philologist suggested by Taylor, however, as his treatise on sacred architecture, entitled ‘Exemplar’, makes abundantly clear. Montano’s ‘Exemplar’ is imbued with ideals of order, proportion and anthropomorphism, in which, moreover, images play a significant role. In the preface, which in general reads like an apology for antiquarian studies, Montano argued for the importance of studying sacred architecture:

If the entire principle of the measures, shapes and all structures and buildings that are included in Scripture is carefully and attentively considered, it will undoubtedly be admitted that this whole principle of buildings of the Greeks and Romans either came from there to them, or, at least, that it is laudable and famous chiefly for the reason that it is not unlike the biblical.83

As Villalpando would do after him, Montano was arguing that the classical architectural orders are derived from designs described in detail in the Bible. Employing the modesty topos, Montano pointed out that he himself embodied the two necessary skills for the study of sacred structures, a knowledge of both Hebrew and the principles of architecture.84 His systematic use of relevant terms, such as icnographia (plan), sciographia (section), and orthographia (elevation) for his architectural biblical designs shows that his self-esteem was not without some foundation (see Fig. 6).

Montano then moved on to analyse in painstaking detail the construction and appearance of Noah’s Ark, Solomon’s Temple and the Tabernacle. His account of the Ark starts on strict Aristotelian and philological lines. Montano explains that the Hebrew word teva (טְבַע, ark) is reserved for a particular cause—the rescue of humans from water. The Ark’s form is therefore derived from this special function, and it carries a deeper meaning, which Noah must have understood clearly upon hearing God’s instructions. The structure was to be oblong, with four angles, so as to carry a person lying down.85 The measurements (300 cubits in length, 50 cubits in width, 10 cubits in height) ‘follow the observed ratio of measures of a man lying dead on the ground in length, width and height’.86 Montano’s insistence on the specific function of Noah’s Ark and his interpretation of its measurements become clear when we examine the accompanying illustration, in which the figure of Christ is shown lying in Noah’s Ark (Fig. 11).

Fig. 11. The image of Christ within Noah’s Ark demonstrates Montano’s theological antiquarianism, which combines careful technical analysis with reflection on hidden meanings in Scripture. *Forma... Arcae Noë*, in ‘Exemplar’, volume 8 of the Antwerp Polyglot (see note 9). (Reproduced with permission from the Department of Rare Books and Special Collections, Princeton University Library, Ex 5145.1569fl.)
The striking image is even more remarkable given that Christ is not mentioned a single time in the text. Montano, it seems, chose to analyse all technical details in the text—discussing building materials, structure and internal organization—in preparation for the image, which alone conveys the deeper significance of the Ark.

The association of the Ark with the Church, and with Christ’s body, was not new; it went back to Patristic and medieval traditions. St Augustine had drawn attention to the human proportions of the Ark in *De civitate dei* (15:26) and had referred indirectly to Christ by likening the Ark’s entrance to a wound. In the twelfth century, Hugh of St Victor devoted two treatises to the Ark, placing it in a cosmographical-spiritual context.87 Montano, however, merges traditional exegesis with the language and methods of the antiquarian study of monuments. We know that he owned, among other architectural works, an edition of Vitruvius’s *De architectura*, in which he would have found many relevant passages on symmetry, on the proportion of the human body, and on the significance of certain numbers.88 In Vitruvius he would also have read about the plan, suggested to Alexander the Great by the architect Dinocrates, to carve Mount Athos into the image of a man in whose left hand a city would be planted.89 Further anthropomorphic ideals were discussed in Leon Battista Alberti’s *De re aedificatoria* (mid fifteenth century) including a direct reference to the Ark.90 Alberti’s contemporary (and Pope Nicholas V’s biographer), the humanist Gianozzo Manetti, likened the cathedral in Florence and St Peter’s basilica in Rome to Noah’s Ark. Although he had to admit that St Peter’s structure could not have been modelled exactly after the actual proportions of the Ark, Manetti insisted on the similarity of the design.91

Montano, we see, was not averse to hidden meanings with numerological overtones. Nor was he locked in philological rationalism, as Taylor argues. Certainly, he demanded philological accuracy, but as a means of reaching the arcane meanings of Holy Scripture. He was part of the same culture to which the more extravagant Villalpando belonged, a culture in which textual humanism, antiquarianism and mathematical Neoplatonism had much in common.92 The case is easier to sustain when we recall Montano’s belief in miraculous gems and powerful bezoar stones.

While the numbers cannot be refuted—maps in Bibles are mainly a Protestant phenomenon—my examination of the maps compiled by a prominent Catholic scholar sheds new light on the relations between maps and religion in the sixteenth century. In widening the scope of analysis to include the broader cultural and intellectual context of the period, I have mitigated to some extent the confessional differences and pointed to significant commonalities. *Geographia sacra* constituted a mode of scholarship and thought which came from, and was deeply embedded in, the contemporary practices and concerns of the sixteenth-century republic of letters. Both Protestant and Catholic biblical scholars shared the same world of antiquarian learning, with its emphasis on systematic description and obsession with measurement and visualization. Their common concern for visual accuracy and historical precision did not contradict, and perhaps even enhanced, the use of biblical maps for pious purposes. At a time in which science and piety were not seen as conflicting, a literal, rationalistic map, based on textual analysis and first-hand travel accounts could readily serve as the basis for a wider philosophical-devotional programme and as a wonderful tool in the struggle to accommodate theology and philosophy within a unified body of knowledge.

My final conjecture, looking beyond sacred geography to maps and antiquarianism, is that, in early modern Europe, the scholarly map enabled a primary mode of antiquarian expression. The map was both an apt means of displaying detailed synchronic knowledge and an antiquarian object in itself, an object that was collected, displayed and exchanged. We learn from illustrated texts such as Buondelmonti’s early fifteenth-century treatise on the Aegean, that from the start interest in antiquities in the early modern period was closely tied to cartography. Individuals such as Leon Battista Alberti, Angelo Colocci and, later, Pirro Ligorio pursued both channels thoroughly; the list of antiquarian-cartographers may be extended further to include Conrad Peutinger, Robert Cotton, William Camden, Abraham Ortelius and many others besides Montano. Geography in early modern Europe was far more than just ‘the eye of history’, as Ortelius phrased it. It served as a model for arranging historical and antiquarian knowledge.
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NOTES AND REFERENCES


6. Delano-Smith and Ingram, Maps in Bibles (see note 5), xvii, xxiv.


8. We still lack a full intellectual biography and a full correspondence edition of Montano, a fascinating and central figure of early modern scholarship, though particular studies and modern editions of his works shed light on his work and thought. The standard biography by Ben Rekers, Benito Arias Montano (1527–1598) (London, The Warburg Institute, 1972), is useful mainly for Montano’s activities, less so regarding his works. See also, among others, Vicente Becares Botas, Arias Montano y Plantina: el libro flamenco en la España de Felipe II (León, Universidad Secretariado de Publicaciones, 1999), Luis Gómez Canseco, ed., Anatomia del humanismo: Benito Arias Montano, 1598–1998 (Huelva, Servicio de Publicaciones Universidad de Huelva, 1998); Sylvaine Hänsel, Der spanische Humanist Benito Arias Montano (1527–1598) und die Kunst (Münster, Aschendorff, 1991); Paul Saenger, ‘Benito Arias Montano and the evolving notion of locus in sixteenth-century printed books’, Word & Image 17 (2001): 119–37. Benito Arias was educated in Seville, and then in the University of Alcalá de Henares, a centre for Hebraic and biblical studies. In 1560 he became a member of the military order of St. James. After his recall from the Low Countries he was the librarian of the Escorial (see Mark P. McDonald, ‘The print collection of Philip II at the Escorial’, Print Quarterly 15 (1998): 13–35), and then, in 1586, retreated to his estate near Seville, where he died in 1598.


13. In an often quoted passage Plantin describes how his thirteen-year-old daughter Magdelaine used to read the biblical texts to Montano: she was in charge of bringing ‘toutes les espreuves des grandes Bibles Royal au bibliothécaire’, for example in his Collection d’ecrire et d’afuerir aux que dese voulent ecrire dans le docteur observe diligemment si nos feilles sont telles qu’il convient pour les imprimer’ (Plantin to Zayas, 4 Nov. 1570, in Rooses and Denucé, Correspondance de Christophe Plantin (see note 9), 1: no. 137).


15. For example, Robert Estienne’s Hebraea & Chaldaea nomina virorum, mulierum, populorum, idolorum, urbium, fluuiorum, montium, caeterorumque locorum, quae in Bibliis leguntur, ordine alphabetti Hebraici (Paris, Rob. Stephanii, 1549). An excellent overview, with a Protestant emphasis, of biblical scholarship in the sixteenth century is Deborah K. Shuger, The Renaissance Bible: Scholarship, Sacrifice, and Subjectivity (Berkeley, University of California Press, 1994), ch. 1. See also François Laplanche, Bible, sciences et pouvoirs au XVIe siècle (Napoli, Istituto Italiano per gli Studi Filosolfici, 1997).

16. For example, while Estienne’s Hebraea & Chaldaea nomina (see note 15) gave only Hebrew names and their Latin translation, Montano amplified this format to include, as Plantin duly emphasized in his ‘Preface to the Christian Reader’, summaries of the lives of biblical figures and geographical descriptions based on classical authors: Montano, ‘Hebraica, Chaldaea, Graeca et Latina nomina virorum, mulierum, populorum, idolorum, urbium, fluuiorum, montium, caeterorumque locorum quae in Bibliis utriusque Testamenti leguntur in veteri interprete’, cum aliquot appellativis Hebraicis, Chaldaicis, Graecis vocibus: adiecta eorum expositione & explicacione. Locorum[m] praeterea descrip- tio ex Cosmographis, in Biblia Sacra, Vol. VIII (see note 9).


18. In 1577 Juan de Mariana, entrusted with the final judgment of the Polyglot, pronounced it non-heretical, yet criticized Montano on various deficiencies.

19. Rekers, Benito Arias Montano (see note 8), 54.


22. Arnaldo Momigliano, ‘Ancient history and the anti-


25. E. Mandowski and C. Mitchell, Pirro Ligorio’s Roman Antiquities (London, Warburg Institute, 1963); C. Mo


27. There were two early sources for the geography of Rome: Notitia urbis Romae regionum XIII cum breviarum suis (dated 334–357), and another version, the Curiosum; see


29. ‘Pictura ista, quam ad me misisti, ex Lucreio disumpta [so in ms. for desumpta] elegantissimam artificem commendat, tum eum qui inventi, tum vero eum qui incidit in aes, et animi tui iudicium ut caetera probat, qui cum oculos etiam habes eruditos, ea seligis, quae in singulis optima censentur artibus’ (30 March, 1590, in Hessels, *Epistulae Ortelianae* (see note 11), no. 177:6).

30. Hänsel, *Der spanische Humanist* (see note 8).

31. Plantin to Montano, 14 February 1568, in Rooses and Denucé, *Correspondance de Christophe Plantin* (see note 9), 1: no. 105. A month after his arrival in Antwerp Montano affirmed this purchase in a letter to Juan de Ovando, in which he praised Mercator (Montano to J. de Ovando, 14 June 1568, Antwerp, in E. M. van Durme, ed., *Correspondance Mercatorienne* (Antwerp, De Nederlandse Boekhandel, 1959), no. 72). For Montano’s account at Plantin’s house see Jean Denucé, *Oud-Nederlandse Kaartmakers in Betrekking met Plantijn*, 2 vols. (Antwerp, De Nederlandse Boekhandel, 1912), 1: 1–16. It would be reasonable to assume that he had also been in direct contact with the great geographer.

32. ‘Est hic amicus mihi insignis vir Johannes Baptista Raimundus Mathematicarum artium in hac academia praeclero, qui praeter literarum studia insigniter pinnit et scribit globosque mathematicos omnium quos ego viderim elegantissimos conflict. Is habet pulcherrimon exemplar descriptionis Synarum regionis a portogallensi legato; hung autem rogavi ut exemplum mihi describeret levi et facili certa tamen descriptione; id cum a vico impetravero tibi mittam ad te et publicum usum, est uti scis regio illa cognitum dignissima’ (28 February, 1576, in Hessels, *Epistulae Ortelianae* (see note 11), no. 62:11–12). In a previous section (7–10), Montano requested a coloured copy (by Ortelius’s sister, he emphasized) of the *Theatrum orbis terrarum* for a friend.


34. ‘1586. Summo theologo d’omnino D. Benedicto Ariae Montano; Viro linguarum cognitione, rerum peritia, et vitae integritate magno Abraham Ortelius amicitiae, et observantiae ergo, DD’.

35. ‘Ante illam etiam Hispaniae veteris a te elaboratam descriptionem mihi pre oculis semper esse significabam una cum effigie tua gratissima quam quoquecumque migro circumferre soleo. . . . Eleganter lapidem Baghalzar tibi delectum servo cum nonnullis aliis geminis [so in manuscript] sive lapidibus mirae efficacitatis’ (30 March, 1590, in Hessels, *Epistulae Ortelianae* (see note 11), no. 177). The image Montano refers to is a portrait medal of Ortelius engraved in silver by Philippe Galle, their mutual friend.


37. ‘Now in the box in which you sent the wax cast of Julius Caesar, I send you a short treatise received from a friend two years ago, which perhaps could add to the map of Spain. He is a certain canon of Badajos, a learned and diligent man, Rodericus Delgadus Paciecus by name and surname. And I will consult him and others about the names of locations in Celibia that you ask for’ [Nunc in eadem capsula qua Iuli Caesaris Ceram misisti meditationem tibi mitto brevem ab amico antequam acceptam quae aliquid fortassis contulerit ad Hispanicae descriptionem. Is Pacemis quidam canonicus est vir doctus ac diligens Rodericus Delgadus Paciecus nomine et cognomine. quem etiam cum aliis consulam de ipsis locorum in Celitberica nominibus quae requiris'] (Campo Florido, near Seville, 10 April, 1591, in Hessels, *Epistulae Ortelianae* (see note 11)). See also Agustín Hernando, ‘The contribution of Ortelius’ *Theatrum* to the geographical knowledge of Spain’, in Broecke, *Abraham Ortelius and the First Atlas* (see note 36), 239–62.

38. ‘Antiquae Jerusalem vera iconographia ad sacræ lectionis praecipue et aliorum de illa urbe historiae explicationem. Ex collatione auctorum cum ruinarum vestigiis ac situ ipso’. It is one of the three Jerusalem maps found in Bibles in the 16th century (Delano-Smith and Ingram, *Maps in Bibles* (see note 5), 121).


40. ‘Is cum iuventutem sum varis variis peregrinationibus diu exerceretur, magno animo studio impulsus, ac dolore etiam affectus, quod omnium optimam et potissimam illam unam praetermissis quae in Syria Palæstinae pietatis ergo suscipliur Christianis solet . . .’ (AI (see note 21), 65*).

41. ‘Itaque cum eleganti adeo ingenio, toto artibus praeditus et instructus esset, omneque illam regionem quae a lope in Iordanem, et a Damosco usque in Beersebah lacer, diligenter attenueete paragrasset, atque ad antiquas cognoscentias res, a fabulisque recentiorum, qui in illis locis degunt, cognoscentias acro praeditus esset iudicio, quaequecumque vidit, omnà exacta notavit, et tum litteris, quam um autographum mihi amicitiæ pignus gra-tissimum dono dedit; tum etiam tabulis a se depictis, expressit’ (AI (see note 21), 65*). The term *tabula* could mean paintings, drawings, or textual lists, as well as maps.

42. Suspicious reception of local lore is an antiquarian commonplace. In the middle of the 16th century the German antiquary Georg Fabricius warned travellers to Rome that ‘one must not listen to the ordinary crowd when learning the antiquities of the city’ (quoted in Anthony Grafton, *The ancient city restored: archaeology, ecclesiastical history, and Egyptology*, in Grafton, *Rome Reborn* (see note 33), 87–123, on 87–88).

43. ‘Igitur illius optimi viri demonstrationibus primum instructus, cum multa deinde ex sacrorum librorum lectione observauerint, quaedam etiam apud alios scriptores adnotaverint, quae ad topographiae rationem expendiendum conduce possent, antiquum Ierosolymorum demonstratum situm, cuius cognitionem non minus utilem quam iucundum sacrarum disciplinarum studiosis futurum sensebam, brevi descriptione inita, et tabula etiam depicta in sacro Bibiliorum apparatu, opportune collocandum curavimus, additis ipsis quae in celebrioribus locorum partiumque notis observati videbantur dignissima’ (AI (see note 21), 65*).
44. ‘Tabula terrae Canaan Abrahæ temporæ et ante adventum filior. Israel cum vicinis et finitimis regionibus, ex descriptione Benedicti Ariae Montani’. And ‘Terraæ Israel omnis ante Canaan dictæ in tribus undecim distributæ accuratissimæ at ad sacræ historiarum intelligendas opportunitatés, cum vicinarum gentium descriptione tabula at exactissimo mansionum XLIII situ. Ad sacræ apparatus instructionem a Bened. Aria Montano’ (Nebenzahl, Maps of the Holy Land (see note 4), did not include Montano’s map in his survey. For further notes see Delano-Smith and Ingram, Maps in Bibles (see note 5), 59.

45. For Adrichem’s maps see Nebenzahl, Maps of the Holy Land (note 4), plate 35. Montano’s influence is clearly seen also in John Speed’s 1595 map, reproduced in Nebenzahl, plate 38. Interestingly, immediately after the publication of the Polyglot, seven of Montano’s maps and illustrations were inserted into the decorative programme on the library walls of the Benedicite abbey of San Giovanni Evangelista in Parma (see Maria Luisa Madonna, ‘La biblioteca: ‘theatrum mundi’ et ‘theatrum sapientiae’’, in L’abbazia benedettina di San Giovanni Evangelista a Parma, ed. Bruno Adorni (Parma, Cassa di Risparmio di Parma, 1979), 177–94). On the significance of such murals in monastic life see Martin Kemp, Behind the Picture: Art and Evidence in the Italian Renaissance (New Haven, Yale University Press, 1997), 178–81.

46. As in his reconstruction of the Temple, Montano chose the historical (Joshua) rather than the visionary (Ezekiel) source to delineate the tribal boundaries. This person remains to be identified. It is unlikely that it was Azaria Dei Rossi, the author of the controversial Meinor Enayim (1573), since we have no information about his presence in Trent. However, Rossi and Montano may have known each other, since their studies dealt with similar issues and materials. I thank Joanna Weinberg (Oxford Centre for Hebrew and Jewish Studies) for discussing this point with me. Montano may be referring to the anonymous Mantuan Hebrew map of the Holy Land (see note 4), which was rediscovered in 1991 in Zurich. See the reproduction in Ariel Tishby, ed., Holy Land in Maps (Jerusalem, Israel Museum, 2001), 127.

47. ‘Adeoque exiguo temporis spacio ab ipsis est expugnata & occupata, ut temporis ipsius brevitas non ad expugnandam, sed ne ad totam quidem illum peragrandum satis esse potuisse videatur: cum tamen in illa urbe ipsa loci natura, atque hominum industria munitissimæ frequentes essent’ (AI (see note 21), 28).

48. AI (see note 21), 54.

49. AI (see note 21), 43–51: ‘Elenchus Quo Libro et Capite Bibliororum, et quoties, singuli Palaesthinae loci continentur’.

50. ‘A description and an image of that index were placed before everyone’s eyes, so that [all the obscure places in Scripture] would be understood more easily’ [Utque facilius ab omnibus intelligi possint, ea ipsius tabulae descriptione ac pictura ante oculus uniuscuiusque continentur’.]

51. ‘Hoc vero tum a nobis, tum a doctissimis iis viris, qui quadam nos doctrina & ingenio longe antecedunt, qui in sacro hoc Apparatu egregiæ possunt operam, praestitum esse arbitramur; ut, videilice, sublata, aut saltem emolliat asperitate ac difficulitate illa, quae lectoris, quo minus simplicem sententia, quae sacræ in libris prima spectanda est, intelligentiam consequatur, impedire posset; ad arcana illum, quae ilidem sacræ continentur libris, aeternæ beatitudinis doctrinam facilius perveniat’ (AI (see note 21), 27).

52. ‘Neque enim (ut eius dimensionis rationem ad geographiae normam ducamus) habet pluram quam sexaginta miliaria passuum in longitudine; in latitudine vero quadringinta miliaria’ (AI (see note 21), 52).

53. AI, 53–54 (see note 21). Servetus, in his first Ptolemy edition (Lyon, 1535), ‘Tabula Terrae Sanctæ, doubled the Holy Land’s fertility, which was later brought against him at his trial in Geneva. Münster argued that God’s favours shifted from Canaan to lands of pious people, or in other words, to Germany. See Münster’s 4th edition of Ptolemy’s Geography (Basel, 1552), ‘Appendix geographical’, 169.

54. ‘Adeoque exiguo temporis spacio ab ipsis est expugnata & occupata, ut temporis ipsius brevitas non ad expugnandam, sed ne ad totam quidem illum peragrandum satis esse potuisse videatur: cum tamen in illa urbe ipsa loci natura, atque hominum industria munitissimæ frequentes essent’ (AI (see note 21), 28).

55. One notes that Montano, in his correspondence with Plantin, insisted on incorporating these same two maps with another text commentary on Joshua, which Plantin eventually did after 1586 (Arias Montano, De optimo imperio, sive, In librum Isoue commentarius (Antwerp, Plantin, 1583); Voet and Voet-Grisolle, The Plantin Press (see note 14), entry 579).


61. ‘Eorum autem qui pietatis causa illa sunt profecti, nemo (ut opinor) ab his aedibus inventus quem laboris, temporis, quam sumptus eam in rem facti adhuc poenituerit: quinimo, quamplures ipsæ & vidi & novi, qui cum eorum locorum sibi in mentem veniæbat, eaque quæ ipsi viderant, commemorabant; mirifica quadam delctatione afficiabantur. . . . Sed quoniam omnis, diversas ob causas alium non parum refert eos qui sacrae scripturae omnium, quia non parum refert eos qui sacram scripturae studiis sunt dediti, illam & singulas eius partes per noscere: pro nostra, quantulacunque ea est, industria, ex accurata sacrorum librorum lectione, eam demptam locorum peraccurandum, acc laboribus, lectori conspiciendam exhibemus, indeque sumplimus initium, ubi Israelitæ ab Aegypto profecti primum per annos quadringinta mansiones collocarunt, iterum donec promissam sibi terram perducerentur’ (AI (see note 21), 28).
62. Voet and Voet-Grisolle, *The Plantin Press* (see note 14), entries 588–90. ‘Biblìa etiam nunc statui imprimere magnis typis cum varis lectionibus in margine et cartae rationibus in fine atque figuris aere excisis juxta illius maiorem quod opus ni fallor placebit curiosis et illic rationem Monumentorum tuorum addere sed fere duplo
rationibus in fine atque figuris in aere excisis juxta
14), entries 588–90. ‘Biblia etiam nunc statui imprimere non est dubium quin illa perspectam quandam
78. Z. Shalev
experts such as Jean Bodin and François Baudouin. See
131. 70. *Al* (see note 21), 6. It is worth pointing out that Montano’s sacred geography serves here the same needs, and assumes the same encyclopedic character, as universal history as systematized at the same period by legal experts such as Jean Bodin and François Baudouin. See
71. Nullus minus in parvis bibliothecis, Latince Scriptoribus, quorum scripta ad nostram usum pervenerunt aetatem, aliquid edidit, quod si quale tandem id sit, diligentier examinetur, comparari possit cum iis, quae Moses de terra Opifir apertissime scriptum: ‘*Al* (see note 21), 4*.
72. Morphologically, *parvaim* (παρειμα) in Hebrew could be broken to mean double Peru. Montano claimed therefore that the verse should in fact read: ‘And this was the gold of Peru and Peru’, and not like the Vulgate, where *parvaim* was interpreted as a mark of high quality (probatisimum).
74. Glizzi, *Adamo* (see note 73), 150–53.
75. Ortelius, *Synonymia Geographica* (Antwerp, Plantin, 1578), 235. In his *Theasaurus Geographicus*, 1596, Ortelius added a few justifications for his rejection of Montano’s view.
77. In his later years Montano devoted his energies to natural history as well. His posthumous work, *Naturae historia, prima in magni operis corpore pars* (Antwerp, Plantin-Moretus, 1601), still awaits a modern study.
78. ‘Quisnam vero apertarum terrarum fructus mortuis
80. For a detailed study of Montano’s designs of sacred architecture see Hänsel, *Der spanische Humanismus* (see note 8), section 4.1.1.2.
Géographie sacrée, goût de l’antique et érudition visuelle: Benito Arias Montano et les cartes de la Bible polyglotte d’Anvers

Le dernier volume de la Bible polyglotte éditée par Benito Arias Montano et imprimée à Anvers par Christophe Plantin a été publié en 1571–1572. Formant une partie de l’Apparatus de la Bible, le volume contient un certain nombre d’essais, d’illustrations et de cartes conçus par Montano en relation avec des questions soulevées par le texte biblique. Les cartes de Montano sont le fruit de sa formation philologique dans les langues orientales et dans l’exégèse, de son profond intérêt pour les antiquités et la géographie et de son habitude de mettre en images ou en tableaux les connaissances. Il concevait ses cartes à la fois comme des aides à l’étude et comme des supports de dévotion et de méditation. En outre, ces cartes reflètent une conception philosophique plus large, selon laquelle les Saintes Ecritures recèlent les fondements de toute philosophie naturelle. Le cas de Montano nous incite à revoir les premières Geographia sacra de l’époque moderne à la lumière des courants de pensée plus généraux de cette période.

Geographia Sacra, Altertumskunde und visuelle Gelehrsamkeit: Benito Arias Montano und die Karten der Antwerper Polyglott-Bibel

Geografía sagrada interés por lo antiguo y erudición visual: Benito Arias Montano y los mapas de la Biblia Políglota de Amberes

El último volumen de la Biblia Políglota, editada por Benito Arias Montano e impresa en Amberes por Christophe Plantin, fue publicado en 1571–1572. Este volumen, que formaba parte del Apparatus de la Biblia, contiene varios ensayos, ilustraciones y mapas hechos por Montano, sobre cuestiones planteadas por el texto bíblico. Los mapas de Montano fueron un producto de su educación filológica en lenguas orientales y en exégesis, su profundo interés por la geografía y lo antiguo, y de su costumbre de representar imágenes y organizar conocimientos. El erudito español dibujó sus mapas como ayuda para el estudio de la Biblia y como instrumentos de devoción y meditación. Sus mapas reflejan, además, su amplia perspectiva filosófica según los fundamentos de filosofía natural de la Sagrada Escritura. El caso de Montano nos anima a reexaminar la primera Geographia Sacra a la luz de tendencias eruditas mas amplias.

Presenting the British Library’s Maps on the Internet

Spring 2003 saw the unveiling of the first part of the most substantial digitization exercise hitherto undertaken by the British Library. Financed by the New Opportunities Fund established by British National Lottery Fund, the whole project represents the first fruit of the determination of Lynn Brindley (the British Library’s Chief Executive since 2000) to make significant parts of the Library’s collections available on the Internet. Although the target audience is the non-specialist ‘Life-Long Learner’, there has been no simplification of the existing catalogue descriptions; on the contrary, in many cases these have been substantially improved. The very high resolution images that will be available on screen as part of the enhanced and relaunched British Library website, however, will be downgraded if downloaded.

The main theme for the British Library’s major project was to have been ‘In Place’, but has been renamed ‘Nuggets’. No fewer than four of the elements making up that project are linked to the Library’s map collections. Perhaps the most exciting of these, ‘The Unveiling of Britain’, involves the digitization of the most informative images of Britain, whether represented separately or on world maps, dating from about 800 A.D. to 1600. Nearly 100 images come from before 1500. Much the largest part of the project, however, involves maps and bird’s-eye views from the manuscript collections of Sir Robert Cotton (1571–1631). Supplementing these early maps are sixteenth-century manuscript and printed maps by such cartographers as Gerard Mercator, Laurence Nowell, William Smith, John Norden, and, of course, Christopher Saxton, including the latter’s manuscript local mapping.

The second element bridges the gap between the sixteenth and the nineteenth centuries, and presents maps taken from the collection of about 1200 manuscript and printed maps of London and its environs, dating from 1570 to about 1860, assembled in the mid-nineteenth century by the interior designer Frederick Crace. Crace’s maps range from well-known representations of the whole city, such as those by John Ogilby, John Rocque and Richard Norwood, to plans of individual buildings in the rent books of City companies, and to ephemera.

The third element of the project has already involved the digitization of all the over 350 surviving manuscript preparatory drawings that were made for the first Ordnance Survey of Great Britain. Dating from between about 1785 and 1840, and covering England and Wales south of a line from Hull to Liverpool, these draft maps are on scales of at least two inches to the mile and are far more detailed than their printed one inch to the mile equivalents.

The final element of the first stage of the British Library’s ‘Nugget’ project involves digitizing the hand-drawn views and aquatints in King George III’s Topographical Collection. Collectively, these views present a sumptuous image of Georgian Britain and its empire, and by making them available at an early stage of the Library’s project, it is hoped that potential sponsors will be encouraged to pay for the digitization of the thousands of maps in this royal collection that have had to be excluded from the present stage of digitizing.

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