Mapping Mediterranean Geographies: Geographic and Cartographic Encounters between the Islamic World and Europe, c. 1100-1600

by

Jeremy Francis Ledger

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Doctoral Committee:

Associate Professor Diane Owen Hughes, Chair Professor Michael Bonner Associate Professor Hussein Fancy Professor Karla Mallette Professor Emilie Savage-Smith, University of Oxford

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List of Abbreviations

ACA = Arxiu de la Corona d'Aragó

AHPB = Arxiu Històric de Protocols de Barcelona

AHM = Arxiu Històrica de Mallorca

BnF = Bibliothèque nationale de France

EI, EI^2 , and $EI^3 = The \; Encyclopedia \; of \; Islam (1st, 2nd, and 3rd editions)$

 $BGA = Bibliotheca\ Geographorum\ Arabicorum$

Note on Transcription

The transliteration of Arabic words and names follows the standards set by the *International Journal of Middle East Studies*.

Abstract

This dissertation is a study of the cultural encounter between Muslim and Christian inhabitants of the Mediterranean basin between the twelfth and sixteenth century. It approaches this subject from the vantage point of the circulation, transmission, and reception of geographical knowledge between Muslim and Christian geographical writers and cartographers who inhabited the shores of the central and western Mediterranean during a period of considerable political and religious change and hostility. At a basic level, it demonstrates the possibility of the transmission of knowledge in a world fragmented by violence and religious divisions. But it also argues that geographical writers and cartographers did not innocently receive and use this geographical knowledge. Rather they incorporated it piecemeal and adapted it, modified it, and even distorted it to fit their own preexisting conceptions of the world. The cross-cultural transfers of geographical knowledge examined in this study did not transform the mentalities and worldviews of recipients though they nevertheless modified them in important ways. The study is organized chronologically around four case studies, each an example of the transfer and reception of geographical knowledge across linguistic, religious, and political divisions. It begins in twelfthcentury Sicily where the Muslim polymath al-Sharif al-Idrisi produced a geography on behalf of the Christian king Roger II in which he blended information from his own Arabic sources with new knowledge he had learned in Sicily. It then moves to the Maghrib and examines the way in which an anonymous Muslim cartographer took up a form of mapping that had developed in Europe and inscribed it with a view that betrayed his Islamic faith. Next it shifts to fifteenthcentury Iberia where it explores a Castilian translation of the twelfth-century Arabic geography

of al-Zuhri. Finally, it focuses on sixteenth-century Ifriqiya where 'Ali al-Sharafi took up a European form of charting and modified it to present an Islamic sacred geography. These examples demonstrate that the analysis and assessment of the transfer and reception of geographical knowledge across cultures is a valuable technique for the study of mentalities and the milieus within which the recipients of knowledge lived.

Introduction

This dissertation tells a story of the development of geographical and cartographical traditions in the western Mediterranean between the twelfth and sixteenth century, a period of considerable political and religious change and conflict, yet paradoxically, one also shaped by exchanges of goods, peoples, and ideas across the sea. It approaches this subject through a close examination of the circulation and transfer of geographical knowledge between Muslim and Christian geographical writers and cartographers who inhabited both the northern and southern shores of the Middle Sea during these centuries. Based on Arabic, Romance, and Latin works of geography and maps, it offers a unique view of the ways in which geographical knowledge reached and was received, and deployed along the northern and southern shores of that sea. The work has two central objectives. The first is to delineate in new ways social and intellectual connections between the Maghrib and Ifrīqiya, an area roughly equivalent to that part of North Africa that stretches from the Atlantic to present-day Tunisia, with the rest of the Arabicspeaking world including the northern shores of the Mediterranean, in particular the Iberian and Italian peninsulas. In seeking to enunciate the channels, codes, and settings through which this knowledge circulated via textual and visual means, the dissertation presents geography and cartography as conduits through which knowledge of the world was communicated and transmitted across this historically important sea. In this way, the study engages with longstanding historiographical questions regarding whether the Mediterranean in the medieval and early modern periods is best viewed as a time and place of connectivity and cultural

commonality or as a time and place of isolation and clash between a Christian north and a Muslim south.

The second objective is to assess the reception of this knowledge and its uses, the ways in which geographical writers and cartographers adapted and blended new, foreign knowledge into an old repertoire of information and modes of geographic thought, which had long depended upon ancient knowledge, to construct a new world – not a natural "real" world, but a cultural construct. The dissertation investigates the image of the world as it was understood and described by these geographical writers both as they saw it themselves and as they imagined it through the reading of earlier texts and shaped it in their dreams. We are fortunate to have at our disposal not only verbal descriptions of their world visions, but also their visual expression in maps. These combined resources allow me to examine the ways in which inhabitants of North Africa, Iberia, and the Italian peninsula, whether Christian or Muslim, mined and translated ancient Greek, Latin, Arabic, Sanskrit, and Persian texts and redistributed in their maps and geographical treatises 'old' knowledge gleaned from these sources that they continued to deem appropriate from their medieval and early modern perspectives. Moreover, I assess the ways in which Christian and Muslim geographical writers and cartographers adapted contemporary geographical knowledge, especially that deriving from peoples or texts across confessional, linguistic, and political lines. By simultaneously establishing the sources of geographical knowledge, tracing the process by which writers and cartographers selected information to include or exclude from a chart or treatise, and the expression of this knowledge in writing and on maps, this project seeks to identify the motives behind particular worldviews expressed in works of geography and cartography. The goal has been to gauge how geographical writers and mapmakers from a given time and place were able to know the world and to represent it. I then

seek to evaluate the ways in which these geographers and cartographers modified traditional views when confronted with new, imported knowledge and understandings. Ultimately, this study offers a nuanced understanding of how medieval and early modern inhabitants of the Mediterranean came to envision the world and their place in it, and why they saw the world in these ways.

The exchange and reception of geographical knowledge in the western Mediterranean in this period was hardly a simple or straightforward process. Works of geography and cartography from the medieval and early modern period were inscribed with markings of the cultures, particularly the religious, within which they were produced. Since the medieval and early modern Mediterranean was characterized, in part, by hostilities predicated on religious and political difference, these markings complicated the reception of these texts, which cannot therefore be read as neutral documents. Beyond questions of religion, the scholarly geographical and cartographical traditions within the Islamic and European-Christian worlds differed significantly, with the result that encounters between them frequently meant that the receivers had to confront entirely new ways of depicting and understanding the world.

This dissertation examines this geographical encounter through the analysis of four case studies, each of them a work of geography or cartography that exhibits signs of the incorporation of knowledge and ways of depicting the world that crossed cultural lines. It begins in twelfth-century Sicily where the Muslim geographical writer Muḥammad al-Idrīsī worked under the aegis of the Christian king Roger II. He produced for the king an exceptional work of geography that joined knowledge from his Arabic textual sources to information that he had gained while attached to Roger's royal court. It then moves to the Maghrib of the fourteenth century where an anonymous cartographer inscribed his portolan chart, a form of cartography that first developed

along the European shores of the sea, with signs of his Islamic faith. The third case again examines an anonymous work, this time a fifteenth-century Castilian translation of the twelfth-century *Book of Geography* by the Andalusī geographical writer al-Zuhrī. Finally, it turns to the sixteenth-century world map and nautical atlases of 'Alī al-Sharafī, a native of the Tunisian port city of Sfax. In his work 'Alī blended together the cartographical forms of Idrīsī and the portolan charting traditions that had reached him from the northern shores of the sea.

While these works range across an extensive geography and period of time, when considered together they provide a broad view of Mediterranean geographical encounters between the twelfth and sixteenth centuries in that they are different in genre, period, authorship, and space of production. A first, general conclusion is that exchange of geographical knowledge occurred in spite of any religious, political, or cultural divisions that characterized Mediterranean life. As these examples demonstrate, it is impossible to maintain the notion of these practices as occurring in isolation or insulation from one another. But of equal importance is the manner in which this new geographical knowledge was received. While in each of the cases presented here the geographer or cartographer in question dealt with new cultural knowledge in his own way, for instance whether by resistance or general acceptance, a common pattern emerges from them regarding the manner of reception of the foreign. Geographical writers and cartographers never took up imported geographical knowledge that had crossed confessional and linguistic boundaries indiscriminately. While these particular geographers and cartographers may have altered their portrayals the world, they did not significantly transform their geographic visions as a result of such cross-cultural exchange.

Contexts

The period examined in this study, from the mid-twelfth century through the last years of the sixteenth, were full of cultural and political change. Foremost among them was the succession of political powers that controlled the shores of the Mediterranean. At the beginning of the period in question, Western Europe was in the process of opening itself to that great sea in ways that would reshape its own culture and economy, while at the same time the fortunes of Muslim power at sea were in decline. The period was shaped by what Roberto Lopez called the "medieval nautical revolution" and a corresponding massive expansion of trade across the sea, primarily driven by Genoese, Venetian, and Catalan merchants. Western Europe also expanded into the Mediterranean in other ways. In the twelfth century, the so-called Reconquista of the northern, Christian kingdoms of Iberia pushed ever further southward into Muslim-ruled lands in spite of resistance of the Almoravids and after 1147, the Almohads, both Berber dynasties from the Maghrib which had been called upon to rescue al-Andalus from the northern thread. The Almohad collapse at the battle of Las Navas de Tolosa (1212) and the Castilian capture of Seville in 1248, however, left only the small emirate of the Nasrids, centered in Granada, as the last of the Muslim-controlled territories of the peninsula. The Nasrids held on to power until the last decade of the fifteenth century, though the end of their rule was in sight by 1462 when the Castilians captured Gibraltar and in so doing limited access to the Maghrib across the Strait. The Christian kingdoms of Iberia, in the ascendancy across Iberia throughout much of the fourteenth and fifteenth centuries, emerged with a newfound confidence vis-à-vis the Muslim inhabitants of the peninsula. Meanwhile, the loss of al-Andalus sparked in the hearts and minds of many

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¹ Roberto Lopez, *The Commercial Revolution of the Middle Ages*, 950-1350 (Englewood Cliffs, N.J: Prentice-Hall, 1971).

Muslims across North Africa hopes for a Muslim reconquest in Iberia, though these dreams never came to fruition.

At the eastern end of the Mediterranean, the Crusades marked another area of Western European expansion both into the Mediterranean and into the lands under Muslim rule. They established crusader states across the Holy Land and established regular trade routes across the sea that linked the Levant with Western European ports. Merchants from the northern shores of the Mediterranean, in particular those of Genoa and Venice, were granted commercial privileges in the Levantine ports, which contributed to the decline of Muslim shipping. Indeed, western Muslims who set out on the *ḥajj* to Mecca often had to reserve places on Genoese and Catalan ships on their journey to the east. Western European merchants also frequented ports across North Africa as well. Indeed, they traveled there so frequently that merchants from Genoa, Pisa, Venice, Barcelona, and elsewhere established *funduqs*, or warehouse-hostels, where they could store goods and lodge during their trips across the shores.²

Around the same time that Crusaders were establishing themselves in the Levant, the central Mediterranean experienced the aggressions of Norman mercenaries who traveled to the southern Italian peninsula where they offered military service to the papacy, Byzantines, and others in exchange for money, lands, and titles. The members of one Norman clan, the de Hauteville, moved beyond the peninsula and conquered Muslim-ruled Sicily in 1091. By the mid-twelfth century, Roger II, a descendant of these Norman mercenaries, had made himself king and ruled over a mixed population of Christians, Muslims, and Jews in Sicily in addition to achieving rule over the entire coastline of Ifrīqiya. The king employed a heterogeneous cast of

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² Olivia Remie Constable, *Housing the stranger in the Mediterranean world: lodging, trade, and travel in late antiquity and the Middle Ages* (Cambridge: Cambridge University Press, 2004).

courtiers and administrators, among them Arabic speakers, some of whom may have been Muslims, but many of whom were certainly Christian eunuchs who hailed from North Africa and had been captured and converted during Roger's conquest of the Ifrīqiyan coastline just south of Sicily.

The Muslim polities of North Africa during much of the period in question were in a state of fracture. In eastern North Africa, the powerful Fātimid caliphate managed trade routes that linked the Indian Ocean with the Mediterranean. But they also maintained diplomatic ties with some Latin states, among them Kingdom of Sicily. Indeed, King Roger began to model his administration and regal image on that of the Fatimid administration and rulers. To the west, a number of dynasties controlled smaller territories across North Africa, some Berber and others Arab. Periodically, an ambitious dynasty sought to dominate the rest. The Almohads, for instance, had conquered all of North Africa from the Atlantic to Ifrīqiya by the late 1150s. Their conquests brought them face-to-face with the Normans of Sicily, or at least with their representatives in their Ifrīqiyan holdings. The Almohads also turned their attention to al-Andalus where in spite of some initial successes the northern Christian kingdoms soundly defeated them in the thirteenth century. Two centuries later, another Berber dynasty from the far western Maghrib, the Maridīds, expressed a renewed imperial ambition. Like the Almoahads, they also conquered the lands of the eastern Maghrib and Ifrīqiya under the rule of Abū al-Ḥasan (r. 1331-1351). He also aimed to extend his influence into Iberia and planned first to gain control of the Strait of Gibraltar, the northern shore of which was then controlled primarily by the Castilians, but also the Nasrids of Granada. After capturing the mountain of Gibraltar in 1333, his forces were roundly defeated at the Iberian port of Tarifa and later (1340) at Río Salado.

A century later, a new, powerful Muslim dynasty reached the shores of the sea. The 1453 Ottoman capture of the metropolis of Constantinople, up to that point the largest and one of the greatest Christian cities in the world, significantly altered the configuration of the Mediterranean and brought them into direct confrontation with the Spanish Hapsburgs. As Andrew Hess has argued, the Ottoman-Hapsburg confrontation impeded some forms of exchange across the sea, yet for the inhabitants of Ifrīqiya and other Ottoman-controlled regions of North Africa, it also resulted in direct and frequent contacts with cosmopolitan Constantinople.³

The period examined in this study, then, was one of changing political, diplomatic, and commercial configurations across the Mediterranean. But it was a time of cultural reorientations as well. Numerous cultural forms moved across the sea and were taken up along both shores where they were modified to fit local contexts. For instance, artistic and architectural forms mutually traveled across the sea in all directions, their circulation a demonstration of the interconnectedness of the sea in the medieval and early modern period. Knowledge also crossed the sea, in spite any cultural, linguistic, or religious boundaries. For example, as contacts across the Mediterranean intensified in these centuries, so too did the exchange of knowledge between Muslim and Christian inhabitants. This is particularly visible in the translation of texts on astronomy, astrology, medicine, mathematics, philosophy, and theology from Arabic into Latin and vernacular languages across southern Europe.

This study asks how geographical knowledge developed along the northern and southern shores of the western Mediterranean within this framework of changing commercial, political,

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³ Andrew Hess, *The Forgotten Frontier* (Chicago: University of Chicago Press, 1978).

⁴ See, for instance, Heather E. Grossman and Alicia Walker eds., *Mechanisms of Exchange: Transmission in Medieval Art and Architecture of the Mediterranean, ca. 1000-1500* (Leiden: E. J. Brill, 2013).

and cultural configurations. How, for instance, did exchange of knowledge across the sea influence geographical practices and to what extent did it contribute to the learning about new geographies and distant peoples of the world? In other words, how did cross-cultural exchange of geographical knowledge change the ways in which geographical writers and cartographers, both Muslim and Christian, conceived of and portrayed their world? The phrase "geographical knowledge" as used here has a broad meaning. It includes information about the physical geography of the world. The geographers of Muslim-ruled Ifrīqiya, for instance, possessed knowledge of distant lands that were little known to their European counterparts, and vice versa. But "geographical knowledge" also encompasses the way in which geographical writers and cartographers described the world. On the one hand, this takes into account the locally- and ideologically-informed impressions geographers or cartographers held of the world and its peoples and which they inscribed in their works. On the other hand, it takes into consideration the way in which these geographical practitioners described and divided the world. In this way, the dissertation centers on the development of Mediterranean geographical tradition that considers ways in which cross-cultural exchanges contributed to new knowledge of the physical geography of the world as well as new ways of conceiving it.

Writing Mediterranean History

As a history of the Mediterranean, this dissertation stands astride some longstanding historiographical debates concerning the nature of the sea in medieval and early modern periods. Indeed, the writing of the history of the medieval and early modern Mediterranean has long been marked by two powerful yet contrasting portrayals of the sea. The first draws on the work of the Belgian economic historian Henri Pirenne whose *Mohammed and Charlemagne* proposed that

"without Mohammed Charlemagne would have been inconceivable." ⁵ He argued that the rise of Charlemagne's empire, the collapse of the Greco-Roman world, and the subsequent transition from antiquity to the Middle Ages could only be understood by looking beyond the boundaries of Europe and Christianity. He contended that it was not the fall of Rome in 476 that had shattered the economic and cultural unity of the old Roman Mare Nostrum, but rather the Islamic invasions of the seventh and eighth centuries. In his view the arrival of this new religion, hostile to Christian Europe, had cut off exchange between the northern and southern shores of the sea. The second view is that epitomized by Fernand Braudel's portrait of the sea in his study of the sixteenth-century Mediterranean. In his examination of the relations between the two great Mediterranean empires of the age, the Ottomans and the Spanish Hapsburgs, rather than focusing, as Pirenne had done, on interfaith hostilities as an obstruction to exchange, he emphasized the shared history of its inhabitants which was predicated on common geographical and environmental constraints. His Mediterranean is packed with religious, political, and societal difference across and along its shores, and yet it is also a sea united by movement and circulation of people, goods, and ideas.

This Braudelian model has tended to appeal to far more historians than has the closed sea of Pirenne, though in truth both provoked response and inspired works of history. Braudel's

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⁵ Henri Pirenne, *Mohammed and Charlemagne* (London: Allen & Unwin, 1939). Historians of more recent periods have presented models of a closed sea as well. For an Ottomanist's take on Mediterranean unity and disunity along the Ibero-African frontier, see Andrew Hess, *The Forgotten Frontier* (Chicago: University of Chicago Press, 1978).

⁶ Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*, 2 vols. (London: Collins, 1972).

⁷ Molly Greene, A Shared World: Christians and Muslims in the Early Modern Mediterranean (Princeton: Princeton University Press, 2000); David Abulafia, The Great Sea: a Human History of the Mediterranean (Oxford: Oxford University Press, 2011); David Abulafia, The Mediterranean in History (Los Angeles: J. Paul Getty Museum, 2003); Adnan Ahmed Husain and K.E. Fleming, A Faithful Sea: the Religious Cultures of the Mediterranean, 1200-1700

work, though, stimulated other great works of Mediterranean history, among them that of Shlomo Dov Goitein. Though Goitein claimed that he had not taken a position on the Pirenne controversy, his *A Mediterranean Society* nevertheless offered a view of the sea in direct contrast to that of the Belgian, full of movement and exchange. Based on the Geniza documents, he traced the extensive and frequent movements of Jews across the Mediterranean, including during periods of tense relations between Islam and Christian Europe. For Goitein's travelers, movement tended to be hindered not by religious or cultural differences but rather by shortcomings in navigational techniques and technology, as well as by environmental limitations. His was a Mediterranean of relatively unconstrained movement. More recently, Peregrine Horden and Nicholas Purcell have refined Braudel's environmental framework. They conceived of a sea of "connectivity" between the innumerable microregions, and correspondingly encourage historians to focus on the local in their analyses of the Mediterranean. Like Braudel, they view the Mediterranean as a place of difference and diversity, yet nevertheless united by the movement of humans.

But concerns regarding division and connection were not the only ones that confronted these historians. They also raised questions regarding the scale of the sea, both in terms of its physical and its temporal limits. Braudel in particular examined such questions. The Mediterranean that he posited was vast, stretching in some cases from the Pillars of Hercules all the way to Beijing. This is not to say, of course, that the Mediterranean itself stretched to the

⁽Oxford: Oneworld, 2007); William Harris, *Rethinking the Mediterranean* (Oxford: Oxford University Press, 2005); John Wansbrough, *Lingua Franca in the Mediterranean* (Richmond, Surrey: Curzon Press, 1996).

⁸ Shlomo Dov Goitein, *A Mediterranean Society* (1967-1988). In the epilogue of volume 5, Goitein claimed that he took no position on the Pirenne thesis, 496.

⁹ Peregrine Horden and Nicholas Purcell, *The Corrupting Sea, a study of Mediterranean history* (Malden, MA: Blackwell, 2000).

Pacific, but rather to suggest that the movement of people connected it to distant regions, and it both received and exported ideas and products across these vast distances. But Braudel, like his followers, also emphasized the *longue durée*, a view that embraced long-term historical structures as powerful forces in the daily lives of the sea's inhabitants. It is this Braudelian Mediterranean upon which this study is founded, though Goitein's vision of a sea in constant movement and Horden and Purcell's emphasis on the local also inform it. Following Braudel, it considers the practices of the writing of geography and cartography along the shores of the sea in full recognition of a Mediterranean of difference and distinction – religious, linguistic, political, social, and so on – and even of hostility and animosity, and yet it places the movement of people, texts, and ideas at the center of its analysis. But more than this, it also takes up Braduel's call for the historian to be alert to both the broader world and the deep past, far beyond the sea's immediate shores. This is particularly pressing given that much the geographical knowledge of those who lived around the medieval and early modern Mediterranean had reached them from afar, both in terms of physical and chronological distance. Though capturing the global geographical and cartographical influences that impinged on the work of geographers and cartographers is critical to this study, so too is the local, as emphasized by Horden and Purcell. For geographers and cartographers received geographical knowledge based on local circumstances and needs.

Finally, the study of the history Mediterranean has been divided not only in terms of its historiography, but also by discipline.¹⁰ Historians have tended to write the history of the sea

¹⁰ Here I follow Hussein Fancy's call for historians of the Mediterranean region to move beyond disciplinary divides and to incorporate Arabic, Latin, and Romance sources in their work. See "The last Almohads: Universal Sovereignty between North Africa and the Crown of Aragon," *Medieval Encounters* 19 (2013): 102-136, esp. 104.

from the perspective of one or the other shore. Scholars have far less frequently embraced both shores of the sea simultaneously. Europeanists, for instance, typically approach the study of the Mediterranean from the perspective of inhabitants of the northern shore and the Latin and Romance language documents that they produced. By contrast, historians of the Islamic Mediterranean have generally relied on the Arabic historical record and, thus they write from the perspective of the southern shores. While these works offer valuable insights into the history of the Mediterranean including connections across its shores, they also impose on the sea a historical vision which does not capture the full range of viewpoints and exchanges that took place across its shores. 11 That is, they offer an incomplete understanding of the history of the Mediterranean in that they write from only one of its shores. This disciplinary and linguistic divide has marked the history of Mediterranean geography and cartography, and thus important aspects of contacts and exchange across the sea have been overlooked in scholarship. 12 By taking the Mediterranean as its geographical focus, this dissertation bridges this divide. That is, by embracing geographies and maps produced by Muslims and Christians along both shores of the sea and recorded in Arabic and Romance languages, it privileges neither the northern or southern shore and thus offers a fuller understanding of the sea.

¹¹ Charles Germain Bourel de la Roncière, *Le Découverte de l'Afrique au moyen âge* (Cairo, 1924-5); Charles Emmanuel Dufourcq, *L'Espagne catalane et le Maghrib aux XIIe et XIVe siècles* (Paris, 1966).

¹² R. Brunschvig, *La Berbérie orientale sous les Hafsides des origines à la fin du XVe siècle* (Paris, 1940-1947).

Geographical and Cartographical Traditions in the Mediterranean

At the heart of this dissertation lies an understanding that works of geography and cartography produced within the European-Christian world differed from those composed by inhabitants of the lands of Islam. Although both shared a common cosmographical inheritance from Greek classical antiquity, in the field of geography their traditions differed and remained distinct throughout the period studied here. This is not to suggest that the geographical practices of Latinate and Arabic traditions did not overlap or share common features – indeed, they were not insulated from one another, as this dissertation shows – but rather to indicate that these traditions differed both in their degree of knowledge of the regions of the world and the ways in which they conceived of and described that world. The geographic traditions of medieval and early modern Latin Europe traced their origins to classical Hellenistic conceptions of the earth that had reached the Latins primarily through late antique Greco-Roman authors, in particular the work of encyclopedists.

While the geographic traditions of the Islamic world also emerged out of Hellenistic thought, they were transmitted through works that differed from those that influenced the Latinate world. As the early Islamic caliphate extended its empire across a huge extent of the known world, it encountered diverse cultures and peoples. It also encountered numerous scientific works, many written in Greek but also in other languages including Sanskrit and Persian. By end of the ninth century a large portion of these texts had been translated into

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¹³ For an introductory overview of the development of these practices in the Christian and Islamic worlds, see Evelyn Edson and Emilie Savage-Smith, *Medieval Views of the Cosmos* (Oxford: Bodleian Library, University of Oxford: 2004).

Arabic, among them Greek works of astronomy, geography, and cosmology. 14 Thus, even though both the Latin West and the Arabic-Islamic world received Hellenistic concepts regarding geography and the description of the world, they inherited different texts which promulgated different views of geography. In Europe, neo-Platonic works such as those of Macrobius (d. ca. 400 CE) and Martianus Capella (fl. early fifth century CE) were especially influential in the development of geographical writing and cartography. Meanwhile, in the Islamic world, earlier and perhaps more authoritative works by Ptolemy and Marinos of Tyre (d. 130 CE) were available in Arabic and the views they espoused became influential, even as they were combined with views derived from Indian and Persian texts. These early disparities between the traditions of geography in a Latin Europe starved of Greek geographic texts and an Islamic world which had built on them from the tenth century continued the succeeding centuries, as these traditions developed within distinct cultural and historical contexts.

The disparate geographical heritages that reached Latin Europe and the Arabic-Islamic lands resulted in equally disparate conceptions of the world and of the best ways to portray and understand it. In brief, in the period in question, European geography and cartography were dominated by the view of an earth divided either into five latitudinal zones, in which only some parts of the earth were inhabitable, or alternatively of a tripartite world comprised of three great landmasses, Asia, Europe, and Africa. Both these concepts had been inherited from antiquity through the works of Macrobius and Martianus Capella, among others. The 'T and O' maps found in numerous Latin and Romance manuscripts, for example, are visual records of this tripartite world, and even most *mappae mundi* from the late medieval period follow this model.

¹⁴ For an overview see Dimitri Gutas, *Greek thought, Arabic culture: the Graeco-Arabic* translation movement in Baghdad and early 'Abbāsid society (2nd-4th/8th-10th centuries) (London: Routledge, 1998).

But more than this, these practices developed within a Christian culture, and the geographies and maps produced in Europe conveyed a world marked by Christian theology and history. Indeed, nearly all of the geographical texts and *mappae mundi* produced in Europe were composed by men attached to the church in some capacity. These authors, even in the period studied in this dissertation, relied on information from Holy Scripture and works of classical and late antique authors. Moreover, their works betrayed an imbalance regarding knowledge of the world. For instance, whereas European geographies contained a great deal of information about Europe and the Mediterranean, they tended to possess far less information about Africa and the lands under Muslim rule.

By contrast, geographers and cartographers in the Islamic world incorporated neither a five-zone model nor a tripartite division into their depictions of the world. Indeed, these views were almost never mentioned in Arabic geography. Instead, these authors divided the known world by a variety of other means, including methods derived from Greek, Persian, and Indian sources. For instance, mathematical geographers in the Arabic-Islamic world preferred to divide the world according to the seven Greek latitudinal climates. Works of descriptive geography tended instead to divide the world by other means, typically based on religious, cultural, or political criteria. Regardless of the specific scheme used by any particular Muslim geographer, these divisions differed greatly from those of Latin Europe. Moreover, nearly all works of Arabic geography center their descriptions on the lands of Islam, for two reasons. First, these geographers had better access to information from those lands, and second, they frequently explicitly set out to describe only those parts of the world under Muslim rule. Thus, like their European counterparts, these representations were deeply marked by religious culture. Moreover, just as European knowledge of the world lacked balance, so too did that of Arabic-speaking

geographers and cartographers. And so, while Arabic-Islamic geographers tended to have an extensive knowledge of the Islamic world and parts of Africa, or at any rate of those parts reached and inhabited by Arabic- and Persian-speakers, they knew considerably less about the lands and peoples of Europe. Accordingly, the image of the world produced and transmitted by geographical writers from Latin Europe and the Islamic world differed considerably. In this way, when geographical encounters took place across the Mediterranean, they entailed a confrontation between disparate conceptions of the world.

Even if models and ways of describing the earth differed between Latin Europe and the lands of Islam, inhabitants of these regions nevertheless shared some concepts regarding the world and its place in the cosmos. For instance, the notion that only a portion of the surface of the earth was habitable and that it was encircled by an impassible, surrounding sea was shared along both shores of the Mediterranean, again, an inheritance from the classical world. Additionally, both, for example, imagined a spherical earth at the center of the cosmos, surrounded by a hierarchically-arranged system of hollow, transparent spheres. Each of these spheres corresponded to a specific celestial body: beginning with the earth at the center, the spheres then follow the order of the Moon, Mercury, Venus, the Sun, Mars, Jupiter, Saturn, which together comprised the seven planets. Beyond these planets one encountered a sphere of stars, which contained the fixed stars, so called because their position relative to one another is unchanging. Latin Europe and the Islamic world had inherited this Aristotelian-Ptolemaic cosmological scheme from Greek antiquity; the Latins learned of it through Roman and Christian intermediaries while Muslim scholars translated it directly from the Greek in ninth-century Baghdad. Consequently, at a fundamental level, Christian and Muslim geographical writers and cartographers shared a common concept of the place of humanity within the universe, and

though such knowledge was not explicitly part of the field of geography per se, it nevertheless occasionally appeared in geographical works.¹⁵

While these cultures received a common Greek cosmological scheme from antiquity, that is, from the minds of pagans, both Christian and Muslim adopted and modified it to fit their own spiritual understandings of the world. The Holy Scripture of both Christian and Muslim asserted that their own God had created the cosmos and the earth, and had imposed upon these creations a perfect order. Accordingly, when geographers and cartographers set out to describe the earth or some region of it, they viewed their actions as a means of praising God the Creator. By studying the earth and unravelling its divine beauty and order, one could hope to attain salvation. Christian and Muslim scholars also took up the notion of the cosmos that they had received from Hellenistic works and turned them to their own spiritual needs. This is perhaps most visible in the calculation of lunar months. By closely following the movements of the first celestial sphere beyond the earth, namely that of the moon, scholars established lunar calendars. Muslims developed a calendar in which the beginning of each month, including months of religious ritual such as Ramadan, was signaled by the appearance of the new moon. Christians also determined dates of religious observance to the movement of the moon. Easter, for example, was fixed as the first Sunday after the first full moon that came after the spring equinox.

Beyond cosmological schemes and the concept of the inhabitable quarter of the earth, geographical writers and cartographers across the shores of the Mediterranean also shared the notion that some places on the earth merited special status in their works, in particular those that they deemed as sites of spiritual or political significance. Like their cosmological scheme, they

¹⁵ Evelyn Edson and Emilie Savage-Smith, *Medieval Views of the Cosmos*, 14-16.

had received this notion from Hellenistic works. Traditionally, the Greeks had imagined the earth as having a center, which they called the *omphalos*, the "navel." The Greeks typically identified the ancient sanctuary of Delphi in central Greece as the *omphalos*. When this concept of an earth with a navel reached the followers of monotheistic religions, however, the navel was relocated in short order. Christians located it in Jerusalem, whereas Muslims identified a number of omphaloi, sometimes Mecca, the spiritual center of Islam, was identified as the surrat al-ard, the 'navel,' a literal translation of *omphalos*. At other times, though, Baghdad, Iraq, or other regions were identified as the center of the earth. ¹⁶ Geographers and cartographers of both Latin Europe and the Islamic lands had received a number of shared understandings of the world from Hellenistic sources. Both cultures, however, realigned this received geographical knowledge such that it suited their own religious and political viewpoints. In any case, in terms of the exchange of geographical knowledge between Muslims and Christians across the Mediterranean, these shared understandings meant that when confronted with knowledge imported from the other shore, geographers and cartographers could at least call upon a common view of the world in some small measure, in spite of the disparity between geographical and cartographical practices in Latin Europe and the Islamic world.

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¹⁶ On the *omphaloi* of geographical works in Muslim, Christian, and Jewish-authored works of geography see Adam Silverstein, "The Medieval Islamic Worldview: Arabic Geography in its Historical Context," in *Geography and Ethnography: Perceptions of the World in Pre-Modern Societies* ed. Kurt A. Raaflaub and Richard J. A. Talbert (Malden, MA: Wiley-Blackwell, 2010), 280-281. Muslim geographers imagined other cities and regions as the *surrat al-ard*, the 'navel of the earth,' as well, among them Iraq, Arabia, the region of Fārs, and even the Ka'ba within Mecca.

Representations

Historians of geography and cartography once viewed the geographical and cartographical works that they studied not as material artefacts through which one might detect signs of the social and cultural contexts within which they were produced, but rather as objective, neutral records of geographical realities. In this interpretive framing, geographies and maps were placed on an evolutionary scale of increasing precision and accuracy. ¹⁷ But such an understanding has long been criticized, in particular by cultural historians who have instead viewed the works as 'representations' or 'constructions' of reality. ¹⁸ This study follows this latter conceptualization in that it approaches historical works of geography and cartography as cultural constructions, and it takes as its premise the notion that the close study of these representations can reveal much about the cultural worlds of their producers.

The work of the geographer and the cartographer is not merely based on access to knowledge of the physical geography of the world. To be sure, attaining knowledge of the physical world is an essential component of these disciplines. But practitioners, at least those who wish to produce works of human geography, must also learn about distant societies, economies, religious practices, and so on. Thus, geographical writers and cartographers share the

¹⁷ C. Raymond Beazley, *The Dawn of Modern Geography, a History of Exploration and Geographical Science* (London: J. Murray, 1897-1906); G. R. Crone, *Maps and Their Makers: an Introduction to the History of Cartography* (New York: Hutchinson's University Library, 1953); John Kirtland Wright, *The Geographical Lore of the Time of the Crusades: a Study in the History of Medieval Science and Tradition in Western Europe* (New York: Dover Publications, 1965); Norman Thrower, *Maps and Man, an Examination of Cartography in Relation to Culture and Civilization* (Englewood Cliffs, NJ: Prentice-Hall, 1972) (reprinted by University of Chicago Press in 2008 under the title *Maps and Civilization: Cartography in Culture and Society*).

¹⁸ See, for instance, Peter Berger and Thomas Luckmann, *The Social Construction of Reality* (Garden City, NY: Doubleday, 1966); Roger Chartier, *Cultural History between Practices and Representations* (Cambridge: Cambridge University Press, 1988).

common problem of having to familiarize themselves with the landscape of the world and its cultures. They must then produce a representation of the world based on the information they have managed to collect. Thus, in composing these representations of the world, the geographer or cartographer has engaged in a kind of cultural encounter, in that he incorporates information and details about another, often distant culture, into his narrative. Hence, the act of producing a representation entails cultural encounter, an engagement, if only on paper (or parchment), with the foreign and the unfamiliar. This study explicitly centers on the ways in which geographers and cartographers dealt with new, imported or foreign knowledge that reached them across linguistic and religious boundaries. Accordingly, geographers and cartographers with access to a wide range of information they had gathered from various sources then found themselves obliged to select what material to include or exclude from their works, and decide how to blend this new, imported knowledge into their usual repertoire of information. Geographers and cartographers cannot possibly include all the information they have about the world or a region into their works. A close examination of their choices about what to include or exclude can reveal much about these individuals and the milieus they inhabited.

However, these acts of decision making regarding what material to include are not made randomly. Rather, they take place within specific historical contexts. Thus, the production of works of geography and maps are not shaped only by the kind and extent of information that a geographer has managed to gather about the world. Indeed, we must also consider the particular context within which each writer and cartographer produced their works. Like all members of their societies, geographers and cartographers inhabited places in which they were exposed to discourses and rhetoric regarding religion, politics, their own culture, the cultures of 'others,' and so on. They, too, of course, held their own views about these issues which had been informed by

personal experiences including their educations, religions, practices, travels, and so on. These experiences provided them with a framework through which they viewed and received local discourses and rhetoric, and filtered information. While geographers and cartographers rarely mention any of these local and personal matters in their compositions, they nevertheless played a critical role in the shaping of their representations of the world and its inhabitants. It is here that the historian interested in mining geographical texts and maps for signs of these ideas, experiences, and beliefs must dig deep to uncover the contexts within which they were made, to discover, for instance, the religious and political undercurrents that contributed to a geographer's portrayal of a particular place or people. The premodern geographers and cartographers on whom this study centers produced their compositions as individuals with their own peculiarities and beliefs, but they also lived in society and their ideas and productions were bound up with discourse, all of which marked their productions to varying extents and in unique ways.

In the medieval and early modern Mediterranean, geographic and cartographic compositions were especially marked by religious culture. Those geographical works produced along the northern shores of the sea nearly uniformly presented geographies grounded in Christian thought and history. This might entail, as we have seen, centering the world on Jerusalem, as do many medieval *mappae mundi*, or describing the world with constant references to biblical events. By contrast, those works composed along the southern shores were invariably inscribed by Islamic culture, for example by centering their descriptions on the lands of Islam, sometimes to the exclusion of all lands (and peoples) beyond its frontiers. There was, of course, considerable variation regarding the extent to which these works were marked by religion.

Portolan charts, for example, are not as explicitly marked by culture and religion as are, say, contemporary *mappae mundi*, but this study will contend that they are in fact not secular. In any

case, the point here is that the geographical writers and cartographers who lived around the sea portrayed their worlds in very different ways. Nonetheless, these differences and disparities between geographical and cartographical works produced by Muslims and Christians around the Mediterranean went far beyond this tendency to inscribe their works with religious elements.

Reception and Encounter

As we have seen, geographic and cartographic practices in the Islamic world and Latin Europe differed greatly in their conceptions of the world and its divisions, their cultural and religious leanings, and their knowledge of the geography of different regions of the world. This study asks how Muslim and Christian geographers and cartographers inhabiting the Mediterranean region responded when confronted geographical knowledge that had reached them across linguistic, cultural, and political lines, and in some cases, across a considerable expanse of time. More precisely, it centers on analyzing the cases of the exchange of knowledge via geographical forms shared by inhabitants of both shores of the sea. One such form, for example, is the geographical treatise. Textual descriptions of the world had long been produced in both cultures. In other words, geographers along the northern and southern shores of the sea both portrayed the earth through geographical texts. Another form considered in this study is the portolan nautical chart, a form of mapping the Mediterranean basin and nearby regions which had been developed along the European shores of the sea yet which also relied on information derived from the Muslimruled shores of the sea. These treatises and maps – and indeed their makers – traveled and were received across the Mediterranean and the knowledge they contained was taken up and used in the production of new works. These maps and texts were not only marked by the culture and views of their makers, but also with traces of the antique texts upon which they were based, as

well as the more contemporary Latin or Arabic geographies and maps from which they had borrowed in constructing their representations of the world.

In the Western Mediterranean, these geographical encounters took place in a region of considerable hostility and tension, much of it between peoples of different faiths. In the period on which this study centers, as noted above, we may point to the Crusaders and the ongoing presence of Crusader states in the Holy Land, the *Reconquista* of the Iberian Peninsula, the Norman conquest of Muslim-ruled Sicily and King Roger's later conquest of the coast of Ifrīqiya, and eventually, battles between the Spanish Habsburgs and the Ottomans. These hostilities frequently provoked antagonistic sentiments across faiths, and these attitudes complicated the encounter at the heart of this study. Nonetheless, the exchange of geographic information continued to take place, despite any antagonisms.

Through a close study of this reception of new geographical knowledge, we can gain a sense of a particular geographer or cartographer's knowledge of the different parts of the physical world, both near and far. But more crucially, we can analyze the reception of these imported representations as an entrée to the mentalities and cultural worlds of the geographers and cartographers under examination. The cultural encounters examined here allowed for many different possible responses. A geographer or cartographer presented with a text or a map embracing a new view of the world might decide to accept it in its entirety and to imitate or copy it. At the other extreme, he might decide to reject it completely. That said, none of the geographers and cartographers studied here responded in such a fashion. Indeed, had they decided to completely reject any outside influence, the historical record would not have reflected any sign of any geographical encounter whatsoever.

Instead, this dissertation argues that the geographers and cartographers in question responded to these geographical encounters through adaptation. They borrowed fragmentarily from their imported sources and then integrated this information into a representation of the world (or a particular region of the world) that reflected their own geographical heritages and traditions. In other words, they did not come to this information in objective ways, but rather selected only whatever information they found suitable, and then modified and distorted this information in such a way as to reflect local interests, needs, and preoccupations. In this way, the transfer of geographical knowledge altered the ways in which these individuals represented their world and its regions to varying extents, but did not transform their own mentalities. Here, then, we have a taste of the slow pace of change of worldviews in the medieval and early modern Mediterranean.

Dissertation Outline

This dissertation is divided into six chronologically-arranged central chapters, each of which centers on an example of the transfer and reception of geographical knowledge across the religious, linguistic, and political divisions in the Mediterranean between approximately 1150 and 1600. The first three chapters focus on twelfth-century Sicily at a moment of the opening of European expansion into the Mediterranean economically and politically. It views Sicily as a site of exchange where the Muslim polymath Muḥammad al-Idrīsī, working under the patronage of the Christian king Roger II, composed an extraordinary work of geography and cartography, the *Kitāb nuzhat al-mushtāq fī ikhtirāq al-āfāq (The Book of Entertainment for People who Desire to Traverse the Regions of the World*). Chapter One situates Idrīsī in the context of a multiethnic, multilingual, and multi-confessional Sicily ruled by a new king. In short, it asks why Roger

summoned Idrīsī to his court. It argues that the king did this out of genuine curiosity about Arabic-Islamic understanding of the world's geography, but also because he saw in Idrīsī and his geographical knowledge a means through which he could project an image of his kingship as both legitimate and powerful. Finally, it suggests that Idrīsī composed his work with two audiences in mind, namely, the Christian court of King Roger and an imagined Muslim audience. The next two chapters examine how Idrīsī wrote his geography in a way that both of his audiences would find acceptable.

Chapters Two and Three follow Idrīsī as he described the world from Palermo. They demonstrate that he had previously formulated his 'geographical mentality' through his reading of Arabic works of geographical literature, and that nonetheless he modified that mentality to produce a work acceptable to both his audiences. Chapter Two centers on the manner in which Idrīsī conceived of the earth and its divisions and the ways in which he, as a geographical writer, divided the earth in such a way as to make sense of it. The chapter argues that Idrīsī rejected the divisions of the earth that he encountered in both Arabic and Latin geography because of his patron's requirements and expectations. It further argues that he rejected these divisions because it was unsuitable vis-à-vis the new geographical information he had learned while in Sicily, and also because of his own concerns as a Muslim client of the Christian kings of Sicily. The third chapter examines the depiction of Islam and Christianity in the *Nuzha*. It argues that even though Idrīsī described the world primarily through recourse to his Arabic written sources, he modified these sources in such a way as to present the two religions in an impartial way, a rarity among geographies of the Middle Ages.

Chapter Four centers on an exceptional navigational map drawn in the mid-fourteenth century and known today as the 'Maghrib Chart.' Written in Maghribī Arabic script, it depicts

that it was based on a European model. This chapter shows that the anonymous cartographer did not merely copy a European model, but rather marked his chart with a view of the Mediterranean that betrayed his Islamic faith, as well as his desire and longing for a return of Muslim rule to the Iberian Peninsula.

The fifth chapter turns to questions of the reception and translation of Arabic geographical knowledge in the Iberian Peninsula in the mid-fifteenth century, a period of Castilian confidence vis-à-vis the Islamic world and Muslim inhabitants of the peninsula. It is based on a close reading of a manuscript of an anonymous Castilian translation of the *Kitāb al-Ja 'rāfiya* ('Book of Geography') composed by the twelfth-century Andalusī geographical writer Abū 'Abd Allāh Muḥammad b. Abī Bakr al-Zuhrī. The chapter argues that the translator read the Arabic work through the mental screens of his Christian faith, his reading of Holy Scripture and of Ptolemy's *Geography*, and finally, his aversion to Islam. It shows that the translator approached al-Zurhī's text as a means of confirming his own Christian view of the world.

Chapter Six returns to the North African coast in the sixteenth century, when the Ottomans and the Spanish Hapsburgs confronted one another over Mediterranean supremacy. In the second half of that century, 'Alī al-Sharafī, a native of the Tunisian port town of Sfax and resident of the holy city of Kairouan, composed a number of works that brought together knowledge of the fields of geography, cartography, and astronomy, including two nautical atlases based in part on European models, as well as a peculiar world map that he had copied from his grandfather who had, in turn, combined the geography of Idrīsī and a Catalan portolan chart. The chapter tells two stories. On the one hand, it centers on 'Alī's world map and argues

that despite his great interest in cartography and geography, he nevertheless had limited access to works of geography and cartography and was completely ignorant of the discoveries of the Europeans from nearly a century earlier. On the other hand, through a close study of 'Alī's nautical atlases, I show that he put a European model of charting to a new use, namely, the production of an atlas of Islamic sacred geography.

Chapter 1: A Geography of Legitimacy

"The king ordered that this book be called: *Kitāb nuzhat al-mushtāq fī ikhtirāq al-āfāq (The* Book of Entertainment for People who Desire to Traverse the Regions of the World), which took place in the course of the first ten days of January, which corresponds to the month of Shawwāl of the year 548" of the Islamic calendar (1154 CE). The twelfth-century geographical writer al-Sharīf al-Idrīsī thus attributed the origin of the title of his description of the known world to the ruler of the Kingdom of Sicily, Roger II. Idrīsī modestly claimed further that "In it [the book] I obey the order and follow the outline [given by the king]." King Roger had apparently conceived of the project and begun research on it fifteen years earlier, around the year 1139, at a high point in the history of his kingdom, then less than a decade old. Over the previous fifteen years he had acquired a royal title and merged the lands of Sicily, Calabria, and Apulia into a single realm; meanwhile, with his capture of the island of Jerba off the coast of present-day Tunisia, he had begun his conquest of the North African coastline that lay south of Sicily. At about the same time that he first undertook research on the geography project, Roger signed the treaty of Mignano, an agreement which granted him official papal recognition as king, as well as a guarantee of lordship, for himself and his descendants, over the lands of the entirety of the southern Italian peninsula and the island of Sicily.

At the end of the decade, Roger could feel satisfied by his achievements. Only fifteen years previously, after all, he had been merely Count Roger, ruler of Sicily. But now he was the new king of the well-governed, financially prosperous, and ambitious Mediterranean realm he

¹⁹ See Idrīsī, *Opus geographicum sive "Liber ad eorum delectationem qui terras peragrare studeant"* (Leiden: E. J. Brill, 1970-1984, 7.

had created. And yet king and kingdom continued to face hostility and condemnation from powerful rivals. As a descendant of the house of Tancred de Hauteville from the Cotentin of Normandy, Roger did not hail from a great ruling dynasty, but rather from a family of mercenary adventurers who had left their homeland in the mid-eleventh century, bound for the southern Italian peninsula. Two of Tancred's sons, Robert Guiscard and his younger brother Roger Bosso, the latter the father of King Roger, entered the service of Pope Nicholas II (d. 1061) who, in exchange for their military assistance, granted them titles and territory in southern Italy. By 1091, with Roger Guiscard dead, Count Roger I became sole ruler of Sicily and Calabria, a title which Roger II inherited in 1105, at the age of nine. After ruling for a quarter of a century as count, he had himself crowned King of Sicily, Calabria, and Apulia on Christmas day in 1130, at the cathedral in his capital city of Palermo. This was an audacious move, for Roger was seen as a parvenu, a monarch without appropriate royal pedigree. He had acquired his royal title from a claimant to the papal throne later deemed a schismatic "anti-pope." And the kingdom he had established across Sicily, Calabria, and Apulia had no historical precedent: Roger created it ex novo. And worse, the Byzantines, the Papacy, and the Holy Roman Emperor all believed that the lands upon which Roger had founded his kingdom were rightfully theirs.

Not only did these opponents attack him with their armies, but they also undertook a propaganda war against him. He was labeled an upstart king, usurper, and tyrant of Sicily. In short, Roger faced a crisis of legitimacy, at least from the perspective of his rivals. Faced with an endless barrage of condemnation, Roger responded with his own campaign of image-making to bolster his legitimacy and that of his kingdom. This program included the production of works of art, inscriptions, and writing that depicted the king as a legitimate, powerful ruler. It was directed toward the population of Roger's lands, namely Greek, Gallo-Romance, Latin, and Arabic-

speaking Christians, Muslims, and Jews, as well as anyone who might visit the kingdom or read texts produced under Roger's rule. ²⁰ Some of these images, like the mosaic in the narthex of the church of Santa Maria dell'Ammiraglio in Palermo, in which Roger appears in the ceremonial garb of a Byzantine emperor, crowned by Jesus, borrow from Byzantine images of power. But the king embraced other dimensions of his population. For instance, he also issued coins inscribed with Arabic inscriptions, again linking his rule with that of God, rather than to any earthly authority. The obverse of some coins, for instance, included the phrase *al-mu'tazz billāh malik Rujār al-mu'azzam*, ("The powerful through God, King Roger the glorified"), whereas the reverse depicted a Christian cross surrounded by the Greek letters IC XC NI KA for *Iesous Christos nikā*, ('Jesus Christ will conquer) and the Arabic title of *nāṣir al-naṣrānīya*, ('protector of the Christians'). ²¹ Other representations, however, came by way of written texts.

It in this context that we must place al-Sharīf al-Idrīsī's *Nuzha*. For as this chapter argues, Idrīsī inscribed his text with a discourse of legitimacy, an act of image-making, on behalf of King Roger. The *Nuzha* was part of a royal program of propaganda. Historians have long seen the preface of the geography as a panegyric for King Roger; here, though, I will argue that the preface and other sections of the *Nuzha* responded to specific critiques leveled against this king by his rivals. But the chapter also shows that Roger saw advantages brought by Idrīsī, a man from whom he could learn about the world while also benefitting from sponsoring a Muslim scholar of exalted lineage. A final purpose of this chapter is to introduce Idrīsī and to place him in the context of twelfth-century Palermo and the Mediterranean.

²⁰ On language in twelfth-century Sicily, see Alex Metcalfe, *Muslims and Christians in Norman Sicily* (New York: Routledge Curzon, 2003), esp. 112.

²¹ Ernst Kantorowicz, *Laudes Regiae: A Study in Liturgical Acclamations and Medieval Ruler Worship*, University of California Press, 1958, 10; Karla Mallette, "Translating Sicily," in *Medieval Encounters*, 9, 1 (2003), 145.

Arrivals.

King Roger. In 1112, Roger II, count of Sicily moved the capital of his kingdom from Messina to Palermo (Figure 1). This latter city had been Sicily's capital during much of the past two centuries under the rule first of the Aghlabids (c. 831-909), and later the Fātimids (909-948) and Kalbids (948-1072), all of them Muslim dynasties with origins and close ties to Ifrīqiya just to the south across the Strait of Sicily. Under the Fātimids and Kalbids, the city of Palermo had become a center of Mediterranean trade. The new rulers had also brought with them both language and religion, and by 1060, on the eve of the Norman conquest of the island, the vast majority of Sicily's population followed the tenets of Islam. Only the mountainous Val Demone in the northeast of the island had a significant Christian population. Pockets of Christians and Jews still lived in Palermo, all probably Arabic-speaking, but most of its inhabitants were Muslim. Indeed, when Ibn Hawqal visited the island in the 970s, he remarked that in Palermo alone he counted 300 mosques, packed so densely in places that they abutted one another. The largest mosque in Palermo, he claimed, held up to 7000 worshippers. And it may well have filled to capacity regularly: in 1050 the city encompassed a population as large as 350,000 inhabitants, massive by contemporary standards.²² By way of comparison, Rome was about a tenth as large, with around 35,000 inhabitants. London's population stood at 25,000 and that of Paris at 20,000. Only Córdoba and Constantinople could match Palermo in size.²³

²² J. Bradford De Long and Andrei Shliefer, "Princes and Merchants: European City Growth before the Industrial Revolution," *The Journal of Law & Economics* Vol. 36, No. 2 (October, 1993): 678. The population of Palermo is based on estimates made by various scholars of the medieval period. See "Princes and Merchants" for a discussion on methods.

²³ See J. Bradford De Long and Andrei Shliefer, "Princes and Merchants: European City Growth before the Industrial Revolution," 678. Córdoba had a population of around 450,000 and Constantinople 500,000.



Figure 1. Map of southern Italy c. 1112, the year during which Roger relocated his capital from Messina to Palermo.²⁴

The Norman conquest had taken place over a period of three decades and while some cities and towns had surrendered only after pitched battles, others had preferred to come to terms peacefully. Roger I and his brother Robert Guiscard complied: after negotiating terms of surrender with the leaders of Muslim communities in each city they seized, the Norman agreed to various pacts in which Muslim communities became subjects – *ahl al-dimnma* – by paying a tribute – the *jizya* – to the Normans. In return, Roger promised them protection as well as certain rights and privileges, for instance the right to practice their faith and to be judged according to

²⁴ The map of the Kingdom of Sicily produced by MapMaster, "Roger II of Sicily," November 2016. https://commons.wikimedia.org/w/index.php?curid=1466670.

their own laws, provided these did not contradict those of the Normans.²⁵ This policy aimed to achieve a level of continuity and a smooth transfer of power. Moreover, even before the conquest had been completed, the Normans began to adapt the customs of the previous rulers. For example, after Robert Guiscard seized Palermo in 1072, he ordered gold coins struck with Arabic inscriptions that included the *hijrī* date of 466 (1073-1074); the *shahāda*, that is, the profession of Muslim faith; and the phrase, "By the order of the great duke Robert, *Malik* (king) of Sicily."²⁶

As count, Roger was already eager to extend the lands under his rule. In particular he looked toward the lands of Apulia, which had been inherited by the descendants of his uncle, Robert Guiscard (d. 1085). When in 1127 Duke William, Robert's last surviving heir, died, Roger seized the moment, bringing an army to Apulia to secure the territory which he claimed had legally passed to him.²⁷ Over the next three years Roger's army subdued barons, recalcitrant cities, and eventually a papal army. The latter victory brought him the duchy of Apulia by papal investiture, the principality of Capua, and in 1130 the royal title of "King of Sicily and Italy," with Sicily playing the role of head of the kingdom. The formation of a kingdom *de novo*, however, was not a simple task. That the Byzantines, the Papacy, and the Holy Roman Emperor all claimed rights to the lands of Roger's new realm brought him into direct conflict with powerful and legitimate enemies. Moreover, Roger's boldness in having himself crowned king attracted the hostility of these kings and emperors. The papacy refused to recognize the legal

²⁵ Jeremy Johns, *Arabic administration in Norman Sicily* (Cambridge: Cambridge University Press, 2002), 33-34.

²⁶ See Jeremy Johns, "I titoli arabi dei sovrani normanni di Sicilia," *Bollettino di numismatica*, 6-7, 1986, p. 14. The Arabic phrase reads: *Bi-amr Abārt al-dūqa al-ajall malik Ṣiqilliya*. See also Karla Mallette, 'Translating Sicily,' *Medieval Encounters*, 9, 1, (2003): 145; Lucia Travaini, *La monetazione nell'Italia normanna*, (Rome: Istituto storico italiano per il Medio Evo, 1995), 66-67.

²⁷ The contemporary historian Romauld Guarna of Salerno wrote that William had chosen Roger I as his heir. Pope Honorius II, however, believed William died without heirs, and hence claimed that the land had escheated to the papacy.

status of Roger's kingdom, since it had been invested by the schismatic "anti-pope" Anacletus II. In siding with Anacletus during the papal schism of the 1130s, Roger had on the one hand gained the title of king, while on the other he found opposition in a powerful adversary, Bernard of Clairvaux, a supporter of the competing papal claimant and eventual pope, Innocent II. Bernard publicly labeled Roger the tyrant of Sicily, an upstart usurper of the property of others, namely of the Papacy and the Holy Roman Emperor. The German bishop and chronicler Otto of Freising, uncle of the emperor, also called Roger a tyrant, and Duke Rainulf of Alife, a vassal of Innocent II, characterized Roger's vicious treatment of inhabitants of Apulia and Campania as "patterned upon the deeds of the ancient Sicilian tyrants." The German and Byzantine emperors, moreover, forged an alliance against Roger, ostensibly because he had taken lands that they claimed as their own in southern Italy.

In their public campaign against Roger, his opponents added to their grievances that he was a usurper, tyrant, and ruler of lands over which he held no legitimate claim. Roger, they complained, had no royal pedigree. He was a parvenu lacking proper ancestry who had had himself crowned king in a sham ceremony under the supervision of the anti-pope. Nor did his rivals limit themselves to this campaign of producing an image of Roger as an illegitimate ruler. Indeed, they sent troops to southern Italy to seize the lands they viewed as their own patrimony, to which Roger responded by sending his own armies into battle. This was not simply a passing threat to the new kingdom. And yet, the new king came out ahead. He spent most of the 1130s at war on the southern Italian peninsula, subjugating rebellious barons, withstanding a German invasion in Apulia, and in 1139 capturing Pope Innocent II at the battle of the Garigliano. By

²⁸ Wieruszowski, "Roger II of Sicily, Rex-Tyrannus," 54 ff.

²⁹ Wieruszowski, "Roger II of Sicily, Rex-Tyrannus," 56.

then Anacletus II, the antipope who had crowned him king, had died and the schism had ended.

With the pope as his prisoner, Roger extracted an official investiture of his kingdom from

Innocent when they jointly signed the treaty of Mignano in July 1139.

While Roger had by that year secured peace and papal recognition of his kingdom, he nevertheless continued to face the old criticisms of his rule. Byzantine and German rulers, for example, still refused to recognize him as one of their own and continued to label him a usurper who had "kept the Sicilian land under his tyrannical sway." This was in part due to the king's Mediterranean policy. At the narrowest point, fewer than 100 miles of sea separate southwestern Sicily from the fertile lands of the Cap Bon peninsula in Ifrīqiya. The rulers of Sicily and Ifrīqiya had historically sought to control both sides of the Sicilian Narrows. And King Roger was no exception; he had long envisioned uniting these shores to Sicily – he attacked them as early as 1123 – and his territories on the Italian peninsula. By controlling the entirety of the narrows, Roger could safeguard the coastlines and shipping routes to and from Sicily, while at the same time monitoring east-west traffic through this stretch of the Mediterranean, even if most ships preferred to follow the northward route, though the Straits of Messina.

When Roger inherited the title of count of Sicily from his father, he also became heir to treaties and agreements his father had arranged such as the one he had with the Zīrids, the governors of much of Ifrīqiya. When the Pisans and Genoese invited Roger I to participate in their sacking of the Zīrid capital of al-Mahdiyya in 1087, he had declined, citing his unwillingness to contravene a treaty he had previously arranged with the Zīrids. During the early

³⁰ Otto of Freising, in writing of the embassy sent by Emperor Manuel to King Conrad in 1145-46 called Roger a "usurper" or "invader" (*utriusque imperii invasorem*). See Wieruszowski, "Roger II of Sicily," 62, n. 68. Two or three years later, Manuel wrote that Roger had kept the Sicilian people under his tyrannical authority. Wieruszowski, "Roger II of Sicily," 63, n. 72.

years of his rule, Roger II observed this treaty, but when the Calabrian town of Nicotera was sacked by an Almoravid fleet in 1123, Roger was handed an excuse to invade the Zīrid fort of al-Dīmās near al-Mahdiyya. Though the attack was repelled, it was nevertheless an early sign of Roger's Ifrīqiyan ambitions. And in 1135, he renewed his quest for control of the lands across from Sicily when his fleet captured the island of Jerba, just east of Gabès. Over the better part of the next two decades, Roger steadily conquered coastal towns of North Africa, most under Zīrid rule although some, like Bougie (Bijāya) were under Ḥammādid control. By the late 1140s he had put an end to Zīrid rule and seized the entire Ifrīqiyan coastline (Figure 2). Indeed, the expansion of his territories in the Mediterranean may have turned his interests toward geography: as he conquered new lands he may have wished to know more about them.

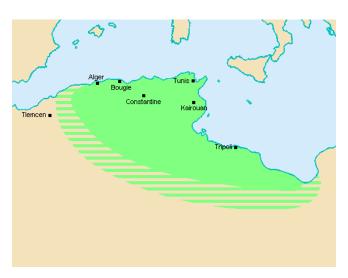


Figure 2. Zīrid-ruled Ifrīqiya.³¹

Just as they had denied his claim to lands in Sicily, Calabria, and Apulia, Roger's
European opponents complained that here, too, he had usurped their lands. Emperor Frederick
Barbarossa (r. 1155-1190) protested that Roger, who already ruled over lands that Frederick saw

 $^{31}\ Map\ accessed\ online,\ November\ 2016.\ https://commons.wikimedia.org/w/index.php?curid=20910214$

as his own, now arrogated to himself the claim of the Holy Roman Emperor to the lands of old Byzantine Exarchate of Africa. The Venetians lodged a similar complaint to the German emperor Lothair in 1135, namely that Roger had conquered Africa, "which is known to be one third of the world."³² This reference to Africa as comprising a third of the world recalls the classical division of the inhabited earth into three continents of Europe, Asia, and Africa. That the Venetians referred to it casually in their letter to Lothair reveals that at least in some ways, their conception of the world was grounded in classical and antique writings of the Greeks and Romans, as well as later Latinate sources that had taken up this notion wholesale. Geographical knowledge had real world implications: the Venetians contended that in his aim to conquer one third of the world – that portion of the world the Venetians believed rightfully belonged to the king of "Greece" – Roger, had transgressed his geographical limits.

We must ask whether Roger undertook his conquest of the Ifrīqiyan coastline as part of a crusading movement.³³ The Second Crusade, after all, was launched during the very years in which Roger attacked city after city along the Ifrīqiyan littoral. Moreover, many viewed contemporary undertakings across the Mediterranean – the 'Reconquista' in Iberia, the Norman conquest of Sicily, and the Crusader assault on the Holy Land – as part of a united movement by western Christendom against Islam.³⁴ Little evidence, however, supports claims that Roger

³² Abulafia, "The Norman Kingdom of Africa," 40.

³³ By the time that King Roger began to focus his attention on Ifriqīya, the region was politically fragmented. After the Fāṭimid conquest of Egypt and the relocation of their capital to Cairo in the tenth century, the Fāṭimids permitted the Zīrids, a group of Ṣanhāja Berber descent, to govern over the eastern Maghrib. Within half a century, the Ḥammādids had declared independence from the Zīrids.

³⁴ There were a number of Muslim writers who viewed these three movements, as well as Roger's conquest of the African coastline, as part of a single assault by western Christendom against Islam. In the Levant, several writers in the twelfth and thirteenth centuries linked the *Reconquista*, the Norman capture of Sicily, Roger's conquest of Ifrīqiya, and the Crusading movement as part of a single program against Islam, among them al-Sulamī (ca. 1105), al-'Azīmī (d. 1161 CE), and Ibn al-Athīr (ca. 1233). Muḥammad ibn 'Alī al-'Azīmī and Ibrāhīm Za'rūr. *Ta'rīkh Ḥalab*. (Damascus, 1984), 358, 366; 'Izz al-Dīn Ibn al-Athīr and Carolus Johannes Tornberg (ed.), *Al-Kāmil fī al-tārīkh*, *Vol. X* (Beirut: Dar Ṣādir, 1965), 185; Niall Christie, *The Book of the Jihad of 'Ali ibn Tahir al-Sulami (d. 1106)* (Burlington, VT: Ashgate, 2015); Carole Hillenbrand, *The Crusades: Islamic Perspectives* (Edinburgh:

conquered Ifrīqiya as a crusader. Rather, imperial ambition drove Roger to seize the coastline.³⁵ Once he had taken coastal cities and towns, Roger did not overtly seek to remove their Muslim populations or press a scheme of conversion. His treatment of these inhabitants mirrored that of the Muslims under his rule in Sicily. In both contexts, he granted Muslim communities a great deal of autonomy, provided they paid tribute and accepted their subject status. In most Ifrīqiyan towns, he did not govern through direct rule, but rather through local officials loyal to him.

Typically upon conquering a town, Roger expelled the current ruler and replaced him with a local official of his choosing. He provided this ruler with a robe of office and diploma of investiture, as Jeremy Johns has stated, "exactly as a Muslim ruler would have done." As long as each appointed ruler recognized the king as overlord and continued to send tax revenues to Palermo, Roger was content to let him rule as he pleased.

With their conquest of Ifrīqiya the Normans entered into direct correspondence with the Fāṭimid caliphate in Cairo. Shortly after Roger's first assault on the littoral in 1123, the Zīrids turned to the Fāṭimids, to whom they had pledged allegiance in 1054-55, for protection. The caliph al-Ḥāfiz sent a letter to Sicily which apparently persuaded Roger to cease his incursions into Zīrid lands, if only temporarily.³⁷ Around this same time Roger sent his "emir of emirs," George of Antioch, the Greek Christian who had served the Zirīds for over twenty years before

Edinburgh University Press, 1999). The papacy also viewed them as part of a single, unified movement against Islam from the beginning. See Claude Cahen, "An introduction to the First Crusade," in *Past and Present*, No. 6 (Nov., 1954), 6-30; Giles Constable, "The Second Crusade as Seen by Contemporaries," *Tradito*, Vol. 9 (1953), 213-279.

³⁵ See David Abulafia, "The Norman Kingdom of Africa," in Anglo-Norman Studies, 7 (1985), 26-49.

³⁶ Johns, Arabic Administration in Norman Sicily, 291.

³⁷ The original of the caliph's letter has not survived. The sole copy was made by al-Qalqashandī, a Mamlūk writer, sometime in the fourteenth or fifteenth century. See Maurice Canard, "Une lettre du caliphe fāṭimite al-Ḥāfiẓ (524-544/1130-1149) à Roger II," in *Studi Ruggeriani*, (1955), I, 125-146; Jeremy Johns, "The Norman Kings of Sicily and the Fāṭimid Caliphate," in *Anglo-Norman Studies, Proceedings of the Battle Conference on Anglo-Norman Studies*, 1993, 145-147. As an aside, no evidence remains regarding the reaction of the Fāṭimids to the Norman conquest of Sicily, which was nominally overseen by the Fāṭimid caliphate. Friendly relations between Cairo and Palermo are recorded, however, by the 1120s. See Jeremy Johns, *Arabic Administration*, 258.

offering his services, Arabic skills, and Mediterranean know-how to the Normans, as ambassador to Cairo. Indeed, George had traveled to Cairo in this capacity "many times," according to al-Maqrīzī, though the purposes of these trips are unknown. For at least 20 years, from 1123 to 1143, the Sicilian and Fāṭimid courts maintained a close, friendly correspondence – apparently conducted in Arabic – that included ambassadorial exchanges and a commercial treaty, and as Jeremy Johns has shown, this relationship played a significant role in the development of Roger's administration after 1132 and in the model of kingship he adopted. ³⁹

Roger's Mediterranean ambitions did not end in Ifrīqiya. To the west, he assisted Count Berenguer III of Barcelona against "Saracen invasions." In northeastern Iberia, the Archbishop of Tarragona, Oleguer, had urged Berenguer to undertake, in the words of Lawrence McCrank, a "crusade" to end Muslim rule in Iberia, for which he recruited Roger II as well as men from Genoa and Pisa in the 1130s, though he placed at the center of his plans Robert Burdet, a soldier from Normandy who had apparently traveled to Iberia to fight on behalf of Christian kings. Roger sent Berenguer a number of galleys to aid in his campaign. To the east, Roger reached out for Antioch. When his cousin Prince Bohemond II died in 1130 leaving only his daughter as heir, Roger attempted to claim the prince's title, albeit unsuccessfully. But this points to Roger's interests in the Holy Land. For instance, while he did not participate directly in the Second

³⁸ On Roger's relations with the Zīrīds and Fāṭimids, see Johns, *Arabic Administration*, 258-259.

³⁹ See especially Johns, *Arabic Administration in Norman Sicily*, 257-283.

⁴⁰ Lawrence J. McCrank, "Norman crusaders in the Catalan reconquest: Robert Burdet and the principality of Tarragona, 1129-55," in *Journal of Medieval History*, 7, 1 (1981), 67-82; Santiago Sobrequés Vidal, *Els grans comtes de Barcelona* (Barcelona, 1961), 191. The agreement between Roger and Ramon Berenguer III is conserved at the Arxiu de la Corona d'Aragó, Cancelleria, pergs. Ramong Berenguer III). See Ignasi J. Baiges i Jardí, Gaspar Feliu i Monfort, Josep Maria Salrach, Pere Benito i Monclús, Rafael Conde, and Victor Farías Zurita, *Els pergamins de l'Arxiu Comtal de Barcelona, de Ramon Berenguer II a Ramon Berenguer IV* (Barcelona: Fundació Norguera, 2010), 1019-1020, Documents 608 and 609.

⁴¹ McCrank, "Norman crusaders in the Catalan reconquest," 71.

⁴² Bohemond was prince of the crusader state of Antioch, a site that Roger coveted in part because control over it would permit him to take a royal crown, whereas Sicily did not, at least before 1130.

Crusade nor did he travel to the Levant, in October 1136 he took the Knights of St. John of Jerusalem under his patronage.⁴³

By the time that Roger signed the treaty of Mignano in 1139, both he and his kingdom had arrived on the European and Mediterranean geographical and political stage (Figure 3). It was only after he had secured some level of peace and achieved his royal ambitions that he truly began to cultivate Palermo as an intellectual and cultural center. In 1140, for example, he brought the Byzantine theologian Nilos Doxopatres to his court and commissioned him to compose a work on the history of the patriarchates of Antioch, Rome, Alexandria, Jerusalem, and Constantinople, in which Rome and the papacy were presented as subordinate to the Patriarch of Constantinople. Historians have interpreted this as a threat by Roger toward the pope that he might change the allegiance of his bishoprics if papal relations did not improve. Hut around the same time, Roger also brought the geographical writer Idrīsī into his service, and it is to his arrival that we now turn.

⁴³ Houben, *Roger II of Sicily*, 78 and references therein.

⁴⁴ Houben, *Roger II of Sicily*, 102 and references therein.



Figure 3. Map of Roger's Kingdom, ca. 1154.⁴⁵

Idrīsī. Scholars have long viewed 1139 as the year in which Idrīsī arrived in Roger's capital of Palermo. This is based on some simple arithmetic: Idrīsī claimed that Roger ordered him to compose the *Nuzha* in 1154 and elsewhere noted that the project had required about 15 years of research. In truth, there is little evidence to support this date (or to refute it), but at the same time, the year 1139 is plausible. As we have seen, in that year King Roger had secured a treaty that brought him papal recognition. The king would finally rule in a time of relative peace. Moreover, the very next year he began to patronize the likes of Nilos Doxopatres. It appears that he turned his interests to patronizing scholars who would produce works that benefited his rule. And so

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⁴⁵ The map of the Kingdom of Sicily produced by MapMaster, "Kingdom of Sicily." November 2016. https://commons.wikimedia.org/w/index.php?curid=1479592

without evidence to the contrary, we will tentatively take 1139 as the date of Idrīsī's arrival in Palermo.

That we do not have firm evidence regarding Idrīsī's arrival is a symptom of a larger problem, namely that no contemporary records regarding his life have survived, whether in Arabic, Latin, or Romance. Even Idrīsī himself revealed little about his life in his own works. We must then write his life not through his own words or even of those who knew him, but instead through those written centuries after his death. The most engaging of these sources is the biographical dictionary entitled al-Wāfī bi 'l-wafayāt ('Completeness in Obituaries') of the Damascene scholar Ṣalāḥ al-Dīn al-Ṣafadī (d. 1363). 46 Though written two centuries after Idrīsī's lifetime, al-Ṣafadī's biographical dictionary nevertheless appeals to modern scholars mainly because it is generally faithful to the historical record of the period and because it does not conflict with the little information that Idrīsī revealed about himself. Moreover, al-Ṣafadī allocated separate entries in his dictionary to Idrīsī, as well as other members of his family and to his patron, King Roger II. Taken together, his entries provide a sense of Idrīsī as a man of wide learning and of exalted lineage, both of which, at least according to al-Safadī, served to make him an attractive recruit and a crucial member of Roger's court. As for King Roger, he appears as a man actively open to and interested in learning from Arabic scholarship. We will begin, then, with al-Şafadī's account of Roger wherein he described the circumstances of Idrīsī's arrival in Palermo. He wrote,

Roger, King of the Franks, Lord of Sicily ... He was a lover of people of the science of philosophy (*ahl al-'ulūm al-falsafīya*) and it was he who summoned (*istaqdama*) al-Sharīf al-Idrīsī, author of the book *Nuzhat al-mushtāq fī ikhtirāq al-āfāq* from the other side (*al-'udwa*) in order to compose something on the shape of the image of the earth.

⁴⁶ EI² s.v. "al-Ṣafadī" (F Rosenthal). On some of his sources, see Donald P. Little, "Al-Ṣafadī as Biographer of His Contemporaries," in Donald P. Little ed. Essays on Islamic Civilization: Presented to Niyazi Berkes (Leiden: E. J. Brill, 1976), 190-210.

When he arrived, the king welcomed his guest with honor, making every effort to glorify him. He [Idr $\bar{s}\bar{s}$] asked him for metal for constructing that which he had resolved [to do]. The king had silver weighing 400,000 dirhams brought and with the silver, he made spheres similar to the celestial sphere ($afl\bar{a}k$). He mounted one on top of another, arranging them in a special manner. Roger was seized with admiration. Because only a little more than a third of the silver had been used, and there were two-thirds left, the king gave it to him as a prize. He added to it 100,000 dirhams and a ship from Barcelona loaded with $R\bar{u}m\bar{t}$ goods of royal quality. The king then asked him to settle nearby and to induce him to accept, the king said to him: 'You are from the caliphal house ($bayt\ al-khil\bar{a}fa$) and if you were among Muslims, their kings would try to kill you. If you stayed with me, you would have nothing to fear for your life.' He accepted and [Roger] secured for him an income⁴⁷ worthy of kings. He would go to the king mounted upon a mule and upon his arrival, the king moved away from his throne and they sat together.⁴⁸

Al-Ṣafadī's account implies that Roger had at least two motives for bringing Idrīsī to his court, namely his interest in Idrīsī's knowledge of the world and in the geographer's exalted lineage. Consider first his interest in Idrīsī's erudition. As the biographical dictionary notes, Roger called upon him because of his learning, in particular his knowledge of the "image of the earth," a detail which suggests on the one hand that Roger had a deep interest in learning about the earth and its place in the universe, even if the view came from an Arabic-speaking Muslim from "the other side," that is, the Maghrib or Ifrīqiya. ⁴⁹ In no small part, then, the king's curiosity

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⁴⁷ Lit. "sufficient amount," *kifāya*.

⁴⁸ For Arabic text, see Michele Amari, *Biblioteca Arabo-Sicula*, Testi arabi, (Lipsia, 1857), 657-658.

⁴⁹ In *Taqwīm al-Buldān*, *A Sketch of the Countries*, a geography based in part on Idrīsī's *Nuzha*, Abū al-Fidā' wrote of the land "between Tangier and Ceuta" as "barr al-'udwa," the "land of the other shore." Later in the same text he again wrote that "barr al-'udwa" is across from al-Andalus and encompasses the central and western ("Far") Maghrib, "al-maghrib al-āwsat wa al-āqṣá." Finally, Abū al-Fidā' treated Ifrīqiya as a region distinct from "barr al-'udwa." Mahdīya, Cartagena (Oartājana), and Sūsa thus fall within the region of Ifrīqīya, whereas the city of Mostaganem (Mastaghāna) in present-day northwest Algeria formed part of "barr al-'udwa." William MacGuckin de Slane, and Joseph Toussaint, Géographie d'Aboulféda (Paris: Imprimerie royale, 1840), 27, 122, 126 (Arabic text). Idrīsī also uses the term al-'udwa to refer to the shore across from al-Andalus. Algeciras, for example, corresponds to Ceuta along "that other shore." He does not use the term to describe the land across from Sicily, whether to denote Ifrīqīya or Calabria. Idrīsī, Opus geographicum, 527. Ibn Khaldūn, on the other hand, used the term al-'udwa to designate the lands opposite Sicily. The term does not appear to refer to a specific section of the coast of northern Africa, but rather to the entire coast. He later mentions the "countries of the other shore in Ifrīqīya and the Maghrib," bilād al-'udwa bi-Ifrīqīya wa al-Maghrib. Ibn Khaldūn, Les prolégomènes d'Ibn Khaldoun (Paris: Imprimerie impériale, 1863-1868), M. Quatremère ed., 36, 310 (Arabic text). Most recently Amara and Nef have proposed that Idrīsī was born in Sicily or Calabria and that al-'udwa here refers to the other side of the Strait of Messina, namely Calabria. There is no precedent, however, for al-'udwa signifying Calabria. See Allaoua Amara and Annliese Nef, "Al-Idrīsī et les Ḥammūdides de Sicilie: nouvelles données biographiques sur l'auteur du Livre de Roger," Arabica 48 (2001): 125-126.

regarding Idrīsī's knowledge of the world led to his inviting the geographical writer to settle in Palermo. Indeed, in this telling, Idrīsī had a reputation as a man of learning who had crossed the shores of the Mediterranean and reached even the king of Sicily. The connection suggests a degree of familiarity between Sicily and the lands of North Africa, which may not surprise us given the diplomatic and commercial ties between Palermo and much of that coastline, as well as Roger's own conquest of those lands beginning in the mid-1130s. It also seems that the king was willing to pay dearly for Idrīsī's celestial demonstration and was keen to pay more still once Idrīsī accepted the invitation to settle nearby. Though it is impossible to corroborate al-Ṣafadī's account, it is worth nothing that at least one other source later made similar claims. In his short collection of biographies entitled *On some illustrious men among the Arabs*, Leo Africanus, writing from Italy in the sixteenth century, contended in his brief account of Idrīsī that Roger had begged him to remain close to his court in Palermo and had offered him a castle as an enticement. ⁵⁰

Here we must emphasize Roger's openness and even eagerness to learn of the world as it was known to Idrīsī. Al-Ṣafadī clearly claimed that Roger had summoned Idrīsī to Palermo because of his knowledge of the image of the earth. But it is worth looking to Leo Africanus's view of the situation, given that like Idrīsī he found himself in a Christian court and tasked with writing a geographical account, in his case of Africa only. Leo wrote that of all the information that Idrīsī delivered, the king especially appreciated "those things that had never before been written in Latin." Leo surely understood the disparity in knowledge between Idrīsī and his sponsors. And in fact, Idrīsī had brought with him to Sicily a geographical knowledge grounded

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⁵⁰ De Viris quibusdam Illustribus apud Arabes. Latin text in Rosario Gregorio, Rerum Arabicarum: qae ad historiam Siculam spectant ampla collection (Panormi, 1790), 238. Leo cited as a source a work named Chronicis Ciciliae by "Ibn El-Hussein," though I have been unable to identify this text.

⁵¹ Rosario Gregorio, *Rerum Arabicarum*, 238.

not in biblical works, the writings of Pliny and Macrobius, or any other texts of Latinate geographical scholarship – that is, the kinds of texts with which the Latinate and Romance-speaking quarters of the Sicilian court might be familiar - but rather in a distinct Arabic-Islamic tradition of geography, founded on Hellenistic texts, in particular the *Geography* and *Almagest* of Ptolemy, in addition to the geographical works composed by numerous Muslim scholars from the ninth century onward.

But Roger also brought Idrīsī to Sicily, at least as al-Ṣafadī subtly intimated, because of the geographer's exalted lineage and, in particular, his ties to the "caliphal house." Roger, he noted, received Idrīsī "with honor" and endeavored to "glorify him." The king not only allowed him to ride to him upon a mule, apparently a sign of respect, but he also willingly left his throne to sit with Idrīsī. And lastly, al-Ṣafadī claimed that Roger was well aware of Idrīsī's caliphal ties and offered not only to protect this member of the caliphal house, but to make him as rich as a king should he stay in Palermo. Though we have no details of Roger's treatment of other learned men and how much money he offered them, the largess shown to Idrīsī, if al-Ṣafadī's account is accurate, seems excessive for the typical court scholar.

But to what did al-Ṣafadī's mention of "caliphal house" refer? Here we must piece together our own brief biography of Idrīsī and his family from the meager records available to us, beginning with al-Ṣafadī who devoted an entry in his dictionary to Idrīsī's grandfather, Idrīs ibn Yaḥyā ibn 'Alī ibn Ḥammūd al-'Ālī, a member of the Ḥammūdid dynasty and a ruler of Málaga in the mid-eleventh century, during the *taifa* period in al-Andalus. According to al-Ṣafadī, the Zirīds of Granada attacked Málaga, thus forcing the Ḥammūdid family to disperse "to different countries," probably sometime in the 1050s. The account contends that his son, Muḥammad ibn 'Abd Allāh ibn al-'Ālī Idrīs, that is, Idrīsī's father, sought refuge in Sicily where

a "Sicilian rebel" named Ibn al-Thumna saw him as a threat to his power and tried, without success, to kill him. The biography explains that in this same period, "Roger the Frank," clearly a reference to Roger I, the father of King Roger, had conquered Sicily and when it was reported to him that Muḥammad ibn 'Abd Allāh (that is, Idrīsī's father) claimed descent from the family of the Prophet, he treated him generously and with respect.⁵² While we do not know whether Idrīsī's father ever set foot in Sicily, it is intriguing that al-Ṣafadī claimed that he fled to Sicily, for another writer, Ibn Qalāqis (d. 1172), a frequent traveler to Sicily, claimed that members of the Ḥammūdid family, that is, the dynasty to which Idrīsī claimed descent, held important positions in Sicily, including as directors of the $d\bar{t}w\bar{d}n$ (the fiscal administration or bureau), under the Normans. Though he made no claim regarding a connection between Idrīsī – indeed, he did not even mention him – and these Ḥammūdids, historians have recently attempted to demonstrate such a connection.⁵³

From al-Ṣafadī, then, we have a suggestion of Idrīsī's links to a ruling family in Málaga and the possibility of ties to the family of the Prophet Muḥammad and to a caliphal line, but the biographer never quite explained the details of the situation. His claims, however, are supported by other evidence, in particular the information that can be gleaned from the names attributed to Idrīsī in various manuscripts and other premodern records. The Italian historian Giovanni Oman conducted a study of all of the names that had been ascribed to Idrīsī and drew a number of conclusions. He argued convincingly that the geographical writer had descended on the one hand from the Idrīsids, a ruling dynasty founded in present-day Morocco by Idrīs I (r. 788-791), and on the other from the Ḥammūdids, a dynasty of Idrīsid origin, erstwhile rulers of a number of

⁵² Al-Şafadī, Kitāb wāfī al-wafāyāt, ed. M.Y. Najm (Wiesbaden: Steiner 1981), VIII, 324-326.

⁵³ Amara and Nef, "Idrīsī et les Ḥammūdides de Sicilie: nouvelles données biographiques sur l'auteur du *Livre de Roger*," *Arabica* 48 (2001). Jeremy Johns, however, has argued against such a connection. See *Arabic Administration in Norman Sicily*, 234-237.

cities in al-Andalus between the years 1016 and 1058, including Córdoba, which they ruled under the caliphal title from 1016 through 1023 and again from 1025 until 1027. After the fall of the caliphate in Córdoba in 1026-27, the family next ruled in Algeciras and Málaga along the Strait of Gibraltar, and from the latter place they continued the use of the caliphal title. Both the Idrīsids and Ḥammūdids claimed descent from the Prophet Muḥammad through 'Alī, the cousin of the Prophet, and Fāṭima, the Prophet's youngest daughter and 'Alī's wife. Hence, when al-Ṣafadī mentioned descent from the Prophet, he referred to Idrīsid-Ḥammūdid claims of that heritage. And beyond this, as a member of the Iberian Ḥammūdid ruling family, Idrīsī could also claim descent from caliphs.

Arabic naming practices frequently allow us to identify an individual's place of origin or residence. In the case of Idrīsī, however, his various names only muddle the picture. He was variously called by copyists *al-Ṣiqillī* ('the Sicilian,' 'from Sicily,' resident of Sicily), *al-Andalusī* ('the Andalusian,' 'from al-Andalus,' 'resident of Sicily'), and *al-Qurṭubī* ('the Córdoban,' 'from Córdoba,' 'resident of Córdoba'). Determining which of these adjectives describe Idrīsī's homeland versus places where he merely resided, even temporarily, is impossible. One writer, Leo Africanus, claimed that Idrīsī "was born in the city of Mazara in

⁵⁴ Giovanni Oman, "Osservazioni sulle notizie biografiche comunemente diffuse sullo scrittore arabo al-Šarīf Idrīsī (VI-XII sec.)," *Annali dell'Istituto Universitario Orientale di Napoli* 20 1970," 211-214; *EI* s.v. "Ḥammūdids" (C.F. Seybold); *EI*² s.v. "Ḥammūdids" (Ambrosio Huici Miranda).

Three texts use the *nisba al-Ṣiqillī*: the frontispiece of a 1344 copy of the *Nuzha* from Almeria which calls the geographer *al-Ṣharīf al-Ṣiqillī* (or, *al-Ṣaqallī*), the 1527 *Libellus de viris quibusdam illustribus apud Arabes* by Leo Africanus, where he is called *Esseriph Essachali*, and the *Kashf al-zunūn 'an asāmī al-kutub wa al-funūn* of Ḥājjī Khalīfa (d. 1657, Constantinople), a bibliographic encyclopedia listing the names of nearly 15,000 books in alphabetic order, where he is named *al-Sharīf Muḥammad ibn Muḥammad al-Idrīsī al-Ṣiqillī*. The *nisba al-Andalusī* on the other hand is found only once, on the frontispiece of a treatise on pharmacopeia attributed to Idrīsī. Finally, *al-Qurṭubī* is found in the first line of *the text* (not on the frontispiece) of a 1679 manuscript copy of the *Uns al-muhaj* (Süleymanie Mosque, ms. Hasan Hüsnü 1289). The last *nisba*, *al-Qurṭubī*, is also found in 'Imād al-Dīn al-Iṣfahānī's *Kharīdat al-qaṣr wa jarīdat al-'aṣr*, composed before 1201 CE. See the Arabic text in Amari, *Biblioteca Arabo-Sicula*, *Testi Ar.*, 610 and Oman, "Osservazioni," 226.

Sicily," though it is difficult to trust his claims given other obvious inaccuracies in the account.⁵⁶ As we will see below, Idrīsī himself may have viewed al-Andalus as his homeland.

What of al-Ṣafadī's biographical sketch of Idrīsī? Just as in his entry for the grandfather of the geographer, his biography of "al-Sharīf al-Idrīsī" emphasized ties between the rulers of Sicily and the family of Idrīsī. His entry reads:

Muḥammad bin Muḥammad bin 'Abd Allah Ibn Idrīsī... author of *The Book of Roger*, that is, the *Nuzhat al-mushtāq fī ikhtirāq al-āfāq*. His father will be mentioned in the biography of the grandfather Idrīs ibn Yaḥyā. Equally, other members of his family will be mentioned, each in his place. This Muḥammad grew up (nasha'a) among the companions (aṣḥāb) of Roger the Frank, Lord of Sicily. He was a cultured man and a gentleman-scholar ($ad\bar{i}b$), a man of refinement ($zar\bar{i}f$), a poet ($sh\bar{a}'ir$), and a lover of the science of geography ($mughram bi-'ilm jughrāf\bar{i}y\bar{a}$). He composed for Roger the aforementioned book. Se

Al-Ṣafadī's contention that Idrīsī was raised alongside the companions of Roger, whoever they may have been, appears in no other sources. Nor did Idrīsī mention such a connection in his own work. And whether "Roger the Frank" here refers to Roger I or his son, Roger II, is far from certain. What is clearer and more plausible, however, is Ṣafadī's characterization of Idrīsī as an *adīb*, that is, an individual who possesses *adab*, a term denoting a humanistic program of learning and proper etiquette. The practice of such a program produces an *adīb*, a gentleman-scholar, ⁵⁹ an individual well-versed in a wide range of scholarship including poetry, religious

⁵⁶ Among the "obvious" inaccuracies we might include the incorrect date assigned to Idrīsī's death (1122-23). Latin text in Rosario Gregorio, *Rerum Arabicarum*, 238.

⁵⁷ James Montgomery defines this term as denoting "a person endowed with *Zarf*, 'elegance,' 'refinement,' also translatable as 'man of the world,' 'dandy,' or, in the plural, 'refined people.'" Furthermore he states that a *zarīf* "is generally considered as a type of *adīb*, indeed *tazarruf* is viewed as an intensification of certain features, intellectual, literary, social, and personal, that are held to characterise the man of *adab*." See *EI*², "Zarīf."

⁵⁸ Ṣalāḥ al-Dīn Khalīl ibn Aybak al-Ṣafadī, *al-Wāfī bi 'l-wafayāt*, ed. Hellmut Ritter (Wiesbaden, 1982), 1:163-164. Partial Arabic text quoted in Giovanni Oman, "Osservazioni," 229.

⁵⁹ See Tarif Khalidi, "Adab hand at work," review of Robert Irwin, *Nights and Horses and the Desert. Times Literary Supplement* No. 5061 (March 31, 2000), 8. Khalidi defines the *adīb* as "the gentleman-scholar, a cultural type of many guises, recognizable over a broad swath of time from Greece to China. *Adab* presupposes that there can be no true erudition without the polished character that goes with it. The *Adib* was an ornament to any salon,

and natural sciences, history, philology, and medicine. By Idrīsī's time, knowledge of the literature of the ancient Greeks had become a well-established aspect of adab. The $ad\bar{\imath}b$, by definition, did not specialize in any single branch of knowledge but rather aimed for breadth in erudition. Frequently, these men – for they were invariably men – inhabited the courts of governors where they worked as secretaries or under the ruler's patronage as royal tutor or court scholar.⁶⁰ And hence, in least one respect that Idrīsī worked under the aegis of King Roger seems not at all unusual.

For al-Ṣafadī, then, Idrīsī was remarkable for having composed the *Book of Roger*, but also for his broad knowledge across a range of subjects. Idrīsī was well-versed in geography, though he also contributed to other fields. Al-Ṣafadī, for example, underscored Idrīsī's proficiency as a poet, excerpting lines from what appear to be five separate poems. 61 One excerpt reads:

If only my true sentiment were where my tomb shall be / My life has been lost in exile. I have recorded for the eyes what it desires / of both land and sea. I have experienced peoples and lands / both good and evil.

Yet I've found neither companion nor home / except in my innermost breast.

As if going forth I were little more / than a dead man in a barren land. 62

Unfortunately, al-Safadī did not record where these lines were written. If they were penned in Sicily, they suggest, at least if interpreted literally, that Idrīsī viewed his life there as one lived in

holding forth with eases on all branches of learning but careful to keep himself aloof from the plebs and the contamination of the mauvais goût. He peddled his graces to his own ilk but often under the patronage of the rich and powerful, who were very fond of staging debates between prominent adibs." Khalidi suggests that the term is similar to the Greek word paideia.

⁶⁰ See James E. Montgomery, "Serendipity, Resistance, and Multivalency: Ibn Khurradadhbih and his Kitab al-Masālik wa-l-mamālik," in On fiction and adab in medieval Arabic literature, ed. Philip F. Kennedy (Wiesbaden: Harrassowitz, 2005), 180-181; Khalidi, "Adab hand at work," 8; EI², "Adab" (F. Gabrieli).

⁶¹ Al-Wāfī al-wafayāt, vol. 1, 164.

⁶² Here I have followed the translation found in Russell Hopley, "The Translation of Nature: Al-Sharīf al-Idrīsī on the Plant Life of the Western Mediterranean," in Translating the Middle Ages, ed. Karen Fresco (Ashgate, 2012), 23-24. For the Arabic text, see al-Wāfī al-wafayāt, vol. 1,163-164.

exile as a companionless, out-of-place man, perhaps longing for a return to his home, whether in North Africa or al-Andalus. Nor was al-Ṣafadī the only person to have identified Idrīsī as a poet. In his *Kharīdat al-qaṣr*, an anthology of Arabic poetry of the twelfth century, 'Imād al-Dīn al-Iṣfahānī, citing the Sicilian poet Ibn Bashrūn (d. 1166), wrote that Idrīsī had composed a collection of poetry for Roger's son and successor William I (d. 1166), noting in particular his "eloquent formulations." 'Imād al-Dīn further noted that Ibn Bashrūn, who he claimed had met Idrīsī in person on Sicily, had included a section on him in his compendium of poets of al-Andalus.⁶³

And in fact, Idrīsī's wide-ranging scholarly interests went beyond geography and poetry: he also wrote an encyclopedia of medicinal plants and medications that survives today in two manuscript copies. In plants, Idrīsī had taken up a well-trodden field in Arabic letters. Since at least the mid-ninth century numerous scholars across the lands of Islam had shown great interest in plants, compiling numerous lexicographical glossaries and works of pharmacology, the latter based on the work of Dioscorides, the first-century Greek physician whose *Materia medica* had been translated into Arabic in 'Abbāsid Baghdad in the mid-ninth century. In the Islamic west, where Idrīsī operated, al-Andalus and in particular the city of Córdoba had become a center for botanical and pharmacological studies in the eleventh and twelfth centuries. Regrettably, neither of the two surviving manuscripts of Idrīsī's book on plants names either a patron or a date of composition. We do not know whether he wrote the book from Sicily, on behalf of Roger's court, or elsewhere. The treatises, nevertheless, paint Idrīsī as a studious man who learned of his world through books. Frequently, as was the case in his study of geography and pharmacology,

⁶³ 'Imād al-Dīn al-Iṣfahānī, *Kharīdat al-qaṣr wa jarīdat al-'aṣr*, Arabic text, Amari, *Biblioteca Arabo-Sicula, Testi Ar.*, 610 and in Oman, "Osservazioni," 226. No other sources refer to Idrīsī as "the Córdoban."

he confronted texts composed in Arabic by scholars who lived as far afield as Baghdad and Córdoba, as well as the works of Greek writers whose work had frequently defined entire fields of study. Though respected as authorities in various fields, these ancient, typically Greek-speaking authors were nevertheless open to critique and, in fact, their work might even be improved upon.

In the preface to his pharmacological work, for instance, Idrīsī contended that his intention was to abridge and emend earlier treatises in which he had found inconsistencies and errors. In many respects, as we will see, the method matches that which he used in compiling the Nuzha. He then enumerated the authors of treatises that he consulted, most of them written in Islamic lands, including the works of six writers from al-Andalus, and wrote that he would turn "his gaze toward the source from which they [the aforementioned authors] drew and toward the treasure that they have put to use, namely the book of the Greek Dioscorides on simple remedies of plant, animal, and mineral origin." He continued, "As I have done with the Qur'ān, I will apply myself to the study [of Dioscorides] until I have learned by heart the totality of its scientific content."64 Idrīsī's reading, then, was more than a mere close reading of a source; rather it was outright veneration. If Dioscorides's *Materia medica* provided a benchmark against which Idrīsī would measure his own work, it is not the only ancient text that he cited, for he, too, wrote of Galen (d. 199 CE) as an authority on medicinal plants and natural remedies. Idrīsī's understanding of his own world, then, was predicated in part on knowledge that even in his own day would have been considered ancient.

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⁶⁴ Idrīsī, Compendium of properties of diverse plants and various kinds of simple drugs, Kitāb al-Jāmiʻ li-ṣifāt ashtāt an-nabāt wa-ḍurūb anwāʻ al-mufradāt (facsimile) (Frankfurt am Main: Institute for the History of Arabic-Islamic Science, 1995), 4.

In all, his treatise comprises encyclopedic entries on some 600 medicinal plants arranged alphabetically by their Arabic names. Most entries begin either with a citation of Dioscorides or a comment stating that the Greek physician was unfamiliar with the plant in question. Idrīsī also included in each entry a description of the plant's properties, uses, and frequently, its geographic distribution and even the type of soil in which it thrives. It is here, when Idrīsī discussed the physical range of each plant, that he interjected a sense of geographical knowledge, of an awareness of a world that extended beyond the bounds of the lands of Islam into his treatise. Deliberately or not, he classed most of the plants that he discussed geographically. Consider, for instance, his descriptions of a handful of plants in Sicily. Targhūghī, today an unidentified plant, "grows in Sicily, especially near the fortress of al-Farārath." While the location of this fortress is unknown – nor does it appear in the *Nuzha* – Idrīsī nevertheless identifies a precise geography for this plant. Similarly, tarīfulun, a species of orchid, "grows in Sicily near al-Nār mountain (Mount Etna, lit. "the mountain of fire"), at Ṭarabū." And of waj, which may be an old Arabic name for 'sweet flag,' Acorus calamus, he wrote that "it grows in Sicily between al-Faṭalūn and al-Zīdāḥ." This geographic knowledge sometimes extended beyond the kinds of specific geographic details seen in the above example. Some entries, for instance, revealed a keen understanding of the Greek system of dividing the world into seven climates. For instance, Ibn Baytar, a physician and botanist from Málaga who flourished in the first half of the thirteenth century, cited Idrīsī in his own pharmacopeia. When describing Lihā al-ghūl, today commonly known as maidenhair spleenwort, he wrote "According to al-Sharīf [Idrīsī] they call it in Persian ardamāna, and in Berber tamrat mashsiyūn. It is a plant which grows in the third climate and is found in no other part...It grows extremely well in the Far West (al-Maghrib al-aqsá) in the basin of Mashsiyūn, between Qalmān and Fez."⁶⁵ In certain respects, then, the study of plants was well suited to those who, like Idrīsī, were lovers "of the science of geography." And in fact, Idrīsī was not alone in his mastery of geography, poetry, and botany. Of particular note, the Andalusī scholar al-Bakrī (d. 1094), who like Idrīsī is best known today for his geographical work, also wrote poetry and compiled a treatise on plants. Neither his *Kitāb al-Nabāt* (Book of Plants) nor his *Kitāb al-Masālik wa-l-mamālik* ('Book of Routes and Kingdoms') have survived in full.

Finally, the *Book of Simples* supports the contention that Idrīsī viewed Sicily as his home. The copyist of one of the manuscripts of the pharmacopeia added the *nisba* of *al-Andalusī* (the Andalusian) to Idrīsī's name on the frontispiece. But beyond this, the descriptions of several plants includes language that suggests that he considered al-Andalus his home. For instance, the text refers to al-Andalus as '*indanā* [*bi-l-Andalus*], "our home [in al-Andalus]," and it is *biladunā*, "our country." Consider his discussion of *Garcinia mangostana*, the purple mangosteen: "One finds it in *our home*, in the east of al-Andalus, in the mountains of Zaragoza (*Saraqusta*). The population of *our country* collects it when it is dry." In contrast, though the treatise includes descriptions of numerous plants in Sicily, the text never refers to Sicily as the author's home. For instance, in the entry for *Cytinus hypocistis*, Idrīsī wrote, "Commoners in *our home* call this plant *asnab*. There are two types, the second is drier and has smaller leaves...

They call this type *al-barghūn* in Sicily." 68

⁶⁵ Idrīsī, Compendium of properties of diverse plants and various kinds of simple drugs, 74, 77, 133.

⁶⁶ Ducène first raised this hypothesis of a homeland in al-Andalus, *L'Afrique dans le Uns*, xxi. Cristana La Rosa, too, raised this possibility in "La terminologia botanica sicula e andalusa nel *Kitāb al-ǧāmi' li-ṣifāt aštāt al-nabāt wa-durūb anwā' al-mufradāt* di Idrīsī," *Annali di Ca' Foscari* 50 (December 2014), 102.

⁶⁷ Idrīsī, *Compendium of the Properties of Diverse Plants and Various Kings of Simple Drugs*, Fuat Sezgin, Mazen Amawi, and Eckhart Neubauer eds. (Frankfurt am Main: Institute for the History of Arabic-Islamic Science at the Johann Wolfgang Goethe University 1995), I, 81, II, 124 (Facsimile of Arabic manuscript). My italics.

⁶⁸ Idrīsī, Compendium of the Properties of Diverse Plants, I, 243-244. My italics.

In summoning Idrīsī to Sicily, King Roger acquired access to the knowledge of a man of wide erudition, an *adīb* educated in Arabic belles-lettres. In terms of geography, Idrīsī offered the king a new way a new way of understanding the earth and its peoples. That is, he had learned of the geography of the world through Arabic texts which drew upon different geographical traditions and distinct pools of geographical knowledge than those available to a Latinate or Romance-speaking geographical writer. And Roger, it seems, had a genuine interest and openness to these new perspectives. But his summoning of Idrīsī to the court was not based merely on the desire for the exchange of geographical knowledge. Rather in Idrīsī he saw opportunity. Roger was acutely aware of his image and he surely appreciated that as a ruler over a majority Muslim population and with close diplomatic and commercial ties to the coastline of much of North Africa, his patronage of a descendant of caliphs and of the Prophet could work to his advantage in that he could display both his willingness and ability to retain a Muslim of exalted lineage. But he also surely appreciated that through Idrīsī's Arabic text he could manipulate the discourse regarding his own kingship, at least among Arabic-speakers. In other words, in his description of the world, Idrīsī would essentially present an insider's officiallysanctioned view of his kingdom to an Arabic-reading public. And finally, by commissioning a work of geography, Roger could ensure that his new kingdom would be placed on the map, as it were, to assert its place alongside other kingdoms, empires, and caliphates.

Living in Palermo

Roger did not only face challenges from without. Beyond the defiant barons in Apulia, he was especially preoccupied with securing the acquiescence of the Muslim population in Sicily, especially after his coronation in 1130. Given that Muslims comprised the majority of the

population, the island's peace and prosperity depended on their compliance. As we have seen, Roger permitted Muslims to practice their religion and to live by their own laws, provided they paid an extra tax and recognized him as overlord. Yet his desire to placate his Muslim population went far beyond this. The fifteenth-century Egyptian biographical dictionary of al-Maqrīzī contends that Roger, following the guidance of George of Antioch, a Greek-speaker who had served both Byzantine and Zīrid rulers prior to serving in Sicily, portrayed himself as a Muslim:

He [George] veiled Roger from [his] subjects, and arranged for him to dress in clothes like the Muslims,' and not to ride out, nor to show himself in public, except on holidays, when he would process, preceded by horses, adorned with saddles of gold and silver, and with caparisons studded with gemstones, and by domed litters and gilded banners, with the parasol (*al-mizilla*) above him and the crown upon his head.⁶⁹

Indeed, Roger's still-extant ceremonial silk mantle, embroidered in gold with a lengthy list of ad 'iya (supplications) in Kufic lettering, confirms the truth of at least some of al-Maqrīzī's claims. Moreover, the Berber historian Ibn Ḥammād, writing in 1220, described the parasol of the Fāṭimids thus: "No kings are known to have adopted this parasol (al-mizalla) other than the Banū 'Ubayd (the Fāṭimids), and the, the king of the Europeans in Sicily. I believe that [the Fāṭimids] presented it to him as one of their gifts." The king also styled some elements in the architecture of his buildings after North African designs. For example, the hundreds of wooden panels that made up the ceiling of the western hall of the Cappella Palatina, painted with Arabic inscriptions – produced, as Jeremy Johns contends, by an atelier of artists from Fāṭimid Egypt – fostered the impression of a ruler not only comfortable with Arabic and the use of North African artistic and architectural styles but – and importantly for Roger's commissioning of Idrīsī to

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⁶⁹ As quoted in Jeremy Johns, Arabic Administration in Norman Sicily, 82.

⁷⁰ Muḥammad ibn 'Alī Ibn Ḥammād, *Histoire des rois 'Obaïdites*, ed. Madelaine Vonderheyden (Paris: P. Geuthner 1927), 14-15, 27-28.

write his geography – also open to adopting and adapting elements of practices and traditions of Muslim rulers.

Nor was it only Roger's symbols of rule that bore the marks of influence from the Fāṭimid caliphate. His administration, in particular after 1132, took on a distinctly Arabic flavor. Whereas the chancery had not issued Arabic documents for decades, in that year Arabic became one of the three official languages of the administration, alongside Latin and Greek. The royal fiscal administration took on the Arabic title of $d\bar{\imath}w\bar{\imath}n$ and employed Arabic speakers, as well as eunuchs styled "palace Saracens," mostly of North African provenance, probably taken from Roger's protectorates in Ifrīqiya, made to convert to Christianity but widely believed to secretly worship as Muslims. The Several later sources write of Roger as a friend of the Muslims. Ibn al-Athīr, for example, suggested in the early thirteenth century that his employment of an ostensibly Muslim staff and embrace of the way of Muslim rulers ingratiated him with his Muslim subjects:

[H]e followed the way of Muslim rulers with mounted companions, chamberlains, armsbearers, body-guards, and others of that kind. Thus, he broke with the custom of the Franks, who are not acquainted with such things... He treated the Muslims with respect, took them as his companions, and kept the Franks off them, so that they loved him.⁷²

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⁷¹ Jeremy Johns has argued that the *dīwān* under George of Antioch and Roger was modeled on that of the Fāṭimid chancery, see *Arabic Administration in Norman Sicily*, 274-283; "The Norman kings of Sicily and the Fāṭimid caliphate," in *Anglo-Norman Studies*, ed. M. Chibnall. 15 (1993): 133-159. Latin sources refer to these eunuchs alternatively as *eunuchi* and *saraceni palatii*. Hugo Falcandus, for example, used these titles to refer to eunuchs who worked for the ruler and who had converted from Islam to Christianity. See Metcalfe, *Muslims and Christians in Norman Sicily*, 250, n. 37. As an example of Roger's importation of the inhabitants of Ifrīqiya int his kingdom, Idrīsī wrote in the *Nuzha* of Jerba, an island lying just north of the African coastline near Gabès: "This island is peopled by Berbers, generally brown in color, inclined toward the bad and hypocrites in character. The elites and the rest of the population speak only Berber. They are people who live in rebellion and disobedience. King Roger, toward the end of 529 AH (1135), equipped a fleet which seized this island. The men who remained there have occupied it since 548 AH (1153), the period in which they emerged from their obedience to King Roger. They were then attacked with a new fleet. The island was newly conquered, *its inhabitants reduced to slavery and transported to al-Madīna*," that is, to Palermo.

⁷² As quoted in Jeremy Johns, *Arabic Administration in Norman Sicily*, 289. See also Ibn al-Athīr, *Al-Kāmil fī l-ta'rīkh*, ed. Tornberg (Leipzig, 1851-1876), 11:66.

There were even rumors that Roger himself was a Muslim. The same Ibn al-Athīr, for instance, noted (c. 1231) that Roger had a close relationship with a Muslim scholar, "a man of piety. The king "paid attention to what he said and gave him precedence over the priests and monks at his court. The people of his realm used therefore to claim that this meant he was a Muslim."

Moreover, some speculated that Roger and his son William I could both speak Arabic. Since the early days of the Norman conquest of Sicily, the Normans had taken to the use of Arabic titles, and Roger and his son did so as well. The use of Arabic titles, however, does not prove that either ruler knew Arabic. Nevertheless, Ibn Saʿīd al-Maghribī, writing in the midthirteenth century, for example, claimed that both father and son spoke Arabic and thus "ingratiated themselves with the Muslims." Seen in this light, the numerous Arabic inscriptions around Sicily, especially in the capital city of Palermo, surely promoted the image of a king and administration familiar with and embracing of Arabic-speakers, an increasing proportion of whom were Muslim. The content of most of these Arabic inscriptions were neither overtly Christian nor Islamic, though they often adopted passages from Islamic writings and applied them to Roger, a kind of cultural appropriation intended to refine the royal image and enhance the king's command of one of the major cultures of his realm.

⁷³ Ibn al-Athīr, *Al-Kāmil fī l-ta'rīkh*, 217. As quoted in Ibn al-Athīr, 'Izz al-Dīn, and D. S. Richards, *The chronicle of Ibn al-Athir for the crusading period from al-Kamil fi'l-Ta'rikh, the coming of the Franks and the Muslim response*, Part I, (Farnham, England: Ashgate, 2010), 373.

⁷⁴ The quote is from Ibn Sa'īd al-Maghribī's *Kitāb al-Mughrib*, as quoted in Metcalfe, *Muslims and Christians in Norman Sicily*, 99. Metcalfe argues that even if Roger could speak Arabic, he could not read or write it. He was illiterate in Greek and possibly also Latin, 100. Jeremy Johns argued that there is no evidence that Roger could read or write in Arabic. He claims that Roger's signatures on chancery documents in both Greek and Arabic (his 'alāma in Arabic) were written by a professional scribe or perhaps even by George of Antioch. See *Arabic Administration in Norman Sicily*, 110-111, 133-134.

⁷⁵ Though Arabic is frequently associated with Islam, peoples of other faiths, including Christianity, have used the language in administration and commerce, as well as in liturgical texts. Though Arabic-language Christian Bibles or other texts may have existed as early as the fourth century, the oldest extant texts – an Arabic translation of the Gospels – dates from the seventh century. In twelfth-century Sicily, some Christians, especially Greek Orthodox Christians, could speak Arabic. Hence, the Arabic inscription of Christian hymns at the base of the dome of Santa Maria dell'Ammiraglio, the church founded by George of Antioch in the 1130s, may have been directed at Greek

Ibn Jubayr's account of Sicily, based on his visit there in 1184-85, speaks to a period some three decades after Idrīsī had written the *Nuzha* yet nevertheless suggests a continued modeling of Sicilian kingship on North African models and the extraordinary use of Muslims in all facets of the administration. Ibn Jubayr admired King William's "use of Muslims and implementation of eunuchs." William, he added, had "much confidence" in Muslims: the supervisor of his kitchen was "a man from the Muslims"; he had Muslim physicians and astrologers in his employ; it was said that he could read and write Arabic; he and his father each had an 'alāma, ⁷⁶ and he appointed Muslim viziers from among his eunuchs and in them "shines the splendor of his kingdom." He approved of the servant girls who converted Frankish Christian women at the palace to Islam. He praised the prosperity of the island and the king's palaces which, he said, exhibited his grandeur "in a manner that resembles Muslim kings." He expressed amazement at the tolerant indifference (*ighdā'*) that the Christians of Trapani – a city on the western edge of the island, the side which still boasted a larger population of Muslims

Orthodox practitioners as well as potential Muslim converts. On the use of Arabic by early Arab Christians, see David Thomas, 'Arab Christianity,' in *The Blackwell Companion to Eastern Christianity*, ed. Ken Parry (Singapore, 2010), 4-5 and Sidney H. Griffith, *The Bible in Arabic* (Princeton; Princeton University Press, On Arabic speakers in twelfth-century Sicily, see Alex Metcalfe, *Muslims and Christians in Norman Sicily. Arabic speakers and the end of Islam.* On the Arabic inscription at Santa Maria dell'Ammiraglio see Jeremy Johns, "Arabic inscriptions in the Cappella Palatina," 129-130. Jeremy Johns has also argued that Arabic inscriptions in the Royal Palace in Palermo urged members of Roger's court to treat the building as equivalent to the Ka'ba in Mecca and had been based on a similar inscription at the Fāṭimid palace in Cairo. See Johns "The Norman kings of Sicily and the Fāṭimid caliphate," in Majorie Chibnall ed. *Anglo-Norman Studies 15: Proceedings of the Battle Conference and of the XI Colloquio medieval of the Officina di Studi Medievali 1992* (Woodbridge, UK: The Boydell Press, 1993), 149-153. Johns, "Arabic Inscriptions in the Cappella Palatina: Performativity, Audience, Legibility and Intelligibility," in Antony Eastmond and Elizabeth James (eds.), *Viewing texts: Inscriptions as image and ornament in the Late Antique and Medieval Mediterranean* (Cambridge: Cambridge University Press, 2015), 128. See, too, Johns, *Arabic Administration in Norman Sicily*, 265-266.

⁷⁶ A signing mark or phrase in Arabic and used on official chancery documents. It frequently comprised a kind of motto for the individual named. Ibn Jubayr said that according to a servant he met on Sicily, the 'alāma of William I was "May God be praised in gratitude for his blessings" (al-hamdu li-llāhi shukran li-an 'umihi), which is similar to that granted by Roger II in the endowment charter for George of Antioch's foundation of Santa Maria dell'Ammiraglio. There Roger's 'alāma reads "Praise be to God, and thanks for his blessings" (al-ḥamdu lillāhi washukrun li-an 'umi-hi). Riḥlat Ibn Jubayr (Beirut: Dār Ṣādir lil-Ṭibā'ah wa-al-Nashr, 1964), 298.

⁷⁷ Riḥlat Ibn Jubayr, 297-298.

⁷⁸ Riḥlat Ibn Jubayr, 299.

than the eastern side – showed toward a group of Muslims who boisterously celebrated 'Īd al-Fiṭr, the Feast of Breaking the Fast.⁷⁹ In the capital city, Palermo, he claimed to have heard the *muezzin* calling Muslims to prayer from the minaret of one of the many mosques.⁸⁰

Idrīsī settled into this complex milieu in Palermo. In spite of the paradoxes of Roger's rule – on the one hand he patterned his administration and essential components of his image on Fāṭmid models, ruled over a large Muslim population in Sicily and Ifrīqiya with seeming fairness and grace, while on the other he send a fleet to aid Berenguer against the "Saracens," sponsored the Hospitallers in the Holy Land, executed the "infidel" Philip, and conquered the coastline of Ifrīqiya – he perhaps he did not feel too out of place there. In a Mediterranean world of reconquest and crusade, exchange and communication were nevertheless possible. Though Palermo's population had fallen sharply after the Norman conquest – perhaps from a peak of 350,000 on the eve of the conquest to 150,000 around 1200 – it remained a great city under Norman rule.⁸¹ There he would have experienced a capital still marked by a strong imprint of Arabo-Islamic culture, a court peopled with Arabic-speaking eunuchs and scribes, a new, wealthy kingdom visited by merchants from all directions, regardless of linguistic or confessional leanings. Sometime probably around the late 1130s, freshly returned to his capital from successful campaigns in Apulia, Roger, the upstart Christian king, ever intent on asserting the authority and power of his kingdom, and ready to incorporate methods of rule and representation from beyond the bounds of his kingdom, took an interest in the geography of his

⁷⁹ *Riḥlat Ibn Jubayr*, 308-309.

⁸⁰ Rihlat Ibn Jubayr, 305.

⁸¹ J. Bradford De Long and Andrei Shliefer, "Princes and Merchants: European City Growth before the Industrial Revolution," *The Journal of Law & Economics* 36.2 (October, 1993): 678. Though contemporary records are scant, much of the decline may be explained by the emigration of Muslim inhabitants in the wake of the Norman takeover; the wealthy and educated, in particular, left the city in large numbers, most of them headed to the *ṭāʾifa* states in al-Andalus or Ifrīqiya, in particular al-Mahdiyya. Fewer seem to have ended up in Egypt. See Alex Metcalfe, *The Muslims of Medieval Italy* (Edinburgh: Edinburgh University Press, 2009), 122-123.

world and turned to Idrīsī to enlighten him on the subject and, as we will see, to project his image to an Arabic-reading audience. That he turned to a geographical text to disseminate this image was not accidental. Indeed, great rulers – kings, caliphs, and emperors alike – had long turned to geography as a tool of power and legitimation. In the first century BCE, Augustus had ordered his minister Marcus Vipsanius Agrippa to arrange the drawing of a map of the inhabited world with an accompanying commentary to be displayed in Agrippa's colonnade in Rome;⁸² Charlemagne (d. 814) owned a silver table upon which a map of his entire empire had been engraved and which his son, Louis the Pious, kept after his father's death; 83 and the 'Abbāsid caliph al-Ma'mūn (d. 833) famously commissioned a world map at his court in Baghdad. Indeed, in particular in the Islamic lands, numerous governors, sultans, princes, and caliphs had commissioned works of geography. And Roger may well have known of the use of geography by some of these kings, since George of Antioch, Roger's "Emir of Emirs," an Arabic-speaker who had served the Zirīds in Ifrīqiya, and the apparent architect behind the king's image-making beginning in the 1130s, had "acquainted Roger with the biographies of kings," according to the fifteenth-century Egyptian historian al-Maqrīzī.⁸⁵

Whether Roger was aware of these precedents or not, the geographies these rulers commissioned had served as statements of knowledge and a means of attaching oneself to a select group of those who possess knowledge and, perhaps more importantly, actively define and write the world. Knowing the world, its place in the universe, its geography, and its peoples, is,

⁸² O.A. W. Dilke, "Ancient cartographic interchanges between Europe and Africa," in Luigi Serra, ed., *Gli interscambi culturali e socio-economici fra l'Africa settentrionale e l'Europa mediterranea : atti del congresso internazionale di Amalfi, 5-8 dicembre 1983* (Naples: Istituto Universitario Orientale, 1986), 624.

⁸³ David Ganz, "Einhard's Charlemagne: the characterisation of greatness," in Joanna Story, ed., *Charlemagne: empire and society* (Manchester, UK: Manchester University Press, 2005), 48 and n. 60.

⁸⁴ George also held the Greek title of "Archon of Archons."

⁸⁵ As quoted in Jeremy Johns, Arabic Administration in Norman Sicily, 82.

as André Miquel suggested, a kind of social passport, an entrée into the learned classes. ⁸⁶ It was this power of geography to define the world, to shape it in the image of one's desires and needs, of course within plausible bounds, that attracted Roger to the subject. But, rulers might also locate themselves within a global geography as a means of imagining their place within the world and even the wider cosmos. Consider the Latin poem, *Adelae comitissae*, written by the French bishop Baudri de Bourgueil (d. 1130) for the Countess Adele of Blois (d. 1137), the daughter of the Norman King William I of England. In that poem Baudri described the room of the countess as the royal palace. The historian Joachim Bumke summarized that description thus:

On the first wall were the creation, paradise, and the flood; on the second scenes from the Old Testament; on the third figures from Greek mythology, the siege of Troy, and the history of Rome. The fourth wall hanging was stretched around the alcoves, where the bed of the countess stood. This fourth tapestry was particularly richly ornamented with gold and silver threads, and it depicted the Battle of Hastings and the conquest of England by Adele's father. On the ceiling a sky with all the stars, planets, and zodiac signs had been painted, and on the marble floor one could see a map with all the rivers, mountains and cities.⁸⁷

The countess's room furnishings established a link between the past, her father's conquest of England, and knowledge of the world. They produced a holistic sense of rule and enhanced regality, in particular through claims of knowledge of the world, especially past knowledge. It is within this framework that the *Nuzha* should be understood. Idrīsī's text gave Roger and his successors knowledge of the world, much of it based on a recovered and appropriated past knowledge, even if it was past knowledge preserved in Arabic texts, but also a means of placing their rule within the larger world, not only in their own lifetime, but also within a deep historical

⁸⁶ André Miquel, "Comment lire la littérature géographique arabe du moyen âge," in *Cahiers de civilisation médiévale* Vol. 15, No. 58 (1972): 102.

⁸⁷ Bumke, *Courtly culture: literature and society in the high Middle Ages*, trans. Thomas Dunlap (Berkeley: University of California Press, 1991), 117-118.

and even cosmological framing. Through the *Nuzha*, the king could represent his rule to himself and others, to grant his kingdom authority by locating it within a world and cosmos of which he had privileged knowledge. And like the countess, Roger, Idrīsī suggested, also decorated his palace with a flamboyant display of geography and knowledge of the world: Roger, he claimed, had ordered workmen to engrave upon a massive disk of pure silver the image of the seven climates, "with their countries, regions, shores, rural regions, gulfs, seas, and watercourses, the location of their rivers, their inhabited and uninhabited places, the well-traveled routes that connect them to one another, the distances in miles, and the known harbors."88

Moreover, to name lands, after all, is to potentially claim them. The ability to name, describe, and depict lands is critical in the move toward control. And moreover, while the geography of Idrīsī was a representation of the places it described, that is, it was a product of his mind, but it also produced. Geographies are capable of influencing one's perception of the world. And thus for Roger, when Idrīsī described his lands in writing, it made them real, it placed them among the lands of other rulers. As the modern scholar of geography Yi-Fu Tuan has noted, words, used in an appropriate context, have the power "to render objects, formerly invisible because unattended, visible, and impart to them a certain character." The words and descriptions employed by Idrīsī had the power to create place and to imbue that place with qualities and characteristics. Once written, in particular in a geographical treatise – an authoritative text of the genre – those words shaped perceptions and conceptualizations of the world.

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⁸⁸ Opus geographicum, 7-8.

⁸⁹ Yi-Fu Tuan, "Language and the Making of Place: A Narrative-Descriptive Approach," *Annals of the Association of American Geographers* 81.4 (1991): 684.

Idrīsī's geography is not merely a description of the world. It also directly addressed a number of critiques leveled against Roger. Idrīsī was attuned to the needs of the dynasty and of the specific messages his patron wished to promulgate. And though the major critiques of his rule came from his Christian rivals, given his deep engagement with the Arabic-speaking Mediterranean in addition to the Muslim population in his own kingdom, it is not surprising that Roger should have desired to promulgate a carefully controlled image of his rule in an Arabic text.

Constructing a King

Though Roger had secured peace and relative security for his rule by the year 1139, he and his kingdom struggled to gain recognition from Europe's great rulers. The king accordingly undertook a program of legitimation that included militarily securing the boundaries of his kingdom, elaborating the fiction that his realm – or at least the island of Sicily – had constituted a kingdom in antiquity, and projecting a carefully planned image of his kingship to each of the three dominant cultures of his kingdom, Arabic-speaking Muslims, Greek Orthodox Christians, and Latinate followers of the Church of Rome, as well as audiences beyond the bounds of his realm. Roger methodically projected, refined, and managed the royal image by means of ceremonial display, works of art and architecture, through the use of the three main languages of his kingdom – Arabic, Greek, and Latin – in inscriptions on royal buildings and on coins and in official documents issued by his administration after 1132.90 Indeed, Roger used a consciously

⁹⁰ See Jeremy Johns, *Arabic Administration in Norman Sicily*, 284-300; idem, "Arabic Inscriptions in the Cappella Palatina," 124-147; Alex Metcalfe, *The Muslims of medieval Italy*, 254-274; Karla Mallette, "Translating Sicily," *Medieval Encounters* 9 (2003), 140-163; William Tronzo, *The cultures of his kingdom: Roger II and the Cappella Palatina in Palermo* (Princeton, NJ: Princeton University Press, 1997).

heterogeneous mixture of languages and artistic styles alongside one another as a means of conveying the perception of his power to bring together and harmonize the different cultures and people of his kingdom. For example, numerous trilingual (and even one quadrilingual) inscriptions ornament the walls of many Palermitan buildings constructed after Roger's coronation and during Idrīsī's residence in the capital. The trilingual chancery at the royal palace and a trilingual psalter with parallel text in Greek, Latin, and Arabic, both dating from after Roger's coronation, further reveal the permeation and pervasive use of the languages of the subjects of the kingdom. Palermitan buildings constructed after Roger's coronation, further reveal the permeation and pervasive use of the languages of the subjects of the kingdom.

In Idrīsī, Roger had an opportunity to manipulate Arabic discourse regarding his kingship. The *Nuzhat*, however, would not be the first Arabic text to treat Roger and his kingdom. A handful of poets, for example, had earlier composed verses in praise of the kingdom. More frequently, though, Arabic poetry about the kingdom had been penned by refugees from the island in the wake of the Norman conquest. Ibn Ḥamdīs (d. 1133), one of Sicily's most celebrated poets, decided, along with innumerable other Sicilian Muslims, to leave the island and to set sail for the shores of Ifrīqiya and al-Andalus once it became apparent that the Normans conquest would be successful. He wrote of having been "expelled" from "Paradise," that is, from Sicily in his youth, and of his longing for his home and lost friends. 93 Elsewhere he portrayed the Sicily of Roger II as ruled by infidels, a site of jihād to be reconquered by Muslims. 94 Other,

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⁹¹ As Jeremy Johns has demonstrated in "Arabic inscriptions in the Cappella Palatina," 124-147.

⁹² On the trilingual chancery, see Jeremy Johns, *Arabic Administration in Norman Sicily*; Alex Metcalfe, *Muslims and Christians in Norman Sicily*. *Arabic speakers and the end of Islam*. On the trilingual psalter, known today as the Harley trilingual psalter, given that it is part of the Harley Collection at the British Library (Harley 5786), see Andrew G. Watson, *Catalogue of Dated and Datable Manuscripts*, vol. I, #838, and vol. 2, fig. 84; Jeremy Johns, "The Greek Church and the Conversion of Muslims in Norman Sicily," *Byzantinische Forschungen* 21 (1995): 133-157.

⁹³ Amari, Bibliotheca Arabo-Sicula (Arabic), 651.

⁹⁴ Amari, Bibliotheca Arabo-Sicula (Arabic), 582.

lesser known poets who, too, had emigrated from Sicily, such as 'Abd al-Hālim b. 'Abd al-Wāḥid and 'Abū al-'Arab al-Ṣiqillī wrote of their sense of loss, the former writing that under the Normans Sicily had become a "burning Gehenna" and the latter lamenting the decadent state of his old "homeland." Roger might have hoped that Idrīsī's text would act as a counterbalance to such invective.

There is a real possibility that Idrīsī had read some of these poems. He had, after all, met Ibn Bashrūn al-Ṣiqillī, a collector of poetry, while in Palermo, and was himself a poet. 96 Moreover, Mirella Cassarino has suggested that Muslim men of letters who lived in or passed through Sicily frequently formed relationships with one another, though not with "poets and men of letters from other cultural traditions." If Cassarino is right, then Idrīsī's project, which surely incorporated information from Christian travelers, would have run counter to this trend. But, it was to the critiques of his patron by neighboring Christian powers to which Idrīsī responded, not to the verses penned by poets. In particular, he inscribed two sections of the *Nuzha* with a legitimizing discourse on behalf of King Roger, namely, the preface and the section of his text in which he describes Sicily. First, consider the preface. After the opening paragraph which Idrīsī devoted to discussion of the earth as God's creation, the reader is introduced to King Roger. Idrīsī wrote,

The most praiseworthy subject with which an investigator can concern himself and engage his ideas and thoughts is that which has already been taken up by the glorified King Roger, powerful through God, and made powerful by Him, King of Sicily, Italy,

⁹⁵ Amari, Bibliotheca Arabo-Sicula (Arabic), Vol. II, 705-706, 734.

⁹⁶ Moreover, many of poets noted above, both those who lived in Sicily and in other Mediterranean cities, maintained friendships and exchanged correspondence with other poets across the Mediterranean. For several examples, see Mirella Cassarino, "Islamic Palermo Experienced and Imagined," 113-114.

⁹⁷ Mirella Cassarino, "Islamic Palermo Experienced and Imagined," 122. Cassarino points to a text written by Ibn Qalāqis as evidence of the nature of intellectual life in Norman Palermo.

Langobardia, and Calabria, [defender of] the *imām* of Rome (*imām al-rūmīya*), protector of the Christian community. ⁹⁸

The "praiseworthy subject" mentioned here was, of course, the geography of the known world. Roger, Idrīsī claimed from the start, had undertaken the study of the world, of God's creation. The rest of the words, or most of them anyway, are not Idrīsī's own. Rather he reproduced the official Arabic-language dynastic title of the Norman king. 99 As far back as Robert Guiscard and Roger I, the Norman rulers of Sicily had adopted Arabic titles. In the early Norman period, including during Count Roger II's childhood, they had simply rendered Latin feudal titles into Arabic. Hence, dux became al- $d\bar{u}qa$, for instance. Later in Roger's reign, though, Arabic titles had become common and by the time that Idrīsī arrived in Palermo, Roger (and subsequent kings of Sicily) had taken the Arabic title *al-malik al-mu 'azzam*, "the glorified king," a designation that Idrīsī attributed to Roger in the Nuzhat. Roger also had a personal laqab or epithet, al-mu 'tazz bi*llāh*, "the powerful through God," which Idrīsī also inserted into his description of the king. Finally, Idrīsī further attributed to Roger two overtly Christian titles, the first, mu 'izz imām Rūmīya, "defender of the imam of Rome," certainly a reference to the pope. The second, al-nāṣir lil-milla al-naṣrānīya, "the protector of the Christian community," may have been a translation of the Greek title ton Christianon boethos, "defender of the Christians," a phrase used in the

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⁹⁸ Idrīsī, *Opus geographicum*, 5.

⁹⁹ Indeed, all kings of Sicily, from Roger I (d. 1154) Frederick II (d. 1250) used this title with the exception of William III who ruled for only ten months, from December 1993 until October 1194, at the age of 8 or 9. For Frederick II's use of the title, see Moshe Sharon and Ami Schrager, "Frederick II's Arabic Inscription from Jaffa (1229)," in *Crusades*, Vol. 11, eds. Benjamin Kedar et al. (Ashgate, 2012), 139-158.

Greek title of Roger, and which became a standard part of Roger's Arabic title. ¹⁰⁰ Finally, Idrīsī calls Roger *al-malik*, "the king," apparently seen as the equivalent of the Latin *rex*. ¹⁰¹

Idrīsī probably would have seen this official royal title, or at least parts of it, in a number of royal settings in Palermo. ¹⁰² He may well have seen George of Antioch's endowment, recorded in an Arabic- and Greek-language charter, for the building of his church, Santa Maria dell'Ammiraglio in Palermo, written in 1143. The charter contained the first-known use of Roger's Arabic title *al-malik al-mu'azzam*, "the glorified king." ¹⁰³ He may also have seen a version of Roger's royal title at the Church of San Michele Arcangelo in Palermo where Grisandus, Roger II's priest, had dedicated a quadrilingual tombstone to his own mother Anna in 1149. Written in Latin, Greek, Arabic, and Judeo-Arabic, the precise message of the dedication varies between languages. The Arabic passage, however, comprised laudatory verses honoring the king, and reads:

...the Presence [an indirect reference to Roger II], the ruling, the most royal, the high, the most high, the glorified, the splendid, the most holy, the magnificent, the one strengthened by God, the [one] made powerful by His power, the one supported by His strength, the one who rules Italy, Langobardia, Calabria, Sicily, and Africa, the defender of the imām of Rome, the protector of the Christian community, may God protect his rule! 104

¹⁰⁰ An 1109 document attributed a similar formula to Roger II's mother: "*al-nāṣira li-dīn al-naṣrānīya*, "the protectress of the Christian religion." See Johns, *Arabic Administration in Norman Sicily*, 271.

¹⁰¹ Jeremy Johns, "I titoli arabi dei sovrani normani di Sicilia," *Bollettino di Numismatica*, 6-7, 1986: 11-54; Jeremy Johns, *Arabic Administration in Norman Sicily: the royal dīwān* (Cambridge: Cambridge University Press, 2002), 268-274.

¹⁰² In the 1130s and early 1140s Roger II experimented with numerous Arabic royal titles. For instance, the coronation robe made in Palermo's royal silk workshop, the *ţirāz*, in 1133-1134 was inscribed with a list of some twenty royal titles. The ceiling of the Cappella Palatina, which formed part of the royal palace, had been painted with twenty-nine royal epithets repeated in various combinations. None of these epithets became part of the 'official' protocol. See Johns, "I titoli arabi," 20-21.

¹⁰³ Jeremy Johns, Arabic Administration in Norman Sicily, 110-111.

¹⁰⁴ Translation in Johns, *Arabic Administration in Norman Sicily*, 136, n. 73, my italics. See also Michele Amari, *Le epigrafi arabiche di Sicilia, trascritte, tradotte e illustrate. Parte seconda: iscrizioni sepolcrali* (Palermo: Lauriel, 1879), number 17, 80-94, pl. 9.2. A similar formula has survived from 1183, this one in reference to King William II in a document issued by the royal *dīwān*. It reads, "...the glorified Presence, the ruling, the most royal, the Williamian, the magnificent, *the powerful through God*, the assisted by His omnipotence, the desirous of victory through His strength, the ruler of *Italy, Langobardia, Calabria, and Sicily, the defender of the imam of Rome, the*

Finally, Idrīsī surely would have handled Sicilian-struck coins upon which elements of Roger official title and epithet were inscribed. Most *taris* – a common gold coin on the island – minted during his reign, for instance, contained the same title that Idrīsī used, "The powerful through God, the glorified king Roger," *al-mu'tazz bi-llāh malik Rujār al-mu'azzam*. ¹⁰⁵ Idrīsī, then, began his presentation of Roger not with a representation that he had conjured on his own, but rather through careful replication of the king's officially-sanctioned Arabic title.

As Jeremy Johns has argued, the Arabic title for Roger cited by Idrīsī and others in the Kingdom of Sicily originated in an Islamic chancery, probably that of the Fāṭimids, a dynasty with which Sicily maintained cordial relations. ¹⁰⁶ Just as the Sicilian $d\bar{\imath}w\bar{a}n$, the office of the chancery which issued official documents in Arabic, Greek, and Latin after 1132, had been imported wholesale from Cairo. Johns further maintains that the Fāṭimid chancery bestowed the title used by both Idrīsī and the rest of Roger's administration. He suggests that the title may have been selected from among a list of standard titles, called *al-alqāb al-uṣūl* by al-Qalqashandī (d. 1418, Egypt) in his manual for scribes, including those suitable for correspondence with Christian rulers. ¹⁰⁷ Hence the title given by Idrīsī, as seen by the Fāṭimid caliph and others in his

protector of the Christian community – may God perpetuate its reign and its days, make eternal its ages and its years, assist its armies and its standards, and support its swords and its pens." My italics. Translation in Johns, "The Arabic Inscriptions of the Norman Kings of Sicily. A Reinterpretation," 325, my italics. See also Salvatore Cusa, I diplomi greci ed arabi di Sicilia pubblicati nel texto origanle, tradotti ed illustrati, Vol. 1 (Palermo: Stabilimento tipografico Lao, 1868), 245; Johns, Arabic Administration, 165-167.

The reverse, as we have seen, depicted a Christian cross surrounded by the Greek letters IC XC NI KA, standing for *Iesous Christos nikā*, "Jesus Christ will conquer" and the Arabic designation, just as in the *Nuzha*, of *nāṣir al-naṣrānīya*, protector of the Christians. Ernst Kantorowicz, *Laudes Regiae: A Study in Liturgical Acclamations and Medieval Ruler Worship* (University of California Press, 1958), 10; Karla Mallette, "Translating Sicily," in *Medieval Encounters*, 9, 1 (2003), 145.

¹⁰⁶ Jeremy Johns, Arabic Administration in Norman Sicily, 267, 274.

¹⁰⁷ Johns, *Arabic Administration in Norman Sicily*, 271; Abū 'Abbās Aḥmad al-Qalqashandī, Ṣubḥ al-a'shā fī ṣinā'at al-inshā', Vol. V (Cairo, 1913-1972): 493-498. See also Moshe Sharon and Ami Schrager, "Frederick II's Arabic Inscription from Jaffa (1229)," 148-150; Samuel M. Stern, Fāṭimid decrees. Original documents from the Fāṭimid chancery (London: Faber and Faber, 1964).

court, would convey a sense of sovereignty, yet at a level inferior to that of the caliph. Roger defended the "imām of Rome," whereas the caliph in Cairo took the title of "the Rightly-Guided *by God*, the Commander of the Faithful." If the official Arabic title adopted by Roger and written in the *Nuzha* conveyed a sense of power and authority, while simultaneously connoting a status subordinate to the caliph's, Idrīsī did not hesitate to place Roger above the Byzantine emperor, writing that "He is superior to the king of the $R\bar{u}m$," that is, to the Byzantine sovereign, "in his authority, his holdings and his ability to direct affairs according to his own wishes, both in confirming and in denying." Here Idrīsī probably had in mind Manuel I Komnenos (r. 1143-1180), though his predecessor, John II Komnenos had also refused to recognize Roger's right to rule in southern Italy.

Following this "official" presentation of Roger, Idrīsī turned his attention to presenting Roger as a proficient, powerful, and triumphant ruler. Idrīsī continued, "Among his [King Roger's] sect he has professed the religion of justice and has extended to them his protection and beneficence. He has taken care of the affairs of his kingdom in the best way and has brought to his domains the most perfect order and the most beautiful harmony." According to Idrīsī, King Roger had managed to bring together his disparate population into harmony, undoubtedly a reference to the difficulties of uniting peoples of varied confessions, ethnicities, and languages, a problem that would continue to trouble Sicilian rulers. Even during William II's reign (1166-1189), creating concord among the celebrated *populo trilingui* of Palermo was seen as a considerable achievement. Eugenius of Palermo praised William II: "Do not you [the king]

¹⁰⁸ Idrīsī, *Opus geographicum*, 5.

¹⁰⁹ Idrīsī, Opus geographicum, 5.

¹¹⁰ Peter of Eboli, court poet of Henry VI, Holy Roman Emperor and King of Sicily, famously described Palermo, the island's biggest city, as the "fortunate city, endowed with a trilingual people." Petrus de Elbo, ca. 1196 in *Liber ad honorem Augusti sive de rebus Siculis*. The Latin reads "Hactenus urbs felix populo dotata trilingui," line 56.

harmonize the inharmonious, and mix together the unmixable...with wise foresight blending and uniting into a single race disparate and incongruent peoples."¹¹¹ Moreover, the passage would have reminded knowledgeable readers of the program of legislation in Roger's kingdom. A year after Roger had consolidated his lands – following the 1139 treaty of Mignano – the king issued a series of laws known today as the *Assizes of Ariano*. This was a collection of laws modeled on Justinian's sixth-century *Digest* in which Roger, like Justinian six centuries previously, claimed the ancient designation of "king and priest," *rex et sacerdos*, and asserted for himself "a certain privilege of priesthood."¹¹²

Idrīsī further depicted his patron as militarily powerful, a man who has "conquered countries in the east and west," whose enemies "suffer humiliating defeats, one after another." They willingly seek his protection and "entrust him with the keys to their states." If Roger's rivals portrayed him as the tyrant of Sicily, Idrīsī countered them, noting that the king "has subdued the necks of tyrants (*jabābira*) of his religion far and wide," a claim surely contesting the numerous denunciations leveled against Roger, accusing him of tyrannical acts and behaviors. Idrīsī presented his patron as asserting authority over his own subjects, instituting law and justice within his kingdom. Roger administered his kingdom then through law, not

¹¹¹ As quoted in Jeremy Johns, "Arabic Inscriptions in the Cappella Palatina," 125.

¹¹² See Ernst H. Kantorowicz, *The King's Two Bodies*, 117-124. Justinian's *Digest* itself borrows this language from Ulpian, a second/third century Roman jurist, 124. Alex Metcalfe has suggested that the "religion of justice" noted by Idrīsī refers to Islam. He translates the passage as follows: "in his faith, he [Roger] was indebted to the religion of justice [i.e. Islam]," see Metcalfe, *The Muslims of medieval Italy*, 246. In spite of Roger's having adapted certain behaviors of Muslim rulers, such a statement by Idrīsī, however, does not fit with the rest of the preface of the *Nuzha*. He presented Roger, after all, as the protector of the Christian community and defender of the Roman "imam."

¹¹³ Idrīsī, *Opus geographicum*, 5.

¹¹⁴ Idrīsī, Opus geograhicum, 590.

¹¹⁵ Idrīsī, *Opus geographicum*, 4.

tyranny. In underscoring Roger's victories over enemies abroad, Idrīsī portrayed him as a ruler worthy of the respect of foreign potentates.

Idrīsī presented Roger as a ruler capable of achieving greatness. He was an accomplished ruler, capable of making the difficult easy, of helping friends and humiliating enemies. "Destiny runs in accordance with his desires and wishes, and fortune serves him and carries out his preferences." Roger rules with "personal courage, clarity of mind, depth of intellect, abundant magnanimity," and possesses an administrative ability informed by a penetrating understanding. Indeed, Roger even achieved his goals in his sleep, for "his slumbers are like the vigils of normal humans." 117

Roger's skills extended far beyond his talents as an administrator and ruler. Idrīsī presented the king as the genius behind the geographical project. If Roger had not had the chance to learn from Aristotle, there was still a sense of Alexander the Great (whether intentional or not), that well-cultured, curious, and inventive man who simultaneously had mastered the art of rule and war. Roger, he claimed, had undertaken the project on his own and had begun an indepth study of the geography of the known world. Thus, as part of his program of representing the king as a man of learning, Idrīsī wrote, "As for his knowledge of the mathematical and practical sciences, you can neither quantify it nor set any limit about it. He has taken the most fitting element of each discipline and has cast the *mu'allā* arrow at it." ¹¹⁸ Roger, Idrīsī noted,

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¹¹⁶ Idrīsī, *Opus geographicum*, 5.

¹¹⁷ Idrīsī, *Opus geographicum*, 5.

¹¹⁸ Here Idrīsī referred to the pre-Islamic gambling game of *maysir*. He wrote that Roger targeted his studies with the *mu'allā* arrow, *bil-qidḥ al-mu'allā*, that is, the seventh and most important arrow in the game of *maysir*. The "*al-mu'allā*" arrow, also known as *al-mighlaq* ("the (arrow) that closes"), denoted "the superior (arrow)." The term had been used metaphorically in Arabic writing to describe accomplished and talented people. Here Idrīsī used it to evoke Roger's talents in the sciences. Moreover, in the previous paragraph, Idrīsī had written that Roger's "merits are like the arrows that strike its mark," another, more common, metaphor for faultlessness and success. The copyists of the *Nuzha* misspelled the term as *al-mughallā*, rather than *al-mu'allā*, a slight difference in *i'jām*, the pointing diacritics that distinguish consonants in Arabic, in this case the letter '*ayn* from *ghayn*. For the Arabic

"has made marvelous inventions and amazing novelties such as no king has ever made before him or ever been distinguished for doing." Indeed, in Idrīsī's telling, Roger's interest in geography and cartography was a natural outgrowth of, on the one hand, his proficiency in the sciences and skill as an inventor, and on the other, of his desire to know the extent and characteristics of his own new kingdom. That Idrīsī credited Roger with having carried out the research project on his own speaks to his own modesty and willingness to present his patron as a learned man. That said, it is also less than convincing. According to Idrīsī, the king began his study of the geography of the world "by consulting the books which have been composed within this branch of learning." ¹¹⁹ A list of twelve authors followed, ten of whom wrote their texts in Arabic and centered their description of the world on the lands of Islam. Idrīsī thus described an incredibly unlikely scenario. While some evidence suggests that Roger could speak Arabic, nothing indicates that he could read it. 120 Literacy was uncommon in twelfth-century Sicily, and even King Roger appears to have been illiterate in all three major languages of his realm, Arabic, Greek, and Latin. 121 Nor is there evidence that any library in mid-twelfth century Sicily possessed these texts. Indeed, the only evidence to have survived regarding library collections survives as a small scrap of paper, perhaps written in the 1150s, upon which someone recorded a list of the holdings of the royal library. The inventory of books was recorded in Arabic, however as Alex Metcalfe noted, the "books cited are mainly secular but also some include some Christian works, probably all of which were written in Latin."122 In short, Roger certainly did not

text quoted above, see Idrīsī, $Opus\ geographicum$, 5. On the game of maysir and the metaphorical use of arrows and the term al-mu' $all\bar{a}$, see Franz Rosenthal, $Gambling\ in\ Islam\ (Leiden: Brill, 1975), 117-118.$

¹¹⁹ Idrīsī, Opus geographicum, 6.

¹²⁰ See Metcalfe, Muslims and Christians in Norman Sicily, Arabic speakers and the end of Islam, 99-100.

¹²¹ Jeremy Johns, "The Arabic Inscriptions of the Norman Kings of Sicily. A Reinterpretation," in *Nobiles Officinae:* perle, filigrane e trame di seta dal Palazzo Reale di Palermo, ed. Maria Andaloro (Catania: Guiseppe Maimone, 2006), 332; Jeremy John and Nadia Jamil, "Signs of the Times: Arabic Signatures as a Measure of Acculturation in Norman Sicily," *Muqarnas* 21: Essays in Honor of Michael Rogers (Leiden: Brill, 2004).

¹²² Metcalfe, *The Muslims of medieval Italy*, 257.

consult these books, at least not on his own. Nor did Idrīsī stop here: later in the preface we see Roger interviewing travelers and plotting cities and other localities on a drawing tablet (lawh altarsīm) whereupon, with the aid of iron measuring instruments, "he began to trace upon it, all the while consulting the books which have already been mentioned, and evaluating what the authors [of those books] had said."123 Roger, then, appears in the Nuzha not only as the impetus behind the geographical project, but also as its lead investigator. However, even if the claim of Hugh Falcandus (d. 1169) that once Roger had brought peace to his kingdom and had become rich, he "devoted himself to peace and leisure" is true, Roger likely did not have much of a role in the geography project beyond acting as its patron. 124 Idrīsī, though, presented his patron as an inventive ruler, as a learned man, capable of consulting texts in Arabic and of composing complex drawings of the layout of the earth. It was only after Idrīsī portrayed Roger as the architect and investigator behind the geographical project that he finally placed himself in the frame. Here Idrīsī unassumingly wrote that Roger had ordered the composition of a book containing a description of the world and stated that, "I am here executing his order and carrying out the command."125

Though he had created his kingdom *de novo*, Roger sought to present it as a *restitutio*, a restoration of an ancient kingdom with an ancient capital. Just before Roger had formed the new Kingdom of Sicily, he had ordered a group of magistrates in Salerno to determine whether he was justified in establishing a kingdom in Sicily with a capital at Palermo. It was a pertinent question, because a new kingdom could not simply be invented from scratch, at least not when

¹²³ Idrīsī, Opus geographicum, 6.

As quoted in Jeremy Johns, Arabic Administration in Norman Sicily, 286. See also Hugo Falcandus, The History of the Tyrants of Sicily by 'Hugo Falcandus,' 1154-1169, trans. Graham Loud (Manchester, UK: Manchester Medieval Source Series, 1998), 58-59; Hugo Falcandus, La historia: o, Liber de Regno Sicilie e la Epistola ad Petrum panormitane ecclesie thesaurarium, ed. Giovanni Siragusa (Rome: Forzani, 1897), 6-7.
 Idrīsī, Opus geographicum, 7.

other powers asserted their claim to the territory. Those gathered in Salerno concluded "that kings had once resided in Palermo, who had ruled only over Sicily...it is right and just that Roger should be granted the royal crown. Hence not only will this kingdom be restored, but extended to the other lands over which he rules." Foreign emperors, kings, and princes would consent to the restoration of an old kingdom far more readily than to the creation of a new one. The foundation charter of the Cappella Palatina in Palermo, dating from 1140, restated the claim of a *restitutio*: the new chapel would be established based on the authority of the Roman Church and the "people of our dominions, the kingdom which was for a long time in abeyance has, through the Redeemer's benevolence, been fully restored to its original state, honorably promoted and exalted."127 Likewise, the privilege issued to Roger as part of the 1139 treaty of Mignano included similar language regarding a restitutio regni Siciliae. That privilege contended that Roger had not created a new kingdom but had rather revived one "that according to ancient historians had existed of old."128 In his official biography of King Roger, Alexander of Telese, writing shortly before the Mignano events, linked the restitutio to the standing of Palermo as the home of kings "in former times." Hence, when Idrīsī wrote that Palermo "was the home of kingship (dār al-mulk) in ancient and former times,"130 he reiterated the official message of the king. Exactly to what precedents Idrīsī referred is unclear. He may well have intended to imply that Roger had rehabilitated the position once held by the Aghlabid, Fātimid, and Kalbid emirs who ruled from Palermo. Some of the Kalbid rulers had in fact used the title of *malik*. ¹³¹ And like

¹²⁶ Alexander of Telese, as quoted in Houben, *Roger II of Sicily*, 51-52.

¹²⁷ Roger II, Diplomata, 133-137, no. 48, as quoted in Houben, Roger II of Sicily, 55.

¹²⁸ As quoted in Wieruszowski, "Roger II of Sicily," 51 and n. 26.

¹²⁹ See Wieruszowski, "Roger II of Sicily," 52, n. 27; T.S. brown, "The political use of the past in Norman Sicily," in *The perception of the past in twelfth-century Europe*, Paul Magdalino ed. (Cambridge: Cambridge University Press, 1992), 203.

¹³⁰ Idrīsī, *Opus geographicum*, 590.

¹³¹ See R.S. Lopez, "The Norman conquest of Sicily," 57-58; Wieruszowski, "Roger II of Sicily," 53.

them, Roger had moved the capital of his kingdom to Palermo – Messina had been Roger's capital for a short period prior to Palermo – and modeled his rule and behavior on that of Muslim rulers. If such an identification between Roger and the island's previous Muslim rulers was unthinkable in Latinate or Greek texts produced under the king, it may have just been possible in Idrīsī's geography.

Whether $Idr\bar{\imath}s\bar{\imath}$ intended to signal a link between Roger and the emirs of Sicily, he could always claim that he had followed his patron's official message – a message the king had devised as a means to enhance his claims of legitimacy – regarding the antiquity of Palermo as a capital, since he, too, knew of Roger's lack of royal ancestry. And so, he fashioned that royal ancestry for him. In his introduction to the description of Sicily, $Idr\bar{\imath}s\bar{\imath}$ recalled the Norman conquest of the island. "In the year 453 of the *hijra* (1061), that most illustrious *king*, the most valorous, the most powerful, and the most brilliant of *kings*, Roger, the son of Tancred ($Tanqr\bar{\imath}n$), the elite of the *kings* of the Franks, conquered the best cities of Sicily, and with the help of his companions came to overthrow its prefects ($wul\bar{a}t$) and tyrant ($tugh\bar{a}h$) protectors." Far from acting as tyrants themselves, the members of the de Hauteville line in Sicily, $Idr\bar{\imath}s\bar{\imath}$ suggested, defeated them. Though he implied that it no longer existed in his time on Sicily, $Idr\bar{\imath}s\bar{\imath}$ wrote of an old frontier zone which he called the *thaghr*, a term used to describe a frontier post or zone between $D\bar{\imath}s$ al-Isl $\bar{\imath}s$ and the $D\bar{\imath}s$ al-Harb. The former, 'the house of Islam,' referred to lands under

¹³² Idrīsī, *Opus geographicum*, 589. My italics.

¹³³ And here Idrīsī may have also made a historical claim: one of his named written sources, the work of Paulus Orosius, had written in his *Seven books of history against the pagans* that "Sicily was first the land of the Cyclopes and after that has ever been nurse of tyrants." See A.T. Fear, *Orosius: Seven books of history against the pagans* (Liverpool: Liverpool University Press 2010), 96; Wieruszowski, too, notes that Otto of Freising, a German chronicler (d. 1158) borrowed from Orosius when he wrote that "For Sicily is said to have been the nurse of the Cyclopes and afterwards of tyrants, *even down to the present day*; the former always fed upon the flesh of men, the latter on their sufferings," 55, my italics.

¹³⁴ El². "al-<u>Thugh</u>ūr." (C.E. Bosworth); Edward Lane, An Arabic-English Lexicon I (London: Williams and Norgate, 1863), 338-339.

Muslim sovereignty and governed according to Islamic law, the latter 'the house of war,' denoted territories bordering on *Dār al-Islām*. Roger I had conquered the island region by region, frontier by frontier. Idrīsī reported that not only did the Norman ruler refuse to create boundaries predicated on religious difference, but he removed them. Idrīsī "defeated and conquered" the entire island, "region by region and took possession of it *thaghr* by *thaghr*." The frontier between the lands of the Muslims and the lands of the unbelievers had been erased on Sicily. Moreover, Idrīsī reported that when he had placed the island under his rule and "made himself king (*malik*)," Roger I spread the benefits of justice to all: he reassured the inhabitants of their right to continue practicing their religions and their laws, and assured them of the "preservation of their goods, lives, and their women and children." 136

Of note here is that Idrīsī repeatedly stated that Roger I was the "king" of Sicily, a title the count had never claimed. The Normans of Sicily, however, had used the title of "king" prior to Roger's 1130 coronation. Robert Guiscard had used the term *malik* in 1072 on a coin, though there is doubt that he was aware of the Arabic content of his coinage. And in any case, Roger I had never used the title for himself; he had always been the "count" of Sicily. Idrīsī, though, granted him the title of "king," and in doing so, he pushed back the date of the establishment of the kingdom of Sicily to the second half of the eleventh century. Perhaps more importantly for

¹³⁵ Idrīsī, Opus geographicum, 589.

¹³⁶ Idrīsī, Opus geographicum, 588-589.

On *thaghr*, see *El*² s.v. "al-<u>Thugh</u>ūr" (C.E. Bosworth and J.D. Latham); Ralph Brauer, "Boundaries and Frontiers in Medieval Muslim Geography," *Transactions of the American Philosophical Society*, 85 (6): 1-73.

¹³⁷ Jeremy Johns, "Arabic Inscriptions in the Cappella Palatina," 124.

¹³⁸ Coins minted in Agrigento under Roger I grant him the title of "al-qūmis Rujjār," count Roger." The titles also include *imām* and *sultān*. The first *taris* minted under Roger I identified him as "count," and "brother of the duke." See Lucia Travaini, *La monetazione nell'Italia normanna* (Istituto storico italiano per il Medio Evo: Nuovi studi storici no. 28: Rome, 1995), 115; Jeremy Johns, "I titoli arabi dei sovrani normanni di Sicilia," 17, 37, no. 9; Philip Grierson, Lucia Travaini, *Medieval European Coinage 14, Italy (III) (South Italy, Sicily, Sardinia)* (Cambridge: Cambridge University Press, 1998), 438.

Roger II's claims to authority, Idrīsī wrote that his father "left for inheritor his son, the glorified king (*al-malik al-mu 'azzam*) who takes the same name as his, and follows in his footsteps." ¹³⁹

As for King Roger, Idrīsī noted that after his father's death, he had "established the state, adorned the kingdom, elevated the power of the king," ensured justice in his lands, maintained security, and exercised clemency. His success was such that other rulers were obedient to him, turned to him for protection, and handed him the keys to their countries. Indeed, "The esteem, fame, and renown of his kingdom have not ceased to grow up to the date in which we write this, this book of ours." Not only had Roger stayed in power in the face of so many powerful enemies, the Church, the Germans, the Byzantines, among others, but he had also managed to govern a secure, prosperous kingdom.

Finally, Idrīsī further reinforced the image of Roger as a great ruler by embellishing the place of Sicily in his description of the habitable world. In so doing, he portrayed a world in which Roger reigned over its finest kingdom. "It remains for us to now speak of noble Sicily..." Idrīsī began his description of the island on which he wrote the *Nuzha*.

We say that Sicily is the pearl of this period because of its abundance and beauty. It is unique in goodness and in its communities and people. In the past, travelers came from all parts and journeyed from cities (*mudun*) to [capital] cities (*amṣār*), and all of them were in agreement in extolling its qualities, praising the extent of its territory, exalting its extraordinary beauty, and speaking of its favorable conditions and of the many advantages which it enjoys because of the goods from every country [of the world] that Sicily attracts to itself. Its kings are the most noble among all others, more powerful than all the other powers with which they are compared. And truly, the king of Sicily must be placed first among all other kings in terms of power, glory, and the magnitude of his goals. ¹⁴²

¹³⁹ Idrīsī, Opus geographicum, 589.

¹⁴⁰ Idrīsī, Opus geographicum, 589.

¹⁴¹ Idrīsī, Opus geographicum, 590.

¹⁴² Idrīsī, Opus geographicum, 588-589.

Sicily, he added, has so many excellent qualities, vast districts, and assets that were he to enumerate them all he would produce a wonderful image; alas, he explained, his space was limited, and so he has described the island succinctly. Idrīsī thus constructed on behalf of his patron a representation of a robust, splendid Sicily, the heart of the kingdom, ruled by a just and powerful – and legitimate – king.

Finally, Roger appears in the *Nuzha* at various points as a just, conquering ruler of coastal cities in Ifrīqīya, yet he injected into these accounts a sense of the realities of conquest. For instance, Idrīsī noted that Roger had seized Barishk in modern day Algeria, "a small city built on a hill and surrounded by an earthen wall," in the year 5--. 143 Of nearby Jījel, Idrīsī related an account of Roger's taking of the town, describing how upon the arrival of the Sicilian fleet, the inhabitants fled inland to a mountainous area and constructed a fortified city where they lived during the summer and from which they carried goods to the coast for trade. Idrīsī wrote that the city "is today in ruins, the houses and the walls are destroyed. One never sees any inhabitants, and no one resides in the city." In spite of this – and Idrīsī does not explain this in detail – it "is nevertheless a pretty city where one finds dairy products, butter, honey, and other products."144 Of the Zīrid capital of al-Mahdīya, Idrīsī noted that Roger conquered it in 543 AH (1148 CE) and that it had a governor designated by the "glorified king Roger." Annaba was conquered by King Roger in 548 (1153), yet "today it is poor, impoverished, and administered by an agent of the glorified king Roger who comes from the Banū Ḥammād." ¹⁴⁶ Of Tripoli, Idrīsī noted that Roger captured it in 540 AH (1145) and "reduced the women to slavery and eliminated the

¹⁴³ A lacuna in extant manuscripts prevents the reading of this date. Idrīsī, *Opus Geographicum*, 257.

¹⁴⁴ Idrīsī, *Opus geographicum*, 267.

¹⁴⁵ Idrīsī, *Opus geographicum*, 276.

¹⁴⁶ Idrīsī, *Opus geographicum* 264.

men," and that the farms and orchards associated with the city continue to be productive. ¹⁴⁷ Roger captured the island of Kerkenna in 548 (1153) and conquered Jerba twice, as we have seen. ¹⁴⁸ While Idrīsī never suggested that Roger's actions had led to the decay of these places, it is not clear why he noted that several of the cities conquered by Roger were later in decline or ruin. Nevertheless, Idrīsī presented Roger as an ambitious ruler, powerful enough to conquer both the Zīrid and the Ḥammādid lands along the North African coastline.

Conclusions

King Roger summoned Idrīsī to his court from the "other shore," from Ifrīqiya or the Maghrib, at least according to his biographer al-Şafadī. He did so out of interest in learning from Idrīsī, an *adīb* learned in geography. But he also sought to benefit from Idrīsī, both though his writing and his status as descendant of the Prophet and caliphs. As we have seen, Idrīsī wrote the *Nuzha* for Roger: the king had ordered him to compose it and had undoubtedly exerted considerable influence over the message it delivered regarding his rule. Idrīsī, then, composed his geography as a client of Roger. Even if the biographer al-Şafadī suggested that Idrīsī was respected at the court in Palermo, this was undoubtedly a relationship between unequals. Roger was the patron and Idrīsī his client. And judging from the accounts of al-Şafadī and Leo Africanus, he was a particularly expensive client. Yet, expensive or not, like all patron-client associations, this was a relationship of exchange: Roger offered Idrīsī riches and protection, and in turn, Idrīsī provided Roger with his knowledge and his words, in his a description of the known world the text of

¹⁴⁷ Idrīsī, Opus geographicum, 222.

¹⁴⁸ Idrīsī, Opus geographicum, 246.

which provided the king a medium in which to promulgate a message of his legitimacy and power.

As we have seen, Idrīsī took his clientage obligations seriously. He endeavored to inscribe his text with a discourse of legitimacy on behalf of King Roger. We have no evidence to tell us how the *Nuzha* and its legitimizing message was received, or indeed, who may have received it. But this nevertheless raises the question of audience. We know that Idrīsī wrote for King Roger, or at least for the royal court in Sicily. Roger had, after all, ordered him to compose a description of the world and the resulting text elevates the king to a status unequalled by his neighboring rulers. But King Roger died in late February 1154, perhaps only two months after he had mandated that Idrīsī compose the work. 149 The king may have never seen the completed product, though it is far from clear whether the date of 1154 marked the beginning of the composition of the Nuzha or its completion. ¹⁵⁰ In any case, the Nuzha would have provided Roger – had he seen it – and perhaps even his successors, an instrument through which they could conceive of the world and the place of their kingship within it. But Idrīsī may have also imagined a Muslim audience as he wrote, perhaps including those who lived in Sicily, but surely Muslims further afield in both space and time. Books and the knowledge that they contained, after all, were copied and circulated widely, as Idrīsī, so dependent on his Arabic works of geography from far-away lands and distant periods as we will see, knew well. Accordingly, Idrīsī developed writing strategies in composing the *Nuzha* from Sicily. While his Arabic sources placed Islam at the center of the world, he could not. But neither would he be inclined – as a

¹⁴⁹ However, the king died on 26 February 1154 in Palermo only a month or two after ordering Idrīsī write the *Nurha*

¹⁵⁰ There is debate regarding the date of the completion of the *Nuzha*. Some see 1154 as the date of the text's completion while others believe it marked the start of its composition. See, for instance, see Roberto Rubinacci, "La data della geografia di al-Idrīsī," *Studi Magrebini*, III (1970), 73-77.

Muslim himself – to write a geography that privileged a Christian view of space, as did nearly all works of Latin geography. In composing his geography, then, Idrīsī performed a balancing act, wary of the dangers that would arise should he hew too closely to the championing of Islam that he found in his sources, but also careful not to discount the lands and civilization of Islam, lest he offend his Muslim readers.

Chapter 2: Writing the World from Palermo

"The first thing that I treat is the discourse regarding the image of the earth (\$\sigma \text{u} al - ar d\$), called \$jughr\overline{a}fiy\overline{a}\$ as Ptolemy named it and described it," the twelfth-century geographical writer al-Shar\overline{1}f al-Idr\overline{1}s\overline{1}says in the preface of the \$Kit\overline{a}b\$ nuzhat al-musht\overline{a}k\$ f\overline{i}\$ ikhtir\overline{a}k\$ al-\overline{a}f\overline{a}q\$ (The Book of Entertainment for People who Desire to Traverse the Regions of the World). He immediately continued, "We ask God for assistance, success, and guidance in every path and road. For He, may His power be magnified, is mighty in this matter and powerful over it." In what followed, Idr\overline{1}s\overline{0}\$ offered his readers a concise account of the earth in its entirety, an overview that presented its shape and size, its inhabitable and uninhabitable parts, its divisions and limits. In placing this discussion in the preface of his geography Idr\overline{0}s\overline{0}\$ effectively introduced a broad framework within which he situated the rest of his treatise which comprised a detailed examination of the lands and peoples of the known world.

But how would he portray the earth and its divisions for King Roger? When he put pen to paper and set out to write his world, he had before him centuries' worth of geographical works. And though he wrote the *Nuzha* from Christian Palermo, most of these treatises were Arabiclanguage works, composed by Muslims who had lived in the *Dār al-Islām*, the abode of Islam. These were the texts and ideas with which he was most comfortable and which had formed his geographical mentality. But at least two of his sources were originally composed in languages

¹ Idrīsī, Opus geographicum, Liber ad eorum delectationem qui terras peragrare studeant (Naples: Brill, 1970), 1:7.

other than Arabic, though he nevertheless knew of them through Arabic translations, namely a work by Paulus Orosius, a fourth and early fifth-century Christian theologian who had studied with St. Augustine, and an unnamed work by Claudius Ptolemy, the famous second-century Greek scholar. Moreover, as a resident of Palermo, a capital with connections to cities across Europe, he may well have had access to more recent works of Latin geography, though to be fair, he made no mention of having encountered such works. Taken together, these works provided him with an array of ways in which other writers over the centuries and across cultures had conceived of the earth and divided it.

And so, in composing his *Nuzha*, Idrīsī sifted through the views promoted by all of his sources, measuring them against one another and incorporating into his work only those that he deemed suitable. And given that he wrote under the aegis of King Roger, some views and divisions of the world, as we will see, were more suitable than others. Some models, for instance, had been devised by Muslims writing for a Muslim audience, and would have presented a portrait of the world unacceptable to Roger. Others, however, had been formulated by Christians and tended to be used by writers wishing to present the world from a perspective that drew upon biblical literature and Christian history. Though Idrīsī ultimately had to fulfill his obligations as a client and produce a text for King Roger, I argue that as a Muslim who imagined a future Muslim audience for his work, this latter view proved equally distasteful.

This chapter, then, examines the way in which Idrīsī conceived of the earth from Sicily. It asks to what extent Idrīsī modified his own geographical mentality and moved away from his own cultural world of Arabic geography, whether through the incorporation of new viewpoints that he absorbed in Palermo or by adopting writing strategies that let him present a world that offended neither his patron nor his imagined Muslim audience. Moreover, he actively sought a

method of dividing the earth that suited his own views, as well as those of the court in Palermo. For geographical writers in the twelfth century and earlier, whether writing from the lands of Islam or Christian Europe, nearly universally presented and divided the world in ways that aligned with their own faith. And so, he had to find a way to present the world while privileging neither religion. At the same time, he needed a model that would embrace the entire oikoumene, including Europe. This chapter, then, examines some of the different methods of presenting and dividing the world available to Idrīsī, from his Arabic repertoire as well as from Latin sources he may have encountered in Sicily. It argues that while he was reluctant to move away from the views of the world espoused in his Arabic texts, he nevertheless found new uses for old methods, in particular the seven latitudinal climates for dividing the world, in order to suit his two audiences. Beyond this, this chapter also compares, if briefly, the conception of the world common to Latin and Romance sources with notions of the world frequently taken up in Arabic geographical writing up to the twelfth century.

Dividing the Earth

I begin not with an examination of how Idrīsī conceived of the earth as whole but rather with the method by which he divided it, how he apportioned it into smaller units so as to make sense of it. Early in the preface of the *Nuzha*, Idrīsī made it clear that in this work he would divide the world into seven latitudinal climates. In fact, he credited Roger with having come up with the idea to do so. He wrote that after Roger had expanded his kingdom and subjected the "Roman" countries – surely a reference to the pacification of the lands of Apulia in southern Italy in the 1130s – the king took up an interest in the geography of his world. He desired

to know exactly the qualities of his lands and to investigate them with certainty and experience, and to know their boundaries ($hud\bar{u}d$) and routes, on land and by sea, and to know in which climate ($iql\bar{\iota}m$) they are located, and the seas and gulfs that characterize them. At the same time he wished to have knowledge about the other countries and regions in the *seven climates*, according to what the scholars have agreed upon and the transmitters and authors have confirmed in their writings: what countries are contained within each climate, reckoned to it and accounted part of it.²

At first glance, this passage seems unremarkable. Roger simply wished to know the position of his kingdom alongside that of other regions and states. When we consider his request in light of the prevailing divisions of the earth in Latin Europe at the time, it is remarkable that he would have asked to know about the seven climates. It is most unlikely that Roger would have thought of the earth as divided by the seven climates and even probable that he would not have known of this climactic model. Latin geographies – that is, the kind of texts with which he would have been most likely to have been familiar – followed other divisions of the earth. By contrast, nearly all Arabic geographical works mention the seven climates, even if only in passing. And thus, if Roger actually knew about the seven climates, it was likely that he had learned of them through Idrīsī. To be sure, it is not worth making too much of this passage, as it is simply Idrīsī's retelling of how he came to write a geography for King Roger. In recounting that story, he may have modified some aspects of it in order to simplify his narrative. That said, the example nevertheless brings into relief the some of the differences between Idrīsī's conception of the earth, based on Arabic works of geography, and those popular among Latinate geographical writers of the period.

The notion that the earth could be divided into a series of latitudinal bands parallel to the equator that encircled the earth is old indeed. It originated with the Babylonians before the

² Idrīsī, *Opus geographicum*, 7.

invention of spherical astronomy, and by at least the sixth century BCE Greek writers had taken up the notion. They posited the division of the earth into a series of what they called "zones," a series of parallel latitudinal bands that encircled the earth. For example, Aristotle (d. 332 BCE) discussed the five zones in his *Meteorologica*. Eratosthenes (d. 194 BCE) modified this vision by increasing the number of bands to seven and by labeling them "climates" (*klimata* [pl.], *klima* [sing.]) rather than "zones." Later astronomical and geographical works, including those of Ptolemy (d. 168 CE) and Marinos of Tyre (d. 130 CE) also mentioned the seven *klimata* and probably through their works and those of others the model entered Latinate traditions. Pliny the Elder, for instance, wrote of the seven "circles" or "parallels" of the Greeks, though to them he added three additional parallels, for a total of ten. Martianus Capella also described the parallels in his *Marriage of Mercury and Philology*, though he, too, added an additional parallel for a total of eight.

The seven-climate model, then, at least in some form, was known in Latin geographical writing. However, the model never truly caught on. Even Martianus Capella, who had written of the seven-climate model, preferred another model that he also described, namely that of five latitudinal bands – zones –encircling the earth. The concept derived from the classical theory of the five zones. And it was this five-zone model that came to dominate the division of the earth in the texts and minds of most educated medieval Europeans, in part through the use of Capella's

³ Aristotle, *Meteorologica*, ed. and trans. H.D.P. Lee (Cambridge, MA: Harvard University Press, 1962), 179-181. See *Brill's New Pauly*, s.v. "Zone" (Wolfgang Hübner).

⁴ The Arabic term for climate, $iql\bar{\imath}m$, derives from the Greek klima. On the Greek origins of the term see EI^2 s.v. "Iklīm" (André Miquel). In his geographical dictionary, Yāqūt argued that the term $aq\bar{a}l\bar{\imath}m$ (climates) "is an Arabic word... It is as though the $iql\bar{\imath}m$ (climate) were so called because it is sliced off, that is to say cut, from the land which borders upon it..." Jwaideh, *The Introductory Chapters of Yāqūt's Mu'jam al-Buldān*, 39; Lennart Berggren and Alexander Jones, *Ptolemy's Geography*, 13.

⁵ Pliny the Elder, *The natural history*, *Book VI*, trans. John Bostock and H.T. Riley (London: H. G. Bohn,1855-57). In chapter 39 Pliny describes the "Division of the earth into parallels."

⁶ Martianus Capella, *Martianus Capella and the seven liberal arts. Vol. 2: The marriage of Philology and Mercury*, trans. William Harris Stahl (New York: Columbia University Press, 1977), 340.

work as a school textbook across Europe, including at the University of Paris where it was used until the mid-thirteenth century. Macrobius's fifth-century commentary on Cicero's *Dream of Scipio* also played a central part in the spread of the five-zone model (Figure 4). Macrobius imagined the Roman general Scipio Africanus the Younger elevated to the heavens, from where he looked down to the earth below. There he claimed to have seen the earth divided into five parallel zones comprised of two frigid and uninhabitable polar zones, a middle parallel occupied by the impassable *Oceanus*, and two inhabited temperate zones between these extremes. 8



Figure 4. The five zone world map of Macrobius, Commentary on the Dream of Scipio, c. 1000 (Oxford, Bodleian Library, MS D'Orville 77, fol. 100r).

⁷ See Easton, "Climate" in *Trade, travel and exploration in the Middle Ages*, 114 and John Kirtland Wright, *The geographical lore of the time of the Crusades* (New York: American Geographical Society, 1925), 161, 242.

⁸ Isidore of Seville also wrote of a similar five zones model in his *On the nature of things* and the *Etymologies*. The five zones are usually credited to Crates of Mallus, a second century Greek philosopher.

As a member of King Roger's court and its connections to Latin scholarship, might Idrīsī have had knowledge of the five-zone division of the earth? His contemporaries in Europe, after all, continued to divide the world into these zones, among them William of Conches (d. 1145) and Lambert of St. Omer (fl. ca. 1120). Moreover, Idrīsī himself wrote in the preface of the *Nuzha* that in his quest to determine the most accurate information of the earth's geography Roger had called a number of "scholars concerned with the subject" to Palermo. 9 While the identity of these visitors is unknown, that some of them might have been Latin scholars would not be surprising. But if Idrīsī had learned of their zonal division of the oikoumene, he incorporated none of it into his geography. Indeed, though in Palermo he may have had access to Latin works of geography, he instead depended largely upon Arabic texts which divided the world differently. These Arabic texts – all but two of them authored by Muslims – provided him with many models from which to select a means of dividing the earth suitable for Roger's project. Some of these models had reached the pages of Arabic geography via the translations into Arabic of numerous Greek, Sanskrit, and Persian works, especially in Baghdad in the late eighth and early ninth centuries. We know that he claimed to have consulted a number of books composed within this branch of learning and would have been familiar with their divisions of the world, including

the *Book of Marvels* of al-Mas'ūdī and the books of Abū Naṣr Sa'īd al-Jayhānī, of Abū al-Qāsim 'Ubayd Allah b. Khurradādhbih, of Aḥmad b. 'Umar al-'Udhrī, of Abū al-Qāsim Muḥammad al-Ḥawqalī al-Baghdādī, of Khānākh b. Khāqān al-Kīmākī, of Mūsā b. Qāsim al-Qaradī, of Aḥmad b. Ya'qūb known by the name al-Ya'qūbī, of Isḥāq b. al-Ḥasan al-Munajjim ('the astronomer'), of Qudāma al-Baṣrī, of Ptolemy al-Aqlūdī [Claudius], and of Urusyūs al-Anṭākī [Orosius of Antioch, i.e. Paulus Orosius]. 10

⁹ Idrīsī, *Opus geographicum*, 5.

¹⁰ Idrīsī, *Opus geographicum*, 5-6. An identical list of authors (with some slight spelling differences) appears in the *Uns al-muhaj*, fol. 4. For example, Isḥaq ibn *al-Ḥasan* al-Munajjim appears as Isḥaq ibn *al-Ḥusayn* al-Munajjim in the *Uns*. While a few of the writers named by Idrīsī are unknown today, most are familiar, and indeed, among the most celebrated of pre-modern geographical writers. Nothing concrete is known of Khānākh b. Khāqān al-Kīmākī,

As he planned the writing of his geography, he surely considered the advantages and disadvantages of the models used by his forebears. But before examining the ways in which these writers divided the earth, it is worth noting that Idrīsī had learned about the geography of the world from these works, in particular those written by Muslims, for his geography is marked by them. He depended on them and excerpted parts of their text at length. Moreover, they formed his geographical mentality and defined a way of describing land and classifying the world. He followed them in his manner of describing the earth and relied on their categories as a means of understanding the world.

But what were some of those models and why might Idrīsī have rejected them? They presented many options, to be sure, among them the four-part division of the oikoumene used by Ibn Khurradādhbih and al-Yaʻqūbī, the seven *kishwars*, Ibn Ḥawqal's "climates," the tripartite world of his only Latin source, the *Historiarum adversum paganos* ('History against the pagans') by Paulus Orosius (again, whose text he consulted in Arabic translation), ¹¹ and finally, the seven climates of the mathematical geographers. At a basic level, Idrīsī certainly dismissed most of these models because they privileged the lands of Islam in one way or another. Consider, for instance, the book of administrative geography entitled *Kitāb al-Masālik wa'l-mamālik* ('Book of Routes and Realms') by Ibn Khurradādhbih (d. c. 912 CE). He had divided the oikoumene into four regions arrayed around the *Ka'ba*, the cube-shaped building inside the Sacred Mosque

though his *nasab* and *nisba* suggest that he had origins in the Kimak Khanate. Idrīsī probably gleaned information from him regarding the lands and peoples of Central Asia. Mūsā b. Qāsim al-Qaradī (or al-Qurdī) is also unknown. His name suggests that he may have been from Qayrawān if the *Uns* spelling of al-Qarawī is correct. In the two extant manuscripts for the *Uns* the name is rendered al-Qarawī. See Ignati Julianovitch Kratchkovsky, *Tārīḥ al-adab al-ǧuġrāfī al-'arabī I* (Cairo: Al-Idāra al-thiqāfa fī jāmi'at al-dawla al-'arabiyya 1963), 281; Jean-Charles Ducène ed. and trans., *L'Afrique dans le Uns al-muhaǧ wa-rawḍ al-furaǵ d'al-Idrīsī* (Leuven: Peeters, 2010), XXXIX.

11 This book had been translated into Arabic Arabic in the ninth or tenth century in al-Andalus either by an Arabic-speaking Christian or convert named Ḥafs al-Qūṭī. Mayte Penelas, *Kitāb hurūsiyūš (Traducción arabe de las Historiae adversus paganos de Orosio)* (Madrid: Consejo Superior de Investigaciones Científicas, 2001), 75.

in Mecca toward which Muslims are obligated to pray. He labeled each of these four regions based on the direction to which one turned to face the *Ka'ba*, and so, he imagined a world organized, in a way, around ritual prayer and Mecca. His contemporary al-Ya'qūbī (d. 897/8) employed the same four-part division and Iraq-centered portrayal of the inhabited quarter in his *Kitāb al-buldān* ('Book of the Countries'), with one significant difference: whereas Ibn Khurradādhbih mentioned some regions that bordered the 'Abbāsid lands – for instance, he briefly mentioned the Byzantine lands – al-Ya'qūbī set out to describe only the lands of Islam. Surely Idrīsī had to reject such a division, centered as it was on Islam and Muslim ritual, as he wrote for a Christian ruler.

In the work of al-Mas'ūdī (d. 956 CE) Idrīsī would have encountered yet another model for dividing geographical space, this one with its own name, the *kishwar*, though al-Mas'ūdī called them "climates" (*aqālīm*). In his *Kitāb al-tanbīh wa-l-ishrāf* ('Book of notification and verification'), he divided the oikoumene into seven circular "climates," which drew upon the Persian geographical division into seven *kishwars*.¹³ In this scheme, the lands known to the early geographers were divided into seven equally-sized circular spaces. Six *kishwars* were arranged around the central – and greatest – *kishwar* of Īrānshahr, the lands of the old Sasanian Empire; but al-Mas'ūdī instead located Babylon (Iraq) at the center.¹⁴ Around this central clime, he

¹² Ibn Khurradādhbih, de Goeje, BGA Vol. 6, 5.

¹³ To complicate matters, Arabic-speaking geographical writers frequently referred to these circular regions not by their Persian name of *kishwar*, but rather as "climates" and the singular "climate," using the same vocabulary as that applied to the seven Greek climates. Indeed, a geographical writer who wrote perhaps half a century after Idrīsī, Yāqūt (d. 1229) dedicated a section of his own geography to clarifying the confusion raised by various uses of the word "climate" in Arabic-language geographical writing. See Jwaideh, *The Introductory Chapters of Yāqūt's Mu'jam al-Buldan*, 38-52. His list includes "climate" as *kishwar*; "climate" as a synonym of "region" especially "the vulgar and the mass of the people;" "climate" as a synonym of city or village; and finally, "climate" in the sense of the seven Greek latitudinal climates, or in his words, "the one relied upon by mathematicians, philosophers, and astronomers."

¹⁴ Jwaideh, *The Introductory Chapters of Yāqūt's Mu*'jam al-Buldan, 40-42.

Al-Bīrūnī convincingly argued that the division of the lands by *kishwars* served only political purposes. See Zayde Antrim, *Routes and Realms, the power of place in the early Islamic world* (Oxford: Oxford University Press, 2012),

envisioned six others, comprising India, the Hijaz and Abyssinia, Egypt and Ifrīqiya, al-Rūm (Byzantine lands), the lands of Gog and Magog, and finally, China. This division almost certainly did not appeal to Idrīsī, because it centered on lands far to the east of his patron's kingdom. He may have attempted to redraw the circular climates in such a way as, say to make Sicily the center, but whether he considered such a scheme we cannot know. In any case, he did not use such a model in his *Nuzha*.

As for Ibn Ḥawqal, perhaps the authority that Idrīsī turned to most frequently, he straightforwardly stated that he had no intention of describing the "seven [latitudinal] climates which comprise the division of the earth," claiming to have seen an Indian map of the world that had used such a division, with the resultant image producing more confusion than clarity. And yet, he nevertheless divided the oikoumene into "climates," though he envisioned twenty of these. Nor were they defined as latitudinal bands. Rather each "climate" indicated a unit of space of irregular shape determined by political, religious, or other factors. Perhaps such a system would have suited Idrīsī. Even if Ibn Ḥawqal began his description with Arabia "because the *qibla* and Mecca, the Mother of Cities, are there," and because it is the home of the Arabs "and includes only them," Idrīsī might have begun his description elsewhere, again, perhaps in Sicily. In theory his patron would have favored a description that began with his own Sicilian kingdom. Though yet again perhaps Idrīsī, who viewed al-Andalus as his ancestral home if not

^{91-92; &#}x27;Alī al-Ḥusayn al-Mas'ūdī, *Kitāb al-tanbīh wa-l-ishrāf*, M.J. de Goeje vol. 8 *BGA*, 31-32. See, too, *EI*² s.v. "Djughrāfiyā" (Ahmad S. Magbul and F. Taeschner).

¹⁵ Kramers, Sūrat al-ard, BGA 2, 2. Michael Bonner notes that the two extant versions of Ibn Ḥawqal's text differ on this point. The manuscript edited by Kramers reads "even if the Indian map [of the world] that is in al-Quwādhiyān," a city in Transoxania. The other version, edited by M. J. de Goeje reads al-ṣūra al-handasiyya, "the geometrical image," which has nothing to do with India. Bonner suggests that the latter makes more sense since Ibn Ḥawqal typically identifies books by author, title, and/or subject matter, not by physical location. See Bonner's translation of Ṣūrat al-ard, 3, n. 8.

¹⁶ Kramers, *Şūrat al-ard*, *BGA* 2, 18.Ş

his own homeland, would have preferred to start elsewhere. In any case, Ibn Ḥawqal had set out with the explicit objective of depicting the "Domain of Islam," (mamlakat al-Islām). Perhaps Idrīsī considered the model too tied to the geography of Islam to be of use to him. In any case, he disregarded it.

Thus Idrīsī rejected out of hand a number of methods by which his predecessors had divided the oikoumene. But these were models from his own cultural world of Arabic texts, compiled by Muslim writers and for consumption by a Muslim audience. The resulting images of the earth all centered on the lands of Islam, and were thus patently unsuitable for his needs as a client of a Christian patron in Palermo. But what of the one Latinate source to which he claimed to have had access, namely the work by "Urusyūs al-Anṭākī," Paulus Orosius (d. after 418 CE), the Galician priest, historian, theologian, and student of Augustine of Hippo? Though far more than a simple geographical treatise, Orosius's work nevertheless presented an overview of the earth. In that overview, he named the three ancient parts (aqsām, sing: qism) of the world, Asia, Europe, and Africa.¹⁷ He then described each of these systematically, listing its regions, provinces, and boundaries and explaining its relationship to the surrounding seas and lands. While this tripartite division ostensibly embraced the entirety of the known world, one of Idrīsī's requirements, he nevertheless rejected it as a model for his own work. Perhaps he did so because of Orosius's overtly Christian message? A.H. Merrills has suggested, for example, that Orosius intended that his book as a whole and its geographical introduction in particular would demonstrate the geographical limitations of the 'Christian' empire and the potential ubiquity of a

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¹⁷Penelas, *Kitāb hurūsiyūš*, 21. The text mentions the three parts of the world, *Ashiya* (Asia), *Awrubā* (Europe), and *Ifrīqiya* (Africa). In the extant Arabic text edited by Penelas, each of these regions is listed as peopled by descendants of one of the three sons of Noah.

universal Christian dominion. ¹⁸ As a Muslim writer, even one who carried out the orders of a Christian patron and who willingly lived outside the *Dār al-Islām*, perhaps a reproduction of Orosius's Christian-oriented world was simply intolerable. Equally, Idrīsī may have rejected this view because only a few of his other sources – his Arabic geographies – acknowledge the three continents, for instance Ibn Khurradādhbih. In fact, these geographical writers almost uniformly ignore the tripartite world completely, even if Hellenistic writers, with which they were familiar, including Ptolemy, mentioned them. This was simply not a division of the world in use in the lands of Islam.

In spite of these disadvantages, might the tripartite world have tempted Idrīsī all the same? King Roger, after all, was almost certainly aware of such a view. Alongside the five-zone division of the oikoumene, an earth divided into three landmasses was *the* division of the world par excellence in Western Europe. The T-O map, so common in medieval treatises from Europe, portrayed the world as three separate lands, divided by the Mediterranean, the Nile, and the Don (formerly known as the Tanais). Even later *mappae mundi* such as the Hereford map (ca. 1300) are based on the T-O plan, with Jerusalem marking the center of the inhabited world. And this tripartite division was of course employed in geographically-oriented works in Idrīsī's day. His near contemporary Gervase of Tilbury, for instance, embraced it in his *Otia imperialia* ('Recreation for an Emperor') (ca. 1210-1214), a text written in an imperial setting on behalf of

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¹⁸ A.H. Merrills suggested that this was the objective of Paulus Orosius's geographical introduction. Merrills contends that only the *Historia Romana* of the second-century writer Appian incorporated a geographical survey in a similar way. Appian, however, focused on the geographical area within the Roman Empire, whereas Orosius focused on lands beyond Roman authority. See *History and Geography in Late Antiquity* (New York: Cambridge University Press, 2005), 64-65, 68-69; see, too, M.A. Rábade Navarro, "Una interpretación de fuentes y métodos en la Historia de Paulo Orosio," *Tabona* (1985-1987): 377-393. Moreover, it bears mentioning that Orosius studied under and collaborated with Saint Augustine.

¹⁹ It should be noted that Paulus Orosius did not present the world in a markedly Christian manner. Biblical places do not appear, not even Jerusalem. On this, see Lozovsky, "*The Earth is Our Book*," 73 and n. 23.

Otto IV, the Holy Roman Emperor (r. 1209-1215). In that text, he wrote that in adopting "the opinion of Paulus Orosius, we maintain that the circle of the whole earth, which is surrounded by the girdle of the ocean, is divided into three parts, and we call its three parts Asia, Europe, and Africa." Surrounded on three sides by ocean, Asia touches Europe in the west. Europe, Gervase added, began at the "river Don in the northern Region" and ends at the Mediterranean to the south. Africa begins at Alexandria and extends to the west up to the ocean. Had Roger requested a geography from a Latinate or Romance-speaking scholar, he likely would have received this view or some close variation of it. But Idrīsī took up none of this in his *Nuzha*. Indeed, the words "Asia" and "Europe" do not appear there at all. The third term from the Arabic text of Orosius, *Ifrīqiya*, appears, though it denotes only that portion of North Africa corresponding roughly to the territory of present-day Tunisia, not to the entire African landmass, as does the Arabic translation of Orosius. Idrīsī did not endorse a continental division; his geographical mentality derived from Arabic texts, and like these sources, he did not take up the three-continent model that so deeply marked Latin scholarship and thinking.

Having thus dismissed competing models for dividing the earth, Idrīsī took up the ancient scheme of seven latitudinal climates. He described them in the *Nuzha*, writing that "scholars have divided this inhabited quarter of the earth into seven climates, each one running from west to east, parallel to the equator." These climates, he added, "are not natural lines, but rather imaginary ones, marked off and found in astronomical science." Here Idrīsī had a special definition of the "natural": coastlines, rivers, and perhaps even mountains were real, "natural" lines. The climates, in contrast, were not natural, in that they did not correspond to the physical

²⁰ Gervase of Tilbury, *Otia Imperialia*, *Recreation for an Emperor*, S.E. Banks and J.W. Binns eds. (Oxford: Clarendon Press, 2002), 178-179.

²¹ Idrīsī, *Opus geographicum*, 9.

geography of the earth. They were, nevertheless, based on natural causes, even though Idrīsī never told his readers his definition of his climates or of what made them "natural"! As Idrīsī himself recognized, the scholars of "astronomical science" used this concept; in astronomy, however, a "climate" is a precise parallel that encircles the earth whereas in geography climates denote the space between two parallel bands within which one may identify cities, towns, objects of the physical environment, and, as the Greeks had done, a certain features of the inhabitants of each climate. Based on what Idrīsī wrote in his later treatise *Uns al-muhai*, we know that when he thought of climates as the space between two parallel lines around the earth which could be measured with simple observations of the sun, namely by measuring the length of daylight at the summer solstice or equinox.²² As Bruce Eastwood has explained it, the early way of identifying parallels, "before trigonometric techniques were invented, was to measure the maximum length of the shadow cast by a gnomon (a rod or a triangular plate, such as the one in a sundial). This length would remain constant along the parallel." The method correlated with "the maximum numbers of hours of daylight along the parallel."²³ Hence, climates were based on "natural" principles, that is, the curvature of the earth and the angle at which sunlight struck it, even if they were invented and measured by astronomers, as Idrīsī stated.

If the lines of the climates, as Idrīsī noted, were imaginary, he believed nonetheless that they could signify real differences in living conditions. For instance, some places were warmer than others, Idrīsī would have argued, by virtue of their greater proximity to the sun. The

²² There he wrote, somewhat cryptically, "We observe it [the inclination] perfectly because the sun, when it is at the zenith of a city, produces warmth there thanks to its proximity, but when it distances itself, cold prevails there." Idrīsī, *Uns al-muhaj*, fol. 7.

²³ As Bruce Eastwood wrote, "The early way to identify parallels, before trigonometric techniques were invented, was to measure the maximum length of the shadow cast by a gnomon (a rod or a triangular plate, such as the one in a sundial). This length would remain constant along the parallel." The method correlated with "the maximum numbers of hours of daylight along the parallel," "Climate," in *Trade, Travel, and Exploration in the Middle Ages*, 113.

variance in conditions, he said, was "due to the power of God," who varied "the inclination of the sun in each climate and its passage in each zodiacal constellation." And these differing conditions could affect human characteristics. For instance, Idrīsī noted that "for the lands of the Blacks (*bilād al-Sūdān*)," the sun was "constantly close, and hence "these regions are burned and the complexion of the inhabitants is black." In contrast, "for the land of the Franks, as it is distant from the path of the sun, its climate is cold and rainy, and their complexion white."

None of this geographic determinism appears in the preface to the *Nuzha*. For that, one needs to look elsewhere in the text: examples of geographic determinism are rare in the *Nuzha*, but they do crop up. For instance, in his description of the lands of the first section of the first climate, that is Western Africa at the equator, he notes that "One does not find water here, and the heat here is so strong that the inhabitants of the first and second climates and those of part of the third, subjected to an intense heat and burned by the sun, are black in color and have crinkly hair, contrary to the people living in the sixth and seventh climates." When describing the Norwegians who live in the northernmost, seventh climate, Idrīsī wrote that "They say that wild men live here in barren lands and that their head is attached to their shoulders, they have no neck at all. They seek refuge in trees, where they build houses and eat acorns and chestnuts." Idrīsī certainly learned of this climatic determinism from his Arabic and Greek predecessors.

²⁴ Idrīsī, *Uns*, fol. 7.

²⁵ Idrīsī, *Uns*, fol. 7.

²⁶ Idrīsī, *Opus geographicum*, 19.

²⁷ Idrīsī, *Opus geographicum*, 950.

Perhaps Idrīsī borrowed his account of the Norwegians from the ancient Greek "akephaloi," the headless men. In the *Histories*, Herodotus located them in Libya and Pliny the Elder placed them in Aethiopia. See Herodotus, *The Histories*, Vol. 4, trans. A.D. Godley (London: W. Heinemann, 1921-1924), 4: 191. Pliny, *The Natural History of Pliny*, Vol. 5, trans. John Bostock and Henry T. Riley (London: Bohn, 1856), 8.

²⁸ Idrīsī may have read of this kind of geographical determinism in texts like al-Mas'ūdī's *Fields of Gold*. See, for example, *Les prairies d'or*, II, 512 and 518-519, when he cites Hippocrates *On Airs, Waters, and Places*. See, too, Ducène, *L'Afrique dans le Uns*, 82.

Hippocrates Airs, Waters, Places had been available in Arabic translation since at least the ninth century, and posited a link between climate and perceived characteristics of populations living in each climate. This theory had

Though he did not embrace the seven-climate model, al-Mas'ūdī, for example, wrote in his *Kitāb al-tanbīh wa-l-ishrāf* that people in the northern reaches of the earth had slow wits, strong bodies, and white skin because of the humid vapors there. The people in the south, by contrast, had black skin and wild spirits due to the burning air.²⁹ In turn, the Muslim geographical writers learned of climatic determinism from Greek writers, among them Hippocrates and Galen.³⁰ Again, though Idrīsī only rarely mentioned the effect of climate on human physiognomy, it was, nevertheless, an occasional feature of his notion of the seven latitudinal climates.

From what sources did Idrīsī learn about the seven latitudinal climates? Given that he named Ptolemy, it may seem obvious that he adopted them directly from Ptolemy's *Almagest* or *Geography*, or perhaps both. Arabic geographers tended to assert that the seven climates had originated with the Alexandrine geographer.³¹ But in fact, Ptolemy allotted only limited space to the seven climates. Even if in the *Almagest* he refers to the seven climates on a handful of occasions, he also described the earth as divided into 26 latitudinal parallels.³² In the words of J. Lennart Berggren and Alexander Jones, the modern translators of the *Geography*, "Ptolemy generally eschews the *klimata* in his own astronomical and geographical writings, but they figured into the work of his predecessor Marinos [of Tyre]."³³ Rather than from Ptolemy, it is far

circulated widely in Arabic geographical literature by Idrīsī's day. See *Medieval Science, Technology, and Medicine, An Encyclopedia*, s.v. "Hippocrates," (Alain Touwaide), Thomas Glick, Steven J. Livesey, and Faith Wallis, eds. (New York: Routledge, 2005), 224-226. As an example Ibn Ḥawqal discussed the effect of climate on skin, even if he did not directly relate it to the classical latitudinal climates. He wrote that "In the northernmost of these two parts [in the northern, inhabited quarter of the earth], the people are white, and the farther north you go the white they become, since these are frigid climes. In the southern part the people are black and become blacker the farther south they go." See Bonner trans., *Ṣūrat al-arḍ*, 10.

²⁹ al-Mas'ūdī, de Goeje, *BGA*, vol. 8, 22, 24.

³⁰ For a recent discussion on climatic determinism in medieval Arabic geographical writing, see Antrim, *Routes and realms*, 94-101.

³¹ For instance, al-Hamadānī, *Ṣifat jazīrat al-'arab*, ed. M. b. 'Alī al-Akwa' al-Ḥawālī (Riyadh: Dār al-Yamāmah lil-Baḥth wa-al-Tarjamah wa-al-Nashr, 1974), 11-15.

³² See Toomer, *Ptolemy's Almagest*, index "clima" for references on the seven climates. On the 26 parallels, see 82-88.

³³ Ptolemy's Geography, 10.

more likely that Idrīsī learned about the seven climates through Arabic works of geography. Nearly all of his Arabic sources mentioned the seven climates, even if they ultimately chose to divide their world by other means. As we have seen, Ibn Ḥawqal remarked that he would not follow the seven-climate division in his work. Ibn Khurradādhbih also mentioned the seven, or more accurately, fourteen climates: he held that the earth should be divided into northern and southern quarters, each divided in turn into seven climates. A Qudāma ibn Ja'far (fl. early tenth century), another of Idrīsī's named sources, also mentioned the seven climates, but again, this is not the means by which he divided the earth in his geographical description.

Some works of Arabic geography, however, were in fact organized according to the seven-climate model. In general terms, Arabic geography might be divided into two categories of descriptive and mathematical geography. Most of Idrīsī's authorities wrote descriptive geographies in which they composed a narrative through which they conveyed information on towns and cities, landscapes, as well as historical and ethnographic detail. Mathematical geographies, by contrast, centered on the seven latitudinal climates and on locating cities and towns, rivers, and mountains within these climates by means of calculations of longitude and latitude. Whereas authors of descriptive geographies often mentioned the seven climates, they never organized their works along such a division. Mathematical geographies, however, almost always employed the seven latitudinal climates. This mathematical tradition, I drew on late seventh- or early eighth-century translations of works of astronomy and geography that had been collected from the recently-conquered lands of Islam. Texts in a number of languages, from Iran, Sind, and Egypt, were translated and studied in court settings. The Umayyad prince Khālid b.

³⁴ BGA, Vol. 6, 5.

³⁵ On Qudāma's discussion of the climates, see Heck, Construction of knowledge in Islamic civilization, 108-109.

Yazīd (d. 704), for example, ordered the translation of works of astronomy – for astronomical works incorporated the study of the earth – in Egypt. ³⁶ But it was further east, in 'Abbāsid Baghdad, where the discipline of geography truly flourished. The translation movement initiated by the second 'Abbāsid caliph al-Manṣūr (r. 754-775) and especially the caliphs Hārūn al-Rashīd (r. 786-809) and al-Ma'mūn (r. 813-833), along with contributions from numerous private benefactors, brought an array of scientific and geographic traditions to the Baghdadi court. Under al-Manṣūr, Indian, Persian, and Greek astronomical and geographical texts, especially those based on mathematical approaches to describing the world, were translated into Arabic. ³⁷ By the end of the tenth century, under the 'Abbāsids, virtually all Greek works of science and philosophy that were available in the lands of Islam had been translated into Arabic. ³⁸ At the same time, and by contrast, no Latin treatises relating to geography were translated at this time in the 'Abbāsid court and these traditions remained quite distinct.

Almost as soon as the translation movement began, scholars attached to the 'Abbāsid 'House of Wisdom' (*bayt al-ḥikma*) began to produce their own works of mathematical geography and to undertake new studies to determine the extent of the earth and other geodesic measures. Their written works frequently combined ideas and approaches to the study of the

³⁶ Ibn al-Nadīm (d. 995 or 998) recorded this in the *Fihrist*, an index in which he attempted to survey all Arabic language books written up to the mid-ninth century. See Muḥammad Ibn Isḥāq Ibn an-Nadīm and Bayard Dodge (trans)., *The fihrist of al-Nadīm: a tenth-century survey of Muslim culture* (New York: Columbia University Press, 1970), 581; J.F.P. Hopkins, "Geographical and Navigational Literature," in M.J. Young et al. eds., *The Cambridge History of Arabic Literature 3: Religion, Learning and Science in the 'Abbāsid Period* (Cambridge: Cambridge University Press, 1990), 301.

³⁷ Dimitri Gutas, Greek thought, Arabic culture: the Graeco-Arabic translation movement in Baghdad and early 'Abbāsid society (2nd-4th/8th-10th centuries) (London: Routledge, 1998); Heck, Construction of Knowledge in Islamic Civilization, 103-104.

Nallino, Kunitzsch, and Pingree have all demonstrated that various scientific texts had been translated from Greek into Middle Persian in the Sasanian Persian period and were then translated from Middle Persian into Arabic in the late eighth and ninth centuries in 'Abbāsid Baghdad.

³⁸ Evelyn Edson and Emilie Savage-Smith, *Medieval Views of the Cosmos* (Oxford: The Bodleian Library (University of Oxford), 2004), 30; Dimitri Gutas, *Greek Thought*, *Arabic Culture* (London: Routledge, 1998). Plato's works, however, were not translated into Arabic in this period.

earth from Hellenistic as well as Persian and Indian traditions.³⁹ However, even though these Persian and Indian works had a noteworthy influence in many Arabic geographies, Hellenistic thought had a far greater effect. The works of Marinos of Tyre (d. ca. 130 CE) – again, whose geography centered on the seven climates – and Ptolemy (d. ca. 170 CE), both entitled *Geography*, were translated into Arabic under the title *Şūrat al-ard* ("Image of the Earth") by the ninth century, though these early translations have not survived to the present. The *Geography* of Ptolemy, as well as his *Almagest*, proved especially influential in geographical writing in the Muslim world.⁴⁰ It also stimulated a new interest in surveying the earth: early in the ninth century, al-Ma'mūn commissioned a team of astronomers and geographers to measure the extent of the earth and to produce a world map, now lost, but described by al-Mas 'ūdī (d. 956) as a depiction of "the universe with its spheres, stars, land and seas, inhabited and uninhabited,"

³⁹ Nor were these Sanskrit and Pahlavī works entirely independent of Greek thought. Indeed, they contained principally "non-Ptolemaic ideas and methods which had been altered in one way or another in accordance with the traditions of India and Iran," David Pingree, "The Greek Influence on Early Islamic Mathematical Astronomy," in *Journal of the American Oriental Society* 93.1 (1973): 32. Al-Bīrūnī, though certainly not among the earliest geographers to write in Arabic or a member of the 'Abbāsid court, discussed Greek, Persian, and Indian theories of the earth in some of his encyclopedic works and writings on astronomy. See David Pingree, "Bīrūnī, Abū Rayḥān," in *Encyclopaedia Iranica*, Ehsan Yar Shater ed. (London: Routledge and Kegan Paul, 1989), 4:279-281; E.S. Kennedy, "Al-Bīrūnī (or Bērūnī), Abū Rayḥān (or Abu'l-Rayḥān) Muḥammad Ibn Aḥmad," in *Complete Dictionary of Scientific Biography, Vol.* 2 (Detroit: Charles Scribner's Sons, 2008), 147-158. See also Adam Silverstein, "The Medieval Islamic Worldview: Arabic Geography in its Historical Context," in Kurt A. Raaflaub and Richard J. A. Talbert, eds., *Geography and ethnography: perceptions of the world in pre-modern societies* (Malden, MA: Wiley-Blackwell, 2010), 273-290.

⁴⁰ Ptolemy completed his *Geography* circa 150 CE in Alexandria. He based his work in part on a critique of the now-lost geographical treatise of Marinos of Tyre. Much of the work centers on an extended set of instructions for drawing scaled projection maps based on measurements of latitude and longitude. A number of Arabic translations of the *Geography* are mentioned in Arabic texts, including those composed at the court of al-Ma'mūn. The *Almagest* was also translated into Arabic in the ninth century. Indeed, the title by which it is known today, *Almagest*, comes from the Arabic title *al-mijisṭī*, itself derived from the Greek title *Megalē syntaxis*. Ptolemy's treatises on astronomy (*Almagest*) and geography (*Geography*) may have been rendered into Arabic as early as the late 700s. See Fuat Sezgin, *Geschichte des arabischen Schrifttums. Mathematische Geographie und Kartographie im Islam*, vol. 10 (Frankfurt: Institut für Geschichte der arabisch-islamischen Wissenschaften, 2000), 79. For details on early translations of the *Almagest*, see George Saliba, *A History of Arabic astronomy*, *planetary theories during the Golden Age of Islam* (New York: New York University Press, 1994), 143-144, and nn. 1-,4. See also Carlo Alfonso Nallino, "al-Ḥuwārizmī e il suo rifacimento della Geografia di Tolomeo," in *Atti della Real Accademia dei Lincei*, anno 291, serie V, *Memorie delle Classe di Scienze Morali* Vol. 2 (Rome: R. Accademia dei Lincei, 1896), 3-53.

settlements of peoples, cities, and so forth." This map, Masʿūdī claimed, improved on those of Ptolemy, Marinos of Tyre, and others that he had seen.⁴¹

The earliest geographical texts produced under the 'Abbāsids were grounded in the work of Ptolemy, especially in his *Geography*, a text that included a list of the longitudinal and latitudinal coordinates of some 8000 localities around the known world, together with a guide for placing them on scaled projection maps.⁴² However, Ptolemy also discussed, in his own words, "the earth's shape, size, and position with respect to its surroundings [i.e., the heavens]," the extent of the oikoumene – the inhabited quarter of the earth, a circular Ocean entirely surrounding the oikoumene, and the circumference of the earth as measured in in stades.⁴³ Scholars in Baghdad such as al-Khwārizmī (d. 850)⁴⁴ and al-Farghānī (d. after 861) ⁴⁵ produced works that drew upon Ptolemy's *Geography*, while differing from it in important ways. Like their Greek model, these works were based on latitudinal and longitudinal calculations, but unlike Ptolemy, both Khwārizmī and Farghānī insisted on a seven-climate model. Both men also

⁴¹ 'Alī Ibn-al-Ḥusayn al-Mas'ūdī, *Kitāb at- Tanbīh wa-'l-ishrāf*, ed. M.J. De Goeje, *Bibliotheca geographorum arabicorum* (Leiden: Brill, 1894), 33.

⁴² J.L. Berggren, Alexander Jones, and Ptolemy, *Ptolemy's Geography: an annotated translation of the theoretical chapters* (Princeton: Princeton University Press, 2000).

⁴³ Berggren, Jones, and Ptolemy, *Ptolemy's Geography*, 58-61. On the Ocean, see 31.

⁴⁴ The full title, at least according to the sole extant manuscript, is *Kitāb ṣūrat al-arḍ min al-mudun wa-al-jibāl wa-al-biḥār wa-al-jazā'ir wa-al-anhār istakhrajahu Abū Ja'far Muḥammad ibn Mūsá al-Khawārizmī min kitāb al-Jughrāfyā alladhī allafahu Baṭlamyūs al-Qallūdhī ("The Book of the Image of the Earth Concerning the Cities, Mountains, Seas, Islands, and Rivers, Extracted by Abū Ja'far Muḥammad Bin Mūsā al-Khwārizmī from the book al-Jughrāfiyā composed by Claudius Ptolemy"). See Carlo Alfonso Nallino, "al-Huwàrizmi e il suo rifacimento della Geografia di Tolomeo," in <i>Atti della R. Accademia dei Lincei Anno CCXCI, Serie Quinta, Vol 2, fasc. 1* (Rome: R. Accademia dei Lincei, 1896), 15. Ptolemy also composed a now lost astronomical work, the *Zij al-Sindhind*, a text derived ultimately from an Indian manuscript. Al-Khwārizmī based this text on a late eighth-century translation of an Indian astronomy by Muḥammad Ibn Ibrāhīm al-Fazārī, a Baghdad-based astrologer and astronomer. See David Pingree, "The Greek Influence on Early Islamic Mathematical Astronomy," 38-42; J.F.P. Hopkins, "Geographical and Navigational Literature," in M.J.L. Young, J.D. Latham, and R.B. Serjeant (eds.), *The Cambridge History of Arabic Literature 3: Religion, Learning and Science in the 'Abbāsid Period* (Cambridge: Cambridge University Press, 1990), 301-305.

⁴⁵ Al-Farghānī entitled his work the *Jawāmi* '*ilm al-nujūm wa-uṣūl al-ḥarakāt al-samāwiyya* ('Compendium of astronomy and principles of celestial motions'); *EI*² "al-Farghānī" (H. Suter, J. Vernet); *EI*³ s.v. "al-Farghānī" (Richard Lorch, Paul Kunitzsch); A.I. Sabra, "al-Farghānī, Ābu'l-'Abbās Aḥmad Ibn Muḥammad Ibn Kathīr," *Complete Dictionary of Scientific Biography*, (Detroit: Charles Scribner's Sons, 2008), 4:541-545.

organized data relating to the physical geography of the known world according to climate. That is, they calculated – or simply followed Ptolemy's numbers in order to calculate – the geographical coordinates of cities, mountains, rivers, and so forth, and then placed them into one of the seven climates according to latitude. The seven-climate model, then, flourished in one strain of Arabic geographical writing, namely mathematical geography.

While it is unlikely that Idrīsī consulted these two works, one of his cited sources indeed presented the world much as they had done, organized by the seven climates. Isḥāq ibn al-Ḥasan al-Munajjim (the Astronomer, d. 1058-59),⁴⁶ a scholar from al-Andalus or the western Maghrib (*al-Maghrib al-aqṣā*), approached geography (and astronomy and astrology) from a mathematical perspective, and like his predecessors in this field, he organized the physical geographical features of the earth and cities into the seven-climate scheme, according to their coordinates.⁴⁷ Hence, from the passing mentions of the seven climates that we find in the likes of Ibn Ḥawqal, Ibn Khurradādhbih, and Qudāma, as well a the acceptance of this concept that we find in Isḥaq ibn al-Ḥasan, we find clear indication that Idrīsī first learned of these divisions from works of Arabic-Islamic geography.

Idrīsī's organization of his *Nuzha* through a seven-climate scheme was nevertheless unusual given that the geographical writers who had earlier taken up such a division were those concerned with mathematical rather than descriptive geography, although some of these included a short descriptive text as part of the "image of the earth" opening – a description of the earth similar to that used by Idrīsī – in which they described the inhabited world by climate. For example, the Ikhwān al-Ṣafā' (Brethren of Purity) wrote an epistle entitled "On Geography," part

⁴⁶ Written Ishaq ibn *al-Husayn* al-Munajjim in the *Uns*.

⁴⁷ See Francisco Castello's edition of this work, *El 'Dhikr al-Aqālīm' de Isḥāq ibn al-Ḥasan al-Zayyāt: tratado de geografía universal* (Madrid: Consejo Superior de Investigaciones Científicas, 1989).

of a larger encyclopedic work, in Iraq in the tenth century. Although they ultimately composed a work of mathematical geography with the requisite tables of coordinates, the Ikhwān also included a brief textual description of the climates. In that description, they stated the degrees of latitude and length of sunlight on the solstice that marks the boundaries of each of the climates, before listing in a short paragraph, a number of mountain ranges, rivers, large cities, and the names of the lands encompassed by the climate, and here and there a note on the people who live in a particular climate. It is listed to the Brethren as a source, but he may have seen similar accounts elsewhere. In any case, the mathematical geographers tended to depict the entire known world in their works, from the British Isles to Korea, from the northernmost reaches of the inhabited earth to the equator. By contrast, authors of descriptive works of geography, to wit, almost all of Idrīsī's Arabic sources, rejected the seven-climate model in preference for, as we have seen, arrangements which permitted them to focus their works on the lands of Islam or least to center the world on the spiritual (Mecca) or political (Baghdad, for instance) center of the Islamic world.

Writing for Roger, Idrīsī simply could not adopt any model that privileged the lands of Islam. Rather, his patron's requirements required that he find a means of organizing the world that embraced the entire oikoumene. He might have elected to organize his geography using the five zones of Macrobius or the tripartite divisions of Orosius. Both of these models incorporated the entire known world. But instead, he turned to the seven climates, a model familiar to him, even though it had never been employed in the service of descriptive geography. This decision did not make the task of describing the world for Roger any simpler. As the author of a

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⁴⁸ See Ignacio Sánchez and James Montgomery trans., *Epistles of the Brethren of Purity, On Geography, An Arabic Critical Edition and English Translation of Epistle 4* (Oxford: Oxford University Press, 2014), 62-74.

descriptive work, Idrīsī depended on other compilations of descriptive geography for information about most of the world. None of his sources, however, mentioned the climates to which the places they described belonged. Rather, Idrīsī had to determine their longitude and latitude, if only approximately, so that he might appropriately locate them in the proper climate. He might use books like that of Isḥāq ibn al-Ḥasan al-Munajjim to determine some of these coordinates, even though many of the places mentioned by Idrīsī are not found in this work. When Idrīsī wrote that Roger wished to learn with precision the location of the regions of the countries by "longitude and latitude," which he suggests King Roger plotted on a map, Idrīsī almost certainly actually had to carry out this work in practice; that is, Idrīsī would have had to determine the approximate geographical coordinates of the places mentioned by his sources such that he might place them into the appropriate climate in his work.⁴⁹

While the Greek climatic model selected by Idrīsī certainly involved a considerable amount of work, as he had to roughly determine the coordinates of each town, city, and mountain that he mentioned, it also presented him with a means of systematically describing and mapping the oikoumene. In the *Nuzha* he noted that in each climate one found a number of cities, fortresses, towns, and peoples, as well as mountains, plains, springs, mines, and rivers. It is here that Idrīsī clarifies the logic of climates for a work of descriptive geography: the geographical writer can describe all of the cities, peoples, and other localities within a climate in a systematic way. Idrīsī described each climate from west to east. It is tempting to view his decision to describe climates beginning in the west as a sign of his identification as a Westerner, perhaps a man who viewed the Maghrib and Mediterranean as meritorious of what might have been seen as a privileged place in his descriptions. While this may indeed be the case, some mathematical

⁴⁹ Idrīsī, Opus geographicum, 9.

geographers, including Khwārazmī, listed geographical coordinates of cities and towns from west to east. Others described the climates from east to west, as would Yāqut who wrote in the early thirteenth century wrote that climate "extends lengthwise from east to west." In any case, Idrīsī began his description with the first, most southerly climate, and proceeding methodically northward, climate by climate. He further systematized the seven divisions in an entirely original manner:

Since we wished to draw these cities in the climates, together with their routes and what their nations encompass, we have divided the length of each of the climates into ten parts reckoned by longitude and latitude. In each of these parts we have drawn the cities, districts, and regions that pertain to it, so that the observer can see that which is hidden from his eyes, or that concerning which he has so far received no knowledge, or which he has not been able to arrive at because of the difficulty of the routes and the difference among nations. In this way the matter will become evident to his own eyes.⁵¹

Idrīsī also employed the same ten-part division of the seven climates in his later work, written for King William I, the *Uns al-muhaj*, writing that "I have divided the length of these seven climates into ten parts," each covering eighteen degrees from west to east.⁵² In all, the *Nuzha* contained 70 sectional maps, each of which accompanied a textual description of the lands depicted (Figure 5). The *Uns* included 73 sectional maps, given that Idrīsī incorporated some lands lying to the south of the traditional seven climates.

⁵⁰ Jwaideh, The Introductory Chapters of Yāqūt's Mu'jam al-Buldān, 42.

⁵¹ Idrīsī, *Opus geographicum*, 13.

⁵² Idrīsī, *Uns*, fol. 14. In the *Nuzha*, Idrīsī does not state the width of the longitudinal sections.



Figure 5. Map of the Maghrib in Bodleian Library, Ms. Pococke 375, fols. 86b-87a.

Idrīsī thus divided the inhabited quarter first into seven latitudinal climates following Hellenistic models, and then into ten longitudinal sections, hence producing a kind of grid atop the surface of the earth. No other extant work of geography used this kind of a division. The method was at once traditional and unique to Idrīsī. Thus, Idrīsī's association with Roger's court compelled him to find a solution to a new problem, namely, how to describe the entire oikoumene in a way that did not privilege the lands of Islam, an unacceptable model from his patron's perspective. Nor, as a Muslim writer himself, could Idrīsī select a model that privileged

a Christian view of space. He was willing to find an innovative resolution, but he did so by turning to his own cultural world of Arabic geography.

The Earth

Idrīsī began the *Nuzha* by locating the earth within the heavens and the wider cosmos. Consider the very first words of the treatise: he opened his text by invoking God, "In the name of the merciful and compassionate God, and may God bless our Prophet Muḥammad and his family." This opening of the text with the *basmala* was more or less standard, a nearly universal practice among Muslim writers of the period, regardless of discipline or subject. Idrīsī then continued by praising God, the Creator:

He arranges something, perfects it; the Creator and Originator, who makes beautiful that which He has fashioned, and who has joined knowledge of Himself to [human] intellects, so that proof of Him has arisen in souls and becomes clear to [human] eyes.... Among His signs is the creation of the heavens and the earth. Now as for the heavens, He raised their ceiling and placed them in order.... As for the earth, He spread out its resting place (*mihād*) and set firmly its high [mountains], and brought out from it its water and its pasturage, and placed his creatures to live on it, settling them on [the earth's] domains.... He showed them its routes and taught them about its beneficial and harmful things. He guided them in journeying on it on land and by sea, over the flat and the rugged country: all of this – may His power be magnified – according to His decree, fiat, will, and determination.⁵⁴

God, Idrīsī explained, had created the heavens and the earth *and* given humans the capacity to know Him, to make His design "clear to [human] eyes." God had created the very things that Idrīsī took as the subject of his work: the earth, mountains, water, pasturage, land, and sea. The opening paragraph of the *Nuzha* is full of Qur'anic allusions yet he *never* directly cited the text.

⁵³ Idrīsī, *Opus geographicum*, 3.

⁵⁴ Idrīsī, *Opus geographicum*, 3.

The "resting place," the *mihād*, appears, for example, in Sūrat An-Naba' ("The Tidings"), when God asks "Have We not made the earth a resting place (*mihād*)?"⁵⁵ The term refers to the space allocated to humans and animals, in some usages it signifies a "bed" (*mihād*) spread out by God.⁵⁶ His allusions to God having "set firmly" the mountains⁵⁷ and "extracted from it its water and its pasture" also refer to passages in the Qur'ān. That God guided man by land and by sea, too, is from holy scripture.⁵⁸ And for Idrīsī, this, the study of God's creation, is "the most meritorious matter with which an investigator can concern himself and employ his ideas and thoughts."⁵⁹ The study of the earth and its geography was nothing less than a means of learning about God and of appreciating the divine order of His world.⁶⁰

Idrīsī even hoped to receive divine blessings as a reward for having described God's Creation. This is most readily seen in the preface of the *Uns al-muhaj*, when he wrote to his unnamed patron, who was in fact King William of Sicily, "You asked me – may God protect you and direct you toward good – to write for you a work summarizing the routes and kingdoms of the earth to fulfill your desire and enthusiastic curiosity in this matter." Having completed the *Uns al-muhaj* for William, Idrīsī added,

I have granted you [this work of geography], hoping to obtain remuneration and reward from the Mighty and Majestic God. It is in essence a study of the kind that the man of faith desires, endowed with good judgement and absolute certainty. It permits knowledge

⁵⁵ Sahih International Translation, 78:6; El-Said M. Badawi, Muhammad Abdel Haleem, "4/0/p m-h-d," Dictionary of Qur'anic Usage (Leiden, Brill, 2008).

⁵⁶ Heidi Toelle, "Earth," *Encyclopedia of the Qur'ān*, ed. Jane Dammen McAuliffe (Leiden: Brill, 2006).

⁵⁷ Sūrat An-Nazi'at ("Those Who Drag Forth"), 79:31-32. Trans. Sahih International.

⁵⁸ Sūrat Al-An'am ("The Cattle"), 6:97. God had created stars to "guide" humans "through the darkness of the land and sea." Trans. Sahih International.

See, too, Sūrat Al-Isrā' ("The Night Journey"), 17:70.

⁵⁹ Idrīsī, *Opus geographicum*, 3.

⁶⁰ Christian geographers also believed that in describing the earth they were in essence praising its Creator. On the study of the earth as a means of acquiring greater knowledge of God and Creation in the Christian context, see Natalia Lozovsky, "*The Earth is Our Book*," *Geographical Knowledge in the Latin West ca. 400-1000* (Ann Arbor: University of Michigan Press, 2000).

of the creatures of God the Powerful and Majestic, the marvels of His wisdom and that which He has placed on the earth for his worshippers.⁶¹

In spite of the Qur'ānic allusions, perhaps Roger might have found something familiar in this opening section. That God had created the world would certainly have been a familiar refrain. Nor did Idrīsī explicitly cite passages from the Qur'ān. But what of the Qur'ān as a source of geographical knowledge? The text of that book sets out a geographical and cosmographical image as may be gleaned from the passages on the earth, mountains, waters, and so forth that we just seen. And indeed, some early geographical writers turned to the Qur'ān as a source of information, for instance writing of the "two seas" of the world. Nor did Idrīsī fill his work with accounts from Prophetic traditions (hadīth), as had other geographical writers to varying extents. Rather, Idrisi gathered his knowledge of God's Creation from other writings, most written by other Muslims who had ultimately built their understanding of the earth and its place in the universe on those of the Greeks and other cultures of antiquity.

Later in the preface of the *Nuzha* Idrīsī conveyed to his readers his notion of the earth (*ard*) as a whole. He surely viewed this portion of his text as a necessary foundation for the rest of his treatise. That is, he had to describe the earth in its entirety, before he could begin to describe it section by section and climate by climate. And so, he began, he began by treating the "discourse regarding the image of the earth (*sūrat al-ard*) called *al-jughrāfīyā* as Ptolemy named

⁶¹ Idrīsī, *Uns al-muhaj*, fols. 2-3. Two manuscripts are extant. Süleymaniye Kütüphanesi, Istanbul, Hasan Hüsnü MS. 1289 dating from 1679 CE and Süleymaniye Kütüphanesi, Istanbul, Hekimoğlu (Ali Paşa) MS. 688, which is a fourteenth-century copy.

⁶² See Adam Silverstein, "The Medieval Islamic Worldview: Arabic Geography in Its Historical Context," in *Geography and Ethnography: Perceptions of the World in Pre-Modern Societies* Kurt Raaflaub and Richard Talbert eds. (Malden, MA: Wiley-Blackwell, 2010), 279-280. Various passages in the Qur'ān mention the existence of two seas, for instance, Q. 55: 15; 25: 53; 18: 60; 27:

⁶³ Al-Zuhrī, for example, included numerous Qur'ānic citations and accounts from *ḥadīths*. See Maḥammad Hadj-Sadok, "Kitāb al-Dja rāfiyya, mappemonde du calife al-Ma'mūn reproduite par Fazārī (IIIe/IXe s.) rééditée et commentée par Zuhrī (Vie/XIIe s.)," *Bulletin d'Études Orientales*, Tome XXI (1968).

and described it."⁶⁴ Here Idrīsī appealed to the authority of Ptolemy and referred to the title of his famous work, the *Geography*. He continued,

We say: what has reached us from the discourse of the philosophers and the greatest of the scholars and experts in the science of astronomy is that the earth is spherical, with the roundness of a ball. The water sticks to it and runs over it naturally without separating from it. The earth and the water are stationary within the hollow of the celestial sphere, just like the yellow [yolk] within the hollow of the egg. Their place there is in the center. The air surrounds them on every side, attracting them toward the celestial sphere, or else pushing them back – God knows best the truth of this question. The earth is stationary within the hollow of the celestial sphere: this is because of the extreme swiftness of the celestial sphere's movement. All created things are on its surface. The air attracts them because of the principle of lightness in their bodies, whereas the earth attracts them because of the principle of heaviness in their bodies, on the analogy of the lodestone (hajar al-maghnitus) which attracts iron toward itself.⁶⁵

Though Idrīsī cited no source, much of this passage derives from the work of Ibn Khurradādhbih.

The ninth-century author of the *Kitāb al-Masālik wa'l-mamālik* wrote that,

The earth is round like a sphere, and placed in the middle of celestial space, like the yellow inside an egg. The celestial sphere envelops it and attracts it, at all the points of its surface, toward celestial space. All the bodies are stable on the surface of the globe, the air attracts them because of the principle of lightness in their bodies, whereas the earth attracts them because of the principle of heaviness in their bodies, in the same way that the stone [hajar] attracts iron.⁶⁶

This view of the earth drew upon Hellenistic geography and astronomy. Though the notion was widespread even by his own time, in the *Almagest* Ptolemy presented arguments to show that the stationary earth "is sensibly spherical" and sat at the center of a rotating celestial sphere. Like Idrīsī and his source, Ptolemy noted that "all heavy objects are carried toward the earth" (though he made no allusion to a magnet) and that light objects are not.⁶⁷ Other elements of the passage,

⁶⁴ Idrīsī, *Opus geographicum*, 7.

⁶⁵ Idrīsī, Opus geographicum, 7-8.

⁶⁶ Ibn Khurradādhbih, M.J. de Goeje ed., BGA Vol. 6, Kitāb al-Masālik wa'l-mamālik (Leiden: E.J. Brill, 1889), 4.

⁶⁷ G.J. Toomer (trans.), *Ptolemy's Almagest* (New York: Springer-Verlag, 1984). Ptolemy wrote that "The general preliminary discussion covers the following topics: the heaven is spherical in shape, and moves as a sphere; the earth

however do not derive from either the *Geography* or *Almagest* of Ptolemy. The egg-yolk analogy, for example, did not come from Ptolemy, though almost certainly derived from Hellenistic tradition.⁶⁸

If the introductory paragraph on the earth bore a similarity to his source's language and phrasings, he followed Ibn Khurradādhbih still more closely in discussing some of the divisions of the spherical earth. Idrīsī wrote,

The earth is divided into two parts, between which is the equator (*khaṭṭ al-istiwā'*), going from east to west. This is the length of the earth and the longest line along the terrestrial sphere, just as the arc of the Zodiac is the longest line in the celestial sphere. The circumference of the earth at the equator is 360 degrees. A degree equals 25 farsakhs; a farsakh equals 12,000 cubits; a cubit equals 24 fingers; a finger equals six grains of barley aligned next to each other, the belly of each touching the back of the next. According to this calculation, the earth encompasses 132,000,000 cubits, which amounts to 11,000 farsakhs, according to the calculation of the people of India. As for Hermes, ⁶⁹ he estimated the circumference of the earth, dividing it into parts of 100 miles each. In this way [he found] 36,000 miles, which comes to 12,000 farsakhs.⁷⁰

too is sensibly spherical in shape, when taken as a whole; in position it lies in the middle of the heavens very much like its center; in size and distance it has the ratio of a point to the sphere of the fixed stars; and it has no motion from place to place," 38. Indian astronomers also held that the earth remained stationary, though Āryabhaṭa, a fifth-century Indian astronomer whose work was translated into Arabic in the ninth century argued that the earth itself rotated.

⁶⁸ Wadie Jwaideh wrote that the analogy of earth as yolk derived from Orphic cosmology. See *The introductory chapters of Yāqūt's Mu'jam al-Buldān* (Leiden: Brill, 1987), 21 n. 7. The conception of the earth as yolk circulated widely in Greco-Roman culture. For instance, the Roman Marcus Terentius Varro (d. 27 BCE) compared the shell of an egg with the sky and the albumen with the earth. And a number of later scholars, including Abelard, wrote of the analogy in his *Philosophia mundi* and his commentary on Macrobius. Finally, Idrīsī's near contemporary Hildegard of Bingen (d. 1179) drew egg-shaped representations of the universe in manuscripts of her *Liber Scivias*, one with the description, "As the round earth in the middle of heaven was created from nothing, so it floats in nothing, like the yolk in an egg." As quoted in Rudolf Simek, *Heaven and earth in the Middle Ages: the physical world before Columbus* (Woodbridge, Suffolk: Boydell Press, 1996), 21. More generally, see Simek's discussion "The Cosmos as an Egg," 20-22.

⁶⁹ The Arabic reads H-R-M-S, "hrms."

⁷⁰ Idrīsī, *Opus geographicum*, 8.

On farsakhs, or parasangs, see EI², s.v. "Farsakh (N. Hinz).

The list of equivalencies given by Idrīsī – a farsakh equals 12,000 cubits, etc. – not only appears in Ibn Khurradādhbih's work, but also that of several other Arabic texts. Al-Mas'ūdī also reproduced this passage in full. Moreover, the passages that Idrīsī borrowed here from Ibn Khurradādhbih were also incorporated to varying degrees by Yāqūt (d. 1229) and Ibn al-Faqīh (fl. 903). While Yāqūt did not name his source, he did not that "A writer other than Ptolemy" had made these claims. See Wadie Jwaideh, *The Introductory Chapters of Yāqūt's Mu'jam al-Buldān*, 21 n 8 and 26 n 1, 3, and 4. A similar set of numbers turns up in al-Muqaddasī, who wrote of the 'Empire of Islam,' that the greatest length of the empire is "2,600 *farsakhs*; every hundred *farsakhs* is equal to 1,200,000 cubits: a *farsakh* is therefore 12,000 cubits. A cubit is equal to 24 fingers; a finger equals the length of six grains of barely

Idrīsī lifted the passage directly from the preface of Ibn Khurradādhbih's Book of Routes and *Realms*, only straying from his source in the final calculation of the circumference of the earth.⁷¹ Here Idrīsī cited two measurements, one calculated by "the people of India" and one by "Hermes." In addition to all but discounting this "sūrat al-ard" section of Idrīsī's treatise – that introductory portion of his geography in which he described the earth in its entirety – scholars have had little to say about this passage, in spite of its importance in suggesting that Idrīsī either had access to Indian, and we will see, Persian, works of geography or astronomy, or that his sources had mentioned such works. Amédée Jaubert, who had translated the *Nuzha* (1836-1840), one of the rare few who offered any comment on this, rendered "Hermes" as "Hérates," and suggested that he be identified with Eratosthenes. 72 Though Jaubert did not elucidate his speculation that Idrīsī meant to name Eratosthenes (d. ca. 195 BCE), head of the library at Alexandria where he produced works on geography, mathematics, philosophy, and more, best known for having calculated the circumference of the earth. His "Hermes," named after the Olympian god, which has survived only in fragments, is thought to present a view of the earth and planets as seen from the heavens (i.e. from the position of the god Hermes), an earth divided into five latitudinal zones.⁷³ Amari and Schiaparelli, on the other hand, argued that "Hermes" is a poorly transcribed Greek name, and raised the possibility that the text references Hipparchus of

side by side. A mile is one-third of a *farsakh*." See Al-Muqaddasī, M.J. de Goeje ed., *BGA*, *Volume 3*, 58-59. Moreover, al-Muqaddasī included a "*ṣūrat al-arḍ*" section that closely imitated that of Ibn Khurradādhbih, 58-59. ⁷¹ Ibn Khurradādhbih stated that "the circumference of the earth is 9,000 farsakhs." He did not mention the

calculations of the Indians or of Hermes, and it is not entirely clear from where he derived these measures. Ibn Khurradādhbih, de Goeje, *BGA Vol.* 6, 4.

⁷² Jaubert, *Géographie d'Édrisi, traduite de l'Arabe en Français et accompagnée de notes par P. Amédée Jaubert, Tome Premier* (Paris : Imprimerie Royale, 1836), 2 and n. 2. Jaubert simply wrote "Ératosthènes?" to indicate his uncertainty.

⁷³ See Friedrich Solmsen, "Eratosthenes as Platonist and Poet," in *Transactions and Proceedings of the American Philological Association* 72 (1942): 207-208; Duane W. Roller, *Eratosthenes' Geography* (Princeton: Princeton University Press, 2010); D.R. Dicks, "Eratosthenes," *Complete Dictionary of Scientific Biography. Vol. 4* (Detroit: Charles Scribner's Sons, 2008), 388-393.

Nicaea (d. ca. 120 BCE), a Greek astronomer, geographer, and mathematician who was among the first Greeks to divide the circle into 360 degrees.⁷⁴

Idrīsī's reference to the "people of India" and "Hermes," in fact, points to yet another 'Abbāsid translation enterprise. The story dates from 771 or 773, when an embassy from Sind reached the Baghdadi court of al-Manṣūr. Among the members of the delegation was an Indian knowledgeable in astronomy. The caliph ordered Ibrāhīm al-Fazārī, a court astronomer and astrologer from Kūfa, to prepare in collaboration with the Indian visitor, an Arabic translation of a Sanskrit astronomical text. ⁷⁵ The Arabic text took the title of Zīj al-Sindhind, a text with astronomical (planetary motions and apogees, etc.) and geographical content. This geographical content derived on the one hand from the $\bar{A}ryabhat\bar{i}ya$, a Sanskrit astronomical treatise that included sections on the earth's equator, shape, diameter, circumference and more, and on the other from a Sasanian Persian tradition attributed to "Hermes." The exact identity of Hermes is a complex question, but in brief, he was a legendary ancient sage, often known as Hermes Trismegistus, the 'Thrice-Greatest Hermes,' of Roman Egypt, first mentioned in Greek texts in the first centuries of the Common Era. Astronomical and astrological texts attributed to him were translated into Middle Persian in Sasanian Iran as early as the third century, and later entered Arabic tradition in the eighth and ninth centuries, primarily through translations at the 'Abbāsid

⁷⁴ L'Italia descritta nel "Libro del re Ruggero" comp. da Edrisi Testo arabo pub. con versione e note da M. Amari e C. Schiaparelli (Roma: Coi Tipi del Salviucci, 1883), VIII. Joachim Lelewel argued that Idrīsī's "Hermes" did not denote Eratosthenes, though he did not suggest an alternative identification. See Géographie du moyen âge Tome I (Brussels: Pilliet, 1852), 100.

⁷⁵ The Sanskrit text was evidently entitled *Mahāsiddhānta* and belonged to what later became known as the Brahmapakṣa. See David Pingree, "Al-Fazārī, Muḥammad Ibn Ibrāhīm," *Complete Dictionary of Scientific Biography. Vol. 4*, 555-556.

⁷⁶ David Pingree, "Al-Fazārī," Complete Dictionary of Scientific Biography; Pingree, "The Fragments of the Works of al-Fazārī," in Journal of Near Eastern Studies, 29 (1970): 103-123; Pingree, "The Greek Influence on Early Islamic Mathematical Astronomy," in Journal of the American Oriental Society, 93, 1 (1973): 32-43.

court.⁷⁷ Hence, while we cannot determine the precise identity of the "people of India" or the text which referred to "Hermes" as mentioned by Idrīsī, he nevertheless demonstrated a willingness to incorporate data from non-Ptolemaic sources, as well as an understanding of the earth as a whole shaped by knowledge that had reached him across distant geographies and stretches of time. On a more practical level, his references to these texts suggest that he had more sources available than those he mentioned in the preface of his two works.⁷⁸

Following Ibn Khurradādhbih, and ultimately a view inherited from Ptolemy, other Hellenistic writers, as well as Sanskrit and Persian works, Idrīsī presented an immense, spherical earth floating freely at the center of the universe. Though large, this earth was knowable: it could be studied, measured, and divided. And for Idrīsī, the earth was divided by the equator into two halves, one northern and one southern. But this line did not simply split the earth into two equal halves; it also divided the inhabited from the uninhabited lands. A patchwork of peoples in antiquity, including scholars with Indian, Persian, and Greek origins, subscribed to the notion

⁷⁷ On Hermes, see Keven van Bladel, *The Arabic Hermes: From Pagan Sage to Prophet of Science* (New York: Oxford University Press, 2009); Martin Plessner, "Hermes Trismegistus and Arab Science," in Studia Islamica 2 (1954): 45-59. Manuscripts of Idrīsī's Nuzha render this name as H-R-M-S, hrms. Jaubert took this to read Hérates and Amari and Schiaparelli Ermete. Neither is correct. Kevin van Bladel has noted, the name derives from Middle Persian with the spelling hyrmys and 'yrmys. On the other hand, the Syriac "abjad-script spelling" is hrms, which is the most widespread spelling in Arabic. The "normal" spelling for Hermes in Syriac is 'rmys or hryms, following Middle Persian. Greek translators, too, continued to use this spelling, and some Arabic texts even note that the name in Greek was spelled as 'rmys or hrmys. Based on this, van Bladel argues "that it is highly likely...[that] the spelling hrms was transferred from Middle Persian (and not from Greek or from Syriac, in which the spelling hrms appears only rarely)." Given that Idrīsī spelled the name as had Arabic authors who translated Middle Persian texts, he likely derived the name from an Arabic text, rather than Greek. See van Bladel, 25-26 and footnotes therein. ⁷⁸ Whether Idrīsī had access to translations of Sanskrit or Middle Persian texts from the 'Abbāsid period (or later) is unknown. He may well have learned of the calculations of the Indians and Hermes from an intermediary, perhaps al-Bīrūnī's Taḥdīd nihāyat al-amākin (d. 1048). In that text al-Bīrūnī wrote, "However al-Fazārī has mentioned in his $z\bar{i}j$ that the Indians consider the circumference of the earth to be 6,6000 farsakhs, where a farsakh is 16,000 cubits. He mentioned that Hermes considered it to be 9,000 farsakhs, where a farsakh is 12,000 cubits. So the share of one

degree...according to the Indians is $18^{1}/_{3}$ farsakhs...But according to Hermes, it would be 25 farsakhs which are equal to 75 miles... Then al-Fazārī claimed that some sages estimated each degree to be equivalent to 100 miles, and hence their estimate of the circumference of the earth would be 12,000 farsakhs." Note that this last sentence, including the measurement of the earth's circumference as 12,000 farsakhs, closely matches that of Idrīsī's last sentence in the passage cited above, though Idrīsī attributed this number of Hermes, whereas al-Fazārī apparently did not. Al-Fazārī's text(s) has not survived outside of a few fragments and extracts from writers such as al-Bīrūnī. This translation is found in David Pingree, "The Fragments of the Works of al-Fazārī," 114.

that humans inhabited only part of the earth. The view of the inhabited earth, just as his view of the earth as a whole up to here, again derived from the work of Ibn Khurradādhbih. In the *Nuzha* Idrīsī continued.

the inhabited part of the earth after the equator is 64 degrees. The rest of the earth is bare without habitation, because of the severity of the cold and heat. All of humanity are on the northern quarter of the earth. Moreover, the southern quarter, which is above the equator, has no settlement and no habitation at all, because of the constant severity of the heat there, coming from the zenith. As a result, its waters dry up, and its animals and plants perish because of the lack of moisture: for animals and plants never exist except where there is water.⁷⁹

However, here Idrīsī finally departed from the work of Ibn Khurrdādhbih, who claimed that the inhabited quarter of the earth only extended to 24 degrees north latitude. Exactly where Idrīsī came up with 64 degrees as the extent of the inhabited quarter of the earth is unclear. This calculation did not derive from Ptolemy's *Almagest* or *Geography*. In the *Almagest*, Ptolemy claimed that the northernmost reaches of the inhabited quarter extended to between 64° 30' and 65° north, to the lands of Scythia, whereas in the *Geography* he wrote that it ended at 63 degrees north, at the island of Thule. Illust like the Alexandrine scholar before him, Idrīsī also apparently had an evolving notion of the earth and its inhabited zones, for in the later *Uns al-muhaj* he noted that the inhabited quarter ended at 66 degrees north, "at the island of Thule, located in the Northern Sea." Again, the origin of this measurement is uncertain. Moreover, between the writing of the *Nuzha* and the *Uns al-muhaj*, probably sometime before 1160 when the Muslims

⁷⁹ Idrīsī, *Opus geographicum*, 8.

⁸⁰ Ibn Khurradādhbih, de Goeje, *BGA Vol.* 6, 4-5. Here Ibn Khurradādhbih wrote 24 degrees rather than 64, probably an error. That number, however, does appear in other Arabic treatises including al-Muqaddasī and, apparently Yāqūt, though the latter's phasing is awkward, making comprehension difficult. See Al-Muqaddasī, M.J. de Goeje ed., *BGA*, *Volume* 3; Jwaideh, *The Introductory Chapters of Yāqūt's Mu'jam al-Buldān* (Leiden: Brill, 1987), 26 and n. 3.

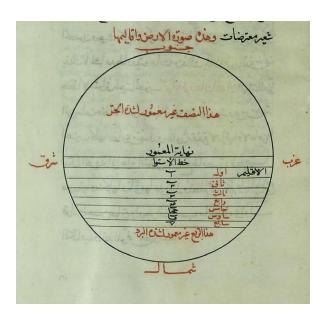
⁸¹ Toomer, Ptolemy's Almagest (New York: Springer-Verlag, 1984), 89; Berggren and Jones, The Geography, 41.

⁸² Idrīsī, *Uns*, fol. 5.

of Sicily were threatened with violence and even massacre, ⁸³ he evidently had changed his mind about the southerly limits of the oikoumene as well. In the *Nuzha* he contended that the inhabited quarter fell entirely north of the equator; the excessive heat and aridity to the south inhibited life. By the time he wrote the *Uns al-muhaj*, however, he stated that just as "Ptolemy claims in the *Almagest*," he too believed that people might be able to withstand the heat and aridity south of the equator, even though, like Ptolemy, he noted that in truth "nothing has reached us from these regions and we have not met anyone who has been able to visit them because of the difficulties of which we have spoken [excessive heat] and which bar access."⁸⁴ In the *Uns al-muhaj*, Idrīsī extended the inhabited lands to 11 degrees south of the equator, a massive shift from his claim in the *Nuzha* that these lands ended at the equator. His source here is unknown, though he apparently believed that he had followed Ptolemy and other "ancients," since he wrote that the "scholars [mathematicians and the "ancients"] affirm that the width of the inhabited part from north to south is 77°, of which/including 11° south of the equator" (Figure 6).⁸⁵

⁸³ Alex Metcalfe, The Muslims of Medieval Sicily, 181-182.

⁸⁴ Idrīsī, *Uns*, fols. 6-7. Ptolemy suggested the possibility of human life below the equator: "It is said that the regions beneath the equator could be inhabited, since the climate must be quite temperate. For the sun does not stay long in the neighbourhood of the zenith, since the motion in declination is swift round about the equinoctial points, and hence the summer would be temperate...But what these inhabited regions are we have no reliable grounds for saying. For up to now they are unexplored by men from our part of the inhabited world, and what people say about them must be considered guesswork rather than report." Toomer, Ptolemy's Almagest, 83. Moreover, Idrīsī may have gained access to a copy of the Almagest in Palermo between the completion of the Nuzha and the composition of the Uns. Accepting that Arabic versions of the Almagest had circulated for centuries, it is just possible that he had only encountered the text after his arrival at Sicily, especially given that his later *Uns al-muhaj* deals directly with Ptolemy to a far greater extent. In 1158, perhaps around the time that Idrīsī composed the Uns (the precise date of composition is unknown; we only know that it was written under William I who reigned from 1154-1166), Aristippus, an envoy to Constantinople, brought a Greek copy of Ptolemy's Megistē Syntaxis, that is, the Almagest, to the court in Palermo. Though evidence is lacking perhaps Idrīsī could paraphrase Ptolemy in his later treatise because he had access to the Almagest itself, even if only in Greek. On Aristippus and his delivery of the Almagest, see Alex Metcalfe, The Muslims of medieval Italy, 257. ⁸⁵ Idrīsī, *Uns*, fol. 5.



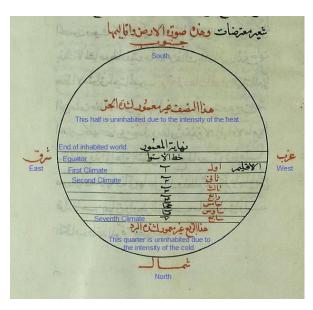


Figure 6. A representation of the spherical earth and its climates from the Uns al-muhaj wa-rawḍ al-furaj. On left, the original image from the Hekimoğlu Ali Paşa 688 manuscript, fol. 13. On right, my English translation of the Arabic (in blue). The image depicts the seven climates of the inhabited world. The lands south of the equator (Idrīsī placed south at the top of the map) are labeled as uninhabited due to the excessive heat. Similarly, the lands north of the seventh climate are uninhabited due to the extreme cold. Idrīsī wrote of this image: "I drew the earth, the division of climates and the equator" (fol. 14).

If the extent of the inhabited quarter varied between the *Nuzha* and the *Uns al-muhaj*, the portrayal of the earth in the two texts was broadly similar, albeit with notable differences. In the *Uns*, just as in the *Nuzha*, Idrīsī included an abbreviated "*ṣūrat al-arḍ*." Here he announced to his readers that he would report "That which the mathematicians and scholars have said on the form [*hai'a*] and division into degrees [*tadrīj*] of the earth as well as the knowledge of the ancients on this subject." Nor did he simply excerpt passages from Ibn Khurradādhbih or any other known geographical writer. He noted that the inhabited part of the earth, from west to east, extended across 180 degrees, "or half the revolution of the celestial sphere." He completely jettisoned any mention of *jughrāfīya*, the spherical nature of the earth, the earth's place in celestial space, the

⁸⁶ Idrīsī, *Uns*, fols. 5-6.

egg-yolk analogy, and the earth's 'magnetic' force. He did not discuss the division of the earth into a northern or southern quarter. And while he mentioned the circumference of the earth, the numbers he provided differed from those of the Nuzha.⁸⁷ The language of the Uns al-muhaj tends more toward technical astronomy: here $Idr\bar{s}\bar{s}$ mentions, without explanation, the height of the polar star "in all regions of the Zodiac," the distance between two locations as measurable in degrees, the definition of longitude ($t\bar{u}l$) of a place as a measure of distance from the meridian and the latitude as a measure of distance from the equator. ⁸⁸

Finally, Idrīsī's *Nuzha* reproduced yet another element of the Hellenistic world view: the notion of an impassable body of water that encircled the inhabited quarter. ⁸⁹ He referred to this sea as the "Surrounding Sea," and sometimes the "the Green Sea" [al-baḥr al-akhḍar] or the "Sea of Darkness" [al-baḥr al-muzlim, al-baḥr al-zulumāt], ⁹⁰ and it marked the limit of the inhabited lands in the west, east, north, and south. Both Greek and Babylonian cosmologies had maintained the notion of such an encircling river or sea, though Idrīsī probably learned of it through Greek texts, or at least Arabic works that transmitted Greek notions of a surrounding sea (Figure 7). ⁹¹ In the Greek tradition since Homer, the god Oceanus had personified a river surrounding the oikoumene. ⁹² Aristotle wrote of an Outer Sea, not the Oceanus. Ptolemy used

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⁸⁷ In the *Uns*, Idrīsī claimed that according to the "philosophers" the earth measured 24,000 miles in circumference. The Hasan Hüsnü 1289 manuscript asserts that "Ptolemy declares that the entire circumference of the earth, with its seas and its mountains, comprises twenty-four thousand miles, and that its diameter, that is to say its width and depth is seven thousand six hundred thirty-six miles," fol. 6.

⁸⁸ Idrīsī, *Uns*, fol. 6. This may suggest that Idrīsī had access to the *Almagest*.

⁸⁹ This body of water is not mentioned in the prologue of the *Uns al-muhaj*.

⁹⁰ These latter names were usually applied to the northern Atlantic Ocean.

⁹¹ The British Library conserves a tablet depicting a Babylonian world map in which a body of water, perhaps a river, surrounds the earth. See H.G. Lyons, "A Babylonian World Map," *Geography*, Vol. 14, 3 (Autumn 1927): 245-246; Eckhard Unger, "From the Cosmos Picture to the World Map," *Imago Mundi*, Vol. 2 (1937): 1-7; Wayne Horowitz, *Mesopotamian Cosmic Geography* (Winona Lake, Indiana: Eisenbrauns, 1998).

⁹² For Homer, Oceanus formed the edge of a circular disc earth. In both the *Iliad and Odyssey* Homer located mythical peoples – the Aethipes Pygmies, and Cimmerii – and monsters – Harpies and Gorgons, for instance, along the shores of the Oceanus. Hesiod, too, held that the Oceanus surrounded the inhabited world. Not all classical authors believed in the existence of such a sea. Some authors, notably Herodotus, rejected the notion of a surrounding sea. See Annemarie Ambühl, Tassilo Schmitt, "Oceanus," *Brill's New Pauly*, Antiquity volumes edited

the term Oceanus, but for him it signified the Atlantic, though he did contend that a body of water surrounded the entirety of the oikoumene. Arabic works of geography followed their Hellenistic model and a brief discussion of the Surrounding Sea was an integral part of the abbreviated *şūrat al-ard* archetype. Ibn Khurradādhbih, for instance, wrote that the extent of the inhabitable earth is "almost completely surrounded by deep waters of the Great Sea [baḥr al-kabūr]." Ibn Ḥawqal similarly wrote of "the Ocean that surrounds the earth" and repeatedly referred to the "Surrounding Ocean." Idrīsī picked up this Hellenistic tradition, filtered through Arabic texts, when he wrote in the *Nuzha* that the "Surrounding Sea [baḥr al-muḥūt] covers half the earth in a connected fashion. Its circumference is like a belt, of which only half is visible, as if, according to the simile, it were an egg submerged in water, while the water was in a basin: so half of the earth is submerged in the sea, and the sea is surrounded by air, and the air attracts of repels it, as we said previously." After presenting the Surrounding Sea and the seven climates, Idrīsī completed his prologue in the *Nuzha* with a description of the seven seas that traverse the seven climates, just as had authors of descriptive geographies before him.

by Hubert Cancik and Helmuth Schneider; Tassilo Schmitt, "Oikoumene," *Brill's New Pauly*; Marie-Claire Beaulieu, "Oceanus," *The Encyclopedia of Ancient History*, ed. Roger Bagnall.

⁹³ Ibn Khurradādhbih, de Goeje, *BGA Vol.* 6, 4-5.

⁹⁴ Idrīsī, *Opus geographicum*, 8. Though Ibn Khurradādhbih did not use this submerged egg simile, at least one other Arabic geography had used it: the Ikhwān al-Ṣafā' wrote that "Half the surface of the Earth is covered by the waters of the Great Encircling Sea (*baḥr al-muḥīṭ*) and the other half is covered, like an egg, half of which is submerged, with the other half protruding from the water." As quoted in Ignacio Sánchez and James Montgomery, *Epistles of the Brethren of Purity, On Geography*, 54.



Figure 7. Circular world map from the Nuzha. Circular world map from the Nuzha today held at the Bodleian Library at the University of Oxford (Ms. Pococke 375, fol. 3b-4a). 'Alī Ibn Hasan al-Hūfī al-Qāsimī copied this manuscript in Cairo in 1456. South is at the top, north at the bottom. The map depicts a world divided by seven climates (drawn in red ink, most visible in western Africa on the right side of the map), encircled by the bahr al-muhīt, the Surrounding Sea, here populated by a handful of unnamed islands. The notion of the seven climates and the surrounding sea reached geographers and astronomers in the Arabo-Islamic world via classical Greek writings, including the work of Claudius Ptolemy. The inhabited world extended from the Fortunate Islands in the west to China in the east. North to south, the inhabited quarter began at the first climate in the south and ranged to the seventh in the north. Here Idrīsī located the legendary figures of Gog and Magog in the north, in an area bordering the Surrounding Sea. The circular map bears little relation to Ptolemaic cartographic principles. Nor does it depict the ten latitudinal sections into which Idrīsī subdivided the seven climates. The map bears a striking resemblance to the circular world map (fol. 27b - 28a) of the "Book of Curiosities of the Sciences and marvels for the Eyes" (Kitāb Gharā'ib al-funūn wa-mulah al-'uyūn), an eleventhcentury work preserved in a manuscript dating from the late 12th or early 13th century (Bodleian Library, MS. Arab. c. 90).

Hence, regarding his view of the earth in its entirety, Idrīsī relied on his Arabic sources. It is as if he had little interest in learning of, say, views of the world current in Latinate or Romance

scholarship in spite of his association with Roger's court and the probable links it provided with such scholarship. If we imagine the court in Palermo as a site of exchange of knowledge and appropriation of new knowledge and information from across the Mediterranean, in terms of Idrīsī's depiction of the earth, that exchange was decidedly one-way. He delivered to the court a view of the world that he had taken from a text that was already around three centuries old and

Idrīsī's near-contemporary Gervase of Tilbury, who had traveled widely including to the court of William II in Sicily, provided a far more extensive treatment of the earth that overlapped with Idrīsī's in some ways, describing it as follows,

The word *mundus* is derived from *motus* (motion), since it is in constant motion. In shape it is round like a ball, and it resembles an egg in that it is composed of different elements. For an egg is completely covered on the outside with its shell; inside the white is surrounded by the shell, the yolk by the white, and in the yolk is a drop of fat in which the germ of new life resides. Likewise the world: the pure ether is surrounded by heaven as by a shell, the dense air by the pure ether, and the earth, which provides the material for growth, by the dense air. 95

Just like Idrīsī and Ibn Khurradādhbih before him, Gervase turned to an egg-yolk analogy to describe the earth. 96 And though Gervase presented, following Orosius, a tripartite world of three continents, he also projected onto it the five zones. 97 And like Idrīsī and the "ancients," Gervase contended that some "people say that the earth is surrounded and enclosed by sea, so that it forms the center in the middle of a circle, being equidistant from the edge all around... The earth, then, takes its place as the centre, and the waters form a circle enclosing the earth," adding

⁹⁷ *Otia imerialia*, 66-69.

⁹⁵ Otia imperialia, 26-27. This passage also occurs in the geographical work of Honorius of Autun (d. 1154 CE). See John F. Wippel and Allan Bernard Wolter, Medieval philosophy: from St. Augustine to Nicholas of Cusa (London: Collier Macmillan Publishers, 1969), 177.

⁹⁶ On ancient and medieval analogies of the egg-volk to the earth, see Peter Dronke, Fabula: explorations into the uses of myth in medieval Platonism (Leiden: E.J. Brill, 1974), 79-99, 155-166.

that this "fits in with the account of the third day [of creation]." Hence, even though Idrīsī did not emerge from his own cultural world, preferring to rely instead on only his Arabic sources, much the view of the world that he presented would have been familiar to readers in Roger's court.

Conclusions

Though he wrote the world as a client of Roger in Palermo, Idrīsī was nevertheless reluctant to incorporate views of the world that extended beyond his own geographical mentality. He portrayed and divided the earth using information that he found in Arabic works. Even though he had spent some fifteen years in Palermo, he showed no sign of having taken up any semblance of new knowledge. And yet, in selecting a means of dividing the inhabited quarter of the earth, he found a new use for an old method. His decision to divide space by means of the seven latitudinal climates allowed him to present a neutral view of the world, one that did not privilege either an Islamic or Christian reading of space. In this way, his works stand out from those of his contemporaries. Geographical writers of period nearly uniformly imagined a world divided in a manner that matched their own religious views. But not Idrīsī. Indeed, given his audiences, he could not. As a client of Roger, he wrote first for the king. But as Muslim himself who imagined a Muslim readership, he certainly had no desire to produce an image of the earth centered on Christian understanding.

If Idrīsī had found a means of dividing the earth that suited both himself and his patron, his view of the earth came directly from his world of Arabic geography. He conveyed to his

⁹⁸ Otia imperialia, 78-79.

readers the view of the world as presented by Ibn Khurradādhbih some three centuries previously. He likely found little reason to modify this conception of the earth since it offered a secular view. And moreover, whether he was aware of it or not, that view would have been familiar to his educated readers in Palermo. In terms of the view of the earth as an entity, Latin and Arabic geographical traditions had inherited from Hellenistic works a common notion of the heavens and the earth. 99

The depiction of the earth that Idrīsī delivered to Palermo suited Roger's desire to learn of new understandings of the world. He openly courted this knowledge, and if Leo Africanus was right in stating that Roger would have valued "those things that had never before been written in Latin," then perhaps King Roger had suggested that Idrīsī stick to his Arabic sources, rather than incorporate the views common in Latin geography. So often cited as a preeminent site of exchange of geographical information and knowledge, Idrīsī seems to have acquired little from the encounter, at least in terms of his understanding of the earth as an entity. However, he brought a great deal of knowledge to the court in Palermo, including an Arabic text, some of the learning of the ancient Greeks, Indians, and "Hermes." In any case, his work reminds us that the patron-client relationship of obligations surely affected the way in which Idrīsī wrote his geography. But in Idrīsī we also see that a Muslim geographical writer could find a way to present a world that suited both a Christian and a Muslim audience. In the next chapter we will turn our attention to examine in detail how Idrīsī portrayed the Islamic and Christian lands – and these are terms that he used – from Palermo.

⁹⁹ On this common conception of the cosmos, see Evelyn Edson and Emilie Savage-Smith, *Medieval views of the cosmos, picturing the universe in the Christian and Islamic Middle Ages* (Oxford: Bodleian Library, University of Oxford: 2004).

Chapter 3: Lands of Islam, Lands of the *Rūm*

In December 1153, only a month before al-Sharīf al-Idrīsī claimed to have receive the order to compose the Nuzhat al-mushtāq fī ikhtirtāq al-āfāq, King Roger personally presided over a trial of a high-ranking eunuch known as Philip of Mahdiyya. Earlier that year, a Sicilian fleet under Philip's command had attacked the port of Būna (modern Annaba in northeastern Algeria), a town then under Hammādid control. After subjugating the town and installing a pro-Sicilian governor, Philip set sail for his return to Palermo. But he was arrested en route, accused of apostasy, and placed on trial upon his return to the capital. Though Roger considered Philip "his own foster-son" he nevertheless sentenced him to death either for behaving "like a secret knight of the devil," a traitor who had "kept up the appearance of being a Christian" yet "in mind and deed he was completely a Saracen," as the Latin chronicler Romauld of Salerno recorded the events some twenty years later. Philip, he concluded "hated Christians, but valued pagans most highly." Like many members in Roger's administration, Philip was a eunuch who had been converted to Christianity at a young age, a fact noted by an independent Arabic account of the trial written about half a century later by the Muslim chronicler Ibn al-Athīr (d. 1233 CE). This account asserted that Philip had been arrested "for the lenience that he had shown to the Muslims

¹ As quoted in Jeremy Johns, *Arabic Administration in Norman Sicily* (Cambridge: Cambridge University Press, 2002), 215. Romuald further contended that Philip donated oil for mosque lamps, ate meat on Fridays and during Lent, and sent representatives to the tomb of Muḥammad.

of Būna. Philip, and all his eunuchs, were accused of being Muslims, and of having concealed it," and they all shared the same fate of being burned alive.²

As a resident of Palermo, Idrīsī was surely aware of this trial and its implications. Indeed, within a few years interfaith tensions would rise in Palermo and lead to the massacre of Muslims in 1160.3 In this atmosphere of interfaith tension and hostility, and tasked with composing a description of the world, Idrīsī would have found himself in a difficult situation. On the one hand, the task was straightforward: he only had to gather information about the world and present it in a text to Roger and his court. But on the other hand, the works of geography from which he would gather that information had represented the world from certain perspectives. All of the Arabic texts on which he so heavily depended had been composed by Muslims who wrote for Muslim audiences, and as such, they privileged the lands of Islam. Latin geographic treatises tended to present the world from a Christian perspective. But as we have seen, Idrīsī wrote with a double audience in mind, on the one hand, that of his Christian patron and his court, and on the other, his imagined Muslim readers, as well as himself. Yet there were real dangers to this, as the trial of Philip demonstrates. If Idrīsī had presented a world that tended too strongly toward the Islamic perspective of his sources, he might well have found himself under threat.

This chapter examines how Idrīsī portrayed Islam and Christianity in the *Nuzha*. It asks to what extent he modified the views of his sources and also assesses writing strategies he adopted to produce a depiction of the world that suited his audiences. Idrīsī's case is unique among all

² Romuald's account added that "counts, justiciars, barons, and judges," along with the king, sentenced Philip to death by "the vengeful flames, so that he who would not have the warmth of love, shall feel the fire that burns, and so that no trace shall remain of this worst of men, but that, having been turned to ashes by an earthly fire, he may proceed to perpetual torment in the eternal flames." Roger, Romuald noted, "was a most Christian and catholic king," willing to apply justice even to his foster-son, Philip. Quoted in Johns, *Arabic Administration*, 216.

³ See Alex Metcalfe's chapter entitled "The Muslim massacres of the 1160s" in *The Muslims of medieval Italy* (Edinburgh: Edinburgh University Press), 181-192.

geographical writers of the medieval period, in that he was a Muslim who lived under Christian rule at a time of great interfaith hostility around the Mediterranean, even at home in Sicily. By exploring how he represented Islam and Christianity we can gain a sense of how these two faiths interacted and had been portrayed in works of geography over time. Idrīsī's work also demonstrates the possibility not only of interfaith exchange at a time of high tension, but also of the nuances of interfaith relations. Here we see that a Muslim geographical writer, a boundary crosser, could write about the two religions in an impartial way and a king could hold a religiously-charged trial while at the same time engaging with a Muslim geographer. Idrīsī described the world primarily though his reading of his Arabic sources, yet he adapted the information that he incorporated into the *Nuzha* in such a way as to present the two religions of Islam and Christianity in an impartial way, one of the few geographies of the Middle Ages to do so. Occasionally, his work is marked with signs of Islam and an admiration for certain aspects of that faith, but at the same time, he also willingly incorporated Christian sources of information in sometimes shocking ways.

Writing Home: Sicily

In his description of his home island of Sicily, Idrīsī found a way to mitigate the dangers of writing his *Nuzha* with a double audience in mind. Instead of centering his account on questions of religion and interfaith relations, he elected to minimize them. When he did mention these questions he treated them in an impartial way, never voicing an opinion one way or the other. Running through his account of the Sicily, however, the reader detects a slight emphasis on the presence of Islam there. This is not to say that he privileged that religion in any way or that he

inscribed Sicily with any deep Islamic rhetoric, but rather that he simply mentioned signs of Islam more frequently than he did signs of Christianity. In other words, he wrote from the perspective of a Muslim, as an inhabitant of Sicily fully aware of its Muslim past and present, willing to mention Islam, yet reluctant to favor it in any way.

This perspective, however, did not hinder Idrīsī from presenting Sicily and its current rulers as a marvel of the Mediterranean. As we saw in Chapter 1, Idrīsī wrote in enthusiastic support of both King Roger and his father, as well as of the king's capital city of Palermo and the island of Sicily. Count Roger I had conquered the island from tyrants and despots and his son, "the glorified" King Roger, had inherited his father's best qualities, improved the governance of his kingdom, and like his father, had defeated enemies and tyrants near and far. That his patron ruled from an island that his father had captured from the hands of Muslim rulers seemed not to trouble Idrīsī at all. Indeed, according to Idrīsī, the island flourished under Roger. As for the island as a whole, he noted that it was a place of abundance, ideally located, full of well-provisioned and well-defended towns and cities, and connected to the rest of the Mediterranean by its numerous ports. Idrīsī, in fact, summed up the island by noting that there "is no place on the face of the earth an island of the sea that contains towns and regions more prosperous" than those of Sicily. As for the capital at Palermo, it was an immense city of beauty, home to the king's powerful fleet, and marveled at and admired by visitors.

Idrīsī also called it the "greatest and highest *minbar* of all the countries of the world." A *minbar* is the pulpit, the raised platform, of a mosque from which solemn announcements and sermons were made to the Muslim community. Idrīsī's use of the term to describe a city is not

⁴ Idrīsī, Opus geographicum, 610

⁵ Idrīsī, Opus geographicum, 590.

unique, nor is this the only place that the term appears in such a usage in the *Nuzha*. For instance, he called Syracuse a "famous *minbar*." In most of his uses, the term appears to be a shorthand for "mosque" or even "civilization," as when he wrote of Barca, a town in modern-day Libya, the "first *minbar*" one encountered on the route from the lands of Egypt to Kairouan. He surely intended it to denote the first sign of civilization after days of travel through the desert, though neither can we rule out "mosque." Here he followed Ibn Ḥawqal nearly word for word, and Ibn Ḥawqal probably learned of this usage of *minbar* from his main source, al-Iṣṭakhrī. In any case, whether Idrīsī intended through his use of the term to compare Palermo to a figurative *minbar*, where the city played the role of the pulpit and perhaps the Mediterranean would be the audience for the messages announced from the city, or whether he used the term to imply that the city was a center of civilization, or a center of Islam (or something entirely different), is unclear. Regardless of the precise meaning, he had learned of this usage through his Arabic geographical sources, and he saw the world in categories he had learned from them. And more to the point, whatever his intentions, the term evokes the mosque.

Elsewhere in his account of Palermo, Idrīsī recalled some of its Islamic history and noted some of its mosques. The capital, he wrote, comprised various districts, two of which he centered on: *al-Qaṣr*, meaning the 'castle or 'palace,' on the outskirts of the city, *Khāliṣa*, meaning 'the elite.' Of *Khāliṣa*, the first thing he noted was that it was the residence of the governor and members of the elite classes "in the days of the Muslims." Meanwhile, along the central thoroughfare in *al-Qaṣr*, the old part of the city and according to Idrīsī a district "famous in all lands," one found impregnable palaces, towering and attractive houses, many mosques, *funduqs*,

⁶ Idrīsī, Opus geographicum, 592

⁷ Idrīsī, *Opus geographicum*, 358

⁸ Idrīsī, Opus geographicum, 590

and numerous bathhouses. In addition to the "many" smaller mosques that he mentioned, the district also contained the "great congregational mosque (al-jāmi 'al-a 'zam), which it was in the past, though today it has reverted to the state it was in previous times." Idrīsī failed to clarify what he meant by this phrasing. What precisely did it mean for the congregational mosque to have reverted to what it had been in previous times? This passage would have been almost certainly incomprehensible to readers unfamiliar with the history of this building. The little information that has survived regarding this "great congregational mosque," happily, permits us to decipher Idrīsī's meaning. According to Ibn Ḥawqal, who visited Palermo in 973 CE, the city contained a "great congregational mosque" which was "formerly a church for the Rūm [the Byzantines] until shortly before the conquest" of the city by the Aghlabids around 831 CE. 10 The building remained a mosque for almost two and a half centuries, until in 1073, a year after the Normans captured the city, when Robert Guiscard converted it into a cathedral dedicated to the Virgin Mother, and in the words of the chronicler William of Apulia, in so doing "what had been the seat of Muhammad and the demon, he [Robert Guiscard] made the house of God and the gate to Heaven for the just." Idrīsī, then, referred to a building that had been a cathedral for nearly a century by the time that he described it in the *Nuzha* as a "mosque." It is extraordinary. He did not bother explaining that under the Byzantines it had been a church or that in his own lifetime it was again church, this time a Latin church. Instead he preferred to recall the Islamic past of the

⁹ Idrīsī, Opus geographicum, 590.

¹⁰ Kramers, 118. Ibn Ḥawqal visited the mosque in person in 973 and described what he saw there as follows: "I estimated that when its congregation was absolutely choking with people it counted 7000 and some-odd men, because it held a maximum of 36 rows for prayer, each of which included no more than 200 men," 121. The mosque no longer stands and even its location is unknown. Alessandra Bagnera has suggested that both written sources and archaeological data located this now-lost building at the site occupied by the present cathedral, which was built in 1185. See "The Urban Evolution of Islamic Palermo," in Annliese Nef (ed.), *A companion to medieval Palermo* (Leiden: E.J. Brill, 2013), 65.

¹¹ Marguerite Mathieu, *Guillaume de Pouille, La Geste de Robert Guiscard* (Palermo, Italy : Istituto Siciliano di Studi Bizantini e Neoellenici, 1961), Book III, lines 332-336, 182-183.

city, a focus that surely would have appealed to Muslim readers of the *Nuzha*. At the same time, however, he admired the building as it was in his day, writing that today it "astonishes the mind with its splendor and craftsmanship," its caprices, inventive figures, gilding, colors, and writing. Here Idrīsī wrote of an ancient Byzantine foundation that had undergone phases of modification first under Muslim rule and its many rulers and later, under the Normans. Whether the writing he praised was in the form of Arabic script or perhaps Greek or Latin inscriptions we cannot say.

In his account of the rest of the island, he further noted a handful of mosques. In Catania, for example, one found both regular, everyday mosques as well as congregational mosques for Friday prayer gatherings. In Butera, in the south of the island, one also found congregational mosques. By contrast, Idrīsī nearly completely ignored the presence of Christian churches. He mentioned only two, and merely in passing. In Catania he related the story of the town having once been known as the "elephant town." Apparently at some point in the past – Idrīsī does not specify the date – a small stone talisman in the form of an elephant rested atop the peak of a tall urban building and hence the name spread to the town. Later, however, this talisman had been moved to the interior of the "church of the monks." The only other church mentioned, the Church of San Marco, is listed merely as a stop on the itinerary from Galati to Caronia in northeastern Sicily; he gave no further details about it. Finally, Idrīsī also claimed that in Scicli, one found the "Spring of Time" ('ayn al-awqāt). Water flowed at this spring only during times

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¹² Idrīsī, *Opus geographicum*, 592.

¹³ Opus geographicum, 592. I have not managed to identify this "church of monks," though it may refer to a Benedictine monastery. Roger I founded a Benedictine cloister in Catania in 1091 or earlier. See Graham Loud, *The Latin Church in Norman Italy* (Cambridge: Cambridge University Press, 2007), 89.

¹⁴ Idrīsī, *Opus geographicum*, 597. Today, some believe that the fishing village of Donna Lucata takes its name from the Arabic 'ayn al-awqāt. See, for instance, Pietro Militello, *Scicli: archeologia e territorio* (Palermo: Officina di Studi Medievali, 2008), 327-328.

of prayer. At all other times, the spring dried up. The reference to prayer times here clearly links this spring to the rituals of Islam.¹⁵

While the depiction of Palermo and Sicily is tilted toward the view from a man interested in the Islamic past on the island and with the markings of the faith in his own time, it is only slightly so. Indeed, Idrīsī gives remarkably little space to religion in his account of Palermo. Hence, while he states uncritically that Roger I conquered the island, the *Nuzha* never clarifies from whom he had conquered it. Probably contemporaries of Idrīsī, at least those who read this text in and around the Mediterranean, knew this history. But still, that he did not preset this as a fall of Muslim rule suggest that he sought to discount that kind of a religious reading of the conquest. We also see, for instance, that Roger I had allowed people in Sicily to maintain their faith in the wake of his conquest, but again, Idrīsī did not bother noting the faith of the people in question. A knowledgeable reader, of course, would have known that he meant Muslims and Jews, but this remained unstated.

Throughout his account of Sicily Idrīsī was reluctant to mention the faith of the island's inhabitants. A few mosques appear, but his overall account came nowhere near to naming all of the mosques on the island. As for churches, only two appear. If we compare his description of Sicily to that of Ibn Jubayr, the late twelfth-century Andalusī traveler and a writer whose every thought seems to have centered on the state of Christianity and Islam, the paucity of such concern in Idrīsī's account becomes still more palpable. Whereas Idrīsī said nothing of the requirement that Muslims pay an extra tax or that the laws regarding conversion on Sicily privileged Christians, Ibn Jubayr maintained a lively and at times vengeful narrative of the

 $^{\rm 15}$ Al-Bakrī wrote of this spring, though he located it near Būna in North Africa.

inequitable conditions under which Muslim lived on the island thirty years later. King Roger had instituted a set of laws around 1140 known as the Assizes which vehemently prohibited Christians from converting to other faiths, including Islam. Meanwhile, Muslims (and Jews) were free to convert to Christianity. Item 13 in the Assizes entitled "About Those Apostatizing," stated that "We curse thoroughly those who apostatize from the Catholic faith. We pursue them with vengeance. We despoil them of all their goods. We withdraw the protection of our laws from those who break a promise or vow, we abolish their right of inheritance and cancel their every legitimate right." The Andalusian traveler could freely write that he hoped Muslims might one day conquer Sicily anew and note "may God relieve the Muslims of his dominance." ¹⁷ He could uninhibitedly write of Christians as pigs, polluters of Muslim space, and worshippers of the cross and to complain that the Muslims of Sicily lived in a state of subordination, inferior to Christians, both Latin and Greek. And yet, unlike Idrīsī, he still found room to praise the beauty of the church of Santa Maria dell'Ammiraglio, the church founded by George of Antioch and built between 1143 and 1151. Ibn Jubayr wrote of it as one of "the most remarkable works of the unbelievers," adding that it was "beyond dispute one of the most wonderful buildings in the world."18

What should we make of Idrīsī's disregard of religious buildings and beliefs of Sicily?

Perhaps we might wonder whether Idrīsī simply ignored the new, spectacular churches in

Palermo because he assumed his most direct audience, that is, Roger and the court, would have already have been familiar with the buildings. He wrote, for instance, that he would not describe

¹⁶ The previous law, Item 12, stated that "No Jew or pagan shall dare either to buy or sell Christian servants." As quoted in "The Assizes of King Roger, Text of Cod. Vat. Lat. 8782," Graham Loud trans., 2004.

¹⁷ Rihlat Ibn Jubayr, 305, 297.

¹⁸ Rihlat Ibn Jubayr, 301.

Syracuse in great detail because it was already a well-known place.¹⁹ But, we can also conclude that Idrīsī either had little interest in viewing the world through the lens of religion, or that he deliberately downplayed such a perspective as a writing strategy. I would suggest that it was the latter: Idrīsī purposefully minimized the markings of religion in this account of Sicily so as to make it palatable for his Christian and Muslim double audience. And in fact, in the other portions of the *Nuzha* examined in this chapter, we will see a similar reluctance to emphasize religious distinctions. Moreover, King Roger had an interest in downplaying religious disparity and interfaith tension. As Idrīsī noted in the preface of the *Nuzha*, Roger "has brought to his domains the most perfect order and the most beautiful harmony."²⁰

Instead of an image of Sicily dictated by religion and religious difference, Idrīsī instead centered on a commercial view of the island and its towns. Over and over he noted the *khāns* and *funduqs* that lined the streets of the island's cities and towns. In particular these institutions which frequently offered storage, lodgings, and security to travelers and merchants from abroad, appeared in towns along the coast.²¹ In his account of a nearly every city, town, and village of Sicily, whether he devoted several paragraphs or just a sentence or two to them, Idrīsī mentioned something of the town's economic situation. Sometimes this meant that he could only mention orchards or farms that lay either within or beyond city walls. At other times, he noted mills, watermills, the fishing industry, cloth production, and so on. Many of the towns along the coast,

¹⁹ Idrīsī, *Opus geographicum*, 593. But Idrīsī also write this elsewhere in the *Nuzha*; such a claim is not unique to Syracuse or Sicily.

²⁰ Idrīsī, *Opus geographicum*, 5.

²¹ On these institutions in the Mediterranean, see Olivia Remie Constable, "Funduq, Fondaco, and Khān in the Wake of Christian Commerce and Crusade," in Angeliki E. Laiou and Roy Parviz Mottahedeh (eds.), The Crusades from the perspective of Byzantium and the Muslim World (Washington, DC: Dumbarton Oaks Research Library and Collection, 2001), 145-156; Olivia Remie Constable, Housing the stranger in the Mediterranean world: lodging, trade, and travel in late antiquity and the Middle Ages (Cambridge: Cambridge University Press, 2004). See also, EI² s.v. "Khān" (N. Elisséeff) and "Funduk" (R. Le Tourneau).

he added, traded with lands across the Mediterranean, regardless of confessional inclinations. The impression of the twelfth-century Mediterranean, then, is of a place more concerned with commerce than with religious distinction and hostilities. He emphasized the extensive, Mediterranean-wide commerce that linked Sicily to the rest of the sea. He noted, for instance, that the town of Trabia $(T.r.b\bar{\iota}'a)$, less than a day's walk east of Palermo, exported "exported *itriyya*," a kind of pasta made from wheat,²² "to all horizons, including all of the towns of Calabria and to the Muslim lands $(bil\bar{a}d\ al-muslim\bar{\iota}n)$ and Christian lands $(bil\bar{a}d\ al-na\bar{\imath}a\bar{\imath}a\bar{\imath}a)$ and take from them much cargo."

Muslim Lands, Christian Lands

While in his account of Sicily Idrīsī devoted few words to religion and interfaith relations, Islam and Christianity nevertheless comprise important categories of his understanding of space and time and hence are central to his portrayal of the world in the *Nuzha*. Indeed, even if Idrīsī sought to limit his use of such categories, they nevertheless mark his text. His remark that Trabia exported pasta to "Muslim" and "Christian" lands reveals this. That he differentiated space and time by means of religious categories should not surprise us. After all, the world he inhabited was divided, at least in part, along such lines. The lands along the southern shores of the Mediterranean were inhabited primarily by Muslims governed by Muslim rulers. Along the northern shores to the sea, Christianity dominated. And in al-Maghrib al-Aqṣā, the western Maghrib, where he claimed to have traveled, just as in Sicily, he doubtless would have

²² The Arabic "*iţriyya*" almost certainly derives from the Greek "*iţrion*." On *iţriyya* see Silvano Serventi and Françoise Sabban, and Anthony Shugaar (trans.), *Pasta: The Story of a Universal Food* (New York: The Columbia University Press, 2002), 28-32.

²³ Opus geographiicum, 599.

encountered a society organized, in part, according to religious categories, with a generalized hierarchy of faiths engrained in law. That is, in the Maghrib, Christians and Jews paid special taxes, whereas in Sicily, Muslims did. Moreover, some Muslim legal scholars had posited juridical categories that organized territory according to its relations to Islam. Those lands that were considered the abode of Islam and embraced Islamic law comprised the *Dār al-Islām*. But jurists defined against this abode the *Dār al-Ḥarb*, the 'abode of war,' sometimes referred to as the *Bilād al-Kufr*, the 'territory of unbelief.²⁴ We do not know whether Idrīsī was familiar with these categories - they certainly do not appear in his geography – but he nevertheless inhabited a world in which these categories had been imposed.

Idrīsī, then, surely saw the use of religious categories in society. His reading of Arabic geographical works would only have served to reinforce them. His relatively frequent use of phrases like "the lands of Islam" and "Muslim lands" mirrored that of his sources and he employed them interchangeably. Qudāma ibn Ja'far (d. 939-40 or 948), for example, had written of both the "lands of Islam" and the "realm (mamlaka) of Islam." The Euphrates River (al-Furāt) he wrote, began in the "lands of the Rūm" (Bilād al-Rūm), entered the "lands of Islam" at Siirt (Si'irt), Malatya (Malatya), and Arsamosata (Shimshāt) in southeastern Anatolia, and traveled another 623 miles before reaching Baghdad. Qudāma also located the capital of the "realm of Islam" in Iraq. ²⁵ Ibn Ḥawqal, as we have seen, dedicated his work to describing the "realm of Islam," though he also repeatedly turned to alternative wording, including the phrase "lands of Islam" in the Ṣūrat al-ard. The other category that Idrīsī employed, the "Christian lands," appears only once in the Nuzha and infrequently in contemporary Arabic literature, whether

²⁴ Jurists of the Shāfi'ī school of law added to the $D\bar{a}r$ al-Islām- $D\bar{a}r$ al-Ḥarb division a third category, that of the Dar al-Ṣulḥ or $D\bar{a}r$ al-'Ahd, the "territory of treaty."

²⁵ De Goeje, *Bibliotheca geographicorum Arabicorum*, Vol. 6, 233-234.

geographical or otherwise, and we will take up this phrase after examining Idrīsī's conception of the "lands of Islam."²⁶

Might Idrīsī have gotten the phrase "Christian lands" from, say, a Latin source during his time in Sicily? To judge from the *Otia Imperialia* (ca. 1220 CE) of Gervase of Tilbury, the answer is no. Gervase spent remarkably little time describing or discussing relations between Islam and Christianity. And in those cases when did mention these, he did so as simply part of his narrative. Consider, for instance, his account of the eighth-century Berber-Arab conquest of the Iberian Peninsula. Recounting the history of the Goths, he wrote that they chose "Roderic as their king, but he was defeated in an encounter with the pagans. And so the kingdom of the Goths in Spain came to an end, with the Saracens gaining possession of the whole of Spain within two years." In the next paragraph he noted that in the time of the Byzantine emperor Constantine V, "Bordeaux was being besieged by Abd-ar-Rahman ['Abd al-Rahmān], king of Spain, and the city of Arles with the rest of its provinces was also hard-pressed by the pagans." But Charles the Great (Charles Martel) had "defeated the pagans on the outskirts of Poitiers, put them to flight, and then made a triumphal return to Francia amid much rejoicing."²⁷ Rather than categorizing space according to a religion, as in Christian lands, Gervase rather categorized space by peoples. The Muslims in Iberia were "Saracens" and "pagans," and occasionally "Arabs," but the lands they had conquered were simply land. In his accounts of the Crusades,

²⁶ In fact, the only other uses of this phrase that I have found date from several centuries after the life of Idrīsī. See, for instance, Nabil Matar, *Europe through Arab eyes*, 1578-1727 (New York: Columbia University Press, 2008), 91, and Matar (ed. and trans.), *In the Lands of the Christians: Arabic Travel Writing in the 17th Century* (New York: Routeledge, 2003), xxii. Note that the appearances of this phrase *bilād al-naṣārā* in these texts are from the pen of Matar, not from early modern sources. The historian of Tlemcen Aḥmad b. Muḥammad al-Maqqarī (ca. 1578-1632 CE) used the phrase three times in his enormous compilation of historical and literary data, poetry, and letters drawn from a variety of works, the *Nafḥ al-tīb min ghuṣn al-Andalus al-raṭīb wa-dhikr wazīrihā Lisān al-Dīn Ibn Khaṭīb*. He uses the "land of Christians" in describing Muslim travels to the Iberian peninsula, Tome 2, Première Partie, ed. R.A. Dozy (Leiden: E.J. Brill, 1858), 128, 142, 146.

²⁷ Gervase of Tilbury, *Otia imperialia*, S.E Banks and J.W. Binns (eds.) (Oxford: Clarendon Press, 2002), 392-395.

which again, occupy only few scattered pages, he focused on the individuals involved, at least on the Christian side. And thus, we see "Robert, duke of Normandy," as "one of the foremost among those who undertook the pilgrimage to Outremer at the instigation of the most holy Urban II."²⁸ Though he fought there, at least "where there was fighting to be done for Christ," under clear religious motivations – indeed, it was a "pilgrimage," the land itself was neither Christian nor Muslim.

The point here is that the categories through which Idrīsī described his world had reached him through societal and textual means. Exactly what he intended to signify by "Muslim lands" and "Christian lands" is not entirely clear. One suspects that the two phrases denote separate regions where rulers considered themselves either Muslims or Christians, but Idrīsī never clearly specified which characteristics permitted a particular place to be categorized as, say, part of the lands of Islam, nor did he identify where these lands lay. Consider again his account of Sicily. Even Sicily, his place of residence, remained ambiguously categotized as part of the "Muslim" or "Christian" lands. On the one hand, he noted more mosques than churches and asserted that "in the days of the Muslims" the ruling elite of Sicily had lived in the Palermitan neighborhood of Khālisa, tacitly suggesting that the island was no longer part of the "Muslim lands." On the other hand, he clearly placed the Christian King Roger at the head of the island. The status of the island, however, remained unresolved. Hence, while he used certain categories that he had encountered in Arabic geography, among them the "lands of Islam," and used them in his text, when it came to classifying lands as belonging to these categories he was remarkably ambivalent.

²⁸ Otia imperialia, 478-481. The Robert mentioned here is Robert Curthose, duke of Normandy, 1087.

²⁹ Opus geographicum, 590.

"Muslim Lands"

Idrīsī's reluctance or perhaps even inability to define explicitly what he meant by Muslim and Christian lands contrasts with his Arabic sources. Ibn Ḥawqal, for instance, presented his readers with a clear definition of what he considered to be the territory of Islam. He contended that

in our time, the length of the realm of Islam, from the border of Farghāna across Khurāsān, al-Jibāl, Iraq, the Arabian Peninsula to the coasts of Yemen, amounts to a journey of about five months. In width, from Byzantium (*balad al-Rūm*), crossing Syria, al-Jazīra, Iraq, Fārs, and Kirmān to the land of al-Manṣūra, along the Persian Sea, is about four months. In this account of the length of Islam I have omitted mention of its [western] boundary of the Maghrib and al-Andalus. This is because it [the west] is like the sleeve of a robe and in its eastern and western parts there is no [true] Islam, because if you have passed Egypt into the land of the Maghrib to the south are the lands of the Blacks and to the north the Sea of the Rūm [the Mediterranean] then the land of the Rūm. But if it is appropriate to consider the length of Islam from Fargāna to the land of the Maghrib and al-Andalus, then it would amount to a journey of three hundred stages.³⁰

He further noted that what permitted him to classify these lands as part of the realm of Islam was that while their inhabitants may have spoken a variety of languages, they were nevertheless united in that they practiced the same religion and submitted to the same (unspecified) ruler.³¹ To be sure, Idrīsī's conception of an Islam somehow unified was an idealized view. Even taking into account that Ibn Ḥawqal had himself drawn his definition of the *mamlaka* directly from the earlier *Book of Routes and Realms* of al-Iṣṭakhrī (d. 957 CE), probably composed late in the first

³⁰ Kramers, *BGA* 1938, 16-17. I have based my translations on those of Michael Bonner, however I have modified some of the passages in minor ways. See, too, André Miquel's trans., Appendice I, *La Géographie humaine du monde musulman jusqu'au milieu du 11^e siècle, Géographie et géographie humaine dans la littérature arabe des origines à 1050* (Paris: Mouton & Co., 1967), 383. Ibn Ḥawqal lifted this definition of the *mamlakat al-Islām* nearly word for word from al-Iṣṭakhrī (d. 957 CE), though he did add the phrase "in our time" which has the effect of granting the passage a kind of authorial veracity. Also, whereas al-Iṣṭakhrī wrote that a journey from Farghāna to al-Andalus extended across three hundred and ten staged, Ibn Ḥawqal measured this – probably an error in copying – as a journey of three hundred stages. See al-Iṣṭakhrī, de Goeje (ed.), *BGA*, Vol. 1 (1870), 11-12.

³¹ Here Ibn Hawqal again followed al-Iştakhrī. Cf. Al-Iştakhrī, de Goeje (ed.), BGA, Vol. 1, 8-9.

half of the tenth century, this view of the lands of Islam as a unity may strike us as odd.³² The lands were neither politically nor religiously united: by 929 CE, the *mamlaka* was divided among three rival caliphates of the Umayyads of Córdoba, the 'Abbāsids of Baghdad, and the Fāṭimids of (eventually) Cairo, two of them Sunni and one Shiite.

In this conception of the lands of Islam as a single, unified space within which Islam flourished, boundaries of the "realm" played a critical role. Frontiers not only separated the civilized lands of Islam from the lands of Unbelief, but in so doing, they created a sense of unity and territory in that they generated a perception of a world defined as 'us' versus 'them,' of Muslim against infidel. Early in the history of Islam these frontiers took on a specific vocabulary. As Arab Muslims expanded out of the Arabian peninsula in the seventh and eighth centuries, they confronted peoples who had not accepted Islam, and in a number of places frontiers were established. That frontier between the Byzantines and Arabs took the name of thughūr (thaghr, sing.). The term literally refers to gaps, breaches, mountain passes, or the [spaces between] the front teeth, but it came to denote the fortresses – usually fortified towns – that stood at entry points along frontiers between the Dār al-Islām and the Dār al-Ḥarb.³³ Later, other frontiers of the Dār al-Islām were commonly referred to as thughūr, for instance in Transoxiana, in al- in al-Andalus, and elsewhere.³⁴ Frequently these frontier towns hosted a

³² On the date of the text, see *EI*² s.v. "al-Iṣṭakhrī (André Miquel). For details on the relationship between Ibn Ḥawqal and al-Iṣṭakhrī see André Miquel, *La Géographie humaine du monde musulman jusqu'au milieu du 11e siècle, Géographie et géographie humaine dans la littérature arabe des origines à 1050 (Paris: Mouton & Co., 1967), 367-390.*

³³ Hārūn al-Rashīd is frequently credited with the creation of this frontier district in the late-eighth century, though Bonner has shown that the formation of this district is best understood "as the result of a long process." See Bonner, *Aristocratic Violence and Holy War*, 144-147; Bonner, "Naming the Frontier," entire article, as quoted page 19. See also *EI* s.v. "al-'Awāṣim" (Streck); *EI*² s.v. "al-'Awāṣim" (M. Canard).

³⁴ On the definition of thaghr, thughūr, see Michael Bonner, Aristocratic Violence and Holy War, Studies in the Jihad and the Arab-Byzantine Frontier (New Haven: American Oriental Society, 1996), 188. More generally, on frontiers in Islamic history, see Michael David Bonner, "The Naming of the Frontier: 'Awāsim, Thughūr, and the Arab Geographers," Bulletin of the School of Oriental and African Studies, 57, no. 1 (1994): 17-24; Bonner, Aristocratic Violence and Holy War: Studies in the Jihad and the Arab-Byzantine Frontier (New Haven: American

 $rib\bar{a}t$, a fortified defensive building at which the $mur\bar{a}bit\bar{u}n$, volunteers who participated in defensive warfare, were posted. The $thugh\bar{u}r$, then, describe places where the lands of Islam met the lands of unbelief and marked a site of defense against outside threats as well as the staging points for raids and incursions into the $D\bar{a}r$ al-Harb.

These frontiers are a common theme in Arabic geographical writing. The ways in which individual writers treated these frontiers offers insight into how they understood the nature of Islam. Qudāma ibn Ja'far, for instance, dedicated a chapter to the frontiers of Islam (thughūr al-Islām) in which bluntly stated that Islam was surrounded on all sides by people hostile to it.³⁶ Ibn Ḥawqal, too, repeatedly described the frontiers. Even without digging deeper into his text, we can see that Qudāma, for instance, did not have a positive view of those peoples who lived byond the realm of Islam. Idrīsī surely noticed this when he consulted Qudāma's text, and in deciding how he would present the frontiers in his own work, he disregarded Qudāma as a model. Rather, Idrīsī turned to the tenth-century work of Ibn Ḥawqal for guidance in describing the frontiers. He repeatedly excerpted descriptions of them from the Sūrat al-ard, from the Byzantine-Arab thughūr to Transoxiana to the frontiers of Uzbekistan and Afghanistan, and even the frontier between Egypt and Nubia. And yet, Idrīsī always modified his source, and the way in which he did so followed a pattern in that Idrīsī always jettisoned talk of jihād and infidels and murābitūn.

Consider Ibn Ḥawqal's account of the frontier post (*thaghr*) of Ghūr in al-Dāwar, a region in present-day Afghanistan. He noted that Ghūr was a fertile region as well as "an abode

Oriental Society, 1996); R.W. Brauer, "Boundaries and Frontiers in Medieval Muslim Geography," *Transactions of the American Philosophical Society* 85, no. 6 (1995), 1-73; A. Asa Eger, *The Islamic-Byzantine Frontier, interaction and exchange among Muslim and Christian communities* (New York: I.B. Tauris, 2015).

35 EI² s.v. "Ribāt" (Nasser Rabat).

³⁶ Qudāma b. Ja'far, *Kitāb al-kharāj wa-ṣinā'at al-kitāba*, *BGA* vol. 6, partial edition by M.J. de Goeje (Leiden : Brill, 1889), 252-266.

of infidels" (*dār al-kufr*) and a "region of unbelief" that was "surrounded by Muslims." He implied that because it was surrounded by Muslims it would soon become part of the "realm" of Islam.³⁷ For his part, Idrīsī took his description of this frontier straight from the pages of Ibn Ḥawqal's text. Like his source, he wrote that al-Dāwar is "the name of a fertile region and a frontier post (*thaghr*) of Ghūr." He extracted this word for word from Ibn Ḥawqal. And yet, nowhere did he write of "infidels" or of "unbelief," or even of the region "surrounded by Muslims." Rather, he removed all of this from his account with the result that his description of this frontier reads more as a disinterested report of the geography and people of this region than a discourse on the lands of Islam, their defense, their expansion, and the infidels that stood in opposition to it. And moreover, he described a frontier of Islam that had long since ceased to play the role of a frontier; the anonymous author of the *Ḥudūd al-ʿĀlam* ('Limits of the World'), a Persian geography written toward the end of the tenth century, noted that already in his time the majority of its inhabitants had embraced Islam.³⁹

Though Idrīsī based most of his descriptions of the frontiers of Islam on those of Ibn Ḥawqal, he stripped away nearly all of his source's discussion of institutions central to the defense and expansion of the lands of Islam. He frequently eliminated references to *ribāṭs* and questions of belief versus unbelief that characterized Ibn Ḥawqal's frontiers. Indeed, the word *jihād* never appears in the *Nuzha*! Consider Ibn Ḥawqal's account of the frontiers of Transoxiana, in which repeatedly mentioned the lands beyond the *thughūr* there as part of the

³⁷ Kramers, *BGA*, Vol. II-1, 444. Neither al-Ya'qūbī nor Qudāma call this a thaghr, nor do they call it the land of kufr (infidels).

³⁸ wa-huwa thaghr lil-Ghūr, Idrīsī, Opus geographicum, 455.

³⁹ The people Ghūr presumably continued to accept Islam during the eleventh century under the Ghurids, a dynasty that had converted to Sunni Islam in the early eleventh century after the conquest of Ghor by the Ghaznavids. See EI^2 s.v. "Ghūrids" (C.E. Bosworth) and EI^2 s.v. "Ghūr" (A.D.H. Bivar).

"Abode of Unbelief." He praised the people of the region for "their courage and valor," noting that "no region in Islam has a greater share in *jihād* than theirs. This is because all the territories in Transoxiana are very close to the Abodes of War (dūr al-ḥarb)."41 He praised the inhabitants of the region for spending their money on building ribāts, on the upkeep of roads, and on waafs "for the sake of jihād." He reported that he had been informed that the region "has over ten thousand *ribāts*."43 He noted other frontier posts in the region, notably writing that "Transoxiana in its entirety consists of frontier posts (thughūr) subject to raiding by the Turks. Its inhabitants may be called up and mobilized for military service at any time, morning or evening."44 The Muslims of Transoxiana, he wrote, comprise a "border district facing the Turks: they block [their entrance] into the abode of Islam and prevent them from violating it."⁴⁵ In short, Ibn Hawqal wrote with pride of the strength of the frontier and devotion of the Muslims who guarded it. As for Idrīsī, he again built his own description of this frontier from that of Ibn Hawqal, and again, he eliminated all references to ribāṭs, waqfs, the Abode of Unbelief and the Abode of War, and he of course jettisoned all mention of *jihād*. Moreover, in Transoxiana, Idrīsī was again guilty of anachronistically presenting a region, in this case Shāsh, as a contemporary frontier of Islam when in fact it had long-since been ruled by dynasties professing Islam.⁴⁷

⁴⁰ The towns of Wakhsh and Khuttal, along the Oxus River, are "abodes of unbelief," a place where Muslims captured slaves for export. And later, if one traveled to the eastern reaches of the province of Farghāna, one traveled "in the direction of the Abode of Unbelief." Kramers, *BGA*, Vol. II-1, 476, 513.

⁴¹ Kramers, *BGA*, Vol. II-1, 467.

⁴² *Waqf*, the pious act of donating a building, land, or money for religious or charitable purposes. See *El*² s.v. "Wakf" (R. Peters, Doris Behrens-Abouseif, D.S. Powers, A. Carmona, A. Layish, Ann K.S. Lambton, Randi Deguilhem, R.D. McChesney, et al.)

⁴³ Kramers, *BGA*, Vol. II-1, 466.

⁴⁴ Kramers, *BGA*, Vol. II-1, 467. He added that the people of Isfijab comprise a frontier post (thaghr) against the Ghuzziyya Turks, that the farthest reaches of Farghāna form a frontier against the Kharlikhiyya, and that the entire land of the Ghuzziyya is a frontier zone (thaghr), 467, 480.

⁴⁵ Kramers, *BGA*, Vol. II-1, 467.

⁴⁶ Idrīsī, Opus geographicum, 487.

⁴⁷ By the twelfth century much of the population had embraced Islam under the numerous rulers of the region, including Qara Khitai, the western Mongolic Qitans who conquered much of Transoxiana in 1141. *EI*² s.v.

Idrīsī's image of the lands of Islam and its boundaries was profoundly shaped by that of Ibn Ḥawqal. The frontiers of Islam that he delineated along the old Byzantine-Arab borderlands, in Transoxiana and other eastern points, and even to the south, between Egypt and Nubia, portrayed a world as Ibn Ḥawqal had described in the Ṣūrat al-ard in about 988. But Ibn Ḥawqal inhabited a world and dwelled in circumstances vastly different to those experienced by Idrīsī. He wrote from a position of confidence, from a formidable place within the mamlakat al-Islām, and from the outset he undertook to describe that realm. This permitted him to emphasize the faith of the inhabitants of the mamlaka, praising them for their participation in ribāṭ and jihād, admiring them for their protection of Islam against the abodes of unbelief. In fact he set out to specify which parts of these or those lands belonged to Islam and celebrated those moments "when the realm of Islam incorporated parts of these [non-Muslim] realms into itself," and thereby "increased in size and acquired ever more honor and greatness." "49

Meanwhile, Idrīsī wrote his description of the world from a Christian court in Palermo. He had traveled little and perhaps even lacked access to long-distance merchants and other wanderers who could tell him of the contemporary condition of the edges of Islam or at least of the parts of the world that his written sources had identified as comprising the edges of Islam. Thus he relied on his written sources to learn about and to present the world, and in terms of the frontiers of Islam, Ibn Ḥawqal was by far his favorite source. Perhaps Ibn Ḥawqal's extensive experience as a traveler that made him Idrīsī's authority *par excellence* regarding the distant lands of Erzerum, Ghūr, Nubia, and elsewhere. By following Ibn Ḥawqal so closely, however, Idrīsī repeatedly presented obsolete frontiers of Islam and revealed his limited awareness of their

[&]quot;Ta<u>sh</u>kent" (W. Barthold); s.v. "Sal<u>d</u>jūķids" (R. Hillenbrand, J.M. Rogers, C.E. Bosworth, F.C. Blois, R.E. Darley-Doran); s.v. "Ķarā <u>K</u>hiṭāy" (C.E. Bosworth); and *Encyclopaedia Iranica* s.v. "Qarā <u>K</u>eṭāy" (István Vásáry).

⁴⁸ El² s.v. "Ibn Ḥawkal" (André Miquel).

⁴⁹ Kramers, *BGA*, Vol. II-1, 7, 10.

limits in his own time. Outdated or not, Idrīsī followed Ibn Ḥawqal in describing the frontiers of Islam. So But why would Idrīsī reproduce descriptions of the *thughūr* far to the east of Sicily and yet find it necessary to remove language of *jihād* and unbelief? Idrīsī himself did not give an answer, though as a client of a Christian king, he could not, even had he so desired, present the religion of Islam as *the* orthodox system of belief, surrounded by an Abode of Unbelief. Such a representation would have been unacceptable to his sponsor's view of the world. For the court, unbelief was defined against Christianity, not Islam. And so, while Idrīsī could write about the *thughūr* as the frontiers of Islam, he could not make the claim that those frontiers separated an abode of belief from one of unbelief.

This is not to say that Idrīsī did not label any peoples with the title of "unbeliever." The lands of the "Lamlam" in the Sudan in western Africa "are Jews, who predominantly profess unbelief (*kufr*) and ignorance." Just to the east, he noted that to the south of the town of Ghāna, one encountered the "land (*ard*) of unbelief among the Lamlam and others." The lands of the Zanj, on the eastern coast of Africa, and the people of the cities of Qarnūa⁵³ and Badhūna are labelled unbelievers. And Idrīsī wrote that he would begin his description of the seventh section of the first climate with the "unbelieving lands of the Blacks." People beyond Africa could also be unbelievers: he wrote of the "unbelieving Turks" of Kashmir and, in southern China, he asserted that the people of a city that he called Isqīrā worshipped idols and were

 $^{^{50}}$ Idrīsī did not incorporate all of the frontiers described by Ibn Ḥawqal. Many more frontiers appear in the Surat alard than the Surat alard than

⁵¹ Opus geographicum, 22.

⁵² Opus geographicum, 105.

⁵³ Qarnuwwa?

⁵⁴ Opus geographicum, 62.

⁵⁵ Opus geographicum, 110.

⁵⁶ Opus geographicum, 184.

unbelievers.⁵⁷ But all of these peoples that he labeled as unbelievers lived far from Idrīsī's Mediterranean home, universally in the southern reaches of the world, in the first and second climates. Moreover, they were unconverted peoples and certainly not Christians, but none of them, at least according to Idrīsī's account, were defined as places of unbelief set off against the lands of Islam.

Lands of the Rūm

If Idrīsī failed to clearly define what he meant by the "Muslim lands," what about that other export target of *itriyya*, the Sicilian pasta of Trabia, namely the "Christian lands?" Here we immediately encounter a difficulty: the phrase only appears once in the *Nuzha*. Nor does it appear, at least to my knowledge, in other works of Arabic geography (or in works of Latin geography from the period). Whether Idrīsī came across this category in one of his sources that has not survived to the present or perhaps from conversations with people in Sicily, we cannot say. That it appeared only once suggests, however, that it was not one of the primary categories through which he viewed the world. That said, given his use of the phrase in a Mediterranean setting, we can assume that for him it connoted the lands of Europe. Rather than investigating his one use of the phrase "Christian lands," here we will instead examine a category to which he repeatedly referred, the "lands of the *Rūm*," which overlapped with the territory of Europe. We will first consider Idrīsī's definition of the term and of the "lands of the *Rūm*," for he did not have a simple territory-based meaning in mind. We will then examine his use of the terms *Rūm* and lands of the *Rūm* to describe Europe. Though much of his knowledge of his lands depended

⁵⁷ Opus geographicum, 205.

on exchanges with travelers at Roger's court, he nevertheless continued to think of them in categories derived from his Arabic geographical sources.

The $R\bar{u}m$ and their lands had long played an important position in Arabic geographical writing. But before discussing the ways in which geographers had imagined them, we must first step back and very briefly consider the broader use of $R\bar{u}m$ in Arabic letters. In first centuries of the Common Era, the Arabian peninsula was surrounded by Roman provinces. In the earliest sources, these Romans, and the later Byzantines, were referred to as $al-R\bar{u}m$. The term almost certainly derives from the name by which the Romans and Byzantines had called themselves, Romānus, Romānī in Latin and Rhōmaíoi in Greek. The Qur'ān recorded this usage, in $s\bar{u}ra$ 30, entitled $al-R\bar{u}m$, in which the term clearly refers to the Byzantines though it also appears frequently across all genres of early Arabic literature. The surrounded by Roman provinces are surrounded by Roman provinces. In the earliest sources, these Romans, and the later Byzantines, were referred to as $al-R\bar{u}m$.

In early Arabic geographical writing, $R\bar{u}m$ referred to the Byzantines. In Ibn Khurradādhbih's *Book of Routes and Realms*, for example, they appear as such. But Ibn Khurradādhbih briefly discussed the genealogy and history of the Roman Empire and in these sections of his text he called the Romans of the west by the name $R\bar{u}m$. He also explained that the empire had begun in Rome ($R\bar{u}miyya$) and in Sicily. ⁶⁰ Rome, he noted, was the residence of 29 kings, while two later ones lived in Nicomedia and then two more in Rome. Finally, Constantine the Great, after having his court in Rome, moved it to Byzantium (Bizantiya) and called it Constantinople, which, he

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⁵⁸ Daniel König, *Arabic-Islamic views of the Latin West* (Oxford: Oxford University Press, 2015), 114-115.

⁵⁹ For a discussion of early use of the term $R\bar{u}m$ in Arabic literature, see König, Arabic-Islamic views of the Latin West, 114-125. For introductory essays on the $R\bar{u}m$ in Arabic geography see Koray Durak, "Who are the Romans? The Definition of $Bil\bar{u}d$ al- $R\bar{u}m$ (Land of the Romans) in Medieval Islamic Geographies," Journal of Intercultural Studies Vol. 31, No. 3, June 2010, 285-298; Manuela Marin, "'R $\bar{u}m$ ' in the Works of Three Spanish Muslim Geographers," Graeco-Graeco

⁶⁰ Idrīsī's description of Rome closely followed that of Ibn Khurradādhbih.

concluded, remains the capital of the $R\bar{u}m$.⁶¹ And he scattered details throughout his work about the Roman or Byzantine empire (he did not clearly distinguish between them).⁶² For example, he wrote that the inhabitants of the "people of the Maghrib" (*ahl al-Maghrib*) and the Copts were once under the rule of the $R\bar{u}m$.⁶³ His knowledge of the western reaches of the Roman Empire and of Europe in general, however, was meager. But historical notions of the $R\bar{u}m$ influenced Idrīsī. Moreover, another of Idrīsī's named Arabic sources, al-Mas'ūdī (d. 956 CE) wrote at length of the history of the $R\bar{u}m$ in his geographical and historiographical work *Meadows of Gold and Mines of Gems*.⁶⁴

Ibn Ḥawqal had a much different notion of the $R\bar{u}m$ and their territory than had Ibn Khurradādhbih. Whereas the earlier writer considered the $R\bar{u}m$ to be inhabitants of the lands of the Byzantine Empire, Ibn Ḥawqal envisioned them as spread across Europe. He wrote,

The genuine Byzantines extend from the border of Rome ($R\bar{u}miya$) to that of the Slavs. The [peoples] I have included together with Byzantium [$bil\bar{u}d$ al- $R\bar{u}m$], such as the Franks, Galicians, and others, speak a variety of languages but are united in their religious and political allegiance, just as the realm of Islam has a plurality of languages, but is still one single region [balad $w\bar{a}hid$]. 65

Ibn Ḥawqal, then, conceived of the lands of the $R\bar{u}m$ as a unified polity, a "realm" (mamlaka). Exactly which single political and religious allegiance he had mind for the $R\bar{u}m$ is unclear. He may have had in mind, for instance, allegiance to the pope or perhaps the patriarch of Constantinople. There are, of course, many possibilities, but Ibn Ḥawqal provided little clarity

⁶² That said, in a short section in his text on the various titles used by rulers across the world, Ibn Khurradādhbih noted that the ruler of the $R\bar{u}m$ used the name $qay\bar{s}ar$ (Caesar), but more precise was the name $b\bar{a}s\bar{\imath}l$ (Basileus). De Goeje, BGA, Vol. 6, 16.

⁶⁴ For discussion of al-Mas'ūdī and the *Rūm*, see König, *Arabic-Islamic views of the Latin West*, 125-129.

⁶¹ De Goeje, *BGA*, Vol. 6, 104.

⁶³ De Goeje, *BGA*, Vol. 6, 83.

⁶⁵ Kramers, *BGA* 2, 13-14. Here I follow Michael Bonner's translation with slight modification. I add, however, that Ibn Ḥawqal's definition of the Byzantines derives directly from that of al-Iṣṭakhrī. Compare de Goeje, *BGA*, Vol. 1, 5.

here, perhaps through lack of familiarity with the subject. Yet he provided firm geographical boundaries for what he called the "realm" of the $R\bar{u}m$. This was bounded to the east by the lands of Islam and to the west and south by the Surrounding Ocean. Here, then, the lands of the $R\bar{u}m$ appear to be coterminous with Europe (this latter term, 'Europe,' never appears in Ibn Ḥawqal's work). If Ibn Ḥawqal had expanded the lands of the $R\bar{u}m$ far to the west, his geography placed far less emphasis on the history of the $R\bar{u}m$ than had those of Ibn Khurradādhbih and al-Mas'ūdī.

As for Idrīsī, his conception of the $R\bar{u}m$ combined the approaches of both Ibn Khurradādhbih and Ibn Ḥawqal, taking a historical conceptualization from the former and a geographical extent from the latter. Unlike Ibn Ḥawqal, however, Idrīsī was not one to provide his readers with clear definitions. He did not state whether he believed the $R\bar{u}m$ formed a single "realm," although since he never used that term to describe their lands, he almost certainly did not hold this notion. In fact, he used the phrase "realm of the $R\bar{u}m$ " only once, and that to refer to the Byzantine Empire. ⁶⁷ Nor did he clearly denote the geographical extent of the lands of the $R\bar{u}m$; for Idrīsī, they lived across a vast, sometimes disconnected expanse, including in the Iberian Peninsula, in the lands of France, across the Italian Peninsula, dotting other parts of Europe, and of course, in the Byzantine lands and even along the Black Sea. Consider the city of Troyes, which Idrīsī located within the lands of France and identified as an important city of the $R\bar{u}m$. Elsewhere he discussed other parts of France as inhabited by the Franks. Were the Franks also part of the Rūm? Based on Idrīsī's description of these lands and his unwillingness to provide a clear definition of his terms, readers are left wondering. Amid this confusion, other parts of Europe were apparently not inhabited by $R\bar{u}m$. They do not, for example, appear in the

⁶⁶ Kramers, BGA 2, 11.

⁶⁷ Idrīsī, Opus geographicum, 804.

⁶⁸ Idrīsī, *Opus geographicum*, 889.

British Isles, nor in the far northern reaches of Europe and the German lands were inhabited by Germans, not $R\bar{u}m$. King Roger appeared as a "Frankish" ruler, superior to the king of the $R\bar{u}m$.⁶⁹ And yet, the lands of Normandy may well have been part of the lands of the $R\bar{u}m$: Idrīsī identified lands near Normandy as belonging to the $R\bar{u}m$, but is less clear as to whether the region of Normandy classified as part of that territory.⁷⁰ His is a confusing depiction of the $R\bar{u}m$. But in Europe we also encounter various groups in parts of southeastern Europe, among them Slavs, Dalmatians, and even Venetians.

In all, the *Nuzha* presents a confused understanding of the various groups that inhabited Europe at the time. Paradoxically, this may have been a consequence of Idrīsī's greater access to information of the geography of the small continent, thanks to his association with the Sicilian court, than his Arabic sources. In contrast to Idrīsī, Ibn Ḥawqal had been able to neatly characterize the lands of Europe as belonging to the *Rūm*. To be sure, other groups such as Franks, Galicians, Slavs, and others lived there, but because Ibn Ḥawqal had little information on the lands and peoples of Europe, in particular Western Europe, he could present the continent in simplified terms. It appears as an uncomplicated place, ruled by a single ruler, because of Ibn Ḥawqal's limited understanding of the lands and groups that live there. For Idrīsī, however, the lands of Europe were a complicated mix of peoples and kingdoms and political alliances. Aside from his reluctance to give clear definitions, if he presented the lands of Europe in a confused way, it was almost certainly because it in fact comprised a complicated mix of peoples.

⁶⁹ Idrīsī, Opus geographicum, 5.

⁷⁰ Idrīsī, *Opus geographicum*, 865.

But Idrīsī's notion of the $R\bar{u}m$ also had a historical basis. Consider, for instance, his claim that some of the inhabitants of Sardinia traced their origin to the "Rūm of Afāriga." The term Afāriga referred to the Latin-speaking peoples of Africa, probably Christian inhabitants of Mediterranean towns in North Africa. But he added that another group of $R\bar{u}m$ lived in Sardinia! These two groups lived apart from one another. Here it seems that $R\bar{u}m$ of $Af\bar{a}riqa$ referred to people who could trace their origin to the North Africa, perhaps as far back as the Byzantine or even Roman period of rule there, but this is left to the reader to guess at. Idrīsī did not clarify what distinguished these two groups – other than the African origins of one of them. But as we see, not all $R\bar{u}m$ were the same. This conception of the $R\bar{u}m$ as descendants of the Romans and Byzantines appears elsewhere sporadically in the *Nuzha*. ⁷² We see, for instance, the Nubians who lived along the thaghr of Aswan in Upper Egypt as having claimed to be "Rūm who are of the Christian religion ($d\bar{\imath}n$ al-naṣrān $\bar{\imath}ya$) from the days of the Copts, before the appearance of Islam, though they are dissenters (*khawārij*) of Jacobite (*ya 'āqūba*) Christianity."⁷³ Here the meaning of $R\bar{u}m$ is not completely clear, though it almost certainly refers to the influence of Roman Egypt on Nubia. That Idrīsī knew of the Copts and Jacobites in Nubia is not surprising and while it is tempting to suggest that he learned of this through his stay in Sicily, where perhaps some Christians there had informed him of their coreligionists in Nubia he almost certainly learned of this from his Arabic sources. Ibn Ḥawqal, for example, wrote that the Nubians "are Christians who follow the religious practices of the $R\bar{u}m$ " and that prior to the arrival of Islam they were in

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⁷¹ Idrīsī, *Opus geographicum*, 877.

⁷² One example will be briefly mentioned below in the context of the $R\bar{u}m$ rulers of Toledo, one apparently ruled before the arrival of Islam and the other after *the* conquest of the city by the R $\bar{u}m$ during the *Reconquista*.

⁷³ Opus geographicum, 877. It is not entirely clear whether Idrīsī referred to Nubians or a group of nomads from surrounding areas, though he added later with clarity that the people who lived between Beja and Nubia were dissenting Christians of the "Jacobite doctrine," just as were the people of Nubia, Abyssinia, and most of Beja. *Opus geographicum*, 44.

contact with their neighbors, the $R\bar{u}m$.⁷⁴ Al-Mas' $\bar{u}d\bar{l}$ also wrote that the Nubians were Jacobites, and hence, like the Copts, Monophysites.⁷⁵

This Nubian example raises the question of whether the term $R\bar{u}m$ is a stand-in for "Christian." Many modern translators of medieval Arabic treatises, for instance, translate the term as "Christian" and insofar as the inhabitants of Europe and the Byzantine Empire were primarily Christians, the term $R\bar{u}m$ clearly connoted at least a vague notions of faith. At the same time, however, whenever $Idr\bar{s}\bar{s}$ wished to emphasize the religion of the $R\bar{u}m$ he did so explicitly. The Nubians, for example, were " $R\bar{u}m$ of the Christian religion." He needed to note this. So while the term carried implications that the people to whom it referred were Christians, for $Idr\bar{s}\bar{s}$ the term had historical implications we well. And moreover, even when the $R\bar{u}m$ were depicted as opponents of the Muslims, as in al-Andalus as we will see below, he never emphasized the conflict as predicated on religious difference or hostility. Again, $Idr\bar{s}\bar{s}$ minimized the presence of interfaith hostility in his work.

The categories of $R\bar{u}m$ and lands of $R\bar{u}m$ reached Idrīsī directly from Arabic geographical writing, and like Ibn Ḥawqal, Idrīsī portrayed much of Europe as part of the lands of the $R\bar{u}m$.

That is, he applied a framework of understanding from Arabic writing to the lands of Europe.

But Idrīsī had learned of the geography and peoples of the lands of Europe from sources made available at Roger's court. The geographical project undertaken in Palermo famously relied on

⁷⁴ Kramers, *BGA* 2, 9.

⁷⁵ Charles Pellat, Les prairies d'or, Vol. 2 (Paris: Société asiatique, 1965), 329.

⁷⁶ For instance, when Reihart Dozy and M.J. de Goeje translated the sections of Idrīsī's *Nuzha* relating to Africa and the Iberian Peninsula, they repeatedly rendered the Arabic term *Rūm* as "Christian. The recent translation of the portions of the *Nuzha* by Nef and Bresc that treat Europe and Africa (based on Jaubert's nineteenth-century translation as well as that of Dozy and de Goeje) usually translated the term a "Christian" as well, though for unexplained reasons, it occasionally remained as *Rūm* or was translated to "Byzantines" or "Romans." Dozy and de Goeje, *Description de l'Afrique et de l'Espagne par Edrīsī*, (Leiden: E.J. Brill, 1866); Nef and Bresc, *La première géographie* (Paris: GF Flammarion, 1999).

travelers as sources of information. In the *Nuzha* Idrīsī did not specify where these travelers had journeyed, but in his later work the *Uns al-muhaj*, composed for King William I, he indicated that they had mainly traveled to Europe. There he wrote that he used information that he learned during the research phase of his project under Roger. He claimed to have incorporated information

which we have taken from the noble and skillful travelers so that the information that the king Roger had furnished us, when writing our book adorned with his name, on the subject of Rūm [and in particular concerning] Germany (al-Lamāniyya), the land of the Franks (al-Ifranjiyya), Lombardy (al-Anbarḍiyya), Gascony (al-Ghashkūniyya), Brittany (al-Bariṭāniyya), Normandy (al-Abarmandiyya), Aquileia (al-Ankatāniyya), Tuscany (al-Dasqāliyya), Longobardia (al-Ankubardiyya), Venice (al-Banādiqiyya), Hungary (al-Unkariyya), Russia (al-Rūsiyya), Cumania (al-Qumāniyya) and the lands of the Kimaks (al-Kīmākiyya).⁷⁸

Here then see one way in which Idrīsī adapted new knowledge that he had gained through his position at the court in Palermo. In incorporating much of this information into his portrait of the world, he superimposed over it categories that he had learned from his Arabic sources. That is, his view of the world was firmly grounded in his reading of Arabic-language geographies. When he encountered new knowledge he simply found a way to fit the new into his previous understanding. While the lands of Europe appear in far greater detail in Idrīsī's work than in any previous Arabic-language geography, this newfound knowledge had little effect on his geographical mentality, defined as it was by his Arabic sources.

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⁷⁷ An ancient Roman city in present-day northern Italy at the head of the Adriatic.

⁷⁸ Idrīsī, *Uns al-muhaj*, fol. 4.

Three Contested Sites

When Idrīsī looked across the Mediterranean from Palermo, he saw a sea packed with religious and political hostilities and conflict. In the Mediterranean, perhaps the two most significant markers of these tensions were the presence of Crusader states in the east and the *Reconquista* in the west. While Idrīsī was in Sicily, across the Levant the Crusaders maintained their states and in 1147-48 even set out on a Second Crusade in an attempt to fortify their holdings there at the expense of Muslim rulers. At the opposite end of the Mediterranean, in Iberia, the northern Christian kingdoms continued their southward march, though they had been checked twice by powerful Berber kingdoms from the Maghrib who had established themselves in al-Andalus. Here we will examine how Idrīsī presented these two sites of contestation, these two 'hotspots' of Mediterranean violence and conflict predicated by religious difference, at least according to the rhetoric of the day. As we have seen, contemporaries of Idrīsī sought to portray the Reconquista and the Crusades as part of a unified Christian movement against Islam. The papacy, for instance, propagated such claims to audiences across Latin Europe. Meanwhile, in the Levant several writers had made the same claim, in part as a tool to stoke Muslim unity against the Crusaders.⁷⁹

As the author of a universal geography, Idrīsī described both al-Andalus and the Holy Land. We cannot be certain that he would have been aware of this rhetoric preached both in Latin Europe and in the Arabic-speaking Levant. By contrast, we know that he had closely

⁷⁹ Even by the early twelfth century some commentators viewed the Christian 'reconquest' in Iberia, the Norman conquest of Sicily, and the crusader invasion of the Holy Land as part of a Christian assault on Islam. After Roger II had begun to seize cities and town across the coast of Ifrīqiya, chroniclers added his actions to the list of evidence of this movement. See, for instance, Niall Christie, *The Book of the Jihad of 'Ali ibn Tahir al-Sulami (d. 1106)* (Burlington, VT: Ashgate, 2015); Carole Hillenbrand, *The Crusades : Islamic Perspectives* (Edinburgh: Edinburgh University Press, 1999); Muḥammad ibn 'Alī al-'Azīmī and Ibrāhīm Za'rūr *Ta'rīkh Ḥalab* (Damascus, 1984); 'Izz al-Dīn Ibn al-Athīr and Carolus Johannes Tornberg (ed.), *Al-Kāmil fī al-tārīkh*, *Vol. X* (Beirut: Dar Ṣādir, 1965).

studied his Arabic geography and can at least compare his description of al-Andalus and the Holy Land to that of his sources. In their accounts of both the Holy Land and al-Andalus they centered their accounts on Islam and viewed the regions as part of the land of Islam. In al-Andalus, though, they wrote of the edge of the realm of Islam where it abutted what they called the lands of unbelief and worse, of polytheism. In the Holy Land, Idrīsī's source wrote long before the Crusades, though based on the way in which they wrote their geographies, they surely would have seen the presence of Christian states as an affront to Islam. Though he wrote at a time of active hostilities in these regions, he nevertheless presented them in less charged language than his sources had done. He also readily incorporated information about the Christian topography of these lands; in particular his embrace of that topography is astounding in his account of the Holy Land.

Al-Andalus

In the far west, on the edge of the known world, where the unnavigable stormy waters of the Surrounding Sea begin, wrote Idrīsī, one finds the Iberian Peninsula, "which the Greeks called Spain (Isbāniya), and is called the Peninsula of al-Andalus." It is called a peninsula, he explained, just as late antique geographical writers had done, among them Paulus Orosius, because it was "triangular in shape," its three corners marked by the "Church of the Ravens," the "Temple of Venus" in the Pyrenees, and the church of Santiago de Compostela in Galicia, and is surrounded on three sides by the sea.⁸⁰ If Idrīsī began his account of al-Andalus by following

⁸⁰ The "church of the Ravens" stood at Cape Saint Vincent at the southwest tip of present-day Portugal. It is so named, noted Idrīsī, because it was said to have been inhabited by ten ravens (in addition to churchmen) who never leave it. The ravens at this church derive from the legend of the martyrdom of Saint Vincent of Saragossa who died under Diocletian around 304 CE. The Temple of Venus," here rendered Ḥaykal al-Zahra, was mentioned by Strabo, Ptolemy, Pliny the Elder, and Pomponius Mela by various names (see Alexander MacBean and Samuel Johnson, *A dictionary of ancient geography* (London, 1773), n.p. and William Smith, *A dictionary of Greek and Roman geography* (London: John Murray, 1872), 52). Finally, Idrīsī called Santiago "Saint Jacob," *shant yāqūb. Opus geographicum*, 726. The Arabic edition of *Kitāb Hurūshiyūsh* (The Book of Orosius), based on a likely ninth-

established models, however, much of the rest of his description of it appears to have been far more original. In spite of this, just as in the eastern borderlands of the old *mamlaka* of Islam, the Iberian peninsula that he depicted did not always resemble contemporary conditions there.

Because this is not a chronologically uniform presentation, it is an awkward account.

However, Idrīsī wrote his description of al-Andalus at a time when much of the peninsula was in upheaval. The caliphate of Córdoba had collapsed more than a century earlier and the Muslim-ruled portion of the peninsula was divided among a series of *taifa* kingdoms that were frequently at odds with one another. Along the middle and northern reaches of al-Andalus, the Christian kingdoms of the north slowly but steadily pushed ever deeper into the more southerly lands under Muslim dominion. Toledo, captured in 1085, had long been the most important conquest by the northern kingdoms. By 1154, the *Reconquista* had reached as far south as Lisbon (1147) and Santarém (1146) on the western coast, and Tortosa (1148) and Amposta (1148) on the eastern shores. But this was by no means a one-sided, steady push southwards. In recent decades Almoravid armies had been holding off northern forces and had even recaptured cities such as Mequinenza on the Ebro. Meanwhile, only a few years before Idrīsī wrote, the Almohads seized control of Almoravid lands in Iberia and also managed to fend assaults from northern armies, at least for a time.

In some ways it is fitting that Idrīsī began his description of al-Andalus with references to the Maghrib. After all, in his own time both the southern and northern lands along the Strait of

century translation of the Latin text of Orosius's *Historiarum adversum paganos libri VII* (ca. 416 CE), stated that al-Andalus had "three corners," rather than a shape like a triangle, as Idrīsī has it. See *Opus geographicum*, 543; Mayte Penelas ed., *Kitāb Hurūšiyūš: traducción árabe de las "Historiae adversus paganos" de Orosio* (Madrid: Consejo Superior de Investigaciones Científicas, 2001), 28. Al-Bakrī, too, noted the triangular shape of the Iberian Peninsula, though Idrīsī did not use al-Bakrī's as a source for al-Andalus. See Adrian van Leeuwen and André Ferré (eds.), *Kitāb al-Masālik wa-'l-mamālik*, Vol 2. (Tunis: al-Dār al-'Arabīya lil-Kitāb, 1992), 893.

Gibraltar were ruled by Berber groups who had their dynastic home in the Maghrib. And thus we begin our consideration of Idrīsī's description of al-Andalus not in the Iberian peninsula, but rather with his account of the city of Ceuta, a small port some eleven miles south of Iberia. After briefly describing that town, Idrīsī immediately bought up its role in the eight-century Arab-Berber conquest of Iberia. He wrote that two miles outside of the port of Ceuta stood "the mountain of Mūsā," named, Idrīsī claimed, after "Mūsa b. Nuṣayr, who presided over the conquest of al-Andalus at the beginning of Islam."81 A paragraph later he mentioned without specifying a date for the crossing of one Muhammad ibn Abī 'Amir to al-Andalus. Readers familiar with the history of the peninsula surely would have recognized this latter individual as Muḥammad b. Abī as al-Mansūr bi'llāh, the de facto master of al-Andalus from 978 to 1002, known in Spanish chronicles as *Almanzor*. 82 In this way, even before he began to properly describe al-Andalus, Idrīsī had linked it to its conquest and the presence of Islam. And he would continue to do once he undertook his description al-Andalus itself. Indeed, among the first cities he mentioned there was the port of Algeciras, about twelve miles from the Maghrib coast. That port, Idrīsī wrote,

was the first city conquered in al-Andalus at the beginning of Islam, in the year 90 of the Hijra (711 CE). It was conquered by Mūsa b. Nuṣayr from the Marwānid tribe (the Umayyads) and by Ṭāriq bin 'Abd Allāh bin Wanmū al-Zanātī, who was accompanied by Berber tribes. This island⁸³ was the first city conquered. To the side of the Gate of the Sea there is a mosque called the Mosque of Banners. They say that this was where the banners of the group which came from Gibraltar (Jabal Ṭāriq) held council. This mountain is so named because Ṭāriq b. 'Abd Allāh b. Wanmū al-Zanātī, when he crossed the strait with the Berbers who accompanied him, fortified it.⁸⁴

⁸¹ Opus geographicum, 530.

⁸² EI² s.v. "Mūsā b. Nuṣayr" (Évariste Lévi-Provençal); s.v. "al-Manṣūr" (Évariste Lévi-Provençal)

⁸³ Algeciras is called the "Green Island," *al-jazīra al-khaḍarā*', in Arabic; accordingly, Idrīsī referred to it as an "island."

⁸⁴ Opus geographicum, 531.

He mentioned yet more conquest lore when he described the city of Toledo, writing that in "the days of the Rūm, Toledo was the seat of their kingdom," and "when the Muslims conquered al-Andalus, they found there a number of treasures," among them 70 crowns of gold adorned with pearls and precious stones, a thousand royal jeweled swords, great quantities of pearls and rubies, golden pots and jars, as well as the "table of Solomon, the son of David" which, he added, was now in Rome. 85 Such accounts of the conquest of al-Andalus and in particular the treasures uncovered in Toledo had by Idrīsī's day become a topos of Arabic geographical writing. Ibn Khurradādhbih, for example, also discussed the conquest. He noted that the king of al-Andalus in those days was Lūdarīq (Roderic) and conveyed a story, similar to Idrīsī's, about the treasures found in Toledo after the conquest, including the fabled "table of Solomon, the son of David."86 Ya'qūbī also wrote of Ṭāriq, the "client of Mūsa ibn Nuṣayr al-Lakhmī."87 In repeating an account so frequently recalled in Arabic literature – and not only in works of geography – Idrīsī imparted his account with an air of familiarity and authority. 88 His recollection of the conquest also served to mark al-Andalus as a longstanding component of the lands of Islam.

But regaling readers with tales of the early conquest was not the only way in which Idrīsī conveyed the status of al-Andalus as part of the lands of Islam, as he also mentioned numerous

⁸⁵ Opus geographicum, 730.

⁸⁶ De Goeje, *BGA*, Vol. 6, 90.

⁸⁷ De Goeje, *BGA*, Vol. 7, 355.

⁸⁸ The "table of Solomon, son of David" appears in various geographical works including that of Ibn Khurradādhbih, see de Goeje, *BGA*, Vol. 6, 156. Yet the account also in the early tenth-century historical chronicle of Muḥammad ibn Jarīr Ṭabarī (d. 923 CE) *Tārīkh al-Rusul wa al-Mulūk* (History of the Prophets and Kings) and the ninth-century *Tārīkh* of al-Ya'qūbī whose geography was cited by Idrīsī. See Martin Hinds (trans.), *The History of al-Ṭabarī Vol XXIII: The Zenith of the Marwānid House* (Albany: State University of New York Press, 1990), 201 and M. Th. Houtsma, *Tārīkh Aḥmad ibn Abī Ya'qūb ibn Ja'far ibn Wahb ibn Wādiḥ al-ma'rūf bi-al-Ya'qūbī* Vol. II (Leiden: Brill, 1883), 341. On the appearance of this account in conquest narratives of al-Andalus, see Nicola Clarke, *The Muslim conquest of Iberia: medieval Arabic narratives* (New York: Routledge, 2012), esp. chapter 5 "The Table of Solomon: a historiographical motif and its functions," 84-101.

mosques around the peninsula, clearly implying that its inhabitants were Muslim. That is, he never directly stated that al-Andalus was part of the lands of Islam or that its inhabitants were overwhelmingly followers of Islam; rather he communicated this through recollection of the conquest and by marking the topography with mosques. And it is in this context that he described the congregational mosque of Córdoba, his longest description by far of any single place, whether building, town, or city, in the *Nuzha*. This was, he contended, a mosque without equal in its architecture, ornamentation, and dimensions. His description of the illumination of the mosque on the "twenty-seventh night of glorious Ramadan," his amazement at the weight of its codex of the Qur'an (two men were required to move it), written out by the caliph 'Uthmān b. 'Affān and stained with drops of his blood: Idrīsī wrote all this with the eye of an admiring Muslim, familiar with this mosque-specific terminology as well as with the identity of 'Uthmān b. 'Affān.⁸⁹ And yet the mosque, or at least the people attached to it, were not perfect according to Idrīsī: its *imām* erred an error in praying after the *salām*, rather than before it. 90 That Idrīsī did not define any of these terms and instead assumed an audience familiar with them suggests that he imagined that at least some portion of his audience would have been Muslim. And, though he must have had his Christian audience in Sicily in mind as he wrote, he apparently found little wrong with describing the mosque in great detail. And in fact, the mosque is simply a long, if admiring, description of a beautiful building in a land that everyone in Sicily knew was part of the *Dār al-Islām*.

However, the image of the peninsula transmitted by Idrīsī was not a contemporary one, at least not in all respects. While he wrote of some contemporary events, he also claimed that

⁸⁹ The third caliph to rule following the death of the Prophet (d. 656 CE).

⁹⁰ Here Idrīsī refers to the *taslīm*, a declaration of peace said after prayer (*ṣalāt*). Idrīsī's criticism of the *imām* at the congregational mosque of Córdoba appears to be unfounded, and prayer should be conducted *after* the *salām*. For Idrīsī's text on the mosque of Córdoba, see *Opus geographicum*, 579-585.

Córdoba "is the capital of the lands of al-Andalus, the mother of its cities, and the home $(d\bar{a}r)$ of the Islamic caliphate." This was a particularly unusual statement for Idrīsī to utter, given that the caliphate of Córdoba had collapsed in 1031 CE, over a century before he wrote the *Nuzha*, when it fractured into a number of independent *taifa* kingdoms (which make no appearance in his description). His own ancestors had in fact been among the last caliphs of the city. 92 It is inconceivable that Idrīsī was not aware of this. Whatever his motivations for locating the caliphate in Córdoba by using the present tense, this had the effect of enhancing the place of al-Andalus among the lands of Islam and of projecting the long-since disappeared caliphate into his own present day.

Not all of Idrīsī's knowledge of al-Andalus reached him via Muslim sources. Indeed, César Dubler has demonstrated that Idrīsī also learned of the geography of Iberia from Christian pilgrims who traveled along the Camino de Santiago. He described Santiago de Compostela (Saint James, *Shant Ya'qūb*) as a famous destination of *Rūm* pilgrims from all parts. The church, he added, compared favorably in its beauty, riches, and marvelous construction to *al-Qumāma*, "the rubbish heap," a reference, as we shall see, to the Church of the Holy Sepulchre in Jerusalem. He mentioned its great quantity of gold and silver crosses enriched with precious jewels and counted around two hundred columns covered in gold and silver. One hundred priests oversaw the running of the church, without counting the numerous other personnel necessary for

⁹¹ Opus geographicum, 585.

⁹² The Italian historian Giovanni Oman conducted a study of all of the names that had been ascribed to Idrīsī and drew a number of conclusions. He argued convincingly that the geographical writer had descended on the one hand from the Idrīsids, a ruling dynasty founded in present-day Morocco by Idrīs I (r. 788-791), and on the other from the Ḥammūdids, a dynasty of Idrīsid origin, erstwhile rulers of a number of cities in al-Andalus between the years 1016 and 1058, including Córdoba, which they ruled under the caliphal title from 1016 through 1023 and again from 1025 until 1027. Giovanni Oman, "Osservazioni sulle notizie biografiche comunemente diffuse sullo scrittore arabo al-Šarīf Idrīsī (VI-XII sec.)," *Annali dell'Istituto Universitario Orientale di Napoli* 20 1970," 211-214.

⁹³ César E. Dubler, "Los Caminos a Compostela en la Obra de Idrīsī," *Al-Andalus*, I, 1949, 59-122.

its operation.⁹⁴ None of these details appear in the Arabic sources that he cited. Nor do they derive from the work of Orosius who, of course, hailed from Galicia, but long before the tomb of Saint James had been discovered there and become a site of pilgrimage.⁹⁵

Accordingly, the peninsula was a Muslim space according to Idrīsī's historical recollections, and yet its north was inhabited by $R\bar{u}m$ and visited by pilgrims from all directions who sought to visit the tomb of James at the great church of Santiago de Compostela. Idrīsī related all this with complete impartiality. He offered no opinion on the presence of the $R\bar{u}m$ in Iberia. He did not inject his writing with code words or phrases that would have betrayed his displeasure of the situation there, but reported all with indifference.

Even his portrayal of the $R\bar{u}m$ who were directly responsible for extending the Christian lands southward appeared as detached reports. Consider his perplexing statement regarding the city of Toledo:

The city of Toledo was, in *the days of the Rūm*, the city of the king and of government. Here was found the table of Solomon, son of David, peace be upon him, along with a number of treasures beyond mention...The city of Toledo *in our time* is the residence of the *sultan of the Rūm* of the two Castiles. 96

Here again, Idrīsī's historical understanding of the $R\bar{u}m$ comes to the fore; his first reference to them recalls a pre-Islamic period of Iberian history, while the latter refers to the $R\bar{u}m$ of his own day. He noted that "in the time of Islam," a vague, unspecified period, "Toledo and a number of nearby cities," among them Medinaceli, Coimbra, and Madrid, possessed congregational

⁹⁴ Idrīsī, *Opus geographicum*, 728.

⁹⁵ Idrīsī's near-contemporary Gervase of Tilbruy did not describe Santiago de Compostela as a pilgrimage site. In fact, he only mentioned Compostela once, and that in a long list of the peninsula's metropolitan sees. Gervase based his description largely on the work of Orosius and added little contemporary data beyond this list of sees. He hardly mentioned the Muslim presence there, and when he did it was in reference to the Saracen or "pagan" conquest of the Iberian peninsula. *Otia imperialia*, 302-305, 392-393.

⁹⁶ Opus geographicum, 550.

mosques from which the *khuṭba* was pronounced, but that now they were in the "hands of the $R\bar{u}m$ whose king, of the two Castiles, descends from Alfonso."⁹⁷

Spanish-Portuguese border, was according to the *Nuzha*, "now in the domain of the *Rūm*." And indeed, Alfonso VII of León had captured the city in 1142. Nearby, people from Cáceres, Trujillo, and Medellín carry out incursions into the lands of the *Rūm*, though Idrīsī never says whether they were Muslims. And so, his reader senses tension and even some violence north of Toledo, but this is never presented as a defining characteristic of relations there. There is no language of Islam versus Christianity, nor are any local political or economic motivations mentioned. Indeed, the word "Christian" appears nowhere in his account of al-Andalus.

Moreover, Idrīsī named town after town across the central peninsula, describing their agricultural production and industries, yet he never identified them as either part of the lands of the *Rūm* or of Islam. When he noted the fall of Muslim-ruled towns to the *Rūm*, he never expressed regret over the loss but rather presented these cases with detached indifference. The overall image he presented of al-Andalus, then, was far from one of a territory riven between two adamantly opposed factions of Muslims and Christians.

And yet, Idrīsī did mention one frontier in al-Andalus. The small city of Mequinenza, roughly 120 kilometers east of Zaragoza and 110 kilometers west of Tarragona, he contended, was "one of the *thughūr* of al-Andalus." Just as with his descriptions of the frontiers in the east, this one, too, did not reflect contemporary conditions. Mequinenza had been captured by

⁹⁷ Alfonso, *al-Ādhfūnsh*, probably from the Latin-Gothic form of Idldefonso. See *EI*² s.v. "Alfūnsho."

⁹⁸ Opus geograhicum, 531

⁹⁹ Opus geographicum, 531.

¹⁰⁰ Opus geographicum, 734.

Alfonso I of Aragon in 1133; it was recaptured by the Almoravids in the following year, and was then recaptured a final time by the Aragonese army in 1149. Perhaps when Idrīsī noted that it was on the *thughūr*, he intended indicate that this was a region of contestation. And yet, when he wrote that all of the surrounding cities had fallen to the Aragonese or Castilians, he was suggesting that it was probably relatively firmly in the hands of the Aragonese. Whatever the case, a reader of the *Nuzha* came away with a sense that there were some hostilities in the region and that the presence of *thughūr* meant that these hostilities were likely maintained between Muslims and non-Muslims, but the extent of the frontier and a sense of where the frontier line stood was completely absent.

It is uncertain how Idrīsī had learned of this frontier, but he may have heard of it from firsthand accounts. His reports of certain towns that had fallen to Alfonso, for instance, suggest that he had some source of contemporary or near-contemporary information at hand. In any case, his Arabic sources, of course, describe the frontiers of al-Andalus – and in far greater detail than did Idrīsī – but none of them located a frontier at Mequinenza. And though Idrīsī did not copy the accounts of the *thughūr* that his Arabic sources had written in their own works, as such a close reader of his sources, Idrīsī surely read them. And in those accounts he would have found the frontier presented as a line between belief and unbelief. For example, Ibn Khurradādhbih, though without explicitly mentioning a frontier, nevertheless labeled the lands that abutted al-Andalus as part of the "land of polytheism (*shirk*)." In his description of al-Andalus, Yaʻqūbī wrote that the city of Merida, four days west of Córdoba, stood facing the "land (*arḍ*) of polytheism (*shirk*), [inhabited by] a people called the Galicians (*al-Jalāliqa*) who inhabit the same peninsula." The city of Zaragoza, he added, was "one of the great frontier post (*thaghr*)

¹⁰¹ De Goeje, *BGA*, Vol. 6, 90.

cities of al-Andalus on the river called the Ebro." To the north, at Tudela, one again encountered the "land of polytheism" of the Basques (al-Baskunis). Finally, he also called Tortosa "the last frontier post of al-Andalus in the east," which faced attacks from the Franks. 102

For his part, Ibn Ḥawqal devoted an entire chapter to al-Andalus, a place that he claimed to have visited in 948-49 CE. He methodically described the "cultivated, civilized lands of al-Andalus," from west to east. For him, the realm of Islam ended at Tortosa, the land beyond which he called France. This border, he wrote,

consists of frontier posts ($thugh\bar{u}r$) that proceed without interruption, heading inland [to the west] toward the land of Ghaljashkash, which is a country of warfare against the $R\bar{u}m$. Then [the thugh $\bar{u}r$] connect to the land of the Basques (Bashk \bar{u} nis), who are also Galician Christians. In this way al-Andalus comes to an end at two different boundaries, one at the Abode of Unbelief ($d\bar{a}r$ al-kufr), and the other at the Surrounding Ocean. 103

Elsewhere Ibn Ḥawqal had contended that beyond the city of Tortosa al-Andalus encountered the "the land of Unbelief."¹⁰⁴ He further named the posts along the Galician frontier (thughūr al-Jalāliqa). ¹⁰⁵ Later, he noted that among "the various categories of unbelievers neighboring al-Andalus, there are none more numerous than the Franks." The Franks near the Muslims are "weak" and have little in the way of military equipment. The Galicians, on the other hand, are "more disobedient, courageous, strong, and valorous and also, moreover, treacherous" than the Franks. ¹⁰⁶ Even the caliph maintained frontier troops (*ahl al-thughūr*) to keep him safe from "from attacks from the enemy." ¹⁰⁷ He further identified the city of Guadalajara, "a renowned

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¹⁰² De Goeje, *BGA*, Vol. 7, 354-255.

¹⁰³ Kramers, *BGA*, Vol. II-1, 109.

¹⁰⁴ Kramers, *BGA*, Vol. II-1, 62.

¹⁰⁵ See al-Iṣṭakhrī's account of al-Andalus from which Ibn Ḥawqal drew much of his material on the *thughūr* of al-Andalus and the "unbelievers" beyond these frontiers. Al-Iṣṭakhrī held that the Franks were "of the countries of polytheism" De Goeje, *BGA*, Vol. 1, 39-47.

¹⁰⁶ Kramers, *BGA*, Vol. II-1, 111.

¹⁰⁷ Kramers, *BGA*, Vol. II-1, 113.

frontier post (*thaghr*)" as the "point of concentration for the jihād against Galicia." ¹⁰⁸ In sum, for Ibn Ḥawqal the frontiers were all-important, barring the unbelievers from the lands of Islam. We know that Idrīsī studied Ibn Ḥawqal's account in great detail. And here we see that he rejected the view put forth by his favorite source. As a client of Roger he simply could not reproduce an account that called the peoples of Iberia, whether Franks, Galicians, or Basques, "unbelievers" or "polytheists." Idrīsī's Arabic sources, then, unmistakably presented al-Andalus as the end of Islam in the west, facing the unbelieving, polytheist enemy.

Holy Land

When the Crusaders arrived in Syria and Palestine at the end of the eleventh century, the Fāṭimid vizier al-Malik al-Afḍal (1095-1121) made the mistake of welcoming them. He viewed the Crusaders as an ally against the Seljuks, and as the "Franks" secured their forces in northern Syria, he turned to Jerusalem and laid siege to it, conquering it in 1098. His forces could not withstand the subsequent Crusader assault, and Jerusalem fell again in July 1099, with its inhabitants massacred. Within a quarter of a century, by 1124, the entire coastline of Syria and Palestine, with the exception of Ascalon, a coastal town in southern Palestine, was under Crusader control. This last Fāṭimid bastion became both a center for refugees from areas occupied by the Crusaders and a military stronghold from which incursions were made into Crusader lands. But even this fortress fell; Baldwin III, king of the crusader state of Jerusalem, captured Ascalon in August 1153. Less than six months later, halfway across the Mediterranean in Sicily, King Roger ordered Idrīsī to compose a description of the world. The latter noted, in his description of Syro-Palestine, that the stronghold had fallen, and that Ascalon "is an

¹⁰⁸ Kramers, *BGA*, Vol. II-117.

¹⁰⁹ Kramers, *BGA*, Vol. II-1, 171.

agreeable city with a double wall and markets, but no orchards outside [its walls] and nothing in the way of trees. The master of Jerusalem conquered it with a $R\bar{u}m$ army [comprised of] of Franks (*ifranj*) and others in the year 548 (1153 CE) and today it is in their hands."¹¹⁰

Beyond this disinterested account, Idrīsī said nothing further about Ascalon. He did not implore God to restore it to Muslim rule, nor did he denounce the Christians there. He made no mention of the Fāṭimids and their raids into Crusader lands. Rather, he composed this simple, detached account of the city, in which its conquest by a $R\bar{u}m$ army appears as just another piece of information among many. Indeed, he devoted almost no space to the Crusader conquest of and presence in the Holy Land. Although contemporaries had portrayed the Crusades as a part of a widespread western Christian assault, none of that rhetoric entered into Idrīsī's description.

Rather he presented the Syro-Palestinian lands as a space of both Muslim and Christian topography. That he treated Christian sites and even the life of Jesus so extensively around Jerusalem is shocking, at least when compared to the ways in which his Arabic sources as well as contemporary Christians wrote of the region.

We begin with Jerusalem (*Bayt al-maqdis*), "the great, ancient city" as Idrīsī called it, formerly known as Īliyā'¹¹¹ and constructed upon a mountain, with easy access from all sides. His attention to the Christian topography and history of the city is apparent from the very beginning of his account. Indeed, the first building described in the city was not the al-Aqsā mosque, one of the most holy sites of Islam, but rather the Church of the Resurrection, the

¹¹⁰ Opus geographicum, 645.

¹¹¹ Cf. Ibn Khurradādhbih, ed. de Goeje, BGA, Vol. 6, 78, and Ya'qūbī, ed. de Goeje, BGA, Vol. 7, 329.

¹¹² Here Idrīsī paraphrased Ibn Ḥawqal. Though small portions of Idrīsī's account borrow from Ibn Ḥawqal, the majority of Idrīsī's description bears little resemblance to his extant written sources. See Kramers, *BGA*, Vol. II-1, 171 and *Opus geographicum*, 647.

westernmost of the city's religious monuments.¹¹³ Muslims, he wrote, called it *al-Qumāma*, a pun on its official Arabic name *al-Qiyāma* ("the Resurrection") and which signified the [Church of] 'the Rubbish Heap.' Whether the Muslim name was pejorative in the time that Idrīsī wrote, however, is uncertain, though modern historians frequently view it as such.¹¹⁴ Idrīsī offers no further comment on the term and so we cannot know whether he intended for this to cause offence. He did, however, remark that the church was a site of pilgrimage from "all lands of the *Rūm*, from the east and the west, who enter [the church] through the western gate. [Entering there] one finds himself inside, under the center of the dome which encloses the entire church, which is itself one of the marvels of the world."¹¹⁵ The sepulchre, ¹¹⁶ he continued, lay below this gate, but one could not enter the sepulchre there. Instead, the only entrance was through the northern gate, the Gate of Santa Maria (*Bāb Shant Mariyya*), ¹¹⁷ beyond which descended thirty stairs. At their base stood the "sacred, exalted tomb [of Jesus]" behind two doors that stood below a masterfully-constructed arched dome. One of these doors faced north, to the Gate of

¹¹³ Recall that Idrīsī typically described landscapes from west to east, hence he began with the Church of the Resurrection, more commonly known as the Church of the Holy Sepulchre.

¹¹⁴ Such views are widespread in the literature, though here we may cite an example related to Idrīsī's *Nuzha*. In their revised edition of Jaubert's translation of the *Nuzha*, Bresc and Nef note that *al-qumāma* is a "Manière péjorative de designer le Saint-Sépulcre de Jérusalem," 355, n. 1. Early Arabic traditions grant significance to the Caliph 'Umar's (d. 644 CE) visit to the Temple Mount following the Arab conquest of Jerusalem. According to these traditions, the Byzantines had used the Temple Mount as a garbage dump since the time of Helena, mother of Constantine the Great. After discussions regarding the best place to erect a prayer house for Muslim prayer, 'Umar ordered Muslims to clean the refuse from the Temple Mount to clear a space for construction of said prayer house. According to the Mamluk scholar Ibn Kathīr (d. 1373), "the throwing of the refuse on the Temple Mount was the Byzantine reprisal against the Jews for throwing refuse on the site of the crucifixion, hence the place is called *al-qumāma* (the refuse) and the church [Church of the Sepulchre Church of the Resurrection] is also called thus," as quoted by Moshe Gil, *A History of Palestine*, 634-1099, Ethel Broido trans. (Cambridge: Cambridge University Press, 1992), 68, n. 70. John Wansbrough suggested that given the use of the term in chancery documents (apparently sent to Christians in Italy though written in Arabic), it may have had "playful" connotations. See *Lingua Franca in the Mediterranean* (Surrey: UK, Curzon Press), 168, n. 61.

¹¹⁵ Opus geographicum, 647.

¹¹⁶ Here Idrīsī said that the "church" was below the gate, though from what follows it becomes clear that he meant sepulchre.

¹¹⁷ Here the Arabic reads "Mariyya," for Mary, rather than the standard Arabic form, Maryam. Perhaps a traveler reported the Latin name of "Maria."

Saint Maria, while the other faces south, toward the Gate of the Crucifixion. At this gate, to the east, was another immense church where the "Franks of the *Rūm*" celebrate [the Mass]. He explained to his readers that just east of this church one encountered the prison where the "Lord Messiah," *al-sayyid al-Masīḥ*, was detained and from which he went to his crucifixion. ¹¹⁸ The interior of the Church of the Resurrection, he wrote, contained a number of paintings (lit. "images") of the prophets, of the Lord Messiah and Saint Mary ¹¹⁹ his mother, John the Baptist, lighted by lanterns suspended from the ceiling, three of them made of gold. Finally, he noted, "if you exit this great church and proceed to the east, you encounter the holy house built by Solomon, son of David, peace be upon him," a place of pilgrimage in the days of the Jews. This temple, he added, "was wrested from their hands and they [the Jews] were driven out from it in the period of Islam." The Muslims enlarged the temple he added, and today it is known as Masjid al-Aqṣā, that is, the al-Aqṣā Mosque.

Here I have included this detailed summary of Idrīsī's description of this portion of Jerusalem to indicate that he had access to meticulous records of the city's buildings. He wrote this description as if he had firsthand knowledge of the church. He had almost certainly received this account (or perhaps multiple accounts) of *al-Qumāma* from travelers, certainly Christians, who had visited the site, probably on pilgrimage. His use of the second person in particular, "if *you* exit...," "you proceed...," "you encounter...," reads as if he were directing a visitor around

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¹¹⁸ Opus geographicum, 555. Jesus was commonly referred to as the "Messiah," al-Masīḥ in Arabic (the Qur'an mentioned Jesus by this name eleven times), a term of Hebrew origin, apparently transmitted to Arabic via Syriac. I wonder how frequently Muslim commentators used the phrase "Lord Messiah," as Idrīsī did here, and whether he might have used the term to suit his audience in Palermo. I do know of one well-known use of this term that dates from around Idrīsī's time, namely the *Şiraţ al-Sayyid al-Masīh* (The Way of the Lord Messiah) by a Damascene scholar named Ibn 'Asākir (d. 1175) whom Carole Hillenbrand called "the head of the centre of *hadith* scholarship in Damascus," who also composed a treatise on *jihad*, and another on the merits of Mecca, Medina, and Jerusalem (*Crusades, Islamic Perspectives*, 164-5). The term, according to the Hans Wehr dictionary is an honorific placed before the names of Muslim Saints.

¹¹⁹ Here Idrīsī wrote *al-sayyid Maryam*.

the church. Or, more likely, it reads as if he had obtained the account from a source who told him about the church by means of a second-person narrative, in particular given that it he rarely used this mode of address elsewhere in the *Nuzha*. Moreover, his account bears some similarity to at least one early second-hand pilgrimage account, namely Adomnán's telling of Arculf's seventh-century journey to Jerusalem. Like Idrīsī, the abbot Adomnán of Iona described the dome of the Church of the Sepulchre and the location of the sepulchre of Jesus in the northern part of the structure before mentioning the church "called Anastasis (that is, resurrection)." The rest of Idrīsī's account of the Holy Land describes many of the same sites in a similar order as had Adomnán some five centuries earlier, suggesting that he probably had access to a pilgrimage account. 121

As for the al-Aqṣā Mosque, Idrīsī described it in considerable detail though he perhaps dedicated the same amount of space to it as had to *al-Qumama*. In any case, he claimed that no other mosque in the world could compare to al-Aqṣā in its dimensions, with the exception of the congregational mosque in Córdoba, which "they say" has a roof of greater extent. Here he wrote of the extent of the mosque, about its great dome, known as the Dome of the Rock, with its mosaics and gilding, built by the Muslim caliphs. He mentioned a church that he called the "Holy of Holies" at its east gate, almost certainly a reference to the Dome of the Chain. 122 At the southern end of the mosque one found the *al-Qiblī* chapel, which "was the chapel of the

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¹²⁰ Denis Meehan ed., *Adamnan's 'De locis sanctis*' Scriptores Latini Hiberniae Vol. III (Dublin: The Dublin Institute for Advanced Studies, 1958), 45-49.

¹²¹ After his description of Jerusalem and its holy sites, Adomnán gave an account of Bethlem, the tomb of David, the sepulchres of the four patriarchs and Jerome. Idrīsī described many of these same sites, again in roughly the same order followed by Adomnán.

¹²² See Guy Le Strange, *Palestine under the Moslems, a description of Syria and the Holy Land from A.D. 650 to 1500* (London: Alexander P. Watt, 1890), 131, 152.

The Dome of the Chain, known in Arabic as *Qubbat al-Silsila*, is a dome adjacent to the Dome of the Rock that had prior to the Crusader capture of Jerusalem had been a Muslim prayer house. The Crusaders transformed the building into a temple dedicated to Saint James, as they ascertained that it was on the spot where he had been martyred.

Muslims, but when the $R\bar{u}m$ conquered it, and it remains in their hands up to the time that we write this book, they changed it from a mosque into a residence of the people known as the $D\bar{a}wiyya$ (the Knights Templars) which means the servants of the house of God (bayt $All\bar{a}h$)."¹²³ He ended his description of al-Aqṣā Mosque by taking note of its gardens, surrounded by marble columns, at the end of which is a refectory for priests. All of this, as we have seen elsewhere, he reported with detachment. He voiced no sadness, regret, or complaints over the presence of the Templars at al-Aqṣā or its use as a site of Christian worship.

Idrīsī's intimate knowledge of the Christian geography and history of the city and surroundings did not end at the Church of the Holy Sepulchre. Not far from the al-Aqṣā mosque, for instance, he mentioned the church named after Mary, known as Gethsemane (*al-jasmāniya*) which held her tomb, near the Mount of Olives. On the road up the Mount stood the Church of the Pater Noster (bātr nuṣtr) and on the summit, men and women live in seclusion (maḥbūs) in desire of reward from God. On the other side of the Mount, he noted, lay the tomb of Lazarus, who lived by the "Lord Messiah," and two miles further, one encountered the village where Jesus obtained the donkey upon which he entered Jerusalem. Just beyond the eastern wall of Jerusalem, exiting the city through Zion Gate, stood the Church of Zion, where one found the room in which the "Lord Messiah" ate with his disciples, along with the table at which they dined, which Idrīsī claimed still existed in his day. He added that this meal took place on a Thursday, certainly in reference to Maundy Thursday. To the south, in Gehenna (the Valley of Hinnom), stood the church of Saint Peter on the northwest shore of the Sea of Galilee, at the source of the river upon which the "Lord Messiah" gave sight to a blind man who had never seen. Nearby was the field that was purchased by the "Lord" – here Idrīsī did not call Jesus by

123 Opus geographicum, 649.

the full title "Lord Messiah," but rather simply "Lord" – where strangers are buried. Nearby, people lived in seclusion in caves carved into a rock face, undoubtedly a reference to Christian ascetics. Idrīsī continued his description into Bethlehem, noting the tombs of Rachel and Benjamin along the way and just to the east of the town was the church consecrated to the angels who preached the birth of Jesus to the shepherds. Idrīsī situated the Mosque of Abraham (Ibrāhīm) 8 miles south of Bethlehem, noting that it held the tombs of Abraham (Ibrāhīm), Isaac (Isḥāq), and Jacob (Yaʻqūb), each with his spouse buried alongside. 124

Idrīsī's Jerusalem and its surrounding area, then, was a description not of the region's Islamic geography, its mosques and Muslim prayer houses, but surprisingly instead centered on its Christian geography and references to the life of Jesus. Idrīsī's focus on Christian themes is astonishing. His Arabic sources, after all, barely mentioned the Christian topography of Syro-Palestine and Jerusalem. And unlike much of the rest the *Nuzha*, his account of Jerusalem and the Holy Land was not extracted from his Arabic sources in any way. For instance, he did not follow al-Ya'qūbī in describing the conquest of Jerusalem by the caliph 'Umar in the seventh century. He did not follow Ibn Ḥawqal who had claimed that "there is no greater sanctuary in Islam" than Jerusalem. Nor did he cite Qur'ānic passages about the city, as had Ibn Ḥawqal. 126 Instead he centered his account on Christian sites marked by the life of Jesus.

Why would Idrīsī devote so much space to the churches of the Holy Land and so little to its mosques? To begin, we might consider his sources: writing from Sicily, he doubtless had access to reports by pilgrims and perhaps even written accounts of Jerusalem in, say, Latin, and

¹²⁴ In Hebron. This is taken from Ibn Ḥawqal. Kramers, BGA, Vol. II-1, 172. Ibn Khurradādhbih mentioned the

Mosque of Abraham, though he only mentioned the tomb of Abraham there; he did not mention the other prophets. De Goeje, *BGA*, Vol. 6, 78-79.

rs, BGA 2, 1/1.

¹²⁵ De Goeje, *BGA*, Vol. 7, 330.

¹²⁶ Kramers, *BGA* 2, 171.

which he could have had translated for him by someone attached to the royal $d\bar{t}w\bar{a}n$. Pilgrim accounts and guidebooks would likely have focused on the very things at the center of Jerusalem in the *Nuzha*: churches and early Christian lore. Moreover, access to firsthand accounts would explain how Idrīsī knew of the Templar residence in the al-Aqṣā mosque and the refectory for priests there. But we might also consider Idrīsī's audience as a partial explanation. Given that he wrote for King Roger and a Christian court audience, Idrīsī may well have concluded that a description of the Christian topography of the Holy Land was an obligatory subject for his work, perhaps even a mark of Roger's power over his Muslim client.

Conclusions

Idrīsī wrote of the two religions of Islam and Christianity with impartiality, a rarity among medieval geographical writers, whether Muslim or Christian. When King Roger tasked him with describing the world, he put Idrīsī in a difficult position, perhaps unknowingly. For how could Idrīsī produce a geography that his Christian patron would find acceptable, in particular in the wake of the trial of Philip of Mahdiyya? After all, he was a Muslim himself and Roger perhaps knew that his faith had some bearing on how he viewed the world. There are some small signs of this: his appreciation for the old mosque in Palermo and for the congregational mosque in Córdoba, for example. He also founded his description primarily on works written by other Muslims who had in turn inscribed their texts with unwavering partiality for their faith. In some ways, these texts had allowed Idrīsī to formulate a kind of geographical mentality, a way in which he perceived the world. He used the categories that they had used. He directly copied numerous passages from them wholesale. His oikoumene was their oikoumene. His notion of the

world had grown out of theirs. And yet, he managed to write for Roger a description that was surely acceptable to its courtly audience. To do so, he used a number of writing strategies. As we saw above, he never defined "unbelief" against Islam; he repeatedly jettisoned discussion of *jihād*, and *murābiṭīn*, and *ribāṭs* appear rarely; and, in general, he minimized talk of religion. When matters of religion did arise, he always described them evenhandedly. Given that none of his sources presented the world in this way and that no other medieval geographer had attempted to describe Islam and Christianity with such impartiality, he undoubtedly wrote in a calculated manner.

Because he wrote in a way that deliberately diminished the importance of religion – that is, because he adopted a writing strategy – it is difficult to say that with the *Nuzha* we have before us Idrīsī's own view of the world. Rather, it is a record of his view as written under the not altogether impartial patronage of King Roger. Did Idrīsī truly have impartial sentiments toward Islam and Christianity? We cannot say one way or the other with certainty, for he never let his guard down; the writing strategy remained intact from start to finish. We can draw some conclusions regarding his geographical knowledge. As noted throughout these chapters on Idrīsī drew the majority of his knowledge from his Arabic sources. And thus he had great knowledge of the lands of Islam, at least as described in centuries past. When he encountered new information, for instance regarding the geography of Europe, he did not waver from his geographical mentality, but rather adapted the new to fit into the categories he had taken from Arabic geographical writing.

It is also difficult to assess the reception of Idrīsī's *Nuzha* in Roger's court. There are no records of its circulation or use there in any extant sources, save that of Leo Africanus who

claimed that the text had been translated into Latin. ¹²⁷ But there is no evidence of a contemporary translation in Palermo or elsewhere. The closest we can come to judging its reception is to note that William I, King Roger's son and successor, asked Idrīsī to write a geography, a book of "routes and realms of the earth," for him, suggesting that Idrīsī's renown as a man learned in geography was known at the court. ¹²⁸

The *Nuzha*, however, did circulate among Arabic speakers of the Mediterranean. Ibn Sa'īd al-Maghribī (d. 1286, al-Andalus), for example, wrote a geography that drew on Idrīsī's work, and he also mentioned it, if only in passing, in his history of the Maghrib. His text on the length and breadth of the earth took up Idrīsī's seven climates and division by means of longitudinal sections. Abū al-Fidā' (d. 1331), a native of Damascus, also took up Idrīsī's geography in his own description of the world. He Maghribī author of an Arabic geographical dictionary (c. 1461) based his work largely on Idrīsī's *Nuzha*. Finally, members of the al-Sharafī al-Ṣafāqsī family of Sfax in present-day Tunisia also used Idrīsī as a source (see Chapter 6). Finally, Ibn Khaldūn (d. 1406) used Idrīsī as his geographical model in his world history. While all of these writers found Idrīsī's geographical knowledge and information useful, none of them followed him in his presentation of Islam and Christianity in an impartial way. Such a view

¹²⁷ Rosario Gregorio, *Rerum Arabicarum quae ad historiam Siculam spectant ampla collectio* (Panormi, 1790), 238. ¹²⁸ Idrīsī, *Uns al-muhaj*, fol. 2.

¹²⁹ The geography is today mostly lost, but his history of the Maghrib, *Kitāb al-Mughrib fī ḥulā 'l-Maghrib*, is extant. On Ibn Sa'īd's passing remarks on Idrīsī, see Oman, "Osservazioni," 222. On the *Kitāb bast al-arḍ fī ṭūlihā wa al-arḍ* (Book of exposition of the length and breadth of the earth), see S. Maqbul Ahmad, "Cartography of al-Sharīf Idrīsī," *History of Cartography*, Vol. 2, Book 1, 170.

¹³⁰ Giuseppina Igonetti, "Le citazioni del testo geografico di Idrīsī nel *Taqwīm al-buldān* di Abū 'l-Fidā'," *Studi Magrebini*, vol. 8, 1976, 39-52.

¹³¹ Muḥammad Ibn 'Abd al-Mu'min al-Ḥimyarī, *Kitāb al-rawḍ al-mi'ṭar fī khabar al-aqṭār* (Beirut: Mu'assasat Nāṣir al-Thaqāfa, 1980).

¹³² Franz Rosenthal, *The Muqaddimah: an introduction to history* (Princeton, NJ: Princeton University Press, 1967).

was necessary only in special circumstances, such as those in which Idrīsī found himself in Palermo.

The introduction of Idrīsī's text in Europe had to wait until 1592 when the Medici Press published a partial Arabic edition. Twenty-seven years later, two Maronite scholars from Lebanon, Gabriel Sionita (Jibrīl al-Ṣihyawnī) and Joannes Hesronita (Yuḥannā al-Ḥasrūnī) produced an imperfect Latin translation of this Arabic edition under the title *Geographia Nubiensis*. But by this point the *Nuzha* had little effect on European geography beyond drawing the interest of some early orientalists, probably because text had been composed in Arabic, a language known to some in Europe, though by no means commonly spoken.

Additionally, manuscripts of the Arabic *Nuzha* do not appear to have been in circulation in Europe until the late sixteenth century when a copy arrived in Rome and eventually the Medici Press. Perhaps some consulted it for its knowledge of Africa. After all, about three quarters of a century earlier, Leo Africanus had written his description of Africa for his captors in Rome. But in general Idrīsī's work left little mark on the geographic writings of sixteenth and seventeenth century Europe.

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¹³³ Idrīsī, *Kitāb Nuzhat al-mushtāk fī dikr al-amṣār wa-'l-aqtār wa-'l-buldān wa-'l-ghuzur wa'l-madā'in wa-'l-āfāq* (Rome: Typographia Medicea, 1592). The book was cataloged under the title *De geographia universalis*, though there is no Latin in the text. Marina Tolmacheva has claimed that an Arabic manuscript of the *Nuzha* reached Rome and the collection of the Medici Press during the 1586 visit of the patriarch of the Syrian Jacobite church. The patriarch brought with him several manuscripts in Arabic, Persian, and Turkish. See "The Medieval Arabic Geographers and the Beginnings of Modern Orientalism," *International Journal of Middle Eastern Studies*, vol. 27, no. 2 (May, 1995): 144.

¹³⁴ The full title is Geographia Nubiensis, id est accuratissima totius orbis in septem climata divisi descriptio, continens praesertim exactam universae Asiae et Africae, rerumque in iis hactenus incognitarum explicationem (Paris: H. Blageart, 1619).

Chapter 4:

Geographies of Conquest: A Maghribī Chart of the Western Mediterranean

In the year 1333, a force of some seven thousand Marīnids soldiers quietly sailed across the Strait of Gibraltar to Algeciras. Muḥammad IV, the Naṣrid sultan of Granada, had appealed to the Marīnids, a powerful Berber dynasty whose empire at that time encompassed much of present-day Morocco, for aid in his siege of Gibraltar. The struggle for control over the towering rock had been ongoing for decades. The Naṣrids had controlled the fortified mountain for close to three quarters of a century when in 1309 a Castilian army led by Fernando IV successfully blockaded the mountain and forced a Naṣrid surrender. Merciful in victory, the Castilians allowed the more than one thousand Muslim inhabitants of Gibraltar to leave unharmed. Most headed south where they settled in cities across the Maghrib. One elderly *moro* is said according to a Castilian chronicler to have told Fernando IV before departing:

My Lord, what are you doing in sending me away from here? Your great-grandfather King Don Fernando when he took Seville sent me away from there, so I went to live in Jerez. And after, King Don Alfonso, your grandfather, when he took Jerez, sent me away and I went to live in Tarifa, believing that it was a safe place. King Don Sancho, your father came and took Tarifa and sent me away from there, and I came to live here at Gibraltar, believing that I would not be as safe in any other place on this side of the sea. And because I see I cannot settle in any of these places, I will go to the other side of the sea and settle in a safe place where I will live out my life. ¹

¹ As quoted in Ferdinand and Antonio Benavides, *Memorias de D. Fernando IV de Castilla*, (Madrid: Impr. de J. Rodriguez, 1860). The story is from the *Crónica del Fernando IV*. My translation from the Spanish: "Señor, que oviste conmigo en me echar de aquí; ca tu visabuelo el rey D. Fernando quando tomó a Sevilla me echó dende é vine a morar á Xerez, é después el rey D. Alfonso, tu abuelo, quando tomó a Xerez hechome dende é yo vine á morar a Ṭarīfa, é cuydando que estaba en lugar salvo, vino el rey D. Sancho, tu padre, é tomó a Ṭarīfa é hechome dende, é vine a morar aquí á Gibraltar, é teniendo que en ningún lugar non estaría tan en salvo en toda la tierra de los moros

The words of this ever-displaced *moro* convey a sense of desperation and an impending doom for those Muslims living on the Iberian Peninsula. From one generation to the next, the Castilians had captured one Muslim-ruled city after another, unremittingly edging further southward in the process. By the turn of the fourteenth century, the southward push had brought the Castilians close to the Strait of Gibraltar, that crucial space where the Atlantic joins the western Mediterranean and the Maghrib nearly touches Iberia. The Strait itself had been an early conquest of Islam and had been under Muslim control since the early eighth century. The ease of the north-south passage meant that the Strait did far more to unite the Maghrib and Iberia – to form "a single world of North and South" - than to divide them. For the Castilians, putting an end to Muslim hegemony over the Straits proved an irresistible goal, for it would both lessen the Marīnid threat to the Iberian peninsula by limiting access which would otherwise provide them an entrée to the valuable trade that passed through the Strait. The Castilians managed to hold Gibraltar for just over two not entirely peaceful decades, from 1309 until 1333. Their rule there came to end in 1333, however, when a joint Nașrid and Marīnid force defeated them. The Marīnids, however, took the mountain for themselves. A formidable force in the early fourteenth century under the rule of Abū al-Hasan and his son Abū 'Inān, the Marīnids could protect Gibraltar against Castilian aggressions. They even sought to extend their empire northward into Iberia. Indeed, using Gibraltar as a base and supply station for their incursions, these two Marīnids rulers rallied their forces around the restoration around Muslim rule in Iberia.

de aquende la mar como aquí. É pues veo que en ningún lugar destos non puedo fincar, yo yré allende la mar é me porné en lugar do biva en salvo é acabe mis días," 220.

² Fernand Braudel, *The Mediterranean and the Mediterranena World in the Age of Philip II*, Vol. I, trans. Sian Reynolds, (University of California Press, 1995), 117.

In the midst of this decades-long struggle over the Strait of Gibraltar and fight for the reestablishment of Muslim al-Andalus, sometime in the middle decades of the fourteenth century, a cartographer drew a curious map. Written in Maghribī Arabic script, it depicts the region of the eastern Atlantic and western Mediterranean. The map's unmistakable similarity to the hundreds of nautical charts drawn at the time in various port cities around the Mediterranean, especially along the northern shore, confirms the influence of European charts. Just like the charts that inspired it, the Arabic-language chart known today as the Maghrib chart (Figure 8)³ presents information necessary for safely navigating the sea. Some three hundred place names line the coasts. In stark contrast to the crowded shoreline, the cartographer left the interior of the landmasses empty, devoid of writing, with one exception. Across the Iberian Peninsula the cartographer wrote "Center of the Peninsula of al-Andalus," a piece of information superfluous to successful navigation of the Mediterranean and moreover, an awkward phrase to write in the fourteenth century, a time in which the geographical extent of al-Andalus fell far short of encompassing the entirety of the peninsula. Though clearly modeled after maps written in Romance languages, some of the place names, in addition to that awkward phrase written across the Iberian Peninsula, present a western Mediterranean world deeply incompatible with the perspectives presented on the contemporary Romance-language charts on which it is based. The chart is not a mindless copy of a "European" or "Christian" chart as some scholars have suggested, nor does it present a neutral, impartial view of the world. Rather, the Maghrib chart

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³ I refer to the Arabic-language nautical chart conserved at the Biblioteca Ambrosiana in Milan, Italy (SP 2, 259 [SP II.1]) as the "Maghrib chart" throughout this paper. The chart has been widely referred to as the 'Maghrib chart' among historians of cartography since the 1962 publication of Joan Vernet's article, "The Maghreb Chart at the Biblioteca Ambrosiana," *Imago Mundi* (1962): 1-16.

incorporates the tensions over the struggle for the Strait of Gibraltar and embodies midfourteenth century Maghribī dreams of re-establishing Muslim rule across the Iberian peninsula.

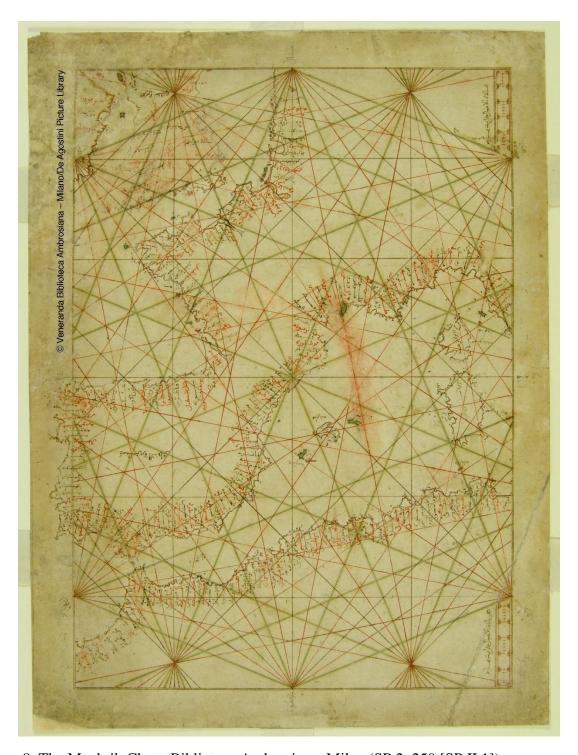


Figure 8. The Maghrib Chart. Biblioteca Ambrosiana, Milan (SP 2, 259 [SP II.1]).

From Liguria to the Maghrib

Stripped of its Arabic writing, we might mistake the Maghrib chart for a chart drawn in a European port city, perhaps Genoa, Venice, or Palma de Mallorca, the three principal centers of early Mediterranean nautical cartography. Whereas nearly two hundred Romance-language nautical charts of the Mediterranean have survived from the fourteenth and fifteenth centuries, only three Arabic-language charts from that period are extant. Moreover, in drawing their maps Mediterranean cartographers based their designs on the same core set of conventions and codes and consequently, nautical charts from the period, regardless of where they were drawn, closely resemble one another in appearance. Historians have long sought to determine the origins of this charting technique. Though the precise details of the early history of nautical charting remain murky, by now nearly all specialists agree that this technique was first devised along the northern shores of the Mediterranean, probably along the coastline of present-day northwestern Italy in the late thirteenth century. From there, the technique spread around the Mediterranean basin and, as the Maghrib chart shows, even crossed ostensible confessional and linguistic boundaries. The Maghrib chart is testimony to the transmission of an elaborate visual representation of space, replete with complex symbolism, abstract concepts, and empirical data, from the predominately Romance-speaking northern shores of the western Mediterranean to the predominately Arabicspeaking southern shores of the sea. As the earliest extant nautical chart from the Mediterranean written in Arabic, the Maghrib chart permits us a view of the reception of nautical charting by one Arabic-speaking cartographer in the western Mediterranean.

A brief glance at the Maghrib chart reveals to the viewer a series of rhumb lines radiating from various points across the chart. Drawn in alternating red, green, and black ink, the interlaced lines contribute greatly to the aesthetics of the chart. Though the numerous lines initially appear as a chaotic muddle, upon closer inspection they impose a visual order on the map. At the center of the map, various rhumbs unite to simultaneously trace the circumference of a circle and a nexus of lines that form its spokes of that circle. The scale of the chart determines the diameter of that circle. A still closer look reveals twelve equally-sized rectangles whose perpendicular lines create yet another level of organization. Finally, a border drawn in a fine black ink surrounds the map. We can see that the geographic content of the map was drawn after the border because the Atlantic coast of the Iberian Peninsula overruns the border. Two identical 100-mile distance scales sit at the corners of one side of the chart, divided – as were nearly all nautical charts – into 20-mile units.

Moving beyond the geometric framing of the network of rhumbs and rectangles, the viewer's gaze perceives yet another level of the chart, that of the intricately winding outline of the coasts, of colored islands, and the characteristic string of toponyms that line the shore. The curves and twists of the coastlines contrast with the rigid geometry of the rhumbs. As with most nautical charts the geographic content of the Maghrib chart does not extend inland from the coastline. The cartographer included only that information necessary for practical use by navigators and sailors. The coastlines themselves are exaggerated: bays and capes appear larger than life. The overstated curves of the coastline were probably intended to help sailors recognize these bays and capes while perched upon a boat. Along the coastline runs a compact list of place names, written inland and perpendicular to the shore so as to avoid disturbing the outlines of the coast. The cartographer rendered these names in red and black ink; red to indicate major ports

and black coastal towns less frequented by sailors and merchants.⁴ Small islands like the Balearics – Minorca, Mallorca, and Ibiza – were painted in red and green inks, probably to ensure the visibility of the islands against the uncolored sea.

Beyond functioning as a geometric frame of the chart, the network of rhumbs has a practical purpose: each line corresponds to a direction on the mariner's compass, a device first used in the Mediterranean in the thirteenth century. Using a compass, a ship's navigator could sail from port to port by tracking the path of a rhumb line, or sometimes a series of intersecting rhumbs. The rhumbs, of course, are an abstraction and do not correspond to lines in the real world. But it was not only navigators who used nautical charts on voyages. Armchair travelers, too, could become pilots by visually tracing the route of a rhumb from one port to another on imaginary journeys. Though nautical charts primarily served professional mariners, in particular sailors and ship pilots, numerous records have survived that indicate that individuals with no professional relationship to the sea – surgeons, physicians, notaries, jurists, clergymen, blacksmiths, painters, and a cooper – owned nautical charts as well. Uses of nautical charts, then, went beyond the purely navigational. They not only helped pilots safely navigate the sea, they also taught them, and other users, about their world.

All of these characteristics, the rhumb lines, the underlying rectangular grid, inner circle, 100-mile distance scales, exaggerated coastlines, and lists of toponyms drawn along the coastline

⁴ Piri Reis, an Ottoman ship captain who operated in the Mediterranean in the late-fifteenth and early-fourteenth centuries wrote a guide to Mediterranean cartography in which he relates that "The names of towns and citadels are in red while uninhabited places are in black," Pirî Reis., Ökte, E. Zekâi. *Kitab-ı bahriye*, (Istanbul: Historical Research Foundation, İstanbul Research Center, 1988), 89.

⁵ See David Woodward and Herbert M. Howe, 'Roger Bacon on Geography and Cartography,' in *Roger Bacon and the Sciences: Commemorative Essays*, ed. Jeremiah Hackett, (Leiden: Brill, 1997), 214.

⁶ See Pujades, *Les cartes portolanes*, 450-453. Note that all of these records are from European port cities, and especially archives of the Crown of Aragon, Genoa, and Venice, and all of these accounts derive from property inventories that these individuals registered with notaries. Very little archival documentary evidence from the Maghrib has survived, and unfortunately no evidence regarding ownership of charts has survived.

figure on all nautical charts. Even the color scheme of coastal towns is maintained across nearly all charts: a port city that appears in red on the Maghrib chart nearly always appears in red on other charts. Moreover, the shape of the coastline remained remarkably consistent across centuries of map production. Nautical charts, however, were not identical to one another. Indeed, no two charts contain the same list of place names, the same coastal outline, the same chromatic scheme for islands, the same location of rhumbs, or the same geographical scope: minute details always vary from chart to chart. The overwhelming similarity among nautical charts, nevertheless, indicates that they all share, at some point, a common precursor, a master prototype.⁷

Specialists have debated the origins of this purported prototype since the nineteenth century. In the historical record, Mediterranean nautical charts appear suddenly, without clear ties to previous charting practices along both the northern and southern shores of the sea. As a historical problem, the precise derivation of nautical charting is still without resolution. Direct contributions from cartographical practices in the Arab-Muslim world has been posited though remains unproven. Fuat Sezgin, for instance, recently suggested – without evidence – that medieval nautical cartography in Europe owes much to the mathematical geography and cartography that were "intensively practiced since the ninth century in the adjacent Islamic culture. This includes the creation or origin of the so-called portolan charts and their linear

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⁷ Historians of cartography have long noted the resemblance of all charts to one another. Heinrich Winter wrote of "the agreed conservatism of the chart makers," 'The True Position of Hermann Wagner in the Controversy of the Compass Chart,' *Imago Mundi* 5 (1948), 21-26. In *The Haven-Finding Art*, Taylor argued that "a single master-copy appears to have been available from the outset, from which all later ones show merely deviations in detail" (New York: American Elsevier, 1971, 113, n. 7). Finally, R.A. Skelton asserted that a prototype chart existed and "was reproduced with no structural alterations for nearly four centuries," *Maps: A Historical Survey of Their Study and Collecting* (Chicago: University of Chicago Press, 1972), 8. These are noted in Campbell, "Portolan Charts from the Late Thirteenth Century to 1500," 422-423.

networks [rhumb lines]." Nevertheless, the schematic nature of these maps of Arab-Muslim geographers have little to do with the winding, detailed tracings of the shorelines of nautical cartography. Their maps also lack distance scales and rhumb lines. This alone, however, does not disqualify the argument that Mediterranean nautical charts originated in the Arab-Muslim world. After all, cartographical practices in Mediterranean Europe prior to the thirteenth century – *mappaemundi*, regional maps, and so forth – similarly have little to do with nautical charts. The origin of nautical charts also bypasses both Ptolemaic longitudes and latitudes as well as ancient *periploi* written as early as the sixth century BCE.

In spite of Sezgin's arguments to the contrary and the lack of obvious precursor maps in Europe, circumstantial evidence suggests that the earliest nautical charts were drawn along the Ligurian-Tuscan littoral arc, probably in the second half of the thirteenth century. The earliest surviving nautical charts, the Carte Pisane and Cortona chart, date from the late thirteenth century and based on linguistic evidence, were almost certainly drawn in or around Genoa. The first references to a nautical chart in the Mediterranean dates from 1270 CE and involved Genoese ships and navigators. In comparison, the earliest Arabic-language reference to nautical chart dates from sometime between 1330 and 1348, when Ibn Faḍl Allāh al-'Umarī wrote in

⁸ Mathematical Geography and Cartography in Islam and their Continuation in the Occident, I Historical Presentation, Part 1, English Trans. of Volume X of Geschichte des Arabischen Schrifttums, trans. Guy Moore and Geoff Sammon, Institute for the History of Arabic-Islamic Science, Frankfurt am Main, 2005.

⁹ For a recent overview of various theories of the origin of nautical charts – classical, "Arabic," Indian Ocean, Byzantine, Chinese, or European – see Pujades, *Les cartes portolanes*, 381-388, 506-520. Pujades points to the coastline "between Genoa and Pisa as the birthplace of nautical cartography," 515.

¹⁰ Both of these charts are undated, unsigned works. They have been assigned early dates of production based on paleographical analysis. Recently, Ramon Pujades has argued that these two charts actually date from the late fourteenth century, though his arguments have been questioned by Tony Campbell. See Ramon Josep Pujades i Bataller, 'The Pisana Chart, Really a primitive portolan chart made in the 13th Century?" *Comité Français de Cartographie*, No. 216, June 2013, 17-32. The earliest dated chart is that of Pietro Vesconte, a Genoese who worked in Venice, from 1311.

¹¹ The earliest references to nautical charts are found in Latin texts. The earliest mention dates from 1270 when Guillaume de Nangis, a French chronicler, wrote of a nautical chart on board the Genoese ship that carried King Louis IX of France – 'Saint Louis' – to Tunis to join the eighth crusade there. See Patrick Gautier-Dalché, "Les sens de *mappa (mundi)*, IXe-XIVe siècle," *Archivum Latinitatis Medii Aevi (Bulletin de Cange)* 62 (2004): 187-202.

some detail about nautical charts in his *Masālik al-abṣār fī mamālik al-amṣār*. References to nautical charts in any text, whether Latin, Romance, or Arabic, are exceedingly infrequent, so the relatively late Arabic mention may not reflect a lack of knowledge of such charts in Arabic-speaking milieus. Finally, an outsized number of early fourteenth-century nautical charts drawn by Genoese cartographers have survived, whereas only three Arabic-language nautical charts have survived from the medieval period, two of which date from the fifteenth century.

Nautical charting, then, probably began along the Ligurian coast, but did not do so in isolation from the Islamic world. While tise specific method of charting developed around Genoa, the knowledge behind the construction of these charts owed much to Mediterranean exchanges. The mathematical expertise that allowed cartographers to draw charts to scale, for instance, required the use of Arabic numerals. ¹² Moreover, collection of the kind of detailed, accurate empirical knowledge demanded by nautical cartographers required repeated, intense exchanges across the sea. The numerous commercial treaties between European and Maghribī sovereigns from the eleventh century and beyond demonstrate the deliberate imposition of a "framework *for* Mediterranean communication" replete with agreed-upon laws and tariffs. Such contracts and diplomacy lubricated commercial, diplomatic, and intellectual exchanges across the sea, facilitating the hundreds and probably even thousands of roundtrip voyages required for the collection and accumulation of accurate data for the plotting of the first nautical charts.

¹² On the importance of Hindu-Arabic numerals to nautical charting see Joseph Needham, Ling Wang, and Gwei-Djen Lu eds. *Science and Civilisation in China. Volume 4, Part 3.* Cambridge: Cambridge university press, 1971, 555-556.

¹³ Wansbrough, *Lingua Franca in the Mediterranean*, 44.

If Mediterranean crossings were a necessary precursor to the development of nautical charting, such crossings also would have provided innumerable opportunities for charts, once invented and put into use on board ships, to circulate and spread. Pujades has argued that Palma de Mallorca and Venice became early centers of nautical cartography "as a consequence of the import of the Genoese cartographic and toponymic model" by Genoese cartographers. Two Genoese cartographers, he claims, carried nautical cartography from Genoa abroad: Angelino Dulceti worked in Palma and Pietro Vesconte in Venice. 14 Though the available evidence does not allow for the reconstruction of the channels through which nautical cartography reached the Maghrib, it is entirely plausible that a Genoese or even a Mallorcan or Venetian cartographer relocated to the Maghrib, even bearing in mind that Maghribī charts use the Arabic language. 15 Chartmaking ateliers, after all, were typically located in port cities where a number of translators or bilingual merchants could be employed. Moreover, a number of *commenda* contracts relating to the trade in nautical charts out of Barcelona have survived from the fourteenth century. The Barcelona-based merchant Domènec Pujol entrusted a number of cartes de navegar to merchants who agreed to sell them in Alexandria, Genoa, Naples, Pisa, and Sicily. 16 Finally, signed charts

¹⁴ Les cartes portolanes, 515.

¹⁵ Though likely unrelated to the spread of nautical cartography, the Franciscan friar Anselm Turmeda famously renounced his Christian faith, converted to Islam, and moved from the Ciutat de Mallorca [Palma] to Tunis around 1385 CE where he wrote a number of books in Arabic and served as vizier. Bearing this unlikeliest of scenarios – a Franciscan converting and moving to Tunis – the notion of a Genoese cartographer relocating to the Maghrib becomes far more conceivable. Add to this the innumerable commercial and diplomatic exchanges between Genoa and various Maghribī ports that took place over the length of the fourteenth century – each contact an opportunity for a Genoese to relocate to the North African coast, and the possibility is still more feasible. Moreover, there are archival records that suggest some "Italian" sailors worked closely with Maghribī sailors. For instance, a 1484 declaration of the councilors of Mallorca during inquisition proceedings against a Sicilian "renegade," a Christian who had converted to Islam. The councilors suspected this Sicilian of providing the Muslim inhabitants of Algiers with "cartes de navegar, ne búxoles, ne sestas" – navigational charts, compasses, and dividers. Archivo Diocesano de Mallorca, *Testaments de Jurats*, MSL-359, f. 347v. A Genoese or Mallorcan or Venetian cartographer certainly could have relocated or worked alongside Maghribī colleagues.

¹⁶ Arxiu Històric de Protocols de Barcelona (AHPB), 58/4, fol. 85v, 9 October 1389; AHPB, 58/5, fol. 79r, 29 April 1390; AHPB 58/6, f. 46r, 30 August 1390; AHPB, 58/9 (Bernat Nadal, January-July 1392, Manual), fol. 82, 14 June 1392; AHPB, 58/9 (Notari Bernat Nadal, 1392 Manual), fols. 87v-88r, 26 June 1392; AHPB, 58/10 (Notari Bernat Nadal, 1392-93 Manual), fols. 57v-58v. The name of the Barcelona merchant is written variously as Domingo Pujol and, more frequently, Domènec Pujol.

have survived from Alexandria,¹⁷ Ancona, Rome, Barcelona, Lisbon, Naples, Rethymno, Savona, Tripoli, Palma de Mallorca, Venice, and Genoa. From its advent in Liguria, the technology of nautical charting had spread widely across the Mediterranean.

While tracing the precise channels through which knowledge of nautical charting reached the cartographer of the Maghrib chart is not possible, the account of the Mediterranean by the Mamlūk encyclopedist Ibn Fadl Allāh al-'Umarī (d. 1349) illustrates some of the ways in which the knowledge contained on nautical charts could circulate around the Mediterranean. Al-'Umarī dedicated one chapter of his encyclopedia Masālik al-Abṣār fī Mamālik al-Amṣār, a text the author intended as an authoritative reference for Mamlūk administrators, to a description of the Mediterranean Sea. The chapter contains a description of the Mediterranean region and contains detailed information on trade itineraries – information of great commercial value – and the goods available in various ports. In his research for this chapter, he interviewed Abū Muḥammad 'Abd Allāh ibn Abī Nu'aym al-Anṣarī al-Qurtubī, an Andalusī sailor, a wise captain – al-ra'is alustādh – who, according to al-'Umarī, passed his youth navigating the Mediterranean, traversing the sea from north to south and east to west, in both Muslim and non-Muslim countries. This sailor described the Mediterranean coastline to al-'Umarī with the aid of al-qanābīs, or "compasses." These *qanābīs* were undoubtedly nautical charts, at least one of which was written in Arabic: according to al-'Umarī the maps included a list of toponyms along the edge of

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¹⁷ Two charts were made in Alexandria, both in Romance language and drawn by the Jewish cartographer Jehuda ben Zara in 1497 and 1500.

¹⁸ The word used by al-'Umarī to signify a nautical chart, *qunbāṣ* and the plural *qanābīṣ*, likely derived from Romance terms that denoted either a mariner's compass or a portolan. For instance, an anonymous Italian language "compass," a text today known as *Lo compasso de navegare* from the late thirteenth century contained a list of sailing directions from port to port around the Mediterranean. The word may well suggest an origin of nautical cartography somewhere along the northern shores of the sea, where Romance languages prevailed. On the term "*qunbāṣ*" as a reference to nautical charts, see Jean-Charles Ducène, "Le Portulan arabe décrit par al-Umarī," *Comité Français de Cartographie*, 216 (June 2013), 81-90. For instance, on page 82 Ducène writes, "Par ailleurs, à partir de la première moitié du XIVe" siècle lorsque les sources arabes du Maghrib ou des pays riverains de la Méditerranée mentionnent des cartes nautiques elles utilisent le terme de *qunbās*."

the coastline as well as lines indicating wind directions. In a later chapter, al-Umarī included a detailed diagram of these rhumb lines, explaining that "As for the lines what we see, these are the winds that ships follow. There are black, red, and green lines..." He explained that the lines represent the "four cardinal winds, then that of eight winds, that of the sixteen winds and finally of thirty-two winds. This [series of lines] is drawn upon the *qunbāṣ*." The names al-'Umarī used for the four cardinal and four quarter winds match those on the Maghrib chart. Finally, the chapter on the Mediterranean reads as if al-'Umarī had put into writing what he had seen on a nautical chart. The names of coastal towns appear one after another, in geographical order, as if he were reproducing the list of names on a nautical chart. For example, from Sabta [Ceuta], on the Maghrib coast, al-'Umarī explains that "We continue to Ḥunayn, then Yarsal, then the islands of Banī Mazaghanā, then Badlis and Bijāya...Next comes Jījal, al-Qullū, Būna, the anchorages of al-Ḥaraz..."

 $^{^{19}}$ A second Arabic-language reference to the *qunbāş* [singular] as a nautical chart suggests that knowledge of the use and production of nautical charts had reached the Maghrib by the mid-fourteenth century. The Tunis-born Ibn Khaldūn recorded in his 1377 CE Muqaddimah an explanation of Mediterranean navigation with the aid of maps: "Navigation on the sea depends on the winds. It depends on knowledge of the directions the winds blow from and where they lead, and on following a straight course from the places that lie along the path of a particular wind. When the wind changes and it is known where a straight course along it will lead, the sails are set for it, and the ship thus sails according to nautical norms evolved by the mariners and sailors who are in charge of sea voyages. The countries situated on the two shores of the Mediterranean are noted on a chart (sahīfa) which indicates the true facts regarding them and gives their positions along the coast in the proper order. The various winds and their paths are likewise put down on the chart. This chart is called the "compass" [kunbāṣ]. It is on this (compass) that (sailors) rely on their voyages." That Ibn Khaldūn, a Maghribī who had traveled on Mediterranean ships, though not extensively and never as a pilot, had such extensive knowledge of nautical charts suggests that awareness of these navigational aids had spread beyond practical users - navigators and sailors - in the Maghrib by the mid-fourteenth century. Some caution, however, must be exercised here: as highly-educated, literate, advantaged individuals, Ibn Khaldūn and al-'Umarī are by no means representative of the average mid-fourteenth century inhabitant of the Mediterranean. Both actively sought knowledge of the world and hence were far more likely than more typical, less well informed Mediterranean inhabitant to know about nautical charts. The above translation is from Franz Rosenthal, (New York: Bollingen Foundation Inc., 1958), 117-118. The term saḥifah, which Rosenthal translates as "chart" refers not to a chart or map specifically, but rather to a piece of paper or skin with writing upon it. See Lane, Edward William, and Stanley Lane-Poole. An Arabic-English Lexicon (London: Williams and Norgate, 1863-1893), 1:1659. Vincent Monteil translated the term as "portulan," Ibn-Ḥaldūn, 'Abd-ar-Raḥmān Ibn-Muḥammad, and Vincent-Mansour Monteil. Discours sur l'histoire universelle = al-Muqaddima. Arles: Actes Sud, 1997. Abdesallam Cheddadi translated the term as "book," Cheddadi, Abdesselam, and Mohammed Arkoun. Le Ta'rīf d'Ibn khaldun; traduction francaise, avec introduction et notes. [s.l.]: [s.n.], 1980.

Al-'Umarī names two further sources for his Mediterranean chapter: a Genoese named Balbanān and a Genoese named Domenichino Doria. 20 These two Genoese informed al-'Umarī of the northern shores of the Mediterranean, especially about the coasts of western Europe and in particular, Italy. His description of the southern shore of the sea is written with far greater detail than his account of the northern shore, suggesting that his source for the African coast, the Andalusī navigator, may have had access to knowledge outside the easy reach of the two Genoese men. Moreover, the same pattern is true of the Maghrib chart: the cartographer included a number of place names along the Maghribī shoreline that do not appear on charts drawn in Mallorca, Genoa, Venice, or elsewhere in Europe; he rendered the southern shore in greater detail than the northern shore. The cartographer of the Maghrib chart may well have gotten information about the southern shore of the Mediterranean from an Andalusī or a Maghribī sailor, just as al-'Umarī had done in the early fourteenth century, that is, at about the same time. Finally, in the early to mid-fourteenth century, across al-Andalus and northern Africa, from the far west to the Mamlūk lands, we see an active interest in practical geography, in determining the best ways to safely and efficiently travel from port to port, in better understanding the distances between cities and the dangers of sailing. This geographical knowledge moved through oral, visual, and textual channels. In writing his administrative encyclopedia, al-'Umarī talked to Andalusī and Genoese sailors, learned about the Mediterranean from a series of nautical maps, and in turn transmitted this valuable knowledge to the readers of his encyclopedia.

In his description of the Mediterranean, Al-'Umarī's combined knowledge gained from a presumably Muslim, Arabic-speaking sailor and two Genoese, presumably both Christians,

²⁰ Balbanān does not appear in any other known documentation. On the other hand, the name Doria undoubtedly refers to the Genoese House of Doria. See M. Amari, 'Al-'Umarī, Condizioni degli Stati cristiani dell'Occidente secondo une relazione di Domenichino Doria da Genova,' *Atti della R. Accademia dei Lincei*, Anno CCLXXX (1882-1883), Serie terza, Memoria della classe di scienze morali, storiche e filologiche, XI.

definitely speakers of a Romance language, though perhaps also able to communicate in Arabic. Geographical knowledge, both in the case of al-'Umarī and of the Maghrib chart, moved from north to south across ostensible confessional, political, or linguistic boundaries. Nevertheless, we would be mistaken if we celebrated this exchange as verification of the mid-fourteenth century western Mediterranean as a harmonious zone. Rather this world was fragmented and confrontational. Consider al-'Umarī's own words when describing the Strait of Gibraltar in the mid-fourteenth century at roughly the same period from which the Maghrib chart dates: it is a place across which wheat is shipped, both "toward Sabta [Ceuta]" along the shores of al-Maghrib al-Aqṣā – the far west of the Maghrib – and "elsewhere along the shore of the enemy, to the west of al-Andalus," that stretch of shore governed at that time by the kings of Portugal and Castile, the latter of whom actively attacked the lands to the east in what remained of al-Andalus. In an otherwise objective description – a simple listing even – of coastal towns, cities, and ports, the text of al-'Umarī embraced the language of hostility: in his own lifetime as well as that of the cartographer of the Maghrib chart, the Strait of Gibraltar became a site of hostility and war, broadly speaking, between Muslims and Christians. The Maghrib chart, too, drew on graphic elements and a representation of space that derived ultimately from charts drawn first in and around Genoa. It is an example of the circulation of a complex technology from the northern to southern shores of the Mediterranean. The Maghrib chart, however, is not a blind imitation of a European chart by a novice cartographer, but rather an elaborate nautical chart that incorporates abstract, symbolic, and empirical data in ways that distinguish it from all other charts. Like al-'Umarī's text, the Maghrib chart appears at first glance as an objective, impartial document, a dispassionate map of coastal towns and cities, of sailing hazards and capes, inspired by models first drawn along the Mediterranean coast of Europe. Nevertheless, like al'Umarī's encyclopedia,

the Maghrib chart reproduces contemporary Andalusī-Maghribī – even pan-Islamic – ideologies regarding the history of conquest in and hops of re-conquest of al-Andalus by Muslims.

Significant Names

If the visual representation of space of the Maghrib chart originated on maps first drawn in ateliers in Genoa, Palma, and Venice, the writing on the chart betrays input not only from Romance-language charts, but also from Arabic-language sources from the Maghrib and elsewhere. Indeed, a close examination of the place names on the chart reveals the inclusion of a blend of toponyms accumulated across at least two millennia, incorporating names originating from a range of languages including, among others, Punic, Greek, and Latin. Names coined far more recently also mark the map, many unmistakably of Arabic origin, several of which are unique to the Maghrib chart. Far from a blind, mindless copy of "western" models as some historians have contended,²¹ the hybrid toponomy of the Maghrib chart rather suggests that it is the product of the complex cultural and linguistic history of the Mediterranean basin across a longue durée. Ancient names, once rich in local significances, sit alongside names of more recent origin, many of which in the fourteenth century still preserved their culturally-specific significances and connotations, and which could consequently introduce to a map a meaning beyond its purely geographical content. While much of the information displayed on the Maghrib chart indeed mirrors that of charts produced along the northern shore of the sea, the incorporation of knowledge from the Maghrib and other parts of the Arabic-speaking Mediterranean world

²¹ Pujades, for instance, has claimed that Arab-speaking cartographer "slavishly copy previous western models and are crammed with Italianisms and Catalanisms phonetically transcribed into the Arabic alphabet." *Les cartes portolanes*, 514.

inscribe the chart with a view of the western Mediterranean that is at once syncretic, merging ancient, contemporary, local, and distant knowledge, and also in conflict with the perspectives presented on contemporary Romance-language charts.

If nautical charts primarily targeted practical users, they also reached out to a broader literate audience. There is writing all over the Maghrib chart, mainly in form of toponyms, though other writing, too, is spread across the chart, some of which suggests that the cartographer did not intend the chart to be used solely on board a ship. For example, looking toward the edges of the chart, the reader sees two identical phrases written just above the distance scales (Figure 2). The phrases read hādihi al-amyāl kull bayt bi-mi'a, which may be read as "These are the miles, with each increment at 100."22 No other nautical charts that date from before the year 1500 incorporate an explanation of how to read a distance scale. Cartographers rather assumed that the users of their charts knew that distance scales always comprised 100-mile increments subdivided into 20-mile units. It is curious, then, that the Maghrib chart includes an explanation for this apparently widely-known element of nautical charts. It suggests that the cartographer drew the chart as a showpiece or as an instructional document, possibly as a sheet of an atlas, rather than for use on board a ship. That the map is drawn on paper, a material unlikely to hold up well to the winds and water encountered on medieval ships, likewise suggests that it did not target practical users at sea.²³ Further, though

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²² The phrase on the map, in Arabic, reads: I use my own translation. The German historian Theobald Fischer translated this phrase as "These are the miles, each subject (house) is one hundred." ("Dies die Meilen; jedes Fach ("Haus") zu hundert,"). Confusion arises from the use of the Arabic word *bayt* in the phrase. *Bayt* most frequently signifies 'house.' However, in the medieval period it sometimes signified 'increment,' which I believe fits this phrase better than Fischer's translation. See Fischer, *Sammlung mittelalterlicher Welt-und Seekarten italienischer Ursprung und aus italienischen Bibliotheken und Archiven,* (Venice, 1886). See,too Edward William Lane and Stanley Lane-Poole, *Arabic-English Lexicon* (London: Williams and Norgate, 1863-1893).

²³ All other pre-1500 nautical charts, irrespective of provenance, are drawn on animal skin, a far more durable material. There are also further reasons to suspect that the Maghrib chart is a single sheet of a multi-sheet atlas. First, charts that represent only a portion of the Mediterranean, as does the Maghrib chart, are always found in atlases, rather than in stand-alone charts. And the geographical scope displayed on the Maghrib chart is not atypical.

now faded, someone – perhaps the cartographer – wrote the names of the cardinal and quarter winds in the margin of the chart, an almost unheard-of practice in nautical cartography. This kind of elementary information regarding the intricacies of distance scales and the directions of winds is more suitable for an instructional tool or descriptive document than for a practical instrument. In fact, this is the very kind of information that al-'Umarī included in his chapter on winds in his fourteenth-century encyclopedia, a text meant to instruct and guide future Mamlūk administrators. But far more than simply educating users about the uses of nautical charts, the Maghrib chart also taught users about the world in which they lived.

The majority of the writing on the chart comes in the form of hundreds of place names written along the coastlines, and as we noted, the majority of the names of the Maghrib chart match place names on other fourteenth and fifteenth century charts. Because nautical cartographers typically included only the names of coastal towns and ports on their charts, they necessarily worked with a limited number of possible place names. That most of these names overlap from chart to chart is inevitable. Indeed, most nautical charts, whether drawn in Mallorca, Genoa, Venice, Tripoli, or elsewhere, contain the same core set of names. Still, though, the cartographer must make many choices regarding which names to include or exclude

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Indeed, the sheets of several atlases, most dating from the early fourteenth century, resemble the Maghrib chart in terms of geographical coverage. For instance, the seventh sheet of Vesconte's 1318 atlas now conserved in Vienna displays a similar region of the Mediterranean. In fact, on this Vesconte chart two names in particular stand out, just as they do on the Maghrib chart: across the center of the Iberian Peninsula is written the word "Ispagna" and in the center of the Strait of Gibraltar is the world "Gibiltera." Second, the scale of atlases typically differed, if only slightly, from the scale of stand-alone nautical charts that depicted the entire Mediterranean region. For instance, Pujades has estimated that each 0.7cm of space on the Maghrib chart represents 50 miles in the real world. This same measurement is found on the sheets of two atlases drawn by Vesconte in 1318, including the Vienna manuscript. This other Vesconte atlas is conserved in Venice at the Museo Correr, call number "portolano 28." Finally, regarding the 0.7cm to 50 mile scale, an anonymous atlas produced in Venice in 1421 (Biblioteca Berio, *Luxoro Atlas*), a 1430 atlas now held in Siena (BC, SV2), and other two mid- to late-fifteenth century atlases also have sheets with the same scale. Only one stand-alone nautical chart, that drawn in 1456 by Pere Rossell (Catalan) has this scale (Chicago, Newbery, NL, ms. Ayer Coll. map 3). Pujades stresses that these scales are approximations only.

from any given chart. In the words of Christian Jacob, "Every map presupposes a selection, the choice of a level of completeness."²⁴ In this selection process, the cartographer produces a world, though not the natural, 'real' world. Rather it is a cultural world, as Jacob writes, "invested by one language among other possible ones, attesting to an organized space, punctuated with meaningful and constructed places, invaded by a reticulation of proper names that bear witness to the appropriation of space through chains of metaphors, fields of knowledge, components of individual or collective mythology, and the declension of lexical variations."²⁵ Cartographers reinvent the world with every map they draw, they play the part of designer in choosing the particular image of the world a map delivers to readers. Maps, after all, also play a special role as transmitters of knowledge. They tell users the names of places, the relative positions of towns along coasts, the orthography of place names. In short, maps teach users about their world. But there are also constraints with which the cartographer must deal. The list of toponyms, for instance, necessarily predates the map, since toponymy relates to knowledge of places. Cartographers do not invent toponyms; rather they select them from an extant pool of possible names.

Writing toponyms on charts is a powerful act: it identifies and defines places. Place names can relate to physical traits. For instance, the terms 'mountain,' 'cape,' and 'port' often become incorporated into place names. At other times, toponyms recall the names of religious or political figures, sometimes they convey political reality and at other times, metaphorical motivations, hence they "project onto space the names of historical characters, names of religious origin." To see the power of naming in practice, consider briefly the first voyage

²⁴ Jacob, *The Sovereign Map*, p 208.

²⁵ Jacob, *The Sovereign Map*, 206. My emphasis.

²⁶ Jacob, *The Sovereign Map*, 206.

across the Atlantic by Christopher Columbus. As he encountered territories for the first time in the New World, he set about naming them: "I gave this cape the name Formoso because it is fair," (19 October 1492) and, "He saw a cape covered with palm trees, and named it Cabo de Palmas" (27 October 1492).²⁷ If Columbus named some places based on their physical characteristics, others had symbolic value, at least for the Spanish: "To the first one [island] I came upon, I gave the name of San Salvador, in homage to His Heavenly Majesty who has wondrously given us all this. The Indians call this island Guanahani. I named the second island Santa María de Concepción, the third Fernandina, the fourth Isabella, the fifth Juana, and so to each of them I gave a new name" ('Letter to Santangel,' February-March 1493). Each of these places already had names in local languages. A cartographer presented with the task of mapping these 'discoveries' had to choose between using the new Spanish names, imbued as they were with linguistic familiarity and Iberian cultural values, or the older, unfamiliar and likely meaningless (for the Spanish) local names. All cartographers are presented with this kind of choice, if less frequently and in less stark contexts than when first mapping the New World, and the cartographer's selection of toponyms can be culturally and spiritually meaningful.

The history of toponyms in the Mediterranean region, however, has a distinct trajectory from that of the New World. While both regions have a layered history that reflects naming inheritances from antiquity, the medieval inhabitants of the Mediterranean more frequently respected ancient names rather than replace them wholesale as in the New World. The Maghrib chart shares the majority of its toponyms with other nautical charts, in part, because of this persistence of ancient names. Consider, for instance, the port of Tabarca in modern-day Tunisia.

²⁷ Tzvetan Todorov, *The Conquest of America: The Question of the Other*, Trans. Richard Howard, New York: Harper & Row, 1984, 27 (cited in Jacob). Also cited in *The Sovereign Map*.

Although conquered by the Arab-Muslims in the late-early-eighth century, the name of the port, even in Arabic, *Tabarqa*, as it appears on the Maghrib chart, echoes the ancient Roman name of the port, *Thabraca*. ²⁸ Contemporary Mallorcan and Italian nautical charts render this port as *Tabarca* or *Tabarcha*. We see this same respect for ancient names again and again throughout the Mediterranean: *Valentia Edetanorum*, modern-day Valencia in southeastern Spain, founded by the Romans in 138 BCE, was written as *Balānsiya* on the Maghrib chart and *Vallença* on Pietro Vesconte's 1313 chart; ²⁹ *Barchinona*, the Latin name for what is today Barcelona, became *Barshilūna* on the Maghrib chart and *Barcelona* on Vesconte's 1313 chart; ³⁰ while *Malaca*, the Latin name for today's Málaga, itself derived from the Punic *Malaka*, became *Mālaga* on the Maghrib chart and *Malicha* on Vesconte's 1313 chart. ³¹ The Maghrib chart, then, like other Mediterranean nautical charts, incorporates the linguistic layering of ancient toponyms drawn from disparate Mediterranean cultures.

Not all names on the Maghrib chart, or indeed, other nautical charts, preserve Punic, Greek, or Roman nomenclature. The Islamic conquest of the eighth century and the subsequent transition to a predominantly Arabic-speaking, Muslim population, left its mark on the coastal toponymy of North Africa and the Iberian Peninsula in ways similar to Columbus's renaming of places at the dawn of the Spanish conquest of the Americas. The city of Algiers, or *al-Jazā'ir* in

²⁸ Ptolemy, Pomponius Mela, and Pliny all called this port Thabraca or Tabraca. See 'Thabraca' in Smith, William, and Charles Anthon. *A New Classical Dictionary of Greek and Roman Biography, Mythology and Geography, Partly Based Upon the Dictionary of Greek and Roman Biography and Mythology*. New York: Harper & brothers, 1854.

²⁹ Other medieval nautical charts drawn in Mallorca, Genoa, and Italy render this as *Valença*, *Valença*, *Vallencia*, or another similar term. I compare the Maghrib chart's toponyms here with toponyms from Vesconte's 1313 atlas because that atlas (and others from the 1310s and early 1320s) appear to have exerted much influence on the naming practices on other nautical charts.

³⁰ Barcelona is written as *Barcellona*, *Barzelona*, and *Barçelona*, or another close variant) on contemporary Mallorcan and Italian charts.

³¹ On Mallorcan and Italian charts, this is rendered as *Malica*, *Mallaca*, and *Mallicha*, or other close variations.

Arabic, sits on what was originally a Punic settlement named *Ikosim*. ³² The Romans slightly modified the name to Icosium, but in 960 the Ziridian prince Bulūggin Ibn Zīrī established a new town on the site with an entirely new name: al-Jazā'ir, or "the islands," in reference to the four islands which lay just offshore until becoming part of the mainland in 1525.33 Mallorcan and Italian charts conversely distort the Arabic name to Alger or Argel. Similar acts of renaming occurred along the southern coast of the Iberian Peninsula where some towns bear the name of the earliest Muslim generals who led the conquest of Iberia in 711. For instance, the present-day town of Tarifa, which sits along the Strait of Gibraltar and was known as Iulia Traducta under the Romans and Visigoths, owes its name to Tarīf b. Mālik, a Berber commander who in 711 led Muslim soldiers during the initial conquest of Visigothic Hispania. The Maghrib chart preserves this toponym, *Tarīf*, while the 1313 chart of Vesconte uses *Tariffa* and the 1375 Catalan Atlas employs Tarifa. Like the acts of naming performed by Columbus, the Muslim conquerors of the Maghrib and Iberia understood the power of naming, of inscribing the map with toponymic monuments of the conquest. These new terms not only added new nomenclature to maps and geographical treatises, they also removed older names, a process of wiping a place off the map as it were. For Arabic speakers with even a passing knowledge the history of the Muslim conquest of Iberia, the name *Tarīf* would compel them to recall the significance, connotations, and history of that place.

Other coastal towns also reveal disparate naming practices from charts drawn in Europe.

The Atlantic town of Bordeaux, briefly under Muslim control in 732, had for centuries been

³² A hoard of 158 coins was discovered here, all inscribed with the name IKOSIM. See "Icosium" in Stillwell, Richard, William L. MacDonald, and Marian Holland McAllister. *The Princeton Encyclopedia of Classical Sites*. Princeton, N.J.: Princeton University Press, 1976.

³³ The name *al-Jazā'ir* is a shortened version of the city's full name, *Jazā'ir Banī Mazghāna*, or 'the Islands of the Sons (Tribe) of Mazghana,' as recorded by the geographer Idrīsī in 1154 and Yāqūt al-Hamawi in the 1220s.

named $B\bar{u}rdh\bar{\iota}l$ or $B\bar{u}rd\bar{\iota}l$ by Arabic-speaking authors. The Maghrib chart, for instance, employs the latter name, $B\bar{u}rd\bar{\iota}l$. Alternatives, however, were available: contemporary Mallorcan, Genoese, and Venetian charts use Bordeos, Bordeo, or some close variation on these terms. There is perhaps not a great difference between some names used on the Maghrib chart and those employed on Mallorcan and Italian charts. $Tar\bar{\iota}f$ and Tarriffa, after all, only differ by a vowel when pronounced aloud, Tarriffa and Tarriffa, are roughly similar. But these slight differences are significant. The cartographer of the Maghrib chart Tarriffa always preferred the Arabic toponyms to those deriving from Romance languages where Arabic toponyms existed.

Others toponyms on the Maghrib chart reveal a more contemporary mixture of Mediterranean languages. The chart employs three terms that signify "port" or "gulf," two Arabic, and one a transliteration of a Romance language term: $j\bar{u}n$, $mars\bar{a}$, and burt. Similarly, four terms designate "cape," two Arabic and two Romance: ra's, tarf, $q\bar{a}b$, and $q\bar{a}b\bar{u}$. For each of these designations – port and cape – the latter terms derive from Latinate words. "Burt" doubtless derives from the Catalan "port," the Italian or Portuguese "porto," or even the Castilian "puerto," all of which ultimately derive from the Latin "portus," while "qāb" and "qābū" stem from the Catalan "cap," the Spanish "cabo," the Italian "capo," or perhaps even the French "cap." The cartographer wrote $Mars\bar{a}$ $Bar\bar{i}s$, the Gulf of Paris, 35 but preferred the Romance-derived "burt" for Burt $Fangh\bar{u}sh$, present-day Port de Fangar, as well as for Burt $F\bar{a}n\bar{u}r\bar{i}$, for Porto Venere, on the Ligurian coast. The first toponym, $Mars\bar{a}$ $Bar\bar{i}s$, is on no other nautical charts, though the cartographer did choose to use the Arabic term $mars\bar{a}$ here. The other two toponyms, however, are on charts drawn in Mallorca and Italy. They were, for instance, rendered

³⁴ Notwithstanding variation in the pronunciation of the Arabic "Ţ" and the Romance "T," among other slight distinctions.

³⁵ The Damascene scholar Abū al-Fida mentions in his *Taqwīm al-buldān* ("A *Sketch of the countries*"), written between 1316 and 1321, that Paris lies along an estuary.

as *Porto Fangos* and *Porto Venero* respectively on Pietro Vesconte's charts from the 1310s. Similarly, various toponyms use the Arabic terms for "cape," but in a few instances the two Romance-derived terms are used instead, for instance, for Cap de Sète in modern-day Mediterranean France is Qāb d. Sīt, or Cauo de Setta on Vesconte's 1313 atlas. 36 Note, too, the possessive "d" (i.e. the "de," or "of") in Qāb d. Sīt. This grammatical construction does not occur in Arabic, and moreover, nor does the preposition de.³⁷ Likewise, it is not clear that the cartographer understood the Romance terms for cape or port, as every instance in which they are used occurs in Europe where Romance languages were widely spoken. That is, the cartographer may have simply transcribed these Romance terms into Arabic letters without understanding their meaning. On the other hand, and probably far more likely, the cartographer did understand the meaning of $q\bar{a}b$, $q\bar{a}b\bar{u}$, and burt but chose not to translate the terms into Arabic because in common Mediterranean usage these Romance terms were used. These Romance names are never used on the chart to designate capes or ports in northern Africa or the southern reaches of the Iberian Peninsula, two areas long dominated by the Arabic language. Rather, those more familiar capes and ports are always labeled with the Arabic terms ra's, tarf, marsā or jūn.

The blend of place names on the Maghrib chart depict the western Mediterranean and Atlantic as a broad region divided into two smaller zones: a northern zone characterized primarily by Romance-derived names, and, across the Maghrib and southern half of Iberia, that characterized primarily by Arabic-derived names. Of course linguistic mixture appears across these zones – *marsā*, as noted above, appears in the name of the Gulf of Paris in Atlantic France – but in general the linguistic pattern follows historical patterns of political control. Interspersed

³⁶ Vesconte's term "Setta" appears to align with the Occitan term for Sète, namely Seta.

³⁷ It is unclear whether the Arabic-speaking cartographer understood its meaning.

throughout the chart, too, are signs of the inheritances of the past. Upon close examination of the names, we detect a palimpsest of naming practices, a world of ancient names that survived alongside more recently-fashioned names. Many of these more recent names evoked recollections of the eighth-century Islamic conquest of *Hispania*, for example the naming of *Tarīf* after the Berber commander Tarīf b. Mālik. Two further pieces of writing on the Maghrib chart confer upon it an association with both the history of and contemporary aspirations toward conquest of the Iberian Peninsula. Written across the middle of the Iberian Peninsula we read "The Center of the Peninsula of al-Andalus," a phrase that would have invariably elicited connotations of conquest. More pointedly still, along the Strait of Gibraltar a unique place name stands out: *Jabal al-Fath*, the 'Mount of Conquest.' First, we will consider the implications of the 'Mount of Conquest.'

An Ominous Name

In the Mediterranean world, replete with modified versions of ancient place names, the appearance of new toponyms stand out since they rupture "the consensus of documents in agreement about the names of the same places." Introduction of a new toponym "breaks the illusion that the map sets in place a stabilized – closed and complete – world, it reintroduces history, temporality, evolution in an image that seeks to obfuscate its subjective and artificial dimension in order to appear as objective reflection, a 'mirror' of the world." Place names can change and on the Maghrib chart a novel place name stands out. Along the Straits of Gibraltar, occupying the spot traditionally reserved for *Jabal Tāriq* – that is, for Gibraltar – the

³⁸ Jacob, *The Sovereign Map*, 209.

cartographer inserted a new toponym: *Jabal al-Fatḥ*, the 'Mount of Conquest' (Figure 9). This name appears on no previous charts, whether in Arabic or Romance languages. From where did this name derive and why did the cartographer select it when other names, in particular the longstanding *Jabal Ṭāriq*, had been employed previously and even contemporaneously?

Cartographers had long incorporated Gibraltar on nautical charts. The precise name used to identify it, however, varied widely from chart to chart. ³⁹ For instance, in 1318 Pietro Vesconte labeled it *Mon Iubeltar* in his atlas. ⁴⁰ The cartographer of the so-called Luxoro Atlas used *Monte Zuibeltar*, ⁴¹ while on the circa 1375 Catalan Atlas it is rendered *Mon Gibeltar*. Finally, if only to show that orthographic consistency was not a major concern among cartographers, on the latefourteenth century Pinelli Atlas, the name, written on two separate sheets of the atlas, appears once as *Monte de Zibeltar* and once as *Gibilterra*. ⁴² Cartographers (and geographers) writing in

³⁹ The names used on nautical charts also differed from names used in pilgrimage guides from the twelfth through fourteenth centuries. For example, one circa 1189 guide renders Jabal Tāriq as "castellum Iebelatarie." See Constanza Gazzera, Narratio de itinere navali, 7 articles extr. From the Memorie della R. accademia delle scienze di Torino (1838), 30. Roger of Howden mentioned Calpes, Jubaltarie insula, and montis Jubaltariae in a single paragraph, Chronia magistri Rogeri de Houedene, Edward W. Stubbs, Rerum Britannicarum Medii Aevi seriptores. London, 1868-71, Vol. 4, 48. Two navigational guides – portolans – from the Italian peninsula, the first from circa 1200 and the second from between 1232 and 1248 use gibelthara mons and monte de gibeltari respectively. See Patrick Gautier Dalché, Carte marine et portulan au XIIe siècle: le Liber de existencia riveriarum et forma maris nostri Mediterranei (Pisa, circa 1200). Rome: Ecole française de Rome, 1995; and Alessandra Debanne, Lo compasso de navegare: edizione del codice Hamilton 396 con commento linguistico e glossario. Brussels: P.I.E. Peter Lang, 2011. In the itinerary of Mauricio de Dacia, circa 1271, we find "...ex parte sinistra in Granata castrum maximum et fortissimum quod dicitur Gibeltare castrum, alio nomine Vulan." Finally, in the Primera crónica general de España written during the reign of Alfonso X, very likely based on an Arabic-language source, we find "e pues que fueron todos pasados [los musulmanes] a Espanna, ayuntaron se en un mont que oy dia lieua nombre daquel moro et dizen le en arauigo Gebaltarif, et los cristianos Gibaltar, ca gebel in arauigo tanto quiere decir como "monte."" Similarly, the seventh/thirteenth century writer Rodericus Toletanus (Ximénez de Rada), 66 wrote "millia bellatorum...duxit in Hispaniam in navibus mercatorum, ne causa transitus perciperetur, et convenerunt ad montem, qui ab illo Mauro Gebel Taric adhuc nuncapatur."

⁴⁰ Österreichische Nationalbibliothek, Vienna, Codex 594. Pietro Vesconte was a Genoese cartographer who operated an atelier in Venice in the first third of the fourteenth century.

⁴¹ Atlante Luxoro, Biblioteca Berio, Genoa. An anonymous chart recently attributed to the Venetian cartographer Francesco Cesanis. Pujades contends that it dates from first quarter of the fifteenth century. See Pujades, 2007, p.504, note 115 for dating of the chart and attribution to Cesanis. See Piero Falchetta, "Elenco comparato dei toponimi costieri dell'Adriatico (isole escluse)," for endorsement of Pujades's proposed date.

⁴² Add. MS. 19510, British Library, London. Also known as the Pinelli-Walckenaer atlas. This anonymous chart is likely Venetian-made and dates from the late fourteenth century. See Pujades, 2007, 69, and Falchetta 'Elenco comparato dei toponimi costieri dell'Adriatico (isole escluse)' regarding the date of the chart.

Arabic exclusively used *Jabal Ṭāriq*, the name that gave rise to the Latinate derivatives noted just above and which translates into the "Mount of Ṭāriq."⁴³ The cartographer of the Maghrib chart, however, followed neither traditional Arabic nor Latinate naming. Moreover, unlike its Romance-language counterparts which grant Gibraltar minor port status by labeling it in black ink, the cartographer of the Maghrib chart wrote *Jabal al-Fatḥ* using red ink: it has become a port of significance. The sudden appearance of this term, as I will argue here, would have conveyed to both Maghribīs and Andalusīs in the mid-fourteenth century, when the Maghrib

That the spelling of "Gibraltar" varies across two sheets on this atlas may well suggest that within a single atelier charts were labeled by more than one scribe or cartographer, or that multiple lists of place names circulated, with differing orthography of some names contained within the lists.

⁴³ The various names used to signify Gibraltar on European-produced nautical charts almost certainly derive from the Arabic Jabal Tāriq. Prior to the Arab-Berber conquest of the Iberian Peninsula in the eighth century, 'Gibraltar' was known as Mons Calpe according to Greek and Roman writers including Strabo, Pomponius Mela, Pliny the Elder, Claudius Ptolemy, and Marcian of Heraclea among others. (See For a general overview of Greek and Roman names of Gibraltar, see entry for "Calpe" in William Smith, Dictionary of Greek and Roman Geography, London. Walton and Maberly, 1854, 483.) Neither of these latter names can explain the origin of "Gibraltar." Smith, the editor of a vast geographical dictionary, stated in 1854 that 'The modern name is a corruption of Jebel-Tarik, i.e. the hill of Tarik, a name derived from the Moorish conqueror who landed here, April 30, 711." The earliest Latin account of the Arab-Berber conquest of Hispania - the oldest surviving account in any language - does not mention either Mons Calpe nor Jabal Tāriq. Nevertheless, several Latin texts from the twelfth century and later employ terms similar to those found the Mallorcan, Genoese, and Venetian charts cited above. For example, two pilgrimage guides, the ca. 1189 Narratio de Itinere Navali ad Terram Sanctam, an account of the overseas route followed by a group of German crusaders to the Holy Land, and the ca. 1190 Chronia magistri Rogeri de Houedene render the name Iebelatarie and Montis Jubaltariae respectively. Two slightly later portolans – books of written sailing directions – the Liber de existencia riveriarum et forma manis nostri, written in Latin, and the slightly later Italian Il Compasso de Navegare employ the names gibelthara mons and monte de gibeltari respectively. See Constanzo Gazzera, De itinere navali, de eventibus, deque rebus a peregrinis Hierosolymam petentibus, 1189, fortiter gestis narratio.) Delle memorabili imprese di una flotta di Crociati partita dalle foci della Schelda l'anno 1189, (Turin: n.p., 1840), 30; Chronica magistri Rogeri de Houedene, Vol. 4, Edward W. Stubbs (ed.), (London: Longman, 1868-71), 48; Patrick Gautier Dalché, Carte marine et portulan au XIIe siècle: le Liber de existencia riveriarum et forma maris nostri Mediterranei (Pise, circa 1200). Roma: Ecole française de Rome, 1995; Alessandra Debanne, Lo Compasso de navegare Edizione del codice Hamilton 396 con commento linguistico e glossario. Brussels: Lang, Peter Brüssel, 2011. The range of spellings offered by these and other authors suggest that no single Latin or Romance name for 'Gibraltar' existed in the medieval period. That the names ultimately derive from the Arabic Jabal Tāriq is indisputable. Nevertheless, many of the names listed above hint at a misunderstanding in meaning of the Arabic name: Jabal means mountain, hence Jabal Ṭāriq signifies 'the mountain of Ṭāriq.' Nevertheless, several of the Latin and Romance versions of this name incorporate terms that indicate "mountain:" montis, monts, monte, and so forth. The Arabic term for mountain, apparently unknown to Romance and Latin speakers, is integrated into the place name itself. To take one example from the above, in the place name Montis Jubaltariae, the Arabic Jabal becomes Jubal, while Tāriq becomes Tariae. The first term, montis, is superfluous, though it likely would have indicated to readers unfamiliar with the etymology of the name, that Jubaltariae is, in fact, a mountain. In the western Mediterranean, full of comings and goings, of trade, diplomacy, and piracy, place names could move across linguistic lines. Nevertheless, meaning, and most likely any connotations the name might have called up for speakers of the original language, did not always move in tandem.

chart was drawn, suggestions of a longstanding yearning to rescue and even to re-conquer al-Andalus from its infidel, Christian intruders.

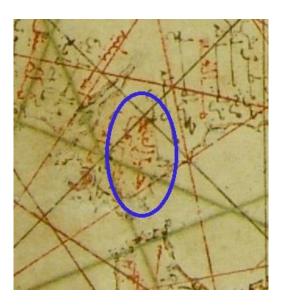


Figure 9. Jabal al-Fath, the Mount of Conquest.

The place known today as Gibraltar has occupied a celebrated place in the minds of inhabitants of the Mediterranean for millennia. For ancient Greeks and later the Etruscans and Romans, this was the legendary northern Pillar of Hercules, the furthest limit reached by Hercules in the west, and, together with the southern Pillar,⁴⁴ the end of the inhabitable world.⁴⁵ Pliny even wrote that some believe that the Strait of Gibraltar had been "dug through by him [Hercules]."⁴⁶ Arabic speakers would have had familiarity with the tale of Hercules, but they could also call upon other, Arabic-language accounts of the creation of Gibraltar. Arabic versions of the medieval romance of Alexander the Great – known as Dhū al-Qarnayn, or 'the

⁴⁴ In antiquity, the southern mountain was called *Abila* or *Abyla* and in the present day two mountains along the coast of Morocco lay claim to the title of the southern Pillar of Hercules: Mount Musa and Mount Hacho.
⁴⁵ See Strabo, Book 3, Chapter 5 for ancient debates about the location of the Pillars of Hercules and of the expedition to the far west undertaken by Hercules. Strabon, Horace Leonard Jones, and John Robert Sitlington Sterrett. *The Geography of Strabo: In Eight Volumes, Volume II.* (Cambridge: Harvard University Press, 1923).
⁴⁶ Pliny, John Bostock, and Henry T. Riley. *The Natural History of Pliny*, 1855, Introduction to Book III.

two-horned one '47 in Arabic – claimed that he, rather than Hercules, created the Strait of Gibraltar, having separated Iberia from northwestern Africa so as to put an end to the "continuous wars" fought between inhabitants of the region. This tale even found its way into medieval Arabic-language geographical treatises. For instance, in his 1154 geography Idrīsī recounted the deeds of Dhū al-Qarnayn in constructing the Strait of Gibraltar. Moreover, those who heard these narratives of Dhū al-Qarnayn would undoubtedly have noted parallels between the imperial ambitions of Alexander in the far west and far east, and those of early medieval caliphates: just like Dhū al-Qarnayn before them, later Muslim rulers sought to penetrate into al-Andalus, to control both sides of the Strait of Gibraltar, and to quell the constant hostilities between the inhabitants there.

The Arabic romance of Dhū al-Qarnayn, then, linked Gibraltar with dreams of conquest in Gibraltar and al-Andalus. Nor was it the only early medieval text to place Gibraltar at the center of conquest. Indeed, the oldest surviving Arabic-language accounts of the Arab-Berber

⁴⁷ Or according to Ibn Kathīr's widely-read fourteenth-century commentary on the Quran, *Tafsir Ibn Kath*īr "one who impacts on two generations or ages." Note that the singular form of *qarnayn* is *qarn*, and traditionally denotes a century. That said, the meaning "horn" is basic. The Arabic title "the two-horned one" for Alexander derive from Greek histories that describe Alexander's conquest of Egypt in 332 BCE. Following the successful conquest, Alexander traveled to the desert Oracle of Ammon at Siwa in Libya. According to some accounts, following this visit Egyptians considered Alexander the son of Zeus Ammon, the King of the Gods. Like Zeus Ammon, Greeks began to represent Alexander as having two ram horns, like those of Ammon. Greek coins, for instance, some of which circulated in Arabia as late as the second century BCE, depicted Alexander in this way. The Qur'an mentions Dhū al-Qarnayn (Sūrat al-Kahf, 82-98) as a prophet who traveled across the world, from the "rising-place" of the sun to the "setting-place of the sun," perhaps in reference to the conquests of Alexander. Some early Muslim scholars also identified the Dhū al-Qarnayn with other figures including Moses, any one of various southern Arabian kings, and the prophet Abraham.

⁴⁸See M. J. de Goeje, and Reinhart Pieter Anne Dozy, *Description de l'Afrique et de l'Espagne*. (Leiden: E.J. Brill, 1866),165-66 Arabic text. Henri Bresc and Annliese Nef translate the following: "Ces derniers leur résistaient et les combattaient autant qu'ils le pouvaient, jusqu'à l'époque où Alexandre pénétra en al-Andalus. Il apprit des habitants qu'ils étaient en guerre continuelle avec ceux du Sous. Il fit venir des artisans et des ingénieurs et se rendit à l'emplacement du détroit qui était alors sur la terre ferme...Alexandre ordonna ensuite qu'on creuse la terre qui séparait Tanger d'al-Andalus, et l'on poursuivit le creusement jusqu'à ce qu'on eût atteint les montagnes qui sont au fond de la terre." Idrīsī, Henri Bresc, Annliese Nef, and Pierre-Amédé Jaubert. *La Première géographie de l'Occident*. (Paris: Flammarion, 1999), 246.

For medieval legends of Alexander the Great in Arabic see Emilio García Gómez, *Un texto árabe occidental de la leyenda de Alejandro: según el manuscrito ár. XXVII de la Biblioteca de la Junta para ampliación de estudios* (Madrid: Impr. de E. Maestre, 1929).

conquest of Visigothic Hispania confer upon Gibraltar a central role in the conquest. ⁴⁹ For example, in his ninth-century text – one of the oldest accounts of the conquest to have survived ⁵⁰ – Ibn 'Abd al-Ḥakam wrote the following of the crossing of the strait by Berber and Arab troops: "There was a strait between [Tangiers] and the people of al-Andalus, and [ruling] over it was a non-Arab man called Yulyān [Julian], lord of Ceuta and of a city on the passage to al-Andalus called *al-Khaḍrā'*...He [Yulyān] was accustomed to obey Ludhrīq [Roderic], lord of al-Andalus, who lived in Toledo." According to the account, Ludhrīq impregnated Yulyān's daughter.

Angered by this, Yulyān undertook to set the "Arabs" against Ludhrīq, "So he [Yulyān] sent word to Ṭāriq [Ibn Ziyād], saying 'It is I who will take you to al-Andalus.'" Accompanied by a group of soldiers, Ṭāriq set sail toward the northern coast. Ibn 'Abd al-Ḥakam describes the landing place: "Now there was in the straits, between the two coasts, a mountain lying between Ceuta and al-Andalus called today *Jabal Ṭāriq*."⁵¹ The account goes on to tell of the sweeping military successes enjoyed by Ṭāriq and his army who captured, among other cities, Córdoba and the Visigothic capital of Toledo.

In Ibn 'Abd al-Ḥakam's telling, the conquest, led by Ṭāriq Ibn Ziyād, began at the mountain "called today *Jabal Ṭāriq*." This peculiar wording leaves open to question the first date at which the name *Jabal Ṭāriq* was used. Earlier Roman writers, after all, called it *Mons Calpe*, or the northern of the two Pillars of Hercules. At some date, now unknown, the name *Jabal Ṭāriq*

⁴⁹ The earliest source of the conquest is actually an anonymous Latin text, now called the 'Chronicle of 754,' written by a Christian who lived in al-Andalus a generation or two after the Arab-Berber conquest. The text mentions Ṭāriq b. Ziyād as having led troops into Hispania, it does not mention specifically Gibraltar, either as *Calpe* or *Jabal Ṭāriq*, though the author does say that the Muslim troops pressed upon the "Pillars of Hercules." See Kenneth Kenneth Baxter, *Conquerors and Chroniclers of Early Medieval Spain*, (Liverpool: Liverpool University Press, 1990), for a translation of this chronicle.

⁵⁰ The oldest extant Arabic-language accounts of the eighth-century conquest were written at least two centuries after the events in question.

⁵¹ Modified from David A. Cohen's translation in Olivia Remi Constable, *Medieval Iberia*, University of Pennsylvania Press, 1997, 33.

replaced *Mons Calpe*. Whatever the date, other sources corroborate Ibn 'Abd al-Hakam's telling and explain the etymology of the name. The anonymous eleventh- or twelfth-century Fath al-Andalus, The Conquest of al-Andalus, states that after convening 3000 Berber and Arab troops at Ceuta, Tāriq Ibn Ziyād led them across the Strait to "a mountain at whose feet they docked, the mountain is called Jabal Tāriq because of his name and it is called this up to the present."52 Geographical texts also place Gibraltar at the center of the conquest. The writings of the tenthcentury Persian geographer al-Istakhrī, for instance, located Jabal Tāria at the center of the conquest. He wrote that "When the Umayyad dynasty disappeared in the Orient, one of them crossed the sea toward al-Andalus from Azīla of the Maghrib to the peninsula⁵³ of *Jabal Tāriq*. He took control of it and it is still in Umayyad hands, up to today... And from the peninsula of Jabal Tāriq he conquered al-Andalus at the beginnings of Islam. Jabal Tāriq is a prosperous mountain, fortified with farmsteads and cities and is the last port of al-Andalus."54 Some of the geographer's information does not measure up to reality. For example, Gibraltar cannot sustain more than one city due to lack of water. 55 Nevertheless, Istakhrī identifies Jabal Tāriq as the starting point of the conquest. Some two centuries later Idrīsī wrote, "Jabal Ţāriq is so named because it is the place where he [Tariq Ibn Ziyad] landed upon crossing the Strait with his Berber army."56 Finally, fourteenth-century sources also presented *Jabal Tāriq* as the starting point of

⁵² Jurjī Zaydān, ed., *Fatḥ al-Andalus, aw, Ṭāriq ibn Ziyād*. Cairo, Dār al-Hilāl, 1965.

⁵³ Peninsula or island. The Arabic term used here is "jazīra.

⁵⁴ My translation from the Arabic. See De Goeje, *Bibliotheca Geographorum Arabicorum*, Vol. 1, Leiden, Brill, 1927, 41-42. My emphasis.

⁵⁵ The lack of readily accessible water sources posed a great challenge to the establishment of any permanent population of considerable size. In the eleventh century, the governor of *Jabal Tāriq* ordered a fortress built to guard against an expected attack from the Almoravids of the western Maghrib. Recognizing the shortage of water, workmen built rain catchments and cisterns to store collected water. Later, in the fourteenth century, the Marinids constructed an aqueduct to transport water on Gibraltar. H.T. Norris, "The Early Islamic Settlement in Gibraltar," *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, Vol. 91 (Jan. – Jun., 1961), 40. ⁵⁶ Idrīsī. *Opus geographicum*, 539.

the conquest.⁵⁷ Writing in Marrakesh around the year 1312, Ibn 'Idhāri wrote in his a*l-Bayān almughrib*, a history of the Maghrib and Iberia, that the first place conquered in Iberia by Ṭāriq was *Jabal Ṭāriq*, and that when the Berber and Arab troops disembarked, they looked to the top of the mountain, climbed the slopes to the peak, and upon summiting, constructed a protective wall that they called the "Wall of the Arabs."⁵⁸

In Arabic-language literary accounts, then, the name of Ṭāriq b. Ziyād and the mountain that took his name became embedded in narratives of the conquest of Hispania. Indeed, in historical and geographical texts, it became the site *par excellence* in the Muslim history of Iberia: it was from Gibraltar that the conquest was undertaken. It was Ṭāriq, after all, who had first crossed the Strait to *Mons Calpe* from which he defeated "Ludhrīq," the king of the Visigoths, and pressed on to conquer Toledo and Córdoba. It was Ṭāriq, and not the other generals of Arab-Berber armies, who received a visit by the Prophet while asleep on board the ship that carried him from Ceuta to Hispania, or so Ibn al-Quṭiyya claimed.⁵⁹ And it was Ṭāriq

⁵⁷ Some historians have raised doubts over the historical personage of Ṭāriq Ibn Ziyād. Medieval documents present a confused story of Ṭāriq's ethnic origins. Outside of documents written centuries after his life, often by authors living far away in Egypt, Syria, or Iraq, there exists no evidence of an actual person named Ṭāriq who invaded Hispania. In any case, the sources tell varied stories. Some, like al-Razī claim he was of Persian origin, from Hamaḍān. Others claim he was of Arab origin, while others still, say he was a Berber. The chronology of Ṭāriq's crossing to Hispania also varies among medieval sources, though most agree that it took place in the year 711 CE. Vallvé suggests that the muddled history of Ṭāriq ibn Ziyād should cause some misgivings regarding the historical authenticity of this person. Moreover, in Arabic, the 3-letter root of the name Ṭāriq is can signify 'to enter,' and in a substantive form, 'he who opens the road,' 'the explorer,' 'the conqueror' (*tarrāq*). Vallvé even claims that *taraqa* and its derivatives can be a synonym of *fataḥa*, 'to open,' 'to conquer.' All of this is to say that the authenticity of the story of Ṭāriq's crossing is doubtful and that Ṭāriq ibn Ziyād may well have been a useful invention of later chroniclers and historians, with a meaningful name intended to evoke associations of conquest. See Vallvé, 'Nuevas Ideas Sobre la Conquista Árabe de España. Toponimia y Onomástica,' *Al-Qantara*, January 1, 1989, 10, 1, esp. 52, 53, 86, 92. Much of Vallvé's argument was first put forth by H.T. Norris, ''The Early Islamic Settlement in Gibraltar,' 39-51. Regarding the definition of *tarrāq*, see See Dozy, *Supplément aux dictionnaires arabes*, (Leiden, Brill, 1881).

⁵⁸ Ibn 'Idhārī al-Marrākushī, *al-Bayān al-Mugrib fi ijtiṣār ajbār muluk al-Andalus wa al-Magrib* (Tetouan: Editora Marroquí, 1953), 15-28.

⁵⁹ In this account, as Ṭāriq slept on board the ship to Hispania, the Prophet Muhammad, along with his companions from Mecca and Medina, all armed with weapons of war, visited him in his sleep and encouraged him to attack the armies of Hispania. Upon awaking, Ṭāriq told his companions of the visit and said it was an auspicious sign. See David James, Muḥammad b. 'Umar Ibn al-Qūṭīya, *Early Islamic Spain: The History of Ibn Al-Qūṭīya : a Study of*

who gave his name to the mountain from which the conquest was allegedly undertaken. As with the romances of Dhū al-Qarnayn in which the Iberian Peninsula became a ground of conquest, the name of the mountain, *Jabal Ṭāriq*, would have evoked connotations of the Muslim conquest of Hispania.

Beyond highlighting its role in the early conquest, most medieval Arabic accounts have little else to say about Jabal Tāriq. In the mid-twelfth century, however, Jabal Tāriq again became a pivotal site that linked the southern and northern shores of the western Mediterranean. The Almohads, a Berber dynasty under the rule of 'Abd al-Mu'min since 1130, had steadily chipped away at Almoravid territory in the western Maghrib and in al-Andalus. 'Abd al-Mu'min had led his armies eastward across the Maghrib, conquering lands as far east as the territory of the Ayyūbids, east of Tripoli, a sign of his grand imperial ambitions. In the year 1159, writing from the Almohad military camp outside al-Mahdiyya – a city he hoped to capture – in Ifrīqiya, 'Abd al-Mu'min proclaimed that "The sovereign informs his correspondents that, although he is engaged on the jihād in the east of the Maghrib, he has not forgotten about the problems of al-Andalus, and that he has decided to build a city on *Jabal Tāriq*, which is situated at the junction between the Mediterranean and the Atlantic and is central for both sides of the Straits; he proposes to endow this foundation with all kinds of advantages and to make it invulnerable."60 With conquest at the forefront of his thoughts and actions, 'Abd al-Mu'min called this city Madīnat al-Fath, the 'City of Conquest.' Its main gate took the name Bāb al-Futūḥ, the 'Gate of

the Unique Arabic Manuscript in the Bibliothèque Nationale De France, Paris, with a Translation, Notes, and Comments. (New York: Routledge, 2009).

⁶⁰ Letter dated 20 of Dhū l-Qa'dah 554/4 December 1159. Évariste Lévi-Provençal, *Trente-sept lettres officielles almohades, texte arabe établi et publié par E. Évariste Lévi-Provençal*, (Rabat: Impr. économique, 1941).

Conquest.'61 *Jabal Ṭāriq*, too, was granted a new name: *Jabal al-Fatḥ*, the 'Mountain of Conquest,' which became 'Abd al-Mu'min's base for conquests into Iberia.

When the anonymous cartographer inscribed the name Jabal al-Fath on the Maghrib chart, it recalled a name first used not in the fourteenth century, but rather two centuries earlier by the first Almohad Caliph. The new name betrayed the intentions and aspirations of 'Abd al-Mu'min during a crucial period of Almohad expansion. The Berber dynasty had only recently managed to take the Almoravid capital, Marrakesh, in 1146. From that year, the Almohads expanded both eastward along the Mediterranean coast, beyond *Ṭarābulus* [Tripoli], and northward, well into and beyond al-Andalus into Christian-ruled territories, an offensive that began with the taking of Almería in 1157. The Almohads readily took to concocting place names that evoked ideas of conquest. Some ten years before the renaming of Jabal Tāriq, for example, 'Abd al-Mu'min ordered the construction of a permanent settlement along the right bank of the Bou Regreg River, across from Salā [Salé] which he named Ribāt al-Fath. Once the site of an Almoravid *ribāt* – a fortified building that housed devout volunteers who defended against incursions by opposing forces – which had successfully repelled raids by the Barghawāta. After 1150, equipped with a new name and new defensive structures, a mosque, palaces, and administrative buildings, *Ribāt al-Fath*, the '*Ribāt* of Conquest,' took on a new role, namely the chief site at which troops assembled and ships mobilized for their military expeditions against the Andalusī and the Maghribī coasts. 62 In the mid- to late-twelfth century the Almohads posed a

⁶¹ Ibn Abī Zar' al-Fāsī, 'Alī ibn 'Abd Allāh, and Ambrosio Huici Miranda. *El cartás, noticias de los reyes del Mogreb e historia de la ciudad de Fez por Aben Abi Zara*. (Valencia, 1918), 205-206, 219.
Nb. Historians differ on the spelling of the gate. Some assert that the Arabic is should be read as *futūḥ* while others say *fath*.

⁶² Several sources mention the expansion and new role of *Ribāṭ al-Fatḥ* under the rule of 'Abd al-Mu'min (r.1147-1163) including Ibn Abi Zar', 125; Ibn al-Athir, XII, 103; Ibn Khaldun, I, 313. See, also, Christophe Picard, 77, 93, who contends that *Ribāṭ al-Fatḥ* was so named because of its critical role in military conquests.

considerable threat to territories under Christian rule in al-Andalus. To take but one example, in the year 1162 'Abd al-Mu'min had constructed and armed a fleet of 400 ships at Ma'mura, on the Seybou River, and at *Ribāṭ al-Fatḥ*. His intention, according to the fourteenth-century Marīnid chronicler and historian Ibn Abī Zar': "to attack the Christians by sea and by land."

Prior to the founding of a city atop Jabal al-Fath, Arabic-language sources always referred to the mountain as *Jabal Ṭāriq*. In the century following the renaming, the new name circulated widely. When Arabic-speaking geographers began to incorporate it in their treatises, however, they often devised new narratives to explain the origin of the term. For instance, a geographical treatise written about half a century later, before 1286, probably in Marīnid-ruled Marrakesh, tells an inventive story of the new name. The geographer Abū al-Ḥasan ibn Saʿīd al-Maghribī (d. 1286), born in Granada and educated in Almohad-ruled Marrakesh, wrote in his Kitāb al-Jughrāfiyā, 64 "Opposite al-Qaṣr al-Majāz [in Morocco] is located [one of the parts] of al-Andalus: *Tarīf*, in front of which, and on the sea, is a small island, well known by travelers, which is called the island of *Tārif*, as well as *al-Jazīra al-Khaḍrā*' [Algeciras, lit. 'the Green Island']. This last is an Andalusī city that one finds opposite Sebta [Ceuta]; in its waters is located a [small] green island [name lacking]. Before this city, toward the south, is found the celebrated Jabal al-Fath, thus named because from it al-Andalus was conquered and people know it by this name, although in books it receives the name Jabal Tāriq, for that is how the mawlā Mūsā b. Nuṣayr who conquered al-Andalus called it."65 Ibn Saʿīd al-Maghribī relates a

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⁶³ 201; Picard, 77-81.

⁶⁴ Book of Geography, also titled Kitāb basṭ al-arḍ fī al-ṭūl wa al-'arḍ, Book of the Extension of the Land in Longitudes and Latitudes.

⁶⁵ As quoted in Juan Vernet Ginés, 'España en la Geografia de Ibn Saʿīd al-Maghribī,' *Tamuda*, VI (1958), 312-313. Basing himself largely on Ibn Saʿīd al-Maghribī, Abū al-Fidā' wrote that "Jabal Ṭāriq, which is also called Jabal al-Fatḥ because the Muslims took refuge there during the crossing to al-Andalus and this mountain is part of the Peninsula of al-Andalus in the south…" does not add any novel information. Quoted in Abū al-Fidā' Ismā'īl b. 'Alī,

confused history of the renaming, but nevertheless suggests the kind of associations that an Arabic-speaking Andalusī or Maghribī would have made when presented with the name *Jabal al-Fatḥ*. Ibn Saʿīd al-Maghribī, apparently ignorant of the story of al-Mu'min's renaming of the port a century earlier, intuitively linked the name – the *Mount of Conquest* – to the conquest of *Hispania*.

The term *al-fath* had found its way into toponymy long before 'Abd al-Mu'min's time. Indeed, the name of the city atop *Jabal al-Fath* had served a propagandistic role elsewhere. In 930, in the midst of firming up their authority in al-Andalus, the Umayyads, under the leadership of 'Abd Raḥman al-Nāṣir, aimed to place the city of Toledo under their rule. After failing to gain the support of the townspeople by peaceful means, al-Nāṣir began a siege to force the town to submit to his rule. Just outside of the walls of Toledo, the Umayyads had set up a staging point from the army could carry out the siege. Recognizing the potential long-term nature of this assault, al-Nāṣir ordered the construction of a bazaar and a few buildings at this camp, and called this makeshift town *Madīnat al-Fath*, a city specifically constructed – and specially named – with the conquest of Toldeo in mind. 66

When the term *al-fath* entered the fray in the twelfth century, then, it built upon earlier, portentous uses of the term. It also exploited earlier uses of the term in literary narratives of the seventh- and eighth-century conquests.⁶⁷ These conquest narratives, frequently called $fut\bar{u}h$, ⁶⁸ sought to explain and justify Muslim rule over non-Muslims, and were typically dedicated to the

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Joseph Toussaint Reinaud, and William MacGuckin Slane, Géographie d'Aboulféda: texte arabe publié d'après les mss. de Paris et de Leyde (Paris: Imprimérie royale, 1840), 66.

⁶⁶ El² s.v. Ţulayţula (Toledo) (Levi-Provençal). Toldeo surrendered after two years.

⁶⁷ The most widely-known use of this term would have been its use in the title of *sūrat al-fatḥ*, the sūra of 'conquest' or 'victory', in the Qur'an.

⁶⁸ 'Conquests' or 'openings.' See Albrecht Noth, Lawrence I. Conrad, *The Early Arabic Historical Tradition, A Source-Critical Study*, trans. Michael Bonner, The Darwin Press, Princeton, NJ, 1994, 31.

conquests of specific regions. For example, the earliest extant work of what historians have called the *futūh* genre tells of the conquest of Syria and dates from circa 810, though it does make reference to earlier texts.⁶⁹ One of the earliest surviving accounts, that of Ibn 'Abd al-Hakam, details the conquest of Egypt, the Maghrib, and al-Andalus. 70 As we have seen, Ibn 'Abd al-Ḥakam links the naming of Jabal Tāriq with the eighth-century conquest of Hispania and the exploits of Tāriq Ibn Ziyād. The allegation that the mountain owed its name to the great conqueror, or the *fattāḥ*, of al-Andalus, an assertion repeated by historians and geographers in the following centuries, conveyed connotations of the site with the conquests and the expansion (futūh) of Muslim rule. Indeed, in some instances, futūh accounts, were devised, in part, as explanations – as etiologies – of place names. Albrecht Noth has demonstrated that a place name could "become embedded into a *futūh* etiology," and hence associated with the early conquest. 71 That Jabal Tāriq first appears in Arabic literature in a ninth-century futūh account, and that even centuries later Maghribīs and Andalusīs, including numerous authors of histories and geographical treatises, repeatedly linked the place name to the military feats of Tariq Ibn Ziyad, suggests that the name carried strong associations with the conquest of Iberia.⁷² The name *Jabal* al-Fath would have evoked similar connotations: the Almohads, intent on expanding eastward and northward, eyed al-Andalus as their next target of conquest around 1160. The new name of the mountain, just as the new name of *Ribāt*, publically announced these intentions.

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⁶⁹ Fred Donner, *Narratives of Islamic origins: the beginnings of Islamic historical writing*. Princeton, N.J.: Darwin Press, 1998, 174-184.

⁷⁰ The *Futūḥ Miṣr wa-akhbāruhā*, sometimes called *Futūḥ Miṣr wa'l Maghrib wa'l-Andalus*, by Ibn 'Abd al-Ḥakam (d. 871) tells of these conquests.

⁷¹ Noth, *The Early Arabic Historical Tradition*, 31.

⁷² Michael Bonner, *Jihad in Islamic History, Doctrines and Practice*, Princeton University Press. Bonner asserts that "The futuh, or conquest, narratives had considerable popularity among medieval audiences, and not surprisingly, for they show enormous literary and rhetorical skill." 65. As such, the significance of *Jabal Ṭāriq* in literary accounts as a kind of springboard of the conquest would have been familiar to countless Maghribīs and Andalusīs who had access to these accounts.

'Abd al-Mu'min did not merely give the mountain a name associated with conquest. Rather, he converted the mountain and port into a site of importance along the Strait of Gibraltar, a "celebrated" site as Ibn Sa Td al-Maghribī had described it a century after its transformation. In addition to renaming Jabal Tāriq, 'Abd al-Mu'min constructed a fortified city upon the mountain. It became a place central to his goals of conquest, both in name and in form. The peak of Gibraltar stands 1400 feet above sea level and commands a broad view of the Iberian and Maghribī coastline. Sailing vessels frequently could not help but sail close to Gibraltar due to Atlantic currents and winds. From it observers could monitor the movements of ships along the Strait. While some sources mention that previous rulers had constructed defensive fortifications there is no archeological evidence of any significant structures on Gibraltar prior to the twelfth century. In any case, if constructions existed there, according to the sources the project carried out under 'Abd al-Mu'min dwarfed any of these earlier developments. Only six months after construction began in March 1160 the majority of the work had concluded. Madīnat al-Fatḥ now comprised a mosque, a palace for 'Abd al-Mu'min and other palaces for members of the ruling family, administrative residences, gardens, and an aqueduct which delivered water to a newlyconstructed, massive cistern. Engineers and masons constructed a vast defensive wall around the city that encircled much of the mountain. The next year, 'Abd al-Mu'min stayed in the newlyconstructed city for two months so that he might better examine the situation in al-Andalus. The court poet al-Ruṣāfī visited his patron and recited a panegyric to the caliph 'Abd al-Mu'min there in which he praised his conquests as well as the mountain where he stayed: "How admirable is Jabal al-Fath, exalted and famous among mountains!"⁷³ A number of judges and local rulers from both sides of the Strait traveled to the mountain, while there they took the decision to

⁷³ Ar-Rusafi de Valencia, and Teresa Garulo. *Poemas*. Pamplona: Peralta, 1980, 113, my translation from Spanish. In this collection, the poem is entitled "Elegy of 'Abd al-Mu'min while disembarked at *Jabal al-Fath*."

launch a jihād into al-Andalus.⁷⁴ 'Abd al-Mu'min made Gibraltar a site of strategic importance along the Strait, a stronghold of Muslim rulers along the southern coast of Iberia. Previously the mountain commanded reverence as the site from which the eighth-century conquest began, though long ceased to merit the status of a critical port. 'Abd al-Mu'min changed this. Gibraltar became an outlet for ferries of foodstuffs, goods, and troops sent from northern African ports to al-Andalus. 'Abd al-Mu'min believed the port crucial enough to entrust it to his son Abū Sa'īd, then governor of Granada, who oversaw operations and defenses at *Jabal al-Fatḥ*. The mountain had always held a prestigious position in historical memory and collective mythology among Maghribī and Andalusī Muslims. 'Abd al-Mu'min, however, had converted it into a fortress of Islam, a crucial link between Iberia and the Maghrib, and a point from which to undertake holy war in the Peninsula.

Less than a century after his renaming and fortifying of *Jabal al-Fath*, 'Abd al-Mu'min's dreams of restoring Iberia to Islam had fallen to shambles. In fits and starts the Christian kingdoms, especially those of Castile and Aragon had advanced southward across the Peninsula. The decisive victory of the armies of Castile, Navarre, Aragon, and Portugal over the Almohad and Naṣrid armies at Las Navas de Tolosa, the battle of *al-'uqāb* as it is known in Arabic, in 1212 hastened the downfall of the Almohads in Iberia. After losing Córdoba in 1236, Valencia in 1238, Játiva and Seville in 1248, and the key port city of Murcia, a key port city, in 1268, the Almohads and Naṣrids ruled a far reduced territory, with diminished control of the strait. The situation of the Almohads in al-Maghrib al-aqṣā – the far west of the Maghrib – did not look promising either. There the Marīnids, a Berber tribe, had seized Marrakesh from a weakened Almohad state in 1269 and soon took control of most of the land controlled by the Almohads. In

⁷⁴ Ibn Abī Zar', Volume II, 397-398.

so doing, the Marīnids inherited a difficult situation in the Iberian Peninsula in which mounting pressure from the Castilians and the Aragonese weighed on their ambitions to control and even expand their territories there. Indeed, the Castilians even extended the confrontation southward, across the Strait of Gibraltar. In 1260 they attacked *Salā* [Salé] and less than a decade later mounted an even larger scale attack in the western Maghrib.⁷⁵ The Marīnids repelled both incursions, yet the Castilian ambitions to extend their reach south of the strait had become clear.

In this state of affairs, the Strait of Gibraltar became a critical site of conflict, a disputed zone fought over primarily by the Marīnids and Castilians. Even before the assaults on the western Maghrib and *Salā*, Castilian rulers had high hopes of capturing *Sabta* [Ceuta], though whether they ever attacked this site is unclear. The strait proved an attractive piece of territory for two main reasons. First, whoever controlled the strait could also control access to a rich commercial network that connected Mediterranean ports with those of the Atlantic, both along the European and African coasts. Second, the Castilians feared that even if they could keep them in northern Africa and physically out of the Iberian Peninsula, the Marīnids would nevertheless manage to supply their coreligionists in the Naṣrid emirate of Granada by means of their ports along the strait, like Gibraltar. Hence, the Castilians hoped to wrest control of the ports along the strait from the Marīnids and Naṣrids, so that they might more easily cut off the flow of

⁷⁵ For details about Castilian military incursions into northern Africa, see Joseph O'Callaghan, *The Gibraltar Crusade: Castile and the Battle for the Strait*. Philadelphia: University of Pennsylvania Press, 2011, esp. chapter 2, 'Alfonso X's African Crusade,' 11-33.

⁷⁶ O'Callaghan, The Gibraltar Crusade, 24-25.

⁷⁷ The Marinids,indeed aided the Naṣids in holding their territory in Iberia. Geopolitics on the Peninsula, however, were often less than the straightforward picture painted by some historians. For instance, in 1309 the Marinid ruler Abū al-Rabī' Sulaymān signed a treaty with Ferdinand IV of Castile and James II of Aragon in which the latter two kings promised military support in favor of the Marīnids in their siege of Ceuta, then held by the Naṣrid pretender to the Marinid throne, 'Uthmān b. Idrīs. See Antonio de Capmany y de Montpalau. *Antiguos tratados de paces y alianzas entre algunos reyes de Aragón y diferentes príncipes infieles de Asia y Africa, desde el siglo XIII hasta el XV. Copiados... de los originales registros del Real y General archivo de la Corona de Aragon.... por D. Antonio de Capmany de Montpalau. Vertidos... del idioma antiguo lemosino al castellano, y exornados con varias notas historicas, geograficas, y politicas (Madrid: Impr. Real, 1786), 5-17.*

supplies and troops northward from the Maghrib into al-Andalus, and consequently isolate the Naṣrids in Granada and minimize the threat of incursions from northern Africa. For the Marīnids, control of the Strait would open up trade routes and access to the Iberian Peninsula for both commercial and military objectives.

In the late thirteenth century, fresh from a series of military successes in southern Iberia, Alfonso X of Castile turned his attention to the Strait of Gibraltar. His troops captured the port of al-Qanāṭir along the western end of the strait on the Iberian side. Still, however, the Marīnids controlled the major ports along both sides of the Strait, including Al-Jazīra al-khaḍrā' and Sabta. Indeed, they even looked to capture Castilian lands in southern Iberia. Partly at the behest of Ibn al-Aḥmar of Granada, who wished to subdue the Castilians, the Marīnids ruler Abū Yūsuf organized a military expedition in Iberia. After landing at Tarifa with a large contingent of troops in 1277, the Marīnids army ravaged lands as far inland as Jerez. At the same time, the local Muslim rulers of Algeciras and Malaga accepted Marīnid suzerainty. Over the course of twenty years Abū Yūsuf launched four military expeditions into southern Iberia, each jihād happily cheered by Ibn Abī Zar' al-Fāsī a century and a half later, in his history of the Maghrib. At the same time, the Castilians, frequently with the assistance of the Aragonese, Portuguese, Pisans, and Genoese, attacked Marīnid territories. Along the Strait, the Castilians besieged Tarifa,

⁷⁸ O'Callaghan, *The Gibraltar Crusade*, 65.

⁷⁹ The four invasions took place in 1275, 1277, 1279, and 1282. Nor did Marinid invasions end after 1282: these are simply the invasions led by Abū Yūsuf. See Ibn Abī Zarʿ al-Fāsī, ʿAlī b. ʿAbd Allāh, and ʿAbd al-Wahhāb b. Manṣūr, *al-Anīs al-mutrib bi-rawḍ al-qirṭās fī akhbār mulūk al-Maghrib wa-tārīkh madīnat Fās* (Ribat: al-Maṭbaʿah al-Malakīyah, 1999).

⁸⁰ For instance, in 1260, the Marīnids were still coming to grips with their rule of Almohad lands. In July 1260, they took Rabat and Salā from the Almohads. The Marinīd emir, Abū Yūsuf Yaʻqūb b. 'Abd al-Ḥaqq (d. 1286) placed his nephew Yaʻqūb in control of Salā. This nephew urged Alfonso X in 1259-1260 to send some two hundred cavalry to the port city, perhaps hoping to enter into alliance with Castile and hence become an independent ruler. The Castilians pillaged the port for some weeks, when the Marinid emir finally arrived with troops to stave off the assault. Though this particular incursion focused on Salé, the ultimate objective of Alfonso's "crusade" may well have been to take the city of Ceuta, which lay along the Maghribi littoral on the Strait of Gibraltar. See Joseph F. O'Callaghan, *The Gibraltar Crusade*, 25-29.

Algeciras, and Gibraltar, all in the hands of the Marīnids by the last quarter of the thirteenth century. By the year 1292, the Castilians had managed to take Tarifa, but Algeciras, the main Marīnid port along the Strait, and Gibraltar, both protected by strong defensive fortifications, remained under Marīnid rule. A combined siege and blockade of Gibraltar by the Castilians and Aragonese in the summer of 1309 led to the surrender of the fortified mountain and city in the fall of that year. The Marīnids now only held one great port along the northern shore of the Strait, Algeciras.

In spite of their setbacks in the early fourteenth century, the Marīnid rulers resolved to recapture the ports they had recently lost and even to expand northward into the Iberian Peninsula. At the peak of Marīnid power, especially under the rule of Abū al-Ḥasan 'Alī (r. 1331-1348) and his successor and son, Abū 'Inan Fāris (r. 1348-1358), the Marīnids possessed a massive, well-trained army comprised of soldiers from distant lands: Arabs, Zanāta Berbers, and Andalusīs, among others, fought for them. With this army, Abū al-Ḥasan extended Marīnid rule eastward across the Zayyānid and Ḥafṣid lands in Ifrīqiya, achieving his goal of uniting the Maghrib under his rule.⁸² He also set his sights on the Iberian Peninsula. In 1333, just a year after

⁸¹ Abū Yaʻqub unsuccessfully tried to retake Ṭarīfa in 1294, just two years after the Castilians had seized it. Following this unsuccessful attempt, he turned over his military positions – Algeciras, Ronda, and their dependent territories – in the Iberian Peninsula to the Naṣrids and shifted Marinid focus to forming a Maghribī empire. In 1295 he invaded the Zayyānid state, which lay just east of his own Marīnid territory. In 1299 he turned his attention to Tlemcen. He besieged the city for the next twelve years without success. With an eye toward the power of naming, however, Abū Yaʻqūb set up a camp which eventually became a town in its own right over the long siege, called *al-Maḥalla al-manṣūra*, the 'Camp of the Victorious,' or, more literally, "The Victorious Camp."

⁸² The Marīnid defeat of the Almohads brought with it many political changes across the Maghrib. What it did not change, however, was the desire to restore al-Andalus to Muslim rule. Though they viewed the Almohads as enemies, the Marīnids nevertheless admired them. Like the Marīnids, the Almohads were of Berber, not Arab origin, having their origins at the oasis of Figuig at the edge of the Atlas Mountains and the Sahara desert. More importantly, the Almohads had at one time ruled over a vast territory that included the southern half of the Iberian Peninsula and stretched across the Maghrib as far east as Ifrīqiya. The Marīnids, especially in the mid-fourteenth century, modeled their own imperial ambitions on the Almohads before them; they sought to extend their own empire to lands once ruled by the Almohads and to preserve and extend their territorial holdings in al-Andalus, beginning with the crucial ports around the Strait of Gibraltar. Allen Fromherz has argued that the Marīnids admired the "Almohads as a powerful Berber dynasty that, like the Marīnids, attempted to hold onto al-Andalus and domains outside of North Africa." *The Almohads: The Rise of an Islamic Empire* (London: I.B. Tauris, 2012), 205, n. 24;

acceding to the throne, as his troops captured Gibraltar from the Castilians. Ibn Marzūq, a Marīnis chronicler born in Tlemcen, recounted his memories of this capture of Gibraltar. A schoolboy at the time, Ibn Marzūq recalled his teacher's reaction upon hearing the news: "Rejoice, community of the faithful, that God has seen fit to return to us *Jabal al-Fatḥ*, reincorporating it among us and returning it to us as it was before!" He added that the news of the Marīnid victory brought "cries of happiness and acts of thanks." Abū al-Ḥasan also sought to take Tarifa from the Castilians, though he was unsuccessful. Nevertheless, by the end of 1333, the Marīnids held two crucial ports along the Strait: *Jabal al-Fatḥ* and Algeciras.

Immediately following the capture of *Jabal al-Fath*, Abū al-Ḥasan began to refortify it. He ordered the construction of a mosque, repaired and improved the defensive wall, and restored the shipyard. *Jabal al-Fath* was a crucial port, one worth investing in. Abū al-Ḥasan's grand ambitions of extending Marīnids territory into Iberia and in restoring al-Andalus to Muslim rule never came to fruition. After a string of successes, in early spring 1340 a huge Marīnid army and fleet gathered at Ceuta and crossed the Strait. They landed at *Jabal al-Fath*, intent on carrying out holy war in the Iberian Peninsula so as to restore it to Islam. The Marīnids' destruction of the Castilian fleet off *Jabal al-Fath* in the spring allowed Abū al-Ḥasan to provision his troops in southern al-Andalus via supply ferries sent from Ceuta and elsewhere to *Jabal al-Fath*. However, what had begun as a promising incursion into Iberia ended badly for the Marīnids. By the fall, Abū Ḥasan 'Alī and his troops had begun to besiege Tarifa, along with the support of Naṣrid soldiers. After a series of miscalculations, the Marīnids conquest ended in a massive defeat at the Battle of Río Salado, fought against the combined forces of the Castilians.

Miguel Angel Manzano Rodríguez, La intervención de los Benmerines en la Península Ibérica (Madrid: CSIC, 1992)

⁸³ Musnad, 323. Trans. of title: The Correct and Fine Traditions about the Glorious Deeds of our Master Abū al-Ḥasan, (Musnad al-ṣahīḥ al-ḥasan fi ma'āthīr mawlānā Abī al-Ḥasan).

Aragonese, Portuguese, and Genoese, in 1340.84 This defeat presaged the fall of the Marīnids in al-Andalus. Four years later, the Castilians – with the aid of English, French, and Genoese troops - captured Algerias after a twenty-month siege. And just few years later, the Castilians again attempted to capture Gibraltar, in 1349-1350, just as Ibn Battūta passed through Tangiers and Ceuta. The traveler wished to join the countless volunteers who defended Gibraltar against the Castilian threat. Ultimately his services were not required: the Castilians abandoned the siege later that year after their king, Alfonso XI, died of plague. 85 Nevertheless, the Castilian siege of Gibraltar worried the Marīnid sultan Abū 'Inān. Immediately in the wake of the Castilian retreat, he ordered reinforcement of the fortifications and according to Ibn Juzayy, "his concern for the affairs of the Jabal reached such lengths that he gave orders for the construction of a model of it, on which he had represented models of its walls, towers, citadel, gates, arsenal, mosques, munition stores, and corn granaries, together with the shape of the *Jabal* itself and the adjacent Red Mound. This model was executed in the palace precincts; it was a marvelous likeness and a piece of fine craftsmanship. Anyone who has seen the Jabal and then sees the copy will recognize its merit."86

⁸⁴ The battle is also known as the Battle of Tarīfa.

⁸⁵ In 751/1350, Gibraltar remained the sole Marīnid bridgehead to the Iberian Peninsula. Shortly after the failed Castilian conquest of t mountain, on 14 September 1350, the Marinid sultan Abū al-Ḥasan 'Alī Ibn 'Uthmān wrote to Pere IV, king of Aragon, a letter seeking reclamation of some captives. The formal opening of the letters begins: "From the servant of God 'Alī, Emir of the Believers, son of our mawlā the Commander of the Faithful Abū Saʿīd...Sultan of Fez, Marrakesh, Sijilmāsa, Draʿ, Salé, Meknès, Taza, Tangier, Ceuta, *Jabal al-Fatḥ*, Ronda, Marbella, the country of the Rīf, Algiers, Medea, Miliana..." Mixed among the various territorial holdings of Abū al-Ḥasan sits *Jabal al-Fatḥ*. This name enjoyed a resurgence in use in the fourteenth century. In Marīnid diplomatic correspondence Jabal al-Fatḥ is always used rather than Jabal Ṭāriq. Document 99, 196-198 in Archivo General de la Corona de Aragón, Maximiliano A. Alarcón y Santón, Ramón García de Linares, Angel González Palencia, and Reginaldo Ruiz Orsatti. *Los documentos árabes diplomáticos del Archivo de la corona de Aragón* (Madrid: E. Maestre) 1940. See also documents 32 (pages 66-67), 96 (pages 195-196), 103 (pages 210-211) in *Los documentos árabes diplomáticos del Archivo de la corona de Aragón*.

⁸⁶ Travels in Asia and Africa: 1325-1354, trans. H.A.R Gibb (Abingdon: Routledge-Curzon, 2009), 313.

Although he never managed to fight against the Castilians at Gibraltar, Ibn Baṭṭūṭa's account of the events of the mid-fourteenth century Castilian siege in his of the *Riḥla*, or *Travels*, reveals much about the outlook of at least two Maghribīs in that moment of tension and violence. Ibn Baṭṭūṭa was ready to die as a martyr in defense of Gibraltar. Meanwhile, Ibn Juzayy (1321-1357), compiler of Ibn Baṭṭūṭa's *Rihla*, wrote that:

The Mount of Conquest [Jabal al-Fath] is the citadel of Islam, an obstruction stuck in the throats of the idolaters. From it began the great conquest [of Hispania by the Arabs] and at it disembarked Tariq ibn Ziyad, the freedman of Musa ibn Nusayr, when he crossed [the Strait in 711]. Its name was linked with his, and it was called Jabal Tāriq [the Mount of Tāriq]. It is also called the Mount of Conquest, because the conquest was there. The remains of the wall built by Tariq and his army are still in existence; they are known as the Wall of the Arabs, and I myself have seen them during my stay there at the time of the siege of Algeciras (may God restore it to Islam!)....Gibraltar was recaptured by our late master Abū al-Hasan, who recovered it from the hands of the Christians after they had possessed it for over twenty years....Our late master Abū al-Ḥasan built on it the huge keep at the top of the fortress; before that it was a small tower, which was laid in ruins by the stones from the catapults...later on our master, the Commander of the Faithful Abū 'Inān (may God strengthen him) again took in hand the fortification...and strengthened the wall of the extremity of the mount...to strengthen its defenses and equipment. May God Most High grant victory to Islam in the Western Peninsula at his hands, and bring to pass his hope of conquering the lands of the infidels and breaking the strength of the adorers of the cross.⁸⁷

It was in this period of hostility and war, of struggle for supremacy along the Strait of Gibraltar, of dreams of empire and restoration of al-Andalus to Muslim rule, that the Maghrib chart was drawn. As a port that linked Iberia with Marīnid lands in North Africa and that hence offered the Muslim caliphate the opportunity to send troops and supplies to Iberia from their western Maghribī holdings, it provided a hope for expansion and rescue of Andalusīs there.

While it played a key role in Marīnids maritime policies – the mountain occupied a fabled place

⁸⁷ Quoted in Gibb, Travels in Asia and Africa: 1325-1354, 311-312.

in the history of Al-Andalus and in the fourteenth century had become a stronghold of Islam against the Christians of the Peninsula -- Christian sailors rarely traveled to Gibraltar in the fourteenth century, other than during sieges. A port of significance, it held a status worthy of being labeled in red ink on the Maghrib chart.

"After me, a jazīra named al-Andalus will be conquered"

The title of a map is the most important piece of writing on any chart, because it directs the perception and expectations of how a viewer will read and experience it. In spite of all of the writing on the Maghrib chart, however, it has no title. This is not unusual: no medieval nautical charts of the Mediterranean have titles. The Maghrib chart, nevertheless, does contain a phrase, written across the middle of the Iberian Peninsula that in the absence of a title, acts as a frame through which the viewer should read the chart. A short phrase draws the gaze of the viewer to the center of the map, to the most visible, most noticeable writing on the chart. Written across the interior of the Iberian Peninsula is the phrase, "The Center of the Peninsula of al-Andalus," wast jazīrat al-Andalus (Figure 10). Should be phrase enjoyed a long history in Arabic literature. First appearing in futūh accounts and even in the mouth of the Prophet Muḥammad as a site of conquest in hadūth collections, the phrase jazīrat al-Andalus evoked suggestions of the Muslim conquest of Hispania, as well as contemporary dreams of conquest and restoration of the jazīra, the peninsula, to Muslim rule. And as the most prominent non-coastal writing on the chart, this

⁸⁸ In Arabic, wast jazīra al-Andalus. My translation.

phrase stands out and takes the role of the title, conditioning the viewer to read the map from a particular perspective.⁸⁹

That the chart invokes 'al-Andalus' is perhaps not unexpected. After all, the Maghrib chart is written in Arabic, which suggests a Muslim probably drew it. The name for Muslim-controlled Iberia was, of course, al-Andalus, at least for Arabic speakers, and the term rarely turns up in Latin and Romance-language sources. In diplomatic correspondence dating from the mid-fourteenth century between the Marīnids and various European sovereigns, the term al-Andalus was consistently used in Arabic-language correspondence, but *always* replaced with "Andaluçia," "Ispagnia," or another similar term in Latin and Romance versions of the treaties. 90 Moreover, in Arabic, Latin, and Romance language diplomatic correspondence of the mid-fourteenth century, both *al-Andalus* and *Andaluçia* refer to a region in Iberia under Muslim rule, rather than the entire peninsula in the fashion of the Maghrib chart. 91 Similarly, when the term

⁸⁹ On the role of titles on charts, see Jacob, *The Sovereign Chart*, 192-201. The title of the map, according to Jacob, "programs a reading of the map that is different from what would be made of an abstract painting by obliging the reader to justify it through a complex process of the mobilization of memory and interpretive activity," 193. ⁹⁰ If the term 'al-Andalus' is relatively easy to find in use in medieval Arabic sources, tracing it in medieval Latinate source is far more difficult. Diplomatic correspondence between Maghribi and Iberian rulers sometimes contains a term related to al-Andalus such as "Andalusia," but never "al-Andalus" itself. Consider, for instance, a treaty of peace and alliance for five years from Pere IV of Aragon to the Marīnid ruler of Fez, Abū 'Inān Fāris from 10 August 1357. The letter is addressed to Abū 'Inān as follows: ...treugas por cinco anyos con vos, muy alto è muy noble, don Boannen, rey de Fez, de Miquinenza, de Sale, de Marruecos...è d'Africa è de la Andaluçia..." See Archivo de la Corona de Aragon, ex. Reg., Diversorum regis Alfonsi III et Petri III, 1355-1359, fol. 303. Another example comes from the next year, on 9 April 1358. Piero della Barba, a Pisan ambassador, signed a peace treaty on behalf of Pisa with Abū 'Inān. This text is useful because both an Arabic-language version and a contemporary Italian-language translation have survived. A Franciscan translated the following from Arabic: "...Ebulhasan figliuolo del nostro signore e commandatore di salvi, solicitatore da crescere il nome de Dio, creatore di tutto, Ebiseed figliuolo del nostro signore e commandatore di salvi, solicitatore e da crescere il nome de Dio, creatore di tutto, Ebi Iusuf figliuolo Vabdellach, re di Fessa e di Michinese e di Sale e di Morrocho, e de le terre di Sus e di Segelmese...e de la Ispagnia, preghiamo Dio ci confermi in bene e vittoria!" The term "Ispagnia" stands out here, especially since later in the treaty the Franciscan has translated the following phrase, "...e i Saracini delle nostre terre, cioè del Levante e del Ponente e de l'Andalusia, salvila Dio!" The Arabic term 'al-Andalus' is translated in two ways here, once as Ispagnia and once as Andalusia. For the Arabic version, see Amari, I Diplomi arabi, vol. 1, 1866, 209. For the Italian translation see Mas Latrie, Traités de paix et de commerce et documents divers concernant les relations des Chrétiens avec les Arabes de l'Afrique septentrionale au moyen âge, 1866, 66. ⁹¹ See Ibn 'Abd al-Mun'im al-Ḥimyarī, *Kitāb al-Rawḍ al-mi'ṭār fī khabar al-aqṭār*, ed. Ihsan 'Abbas (Beirut: Librairie du Liban, 1975); EI² s.v. "Ibn 'Abd al-Mun'im al-Ḥimyarī." (T. Lewicki).

Andaluzia repeatedly appears in the *Crónica General de Espanha*, a late thirteenth-century Castilian text, as well as other Castilian and Aragonese chronicles from the period, it always refers to a Muslim-ruled region, rather than the entire Peninsula.

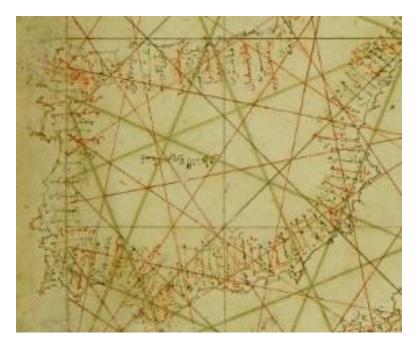


Figure 10. The Center of the Peninsula of al-Andalus. The text reads: wast jazīrat al-Andalus.

Certainly at an earlier date the term *al-Andalus* or *jazīrat al-Andalus* could refer to a territorial expanse that stretched across nearly the entire peninsula. Indeed, in his geographical dictionary *Kitāb al-Rawḍ al-mi'ṭār fī khabar al-aqṭār* the Maghribī *faqīh* 'Abd al-Mun'im al-Ḥimyarī employed the phrase *jazīrat al-Andalus* to denote the entirety of the Iberian Peninsula. Thought to have been written in 1461, the dictionary is essentially a compilation of geographical treatises from the eleventh and twelfth centuries: *Kitāb al-Masālik wa-al-mamālik* by al-Bakrī (ca. 1067-8), *Nuzhat al-mushtāq fī 'ikhtirāq al-āfāq* by Idrīsī (1154), and the treatise *Kitāb al-*

Al-Ḥimyarī wrote that the name "jazīrat al-Andalus" is used because the landmass is triangular in shape and lies between the "Shami Sea" [the Mediterranean] and the "Dark Surrounding Sea" [the Atlantic]:

Istibṣār fī 'ajā 'ib al-amṣār (ca. 1154), a reworking of al-Bakrī's geography a century after the death of al-Bakrī. ⁹² Hence, though written in the fifteenth century, this dictionary reflects conceptions and definitions of terms, among them *jazīrat al-Andalus* that date from three or four centuries earlier. By the time that the cartographer drew the Maghrib chart, those parts of the Iberian Peninsula under Muslim control had been far reduced from the territorial peak of al-Andalus, when it encompassed the majority of the peninsula. Indeed, by 1252, some one hundred years before the drawing of the Maghrib chart, the emirate of Granada was the only territory under Muslim rule on the peninsula. When a now anonymous mid-fourteenth century cartographer wrote across the Iberian Peninsula "Center of the Peninsula of al-Andalus," the content of the phrase did not match the geopolitical reality. Moreover, the cartographer had at hand alternatives to the term "al-Andalus." Writing in the mid-eleventh century, the geographer al-Bakrī wrote of the various names of the Peninsula:

They say that its name in antiquity was Ibārya [Iberia] from the River Ibruh [Ebro], later it was called Bāṭiqa [Betica] from the River [Bītā] [Betis], which is the river of Qurṭuba [Córdoba], then it was called Ishbānīa [Hispania] from the name of its king in the past, he [who] was named Ishbān, though others say that it received this name because of the al-Ishbān people who populated it and who established the sacred region of the river in the earliest times... But there are some who say that the true name is Ishbāriyya [Hesperia], named after Ishbarus [Hesperis] which is the star known as "the red." Finally, it took the name of al-Andalus from the Andalusīs who live there.⁹⁴

⁹² EI² s.v. "Ibn 'Abd al-Mun'im al-Ḥimyarī" (T. Lewicki)

These earlier geographers wrote of "al-Andalus," and sometimes "Jazīrat al-Andalus" as a geographical space that encompassed the entire Iberian Peninsula. Idrīsi, for instance, wrote that "al-Andalus has the form of a triangle. It is bounded on three sides by the sea, namely: on the south by the Mediterranean, to the west by the Dark Ocean, and north by the sea of the English – a Christian people... The *Spanish peninsula*, (al-jazīra al-Isbāniyya) is separated into two along its length by a long chain of mountains…" (my emphasis).

⁹³ See, for instance, the above quote from Idrīsī; he used the phrase *al-jazīra al-Isbāniyyaa*, hence employing the old name of the Peninsula, *Hispania*, rather than al-Andalus.

⁹⁴ Historians have long debated the origin of the name "al-Andalus." For some discussion and relevant citations, see 'El Nombre de al-Andalus' by Joaquín Vallvé, *Al-Qantara: Revista de Estudios Árabes*, 4 (1), 303-356, 1983. See, too, Heinz Halm, "Al-Andalus und Gothica Sors," *Der Islam* 66, 2 (Jan., 1989): 252-263.

Moreover, Arabic-speaking chroniclers and geographers had by the fourteenth century recognized regions of the Iberian Peninsula beyond al-Andalus: they frequently used one of the Arabic terms mentioned by al-Bakrī, Ishbāniya, to denote the Christian kingdoms of Liyūn (Leon), Qashtālla or Qashtīla (Castilla, Castile), Burtugāl (Portugal), Arāghūn (Aragon), and Nabārra (Navarre). 95 In writing "The Center of the Peninsula of al-Andalus," then, the cartographer compelled the map's users to read from one of two perspectives. One perspective maintained the fiction that al-Andalus encompassed the entirety of the Peninsula, a geographical scope that more closely matched the past of the Iberian Peninsula, when Muslim rulers dominated much, but never all, of the lands there. From another perspective, the phrase would have elicited a dream of a territorially expansive al-Andalus, a Muslim al-Andalus that would encompass the totality of the Peninsula, an aspiration of numerous Maghribī rulers in the fourteenth century. The phrase Jazīrat al-Andalus, then, seems an innocent term used to describe a geographical space, even if its use in the mid-fourteenth century as embracing all of Iberia was not entirely geographically accurate. But that phrase had a long history of that, much like the name Jabal al-Fath, would have aroused among both Maghribīs and Andalusīs connotations of conquest of the Iberian Peninsula, in both the past and present.

From its earliest appearances in writing, authors consistently associated the phrase *jazīrat al-Andalus* with the Muslim conquest of Hispania. Consider the account of the 711 Berber-Arab

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⁹⁵ EI² s.v. "al-Andalus" (J.D. Latham, G.S. Colin, L. Torres Balbás, E. Lévi-Provençal). Other options were also vailable. Writing around 1068, the Andalusian geographer al-Bakrī wrote of the history of the inhabitants of the Iberian Peninsula. Whereas in its earliest days the term "Iberia" was used because of the name of the Ebro River (Ibruh), it later became known as "Hispania" (Ishbāniya), and finally took the name "al-Andalus" because it was inhabited by Andalusis. In 1154, Idrisī wrote of the "country of al-Andalus," known in Greek as Ishbāniya and known in the twelfth century as the "peninsula of al-Andalus." See Idrīsī, Opus geographicum sive "Liber ad eorum delectationem qui terras peragrare studeant" (Leiden: Brill, 1970-1984), 525.

invasion as related in the anonymously-authored $Akhb\bar{a}r$ majm \bar{u} 'a, the 'Collected Accounts,' dating from the tenth or eleventh century. ⁹⁶

So [Mūsā ibn Nuṣayr] sent one of his clients called Ṭarīf known as 'Abū Zur'a' with four hundred infantry and a hundred horses. They crossed in four ships until they came to an island called *Jazīrat al-Andalus*, the Isle of al-Andalus, which was the crossing point and shipyard [of the Christians]. It was [later] called the *Jazīrat Ṭarīf*, the Isle of Ṭarīf, thus named because it was where he landed.⁹⁷

While we see here some confusion over the geographical space denoted by *jazīrat al-Andalus*, in this, the earliest-known use of the phrase, the author nevertheless places it within the context of conquest. 98

While *futūḥ* accounts circulated widely among Arabic-speakers, the presence of the phrase *Jazīrat al-Andalus* in accounts of ḥadīth, the acts or sayings of Prophet, likely had a still greater impact on the imaginations and deeds of the Muslim faithful. From an early period, Islamic scholars collected, compiled, and recorded the acts and sayings of the Prophet. As early as the early ninth century, *Jazīrat al-Andalus* appears as a site of Islamic conquest ordered by Muḥammad himself. Writing around 1312-1313, though building upon a tradition begun

⁹⁶ The history covers the period from the arrival of Berber and Arab armies in Hispania in 711 to the rule of the first Umayyad ruler of al-Andalus, 'Abd al-Raḥmān III (912-961). For a detailed discussion of this text, see David James, A History of Early Al-Andalus: The Akhbār Majmū'a: a Study of the Unique Arabic Manuscript in the Bibliothèque Nationale De France, Paris, with a Translation, Notes and Comments, (Milton Park, Abingdon, Oxon: Routledge, 2012).

⁹⁷ As translated by James, 49.The Arabic is found in *Akhbar machmuā* (Colección de tradiciones). Crónica anónima del siglo XI, trans. By Emilio Lafuente y Alcántara, (Madrid: Rivadeneyra, 1867), 5-6.

⁹⁸ The account of Ibn 'Abd al-Ḥakam predates the *Akhbār majmū* 'a by two centuries – though it is clear that the *Akhbār majmū* 'a is based on sources dating from the centuries before it was compiled – and though it does not mention the *jazīrat al-Andalus* it nevertheless appears to use the term "al-Andalus" to signify the Iberian Peninsula, or at least part of it: "Now there was in the straits, between the two coasts, a mountain lying between Ceuta and al-Andalus called today Gibraltar [Jabal Ṭāriq]." This earlier text also places Gibraltar as the first landing place of the Arab-Berber troops, rather than Ṭarīfa as does the *Akhbār majmū* 'a. This trans. found in Olivia Remie Constable, *Medieval Iberia, Readings from Christian, Muslim, and Jewish Sources*, 2nd edition, ed. Trans. David Cohen, 37. The Arabic text is found in Ibn-'Abd-al-Ḥakam, 'Abd-ar-Raḥmān Ibn-'Abdallāh, and Charles Torrey, *Futūḥ Miṣr wa-aḥbaruhā*, *The History of the conquest of Egypt, North Africa and Spain*. (New Haven: Yale University Press, 1922).

centuries earlier, the Maghribī historian Ibn 'Idhārī al-Marrākushī related the following *hadīth* in his al-Bayān al-mughrib:

Khālid ibn Sa'īd states that Muḥammad ibn 'Umar ibn Lubāba transmitted from 'Ubayd Allāh ibn Khālid, who in turn transmitted it from he who told Abū Zayd al-Miṣrī. He traced the *ḥadīth* to Ibn 'Abbās⁹⁹ – may God be satisfied with him – who heard from Abū Ayyūb al-Ansāri¹⁰⁰:

When the Messenger of God – peace be upon him – stood, behold that suddenly he traveled to the west [al-Maghrib], greeted and made signs [of greeting] with the hand. I asked him: "Whom do you greet, oh Messenger of God?" He said: Some men of my *Umma* will be in the west, at an *island* [jazīra] called al-Andalus. 101 In it [al-Andalus] he who is alive will be a defender of the faith [murābit] and anyone who dies will be a martyr [shahīd]! Those whom God has excluded in his book:

The Horn will be blown, and whoever is on the earth will fall dead except whom God wills.¹⁰²

While most early compilations of hadīth are now lost, because of the preservation of the isnad, or chain of transmission from one transmitter of a hadīth to another, which we see here in the opening lines, this *hadīth* may well date from the ninth-century compilation of 'Abd al-Malik ibn Ḥabīb. 103 It was certainly known in the twelfth century when the Andalusī geographer al-Zuhrī wrote about it in his description of al-Andalus in Kitab al-Jughrāfiyā. Al-Zuhrī cites Abū

⁹⁹ The paternal cousin of the Prophet Muhammad.

¹⁰⁰ A companion of the Prophet.

¹⁰¹ Early sources tend to use the word *jazīra* to signify "island." By the time of al-Bakrī (d. 1094), however, geographers used the word to denote "peninsula." Idrīsī, for instance, followed al-Bakrī's phrasing closely in writing: "This first section of the fourth climate begins with the part of the Far West bathed by the Dark Ocean from which emanates the Sea of Syria [Mediterranean Sea], and extends toward the east. In this map, we find al-Andalus, which the Greeks called Ishbania. We also call it the jazīrat al-Andalus, because it is in the shape of a triangle and narrows toward the east to the point of leaving a gap, between the Mediterranean and Dark Ocean which surround it, of only five days..."

¹⁰² Ibn 'Idhari, al-Bayān al-mugrib fī akbār al-Andalus wa-l-Maghrib, edition by G.S. Colin and E. Lévi-Provençal, Leiden, 1951, I, 7. The last line, The Horn will be blown, and whoever is on the earth will fall dead except whom God wills, is a partial quotation from the Qur'an, Surat 39 (Surat al-Zumar, Surat of the Troops), ayah 68. ¹⁰³ In addition to those directly quoted here, according to Joaquin Vallvé similar versions of this hadīth appear in other Andalusī works including those of 'Abd al-Malik ibn Habīb (b. ca. 790, Granada – d. 852-53, Córdoba); Ibn 'Abd al-Barr (b. 978 – d. 1071, Xátvia); Ibn al-Tallā' (b. 1014 – d. 1104, Córdoba); Baqī b. Makhlad (b. 817 – d. 876, Córdoba), as well as some non-Andalusī works such as those of Ahmad b. Hanbal (b. 780 – d. 855, Baghdad) and Abū Ayyūb al- Anṣārī (Companion of the Prophet). See Vallvé, 'El nombre de al-Andalus,' 308-309, notes 13-26.

Muḥammad 'Abd al-Malik Ibn Ḥabīb as the source of the ḥadīth and relates it in nearly identical language as that used by Ibn 'Idhārī al-Marrākushī two centuries later: "After me an island [jazīra]¹⁰⁴ called al-Andalus will be conquered, in which those that live will be happy and those that die will die as martyrs." Al-Zuhrī explains this tradition at length and its bearing on the mindset of Andalusīs:

If this hadīth is authentic it is enough to give glory to al-Andalus, but if it is not, it would be the same because it is in agreement with the Qur'an and with the Sunna, given that each inhabitant of al-Andalus holds the reins of a steed that marches along the path of God. This happens because they are living there in spite of the presence of the enemy – may God exterminate them! – and they survive daily, in spite of their small number and their distance from their coreligionists, notwithstanding the proximity of the enemy and the constant fights and raids. Before the Andalusīs there is a dangerous sea and behind them, there is situated an enemy ready [for combat]. This enemy - may God exterminate them! - is settled on the same land, adjoining their country. For this reason, one only sees vigilant eyes in al-Andalus, for the love of God, those that fight to follow the path of God, and those who are ready to battle against the enemy, without deviating from the Muslim religion, in obedience of the divine will. He who dies in these conditions dies as a martyr; he who continues with life, lives happily, given that the *jihād* and those who carry it out before God - exalted is He! - are the purest offering. And God said – exalted is He! – and He is the most truthful of speakers: 'God has bought from the believers their souls and their wealth because they belong to Paradise: They battle on the path of God and they kill and are killed. It is a promise of Him!"105 This is in agreement with the Qur'an and the Sunna. And the grace is God's."¹⁰⁶

For al-Zuhrī, whether authentic or not, the daily life of the Muslim inhabitants of al-Andalus echos the sentiments of the hadīth. For Al-Andalus, according to al-Zuhrī, is a land awash with

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¹⁰⁴ Or peninsula.

¹⁰⁵ Al-Zuhrī here paraphrases Qur'ān 9:111 (Sūrat at-Tawbah): "Verily, God has purchased of the believers their lives and their properties; for the price that theirs shall be the Paradise. They fight in God's Cause, so they kill (others) and are killed. It is a promise in truth which is binding on Him in the Taūrat (Torah) and the Injīl (Gospel) and the Quran. And who is truer to his covenant than God? Then rejoice in the bargain which you have concluded. That is the supreme success." Hilālī, Taqī al-Dīn, and Muhammad Muhsin Khan. *Al-Qur'ān Al-Karīm: Wa-Tarjamat Ma'ānīhi Ilá Al-Lughah Al-Inkilīzīyah, The Noble Qur'an : English Translation of the Meanings and Commentary*. (al-Madīnah al-Munawwarah: Majma' al-Malik Fahd li-Ṭibā'at al-Muṣḥaf al-Sharīf, 1998).

non-Muslim enemies, a site of jihād and of conquest carried out in the name of God. Without explicitly stating it, al-Zuhrī presents the *jazīra* of al-Andalus as a land of Islam, a place Muhammad himself claimed as a territory, a space preordained by God to be conquered and ruled by Muslims. Indeed, in this understanding, the presence of two definitions of Jazīra al-Andalus in Arabic-language geographies and histories cohere. On the one hand, al-Andalus denotes the entirety of the Iberian Peninsula. On the other hand, it denotes the lands under Muslim rule, which according to the hadīth just cited, should, by order of God, include the entirety of the Iberian Peninsula. The presence of the phrase Jazīrat al-Andalus on the Maghrib chart would have evoked both definitions for fourteenth-century Andalusīs and Maghribīs: the 'Center of the Peninsula of al-Andalus' was a both a geographical entity and an evocative name, a phrase synonymous with notions of conquest and a Peninsula under Muslim rule. That this hadīth appears in later texts contemporaneous with the Maghrib chart, including those of Maghribī geographers like Ibn 'Idhārī al-Marrākushī, suggests that the outlook that linked jazīrat al-Andalus with conquest persisted well into the fourteenth century and beyond. Even as late as the mid-fifteenth century Ibn 'Abd al-Mun'im al-Ḥimyarī could write in his geographical dictionary that "Al-Andalus is a territory of jihād and a land of ribāt." 107

In spite of the Prophet's commandment for Muslims to conquer the *Jazīra of al-Andalus* and to offer one's life in the name of God, by the thirteenth and into the fourteenth centuries the Muslim-ruled territory of al-Andalus had diminished greatly. The expansion of the kingdoms of Castile and Aragon ever further southward resulted in the displacement of a great many Andalusī Muslims. Rather than live under new rulers, Andalusī refugees fled to towns and cities still

¹⁰⁷ My translation.

firmly in the grip of their coreligionists, and in fact, many decided to leave al-Andalus behind altogether, preferring instead to resettle in towns and cities along the shores of the Maghrib.

Many highly-educated Andalusīs found a welcome home in the courts of the Marīnids, Zayyanids, and Hafsids. The migration of Andalusīs to Maghribī courts and cities impacted the outlook of Maghribīs in important ways that explain certain elements of the Maghrib chart. As Ramzi Rouighi demonstrated for the Ḥafṣid lands, Andalusīs were readily accepted as advisors in the courts of Maghribī sovereigns and eventually dominated intellectual circles because of their "particular form of political expertise and cultural refinement." Perceived as victims of Christians in Iberia and even portraying themselves as such, the Andalusīs, as shown by Rouighi, influenced Hafsid political expression, especially by injecting into geopolitical discourse a yearning to come to the aid of those Andalusis who remained in Iberia. Consider, for instance, the plea of Ibn al-Abbār, a scholar from al-Andalus who had relocated to the Ḥafṣid court of Abū Zakariyyā' Yaḥyā (r. 1229-1249): "Come with your cavalry, the cavalry of God, to al-Andalus. For the way to her *rescue* is nearing helplessness." ¹⁰⁹ Ibn al-Abbāar further demanded of Abū Zakariyyā' that he defend al-Andalus on behalf of Islam. Rouighi argued that a "pan-Islamic ideology" directed toward the *najda*, ¹¹⁰ or rescue, of al-Andalus, came to dominate at the Hafsid court and its literature. 111

If the call to 'rescue' al-Andalus from the Christians and to defend Muslim coreligionists there persisted in the Ḥafṣid court and literature, the Marīnids who ruled in the far west of the

¹⁰⁸ Rouighi, Ramzi. *The making of a Mediterranean emirate: Ifrīqiya and its Andalusis, 1200-1400* (Philadelphia: University of Pennsylvania Press, 2011), 17.

¹⁰⁹ As quoted in Rouighi, *Mediterranean Emirate*, 114. My emphasis.

¹¹⁰ Known as *najdat al-Andalus*, the rescue of al-Andalus.

¹¹¹ Rouighi continues "As Muslims, Ifrīqīyans had the 'duty' to help Andalusis and it was also in their best 'interest' to do so," 114-115.

Maghrib actually put this into practice. The Marīnids, after all, frequently supported the Naṣrid-ruled Emirate of Granada, the last bastion of Islam in al-Andalus. In fact, the Marīnids sultans Abū al-Ḥasan and his son Abū 'Inān, both of whom ruled around the period in which the Maghrib chart was drawn, undertook a great project to reunify the entire Maghrib under their rule and to reestablish Muslim rule across Iberia, just as the Almohads had done before them. Indeed, like the Almohads, as we have seen, their approach to the Iberian Peninsula would go through Jabal al-Fatḥ. Though the project to restore al-Andalus to Muslim rule failed, they had nevertheless sought to carry out the jihād in al-Andalus, to undertake the conquest and najda of al-Andaus, and for the third time in history, had done so via Gibraltar, or as the Marīnids ominously called it and as it suggestively appeared on the contemporaneous Maghrib chart, Jabal al-Fath.

In spite of the defeat, Muslim commentators did not easily give up the dream of a Muslim re-conquest of al-Andalus. Writing only a few decades after the Marīnids defeat at Río Salado (30 October 1340, Ibn Khaldūn continued to invoke Maghribī aspirations of conquests in al-Andalus in his *Muqaddimah*:

Perhaps some political opportunity will arise in the coastal countries [the Maghrib], and the Muslims will (once again) ask the wind to blow against unbelief and unbelievers. The inhabitants of the Maghrib have it on authority of the books of predictions that the Muslims will yet have to make a successful attack against the Christians and conquer the lands of the European Christians beyond the sea. This, it is said, will take place by sea. 'God is the friend of the

¹¹² Or nearly so. The Almohads never managed to dominate the entirety of the Iberian Peninsula.

¹¹³ While dreams of reconquering al-Andalus and the military power to potentially make those dreams a reality reached an apogee under Abū al-Ḥaṣan and Abū 'Inān in the mid-fourteenth century, earlier Marinid rulers had equally attempted to invade Iberia. For instance, Ibn Abī Zar ' praised Abū Ya'qub Yusuf (d. 1307) for repeatedly launching, in the words of Ibn Abī Zar ', jihād against the Castilians in Iberia. Indeed, Fromherz has suggested that in his account of the formation of the Marinid state, the rulers of that dynasty relied on both tribal politics and *jihād* in Iberia as motivators of unity. Similarly, Abū al-Ḥaṣan and his son rallied Marinid forces under the call to restore to Islam the lands lost to Christians in al-Andalus. See Allen James Fromherz, *Ibn Khaldun: life and times*. (Edinburgh University Press, 2010), 17.

believers.'114

It should come as no surprise that Ibn Khaldūn would have proclaimed the eventual Muslim conquest of al-Andalus. After all, as we have seen, that very ideology circulated widely in writing – in geographies, histories, and maps – throughout the fourteenth century. There is no reason to believe that Ibn Khaldūn would have been impervious to such ideas any more than the cartographer of the Maghrib chart. Moreover, Ibn Khaldūn was born into a family of Andalusī origin, and his sympathies lay with the native land of his ancestors. ¹¹⁵

Finally, Andalusī immigrants to the Maghrib, at least in the Ḥafṣid lands, also played an important role as educators. ¹¹⁶ Teachers in the Maghrib, as in most Islamic lands, concentrated on teaching the fundamentals of reading, writing, and the Qur'ān and *hadīth*. Though these teachers did not have much say over the subjects that they taught, they nevertheless played a crucial role in transmitting ideology to their students. Ibn Khaldūn wrote that most primary instructors in Ifrīqīya were Andalusī in origin:

The people of Ifrīqīyah combine the instruction of children in the Qur'ān, usually, with the teaching of traditions (i.e. *Hadīth*). They also teach basic scientific norms

¹¹⁴ The Muqaddimah, Rosenthal trans., Vol. I, 538.

¹¹⁵ Rosenthal, who translated *The Muqaddimah*, suggested that Ibn Khaldūn's Iberian roots played an outsized role in his perspective on western Mediterranean history and politics. Rosenthal wrote that "The refugees from Spain who came over and settled in north-western Africa in ever growing numbers constituted a group apart, an elite group at that. The *Muqaddimah* frequently mentions the great contributions made by Spanish refugees to the cultural life of northwestern Africa and stresses the superiority of Spain and the originality of its civilization. This shows that Ibn Khaldun, more than a century after his family had left Spain, still considered himself to some extent a member of that glorious civilization. Though as a Muslim he felt at home everywhere within the vast realm of Islam, he preserved throughout his life a deep and sincere affection for northwest Africa, the country of his birth, for the "homeland" where, according to the poet, "the amulets are first attached" to the child. He always felt a certain responsibility for the political fate of northwestern Africa and took an active interest in it long after he had left. His true spiritual home, however, was Spain....But his basic loyalty to Spain and its civilization had a much more farreaching effect on Ibn Khaldun's personality and work than these transient ties [to northwestern Africa, to the ruler for whom he worked]." Vol. I, xxxiv-xxxv.

Andalusī émigrés established themselves across the Maghrib, though their role as educators has been explored only in Hafsid lands, although Ibn Khaldūn, however, writes of their importance elsewhere in the Maghrib.

and certain scientific problems... In general, their method of instruction is the Qur'ān is closer to the Spanish [Andalusī] method, because their (educational tradition) derives from the Spanish [Andalusī] shaykhs who crossed over when the Christians conquered Spain, and asked for hospitality in Tunis. From that time on they were the teachers of [Ifrīqīyan] children.¹¹⁷

As Rouighi points out, of the teachers included in 'Unwān al-dirāya, a biographical dictionary of notable figures from thirteenth-century Bijāya, a Ḥafṣid port, most were either from al-Andalus or of Andalusī descent. Moreover, the teachers of the children of the wealthy, privileged sectors of society typically came from Andalusī stock. Might these instructors have taught their Maghribī pupils the hadīth in which the Prophet commanded that the faithful conquer a "jazīra" named al-Andalus or the history of the early conquest and subsequent renaming of places? The history of the peninsula of al-Andalus doubtless would have found a place in the curriculum of these teachers and hence their students. Andalusī immigrants, then, could influence Maghribī politics and ideology in important ways. They held positions in the courts of sovereigns where they could directly appeal to rulers and court members to rescue al-Andalus from the Christians. Andalusīs, too, could inculcate the youth as teachers of both elites and those of lesser means. 119

Conclusion

Across the Maghrib in the early and middle decades of the fourteenth century, aspirations of reconquest of al-Andalus had become a common cause. Faced with a struggle for control of the

¹¹⁷ Muqaddimah, Vol. 2, Rosenthal trans., 422-423.

¹¹⁸ Rouighi, 128-129.

¹¹⁹ This draws on the work of Rouighi, who studied the Hafsid lands. Whether this situation extended to other areas of the Maghrib has not been demonstrated, though Andalusi immigrants relocated to cities across the Maghrib, not only to Hafsid lands. See, too, Jamil Abun-Nasr, *A History of the Maghrib in the Islamic Period*. Cambridge: Cambridge University Press, 1987, 5, 137-138. He writes that the Marīnids, Ḥafṣids, and Zayyānids all benefitted from the arrival of Andalusi refugees, hence a situation similar to that of the Hafsids in which Andalusis urged a pan-Islamic ideology, and restoration of al-Andalus, may have obtained across the Maghrib.

Strait of Gibraltar and southern Iberia, Marīnids rulers revitalized the name *Jabal al-Fatḥ* at a time when their military forces posed a substantial threat to Christian powers on the Iberian peninsula. In this climate of hostilities, a now anonymous cartographer drew the Maghrib chart, a nautical map based on models first drawn by Romance-speaking cartographers along the northern shores of the Mediterranean. The chart attests to the exchange of knowledge across a sea fragmented by violence and linguistic, confessional, and political divisions. In the case of the Maghrib chart, a complex visual representation of space moved from the northern shores of the sea to the southern. The inclusion of the name *Jabal al-Fatḥ* on the chart on the one hand reflects the contemporary use of the term, at least among Marīnids rulers and Maghribī writers of geographical treatises, and on the other hand, fourteenth-century ambitions of Muslim conquest of Iberia. The invocation of the phrase 'the Center of the Peninsula of al-Andalus' further emphasizes these aspirations by recalling the past glories of a territorially expansive al-Andalus *and* by pointing to contemporary ambitions to make an Iberia-wide, Muslim al-Andalus a reality.

Nothing on the chart allows us to determine with any certainty the geographical origin of the cartographer. The Maghribī Arabic script used on the map confirms an origin somewhere in al-Andalus or the Maghrib, but beyond this, we cannot be more specific. Nor does the ideology reflected on the map – namely the dream of the *najdat al-Andalus*, the rescue of al-Andalus – help in narrowing down this question given that it enjoyed widespread popularity across the entire region. A cartographer from either al-Andalus or the Maghrib would have been equally capable of drawing the Maghrib chart. For the fourteenth century inhabitants of both the Maghrib and al-Andalus, the Maghrib chart, centered on al-Andalus, would evoke thoughts of contemporary al-Andalus. Ibn Khaldūn explained the significance of al-Andalus as follows:

From the time that Spain [al-Andalus] was conquered by the Muslims, that land beyond the sea has always been a frontier of their empire, the setting for their holy wars, the field of martyrdom, and the gateway to eternal happiness for their soldiers. Muslim institutions in that country were constantly on a flaming brazier, so to speak, placed as they were between the claws and fangs of the lions of infidelity. Surrounded by a mass of hostile people, the true believers of Spain [al-Andalus] still find themselves separated from their coreligionists by the sea. ¹²⁰

While the Marīnids may have led the charge for the rescue of al-Andalus, inhabitants across the Maghrib praised their actions. If the intricate details of the chart as a tool for navigation may have been indecipherable to the majority of Andalusīs and Maghribīs – the scales on the chart, for instance, required explanation – the implications of terms like *Jabal al-Fatḥ* and *Wasṭ al-Jazīrat al-Andalus* would have been far more legible. In making the Maghrib chart, the cartographer mapped a Maghribī-Islamic framework over the transmitted geography of Romance-language nautical charts drawn primarily for and by Christians.

The toponomy of the Maghrib chart consists of a mixture of ancient, recent, distant, and local names. This blending of cultures and languages and of information enduring across millennia speaks to the cumulative nature of knowledge. Alongside ancient place names the cartographer situated far more recently fashioned names. Many of these more recently coined terms retained their culturally-specific connotations. For Arabic-speaking inhabitants of al-Andalus and the Maghrib, the name $Tar\bar{t}f$ along the Strait of Gibraltar recalled the history the eighth century Muslim conquest of Hispania, whereas for medieval Romance-speakers, Tarifa would have induced a set of different connotations. Here we can glimpse the intimate relationship between culturally created meanings and context. The Maghrib chart, with its specific mixture of toponyms and phrases would likely elicit a particular set of connotations

¹²⁰ As quoted in Joseph O'Callaghan, *The Gibraltar Crusade* (University of Pennsylvania Press, 2011), 3.

among fourteenth century Andalusīs and Maghribīs. A nearly identical map, however, written in a Latinate tongue and with a slightly different assortment of toponyms, would likely raise a far different set of connotations among contemporary European users. The contours of the coastlines do not vary between the Maghreī and Romance-language charts and they share most of their toponyms, but by substituting 'Ispagna' for 'the Center of the Peninsula of al-Andalus' and 'm. iubeltar' [Mount Gibraltar] for 'Jabal al-Fath,' as the 1318 chart of the Genoese cartographer and early practitioner of nautical charting Pietro Vesconte (fl. 1310-1330), does (Figure 11), the maps impart very different messages. ¹²¹ When nautical charting reached the Maghrib from Europe, the specific techniques and conventions of the cartographer remained the same, but the new context required a new, more local set of place names and meanings. Though the Maghrib chart may appear as an innocent document, a drawing of the shapes of landmasses and a list of place names, it is in fact full of culturally-marked names and phrases.

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¹²¹ This 1318 Vesconte atlas is held at Vienna, ONB, ms. 594 (sheet 7).



Figure 11. Iberia and the Maghrib on the sheet of a 1318 Pietro Vesconte atlas.

Chapter 5: Translating al-Zuhrī's *Book of Geography* in Salamanca

In the mid-fifteenth century, an anonymous translator somewhere in the Iberian Peninsula undertook the project of putting into Castilian an Arabic-language geographical treatise. Whether he knew it or not, the text that he had selected for translation had been written in the second half of the twelfth century by an Andalusī geographical writer named Abū 'Abd Allāh Muḥammad b. Abī Bakr al-Zuhrī. Little is known about al-Zuhrī, but it seems that he had been born into a family that traced its lineage back to two ancestors who had been companions of the Prophet Muhammad in Arabia. More recently the family inhabited al-Andalus where its members practiced law, studied the traditions, and in al-Zuhrī's case, studied the geography of the world. In the preface of his treatise entitled *Kitāb al-Jar'āfiya*, 'The Book of Geography,' he claimed to have based his work on the "geography" of someone named "al-Fazārī," possibly a geographerastronomer attached to al-Ma'mun's 'House of Wisdom' who had in turn based his work on the "geography" produced by seventy scholars at the Baghdadī court of Hārūn al-Rashīd (d. 809 CE). In embarking on this translation project, the translator, then, undertook to bring to fifteenthcentury Iberia a view of the world dating back nearly seven centuries, and deriving almost literally from the other side of the world.

This chapter centers on this anonymous fifteenth-century Castilian translation of al-Zuhrī's geographical treatise, the only known Romance translation on the Iberian peninsula of an Arabic geographical treatise from the medieval period, thus offering a unique view of the reception and translation of an Arabic geographical treatise. Though we know little of the anonymous translator, based only on a few elements of the Castilian manuscript and the state of the study of cosmography and astronomy in the Castilian-speaking lands, this chapter argues that the translator worked somewhere in or around Salamanca, at that time the Iberian peninsula's leading center of scholarship in these fields. But more than this, the chapter demonstrates that the translator explicitly approached al-Zuhrī's text through the screens of his Christian faith, his reading of Holy Scripture and the *Geography* of Ptolemy, as well as his distaste for everything relating to Islam and "Moros." Moreover, the translator did not aim to produce a translation that captured al-Zurhī's text either word-for-word or according to sense or in any other precise manner. Indeed, his imperfect Arabic did not permit him to do so, even if he had desired to produce an accurate translation. But, at the same time, the translator omitted significant portions of the Arabic text, with no obvious motivations for doing so. Accordingly, the resulting translation offered an unsatisfactory rendering of al-Zuhrī's, conveying only a small portion of the original text and thus disregarding a great deal of its information. Moreover, the translator inserted his own commentary in such a way as to make it clear that he approached the text not solely or even primarily as a means of garnering information from another geographical culture, but rather to confirm his own preexisting understanding of the world.

The Texts

In 1962 the French archivist Guy Beaujouan surveyed the medieval "scientific" manuscripts conserved at the University of Salamanca and its colleges, or "Colegios Mayores." He produced a catalog of library holdings in which he lists "Salamanca Manuscript 2086," a 48-folio work on

paper which he described as an "anonymous geography written in Castilian by a Christian, but under the influence of an Islamic treatise" in a uniform fifteenth-century hand. The manuscript was left unfinished, in that the translator (or copyist) left blank the space for the first letter of each new section of the text, certainly with the expectation that a large, perhaps illuminated letter would later be inserted. But beyond this, the manuscript itself conveys remarkably little information about its composition. It contains no indication of the work upon which it was based, no date or place of composition, and no suggestion of a patron or dedicatee. It is thus anonymous in all senses. But we can, at least to a limited degree, trace the manuscript to the Colegio Mayor de San Bartolomé, the oldest of the university's colleges and a center for the study of mathematics, geometry, astrology, and cosmography. In his 1770 history of the "old college" of San Bartolomé, Francisco Ruiz de Vergara y Alaya recorded the holdings of the library.

Alongside works on the astrolabe by Māshallāh (d. 815 CE) and Ptolemy he listed a "Tratado de Geografia," 'a treatise of geography,' almost certainly a reference to the anonymous work described by Beaujouan.²

But the manuscript's true introduction to scholars came over a century later when Marco Jiménez de la Espada, a Spanish writer best known as a zoologist and explorer, published a transcription of some of its folios as an appendix to his complete transcription of a fourteenth-century Castilian geographical work, *El Libro del conoscimiento de todos los reinos* ('Book of

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¹ I will refer to this manuscript as the "Salamanca manuscript" in this chapter. Beaujouan's text reads, "Geografía anónima, rédigée en castillan par un Chrétien, mais sous l'influence d'un traité d'origine islamique." *Manuscrits scientifiques médiévaux de l'Université de Salamanque et de ses "Colegios Mayores*," (Bordeaux: Féret & Fils, 1962), 104-107.

² Francisco Ruiz de Vergara y Alava, *Historia del colegio viejo de S. Bartholomé, Mayor de la Universidad de Salamanca* (Madrid, 1770), 338. Between 1803 and 1954 the manuscripts of the Colegios Mayores of Salamanca were transported to Madrid where they became part of the libarary at the royal palace. In the mid-1950s they were returned to Salamanca. Beaujouan, *Manuscrits scientifiques médiévaux de l'Université de Salamanque*, 47-52.

Knowledge of All Kingdoms').³ Given the anonymity of the manuscript, Jiménez de la Espada could only describe this as a "general treatise of geography written in Arabic" sometime in the thirteenth century, and "translated to Castilian with some modifications" in the mid-fifteenth.⁴ The identity of this geography written in Arabic, which had formed the base of the translation, remained a mystery for nearly another century when in 1961 Ḥusayn Mu'nis recognized it as a work based on the geographical treatise of the twelfth-century Andalusī writer, Muḥammad ibn Abī Bakr al-Zuhrī.⁵ However, the translation remained largely untouched at the University Library in Salamanca until Dolors Bramon transcribed it in 1991 as part of her doctoral dissertation at Barcelona.⁶

Who, then, was al-Zuhrī and of what did his geographical treatise consist? In other words, what kind of a work attracted the attention of the anonymous, fifteenth-century translator? Just as with the Castilian translation, the manuscripts of al-Zuhrī's geography, of which at least nine are known, do not bear his name, with one exception. A manuscript dating from around 1400-01 named him Ibn 'Abd 'Allāh Muḥammad b. 'Abī Bakr al-Zuhrī, and it is based on this single instance that he is considered the author of the geography. The absence of this name from the rest of the manuscripts, however, created problems for earlier scholars who

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³ Libro del conosçimiento de todos los reynos y tierras y señorios que son por el mundo y de las señales y armas que han cada tierra y señorio por sy y de los reyes y señores que los porueen (Madrid: Imprenta de T. Fortanet, 1877), "Apéndice Núm. 3," 702-714.

⁴ De la Espada, 702.

⁵ Ḥusayn Mu'nis, *Al-jaghrāfiyya wa l-jaghrāfiyyūn fī l-'Andalus*, in *Revista del Instituto de Estudios Islamicos en Madrid*, vols. VII-VIII, Madrid, (1961-1962), 257-372.

⁶ Bramon, *El mundo en el siglo XII* (Barcelona: Editorial AUSA, 1991). This includes Bramon's Spanish translation of the Arabic edition produced by Maḥammad Hadj-Sadok in 1968. The transcription of the Castilian translation was only a small part of the dissertation project and while the text contains many notes, Bramon did produce a detailed study of the translation.

⁷ The earliest manuscript is the one which contains his name, dating from ca. 1400-01, Bibliothèque nationale de Paris, 2220 anc. 596. Maḥammad Hadj-Sadok, "Kitāb al-Dja'rāfiyya, mappemonde du calife al-Ma'mūn reproduite par Fazārī (IIIe/IXe s.) rééditée et commentée par Zuhrī (Vie/XIIe s.)," *Bulletin d'Études Orientales* 21 (1968): 17-23. Carl Brockelmann had already identified al-Zurhī as the author in 1898. See *Geschichte der arabischen Litteratur* (Weimar: E. Felber, 1898), 1:476-477, and Eugenio Griffini, "Estratti della geografia di az-Zuhrī od Anonimo di Almería," in *Centenario della nascita di Michele Amari* (Palermo: Virzi, 1910), 1.24: 16-427.

took to referring to the author as the "anonymous," or the "anonymous geographer," or based on the author's detailed presentation of the city of Almería, the "anonymous of Almería." The Algerian scholar and editor of al-Zuhrī's manuscript, Maḥammad Hadj-Sadok, contended that this name tied the author to the Banū Zuhra b. Kilāb, a Meccan family whose members included two companions of the Prophet Muḥammad, celebrated *muḥaddithūn* ('traditionists') and *qādī*s of the eighth and ninth centuries, and later, in al-Andalus, a number of judges, preachers, doctors, and littérateurs. Based on details from the geographical work, al-Zuhrī was probably a resident of Almería and certainly a contemporary of Idrīsī, though his text dates from at least two decades after the composition of the *Nuzha* (ca. 1054 CE). Of course, the chances are that the fifteenth-century translator did not know al-Zuhrī's identity, since this name is largely absent in the Arabic manuscript tradition, or at least in nearly all extant manuscripts.

The frontispieces of the manuscript copies of al-Zuhrī's treatise carry the title of *Kitāb al-Ja'rāfiya*, the 'Book of Geography.'¹¹ The meaning of this term, *Ja'rāfiya*, is not fully clear, though in a passage in the introduction of his work al-Zuhrī clarified it to some extent. There he contended that

I have copied this *Ja 'rāfiya* from a copy of the *Ja 'rāfiya* of al-Fazārī which was copied from the *Ja 'rāfiya* of the Commander of the Faithful 'Abd Allāh al-Ma'mūn ibn Hārūn al-Rashīd, which was compiled by seventy men of philosophy of Iraq. It represented the character of the earth, though it was not precise. Because the earth is spherical and the *Ja 'rāfiya* flat, but they projected it [lit. flattened it] on a flat surface as an astrolabe or figures of the eclipse books are flattened in order to contemplate all of its parts, zones, limits, climates, seas, rivers, mountains, inhabited and uninhabited regions, in order to know the location of settlements, both in the east and the west, and to consider its

⁸ For example, see the title of Griffini's essay, "...od Anonimo di Almería."

⁹ Hadj-Sadok, *Kitāb al- Dja'rāfiyya*, 23-24.

¹⁰ Hadj-Sadok, *Kitāb al- Dja 'rāfiyya*, 25

¹¹ The short vowel after the initial $j\bar{\imath}m$ ("J") is not indicated, thus the word may be read as $Ja'r\bar{a}fiya$ or $ju'r\bar{a}fiya$. The word derives from the Greek "geographia." The term appears frequently in medieval works of Arabic geography, though usually with a *ghayn* in place of the 'ayn, thus giving the more typical reading of *jughrāfiya* or *jaghrāfiya*.

extraordinary places, the marvels that one finds in each zone [juz'] and the ancient buildings preserved in its regions. 12

Thus, if we follow al-Zuhrī, the term *Ja'rāfiya* appears to have two significations. On the one hand, it apparently denotes a map of the world, or *mappa mundi*, and on the other, it seems to refer to a written description of the world based on that map. Does this mean that al-Zuhrī wrote his treatise with a map of the world drawn by al-Fazārī at hand? Hadj-Sadok and others have made this claim, in part because al-Zuhrī described in his text the "blue circle which surrounds [a piece] of leather representing the sea known as the Sea of Darkness." This piece of leather, these scholars claim, refers to a map. So too, it seems, did the fifteenth-century translator, for he rendered the term as "napamundy" [sic]. Regrettably, no maps accompany any of al-Zuhrī's manuscripts, nor are there any in the Salamanca manuscript.

There are a number of mysteries regarding al-Zuhrī's text. Scholars, for instance, have not managed to precisely identify al-Fazārī. Hadj-Sadok believed that the name referred to Abū 'Abd Allāh Muḥammad b. 'Ibrāhīm, who lived during the time of the 'Abbāsid caliph al-Ma'mūn (r. 813-833) and "saw with his own eyes the famous map" of the House of Wisdom, *al-ṣūra al-ma'mūniyya*. David Pingree has argued elsewhere that al-Fazārī was indeed a scholar in Baghdad, though he placed him there beginning around 770 CE, where he took part in the transmission of Sanskrit works of astronomy into Arabic. He apparently had a son, also known

¹² Hadj-Sadok, *Kitāb al- Dja 'rāfiyya*, 306. All translations are mine unless otherwise noted.

¹³ For the Arabic text, Hadj-Sadok, *Kitāb al- Dja'rāfiyya*, 305. For Hadj-Sadok's claim that al-Zuhrī worked from a map, 31. Dolors Barmon also believes al-Zuhrī wrote with a world map before him. See *El mundo en el siglo XII* (Barcelona: Editorial AUSA, 1991), xxix.

¹⁴ Salamanca Ms. 2086, fol. 18r.

¹⁵ Kitāb al- Dja'rāfiyya, 31.

¹⁶ David Pingree, "The Fragments of the Works of al-Fazārī," *Journal of Near Eastern Studies* 29.2 (1970): 103. Pingree recorded his name as Muḥammad b. Ibrāhīm al-Fazārī. Dolors Bramon follows Hadj-Sadok's suggestion that al-Fazārī had seen the famous map of al-Ma'mūn, *El mundo en el siglo XII*, xxix-xxxi.

as al-Fazārī, which has led to some confusion among modern scholars. Whether either of them had seen the map of al-Ma'mūn is open to speculation. As to whether al-Zuhrī meant "al-Fazārī" the elder or younger is uncertain, though his reference to the caliphate of Hārūn al-Rashīd, the father of al-Ma'mūn, suggests that he meant to denote the elder.

Whether al-Fazārī had seen al-Ma'mūn's map or another one drawn during the reign of Hārūn is somewhat beside the point, since the translator of the Salamanca manuscript had little interest in his identity and the name was completely omitted from the composition. As for the contents of al-Zuhrī's treatise, he wrote a geography of the oikoumene as known in much of Arabic geography. He described a world based on the notion of the oikoumene encircled by the Surrounding Sea (al-bahr al-muhīt), and his description accounts only for lands north of the equator, though his description ranges from the Atlantic coasts of Africa to the eastern shores of Asia. He claimed to have learned from "the philosphers" that the earth measured 27,000 miles in circumferences and had a diameter of 9000 miles. 17 His knowledge of the northern reaches of the world was particularly anemic, though this is typical of works of Arabic geography, a result of dependency on other works written in Arabic that in turn relied on sources devoid of information about much of Europe and in particular of the northern lands. While he described some parts of Europe, Great Britain and Ireland are absent. The nomenclature for some portions of the world is especially confused, in particular that relating to Europe. Finally, al-Zuhrī incorporated an unusual division of the world and a unique terminology for describing it. He divided the

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¹⁷ Hadj-Sadok, *Kitāb al-Dja'rāfiyya*, 10. Yāqūt (fl. early 13th century) also cited these measurements, claiming that they derived from Ptolemy. Wadie Jwaideh, *The introductory chapters of Yāqūt's Mu'jam al-Buldān* (Leiden: E.J. Brill, 1987), 27.

oikoumene into seven longitudinal parts (juz'), each of which he further subdivided into three smaller sections (aṣqā').¹⁸

Al-Zuhrī's *Kitāb al-Ja'rāfiya* is decidedly a work of descriptive rather than mathematical geography or astronomy. As such, it includes much information on commercial routes, the agricultural and industrial status of cities and towns, foodstuffs, and numerous details on customs, whether social, political, or religious. Al-Zuhrī also included references to historical events including, frequently, important events in Islamic history. He also included the occasional verse from the Qur'ān or extract from the *hadīth*. To his mind, God, of course, had created the world, and al-Zuhrī took to citing the Qur'ān as evidence. ¹⁹ But what truly stands out in his work are the marvels ('ajā'ib). Marvels and geography had long been mixed in Arabic letters. Indeed, the earliest works of Arabic geography detail a number of marvels. But al-Zuhrī's text is packed with them, from tales of the unusual animals and humans (or near-humans) that roamed the earth to miraculous stories about the unimaginable height of the lighthouse at Alexandria to stories of magical statues, and cities where snakes and serpents could not enter. It seems that his inclusion of so many marvels responded to the desire of a twelfth-century readership with a taste for the wondrous. ²⁰ He probably learned of a number of these marvels from a now-lost book by Ibn al-

¹⁸ The seven regions are as follows: I. China, India and Sind; II. Yemen, Red Sea, Egypt up to the limits of Syria and its regions; III. Iraq; IV. Palestine and its regions; V. Syria and its regions; VI. Maghrib and its regions; VIII. Sudan and its regions. Hadj-Sadok, *Kitāb al- Dja'rāfiyya*, 301-302.

There is some debate over the way in which this system worked in practice. Bramon argues that the seven longitudinal parts should be examined in a "bustrophedon" pattern, from the Greek for "turning like an ox." The Greeks used it to describe texts in which every other line of writing was flipped or reversed (including the reversal of letters). Rather than reading in only one direction, say, left to right, alternate lines in such a text must be read in opposite directions. For how this may have worked in al-Zuhrī's model see *El mundo en el siglo XII*, xxviii-xxix, xxxv-xxxvi.

¹⁹ For example, he cites Q: 35, 13 to explain the presence of potable water on earth, Q: 11, 9 to describe the creation of the earth and sky, Q: 55, 19-20 on the "two seas" of the world. And all of this in only one chapter! See Hadj-Sadok, *Kitāb al-Dja'rāfiyya*, 305-306.

²⁰ He wrote, for example, around the same time as had Abū Ḥāmid al-Gharnāṭī who also wrote a book of geography with a strong dose of marvels. See the edition and translation of his work by Ingrid Bejarano, *Al-Mu'rib 'an ba'ḍ 'aŷā'ib al-Magrib (elogio de algunas maravillas del Magrib)* (Madrid: Consejo Superior de Investigaciones

Jazzār variously entitled, according to al-Zuhrī, *Kitāb al-'ajā'ib*, 'The Book of Marvels,' or '*Aja'ib al-buldān*, 'The Marvels of the Countries.' As for his authorities of geographical knowledge, he drew upon works by al-Mas'ūdī (d. 956 CE), though he also cited historians like al-'Udhrī (d. 1085, al-Andalus) and Ibn Ḥayyān (d. 1075, al-Andalus), as well as what he believed was a book on stones by Aristotle, the *Kitāb al-aḥjār*.²¹ He described numerous cities and towns, always ready to alert the reader to some nearby miraculous animal or celebrated event from Islamic history that took place in a given city, or to convey details of the life of this companion of the Prophet or that caliph in Baghdad or Córdoba. In short, this is a book that describes the wondrous world that God has created and is filled with miraculous accounts, details of the geography of the world, and marked throughout by Islamic culture.

The fifteenth-century translator thus encountered a text deeply inscribed by the culture of al-Zuhrī's twelfth-century Andalusī milieu. This was no easy project. Translating a geography entails far more than transmitting ideas of the physical world into a new language. It also requires taking culturally-influenced notions of the earth across cultural and social frontiers. And al-Zuhrī's treatise was full of details about far away, unfamiliar lands; a unique division of the oikoumene; and the names of celebrated rulers and stories from the lands of Islam. In total, al-Zuhrī's text was comprised by 382 sections, of which the Castilian translation covered only the first 252. The translator gave no explanation for stopping at this point, but this meant that the Castilian work did not extend across the entire oikoumene. Indeed, in practice this meant that the translation included, broadly speaking, the sections on China, India, Sind, Mecca, Medina,

Científicas, Instituto de Cooperación con el Mundo Árabe, 1991).

Hadj-Sadok counted a total of 46 marvels in al-Zuhrī's geography, Kitāb al-Dja'rāfiyya, 34-40.

²¹ There is some variation in the extant copies of al-Zuhrī's manuscripts regarding sources. In some he cites as authorities many unnamed but titled people: philosophers, sages, doctors ('aṭibba), thinkers ('ahl al-naẓar), astronomers (munajjimūna), astrologers (falakiyyūna), and historians ('ahl al-tārikh). For a fuller list of his sources and a discussion on his use of them, see Hadj-Sadok, *Kitāb al-Dja'rāfiyya*, 32-34.

Egypt, Tabaristan, Iraq, Palestine, the Turkish lands, Daylam, Syria, the lands of the Rūm, and al-Andalus. But much is missing from the Castilian version, including lands close to the Iberian Peninsula. It further lacks sections on the Maghrib, Ifrīqiya, the Sahara, Abyssinia, and Nubia. Moreover, the translator's ostensible inclusion of certain sections of al-Zuhrī's text does not necessarily indicate that he treated these with clarity or even with the intention of conveying information from the Arabic text. For example, the translator included the section on Mecca, but as we will see, he did not simply translate al-Zuhrī's text but rather offered a commentary, not on the geographical information it contained, but rather on the culture and religion from which this information derived. And finally, between the verso of the second and the recto of the seventeenth folio, the Castilian version contains an interpolation from another, unidentified text that appears derive from a work of astronomy or astrology.²² This interpolated section treats the four quarters of the world according to Ptolemy; the seven latitudinal climates, if only briefly; the length of the *linea egual* or equator;²³ the signs of the zodiac of Ptolemy; the Pillars of Hercules and their idols; the three islands que dizen en arabigo Alhalidet, "that are called in Arabic al-Khālidāt (the Canaries);²⁴ and even a note on an "ancient king" who wanted to dig a canal from the Red Sea to the Mediterranean.²⁵

²² Bramon's transcription of the Castilian translation does not include this interpolation. She believed that since it derived from a text other than al-Zuhrī's geography, it was best to omit it from her transcription.

²³ Salamanca Ms. 2086, fol. 3v.

²⁴ Salamanca Ms. 2086, fol. 7v.

²⁵ Salamanca MS. 2086, fol. 9r. Beaujouan mentioned this passage in his description of the manuscript, claiming that it referred to Senusret III, pharaoh from 1878-1839 BCE. I think it more likely, since this is interpolation probably derived from an Arabic text, that the Red Sea–Mediterranean canal was the project of caliph 'Umar ibn al-Khattāb (r. 634-644 CE) who wished to excavate such a canal.

The Translator

We know little of the translator of al-Zuhrī's treatise. The manuscript contains no name or other identifying data. But the manuscript is nevertheless full of clues that permit us to make some observations about the translator. We know, for instance, that he worked sometime during the fifteenth century, perhaps in the middle decades, at least according to efforts to date the text based on paleographical observations. We also know that the translator had a passable, though as we will see, far from perfect knowledge of Arabic, and that his Castilian bears the marks of the Castilian-Leonese linguistic frontier (Figure 12). And finally, we can be relatively certain that the translator had prior experience in the study of the earth, given his comments about Ptolemy and works of astrology. Moreover, since translators tend to translate books on topics familiar to them, it is likely that this translator was familiar with the genre of geographical writing. Here I will argue that all of this in fact demonstrates that the anonymous translator worked on this project in or around the university town of Salamanca, renowned as a center for the study of astronomy and cosmography throughout the fifteenth century.

²⁶ Guy Beaujouan dated the manuscript to the fifteenth century, *Manuscrits scientifiques médiévaux de l'Université de Salamanque*, 107. A century earlier Marco Jiménez de la Espada argued that the writing looked like a midfifteenth century hand. *Libro del conosçimiento de todos los reynos*, 702.

²⁷ Bramon, *El mundo en el siglo XII*, *el tratado de al-Zuhrī*, xxxii. Beyond this linguistic observation, Bramon made no attempt to locate the translator in any particular setting.

²⁸ And as Peter Burke has noted, translators in the early modern period, especially amateur translators, usually translated texts from subjects with which they had some familiarity. He noted that devotional writers frequently translated other devotional writers; physicians translated works of anatomy; historians translated the works of other historians, and so on. See Peter Burke, "Cultures of translation in early modern Europe," in *Cultural translation in early modern Europe* Peter Burke and R. Po-Chia Hsia eds. (Cambridge: Cambridge University Press, 2007), 12.

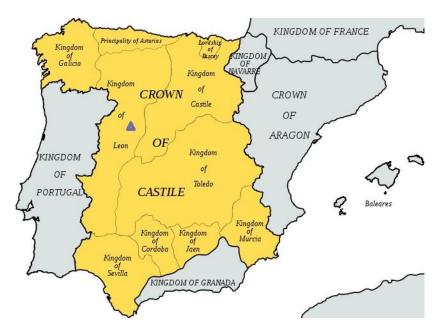


Figure 12. The lands of the Crown of Castile ca. 1400. Salamanca is marked with a blue triangle in the Kingdom of León.²⁹

As far as it is possible to trace its trajectory over time, Salamanca Ms. 2086, the Castilian translation of al-Zuhrī's treatise, has always belonged to the collection of the University of Salamanca. As we saw above, the earliest record we have of it dates from 1770 and places the work at the library of the Colegio Mayor de San Bartolomé, the oldest college at the university. But there are signs that the manuscript had been part of a larger collection since around the year 1500. Though the manuscript itself contains no title, someone, perhaps a librarian or archivist, inscribed across the first folio the phrase *libro de astrologia*, a "book of astrology," in what Beaujouan judged to be a late fifteenth- or early sixteenth-century hand. This improvised label suggests that the manuscript may well have formed part of a collection of books, perhaps as part of the library of the college. But beyond this, as Dolors Bramon has argued, the Castilian used by the translator exhibits influences from Leonese, a Romance dialect spoken in, among other

²⁹ Map accessed online November 2016 at https://commons.wikimedia.org/w/index.php?curid=6916911.

³⁰ Manuscrits scientifiques médiévaux de l'Université de Salamanque, 107.

places, the region around Salamanca.³¹ And thus, given the location of the manuscript in a library in Salamanca and the translator's Leonese-Castilian dialect, we might tentatively suggest Salamanca or its environs as a site of production.

However, still more evidence points to Salamanca as the site of the University of Salamanca, and in particular the Colegio Mayor de San Bartolomé, as the preeminent center for the study of astrology and astronomy in Iberia in the fifteenth century. This strongly suggests that the translation was carried out there. Modern historians have argued that during the fifteenth century the University of Salamanca was a center of "scientific humanism." This scientific humanism, they claim, was a program led by professors at the university who sought to recover, in the mode of humanists, classical learning in natural philosophy and astronomical science. As a consequence, humanist cosmographical knowledge thrived at Salamanca. This academic field brought together disparate classical traditions, among them Aristotle's natural philosophy and its framework for a general understanding of the natural world; Euclidian geometry; Ptolemy's geography as a guidebook for mapping the world according to mathematical and astronomical measurements; and finally, the descriptive geographies and encyclopedic tendencies of the writings of Pomponius Mela and Pliny. 33

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³¹ Salamanca was in the southernmost reaches of the old Kingdom of Léon. On Salamanca as a site of mixing of Castilian-Leonese linguistic elements, Donald Tuten wrote of thirteenth-century linguistic patterns in Léon and Castile, noting that the collection of texts that he studied from Salamanca (mostly notarial documents) "do reveal a significant mixing of Leonese and Castilian elements." *Koineization in medieval Spanish* (New York: Mouton de Gruyter, 2003), 156.

³² Cirilo Flórez Miguel, Pablo García Castillo, and Roberto Albares Albares, *El humanismo científico* (Salamanca: Caja de Ahorros y Monte de Piedad, 1988), 110-111; José Chabás, "The University of Salamanca and the Renaissance of Astronomy during the Second Half of the 15th Century," in Feingold Mordechai and Victor Navarro-Brotons (eds.) *Universities and science in the early modern period* (Dordrecht, Netherlands: Springer, 2006), 29-36; José Chabás, "Astronomy in Salamanca in the mid-fifteenth century: the *Tabulae resolutae*," *Journal for the History of Astronomy* xxix (1998): 167-214; Luis E. Rodríguez-San Pedro Bezares, *The University of Salamanca from the Middle Ages to the Renaissance* (Salamanca: Ediciones Universidad de Salamanca, 2013).

³³ On Renaissance cosmography in fifteenth and especially sixteenth century Spain, see María M. Portundo, *Secret Science, Spanish cosmography and the New World* (Chicago: University of Chicago Press, 2009).

Indeed, in 1411 the University of Salamanca officially instituted a chair of astronomy, geometry, and arithmetic and by the mid-fifteenth century this professorship had become the most prestigious of its kind in Iberia, while the university had become the most important center of astronomy and cosmography on the peninsula.³⁴ The Colegio de San Bartolomé, in particular, was the epicenter of scientific humanism as applied to astronomy and cosmography. Building on Beaujouan's study of the manuscript collections at Salamanca, Ana María Carabias Torres has identified an extensive collection of works held by the Colegio in the fifteenth century that were crucial to the humanistic cosmographical project of the scholars of the college. In addition to works by the likes of Aristotle, Strabo, Pliny, Pomponius Mela – all mainstays of the project of scientific humanism at the university – one would have also found Jacobus Angelus's 1406-07 Latin translation of Ptolemy's Geography, Sacrobosco's treatise on the sphere (c. 1256 CE), the Etymologies of Isidore, and Latin translations of Euclid's Elementa geometrie, and the Quadripartium of Ptolemy. Additionally, many works translated directly from Arabic into Latin by the scholars at the "Toledo School" of translators were also held at the library, including several copies of works on astrology and astrolabes by Māshallāh, 35 an astrological work by "Abenragel,"³⁶ works on the celestial sphere by "Alfraganus,"³⁷ texts on astrology by "Azarchel," and various astronomical tables.³⁸

³⁴ Luis E. Rodríguez-San Pedro Bezares, *The University of Salamanca from the Middle Ages to the Renaissance*, 44, 73.

³⁵ Māshā'llāh ibn Atharī (d. ca. 815), a Jewish astrologer active in 'Abbāsid Baghdad.

³⁶ That is, Ibn Abī al-Rajāl (d. after 1037, Kairouan), court astrologer of al-Mu'izz ibn Bādis in Ifrīqiya.

³⁷ A-Farghanī (d. 870), an astronomer attached to the Baghdad court of the 'Abbāsid caliph al-Ma'mūn who worked on problems of measurement of the extent of the earth.

³⁸ That is, al-Zarqālī (d. 1087), a Muslim instrument maker, astrologer, and astronomer in Toledo and Córdoba. For a full list of the astronomy, geography, and cosmography holdings at the Colegio de San Bartolomé in the fifteenth century, see Ana María Carabias Torres, "Los conocimientos de cosmografía en Castilla en la época del Tratado de Tordesillas," in *El Tratado de Tordesillas y su época*, ed. Luis Antonio Ribot García (Madrid: Junta de Castilla y León, 1995), 7-12. Several of the works in the catalog had been translated by John of Seville and Gerard of Cremona, both of whom worked at the celebrated Toledo School of Translators. The university library proper also

Salamanca, then, was the foremost center of the study of cosmography and astronomy in Iberia and held a concentration of texts on these subjects unmatched by other universities and libraries on the peninsula.³⁹ We know, though, that the translator of al-Zuhrī's geography had consulted other works of astronomy and possibly cosmography. The very first line of the translation states that it "is evident to those who have seen something of treatises on the sphere that the sky is round like a ball and that the earth is placed at the midpoint, which is the center, and this is its natural place."40 And later in the work the translator indicated familiarity with Ptolemy's writings, noting on a few occasions that the Arabic text departed from what Ptolemy had said. For instance, the translator wrote that he thought al-Zuhrī's text had followed Ptolemy but that the rest of it had deviated from the Alexandrian's order: the text up to the thirty-first folio "is all said by Ptolemy," whereas the "from here onwards does not appear to be thus."⁴¹ Moreover, the Castilian translation betrays familiarity with terminology required in the study of astronomy and cosmography. In other words, the translator was fluent in astronomical and cosmographical terminology, or at least those used by al-Zuhrī. And so, we might ask where the translator had learned this specialized vocabulary. University libraries and perhaps even libraries of wealthy individuals contained works of astronomy, and basic astronomy was part of the quadrivium. Hence, there is the possibility that the translator had gained familiarity in the subject at just about any other university in Iberia. Salamanca, however, with its extensive catalog of

held a number of works on the sphere, astronomical tables and tables of the coordinates of major cities, other works of astronomy, and miscellaneous notes on geography.

³⁹ Carabias Torres, "Los conocimientos de cosmografia," 1-2.

⁴⁰ Salamanca Ms. 2086, fol. 1r. My italics. The translation reads "[M]anifiesto es a los que han visto alguna cosa de los tractados de la espera que el çielo es como una pella redonda hueca e que la tierra está puesta en el punto de medio, que es el centro, e allí es su lugar natural."

⁴¹ Salamanca Ms. 2086, fol. 31r. "Conviene saber que lo que se falla en este libro desta climia non es como lo de fasta aquí, que en lo de fasta aquí paresçe por ello que es todo dicho de Tolomeo. E lo de aquí adelante non paresçe seer así."

texts and longstanding reputation as the leading center of the study of these subjects marks it as a likely site for this translation.

But what about knowledge of Arabic? The translator had a good, if imperfect, knowledge of the language. It is clear that he was not a native speaker. Where might one learn to read Arabic in fifteenth-century Iberia? There were a number of options available, provided one had financial means. One time-tested approach was to travel to Granada where one might study with native speakers. A number of humanists followed this route, among them Hernán Núñez de Toledo (1475-1553) and Diego Hurtado de Mendoza (1503-1575), both of whom traveled to Granada to study Arabic before joining the University of Salamanca. 42 Another method entailed finding a native speaker, usually a *mudéjar*, a Muslim who had remained in Iberia after the Reconquista and had not converted to Christianity. Juan de Segovia (d. c. 1458), for instance, received lessons in the language from Yça Gidelli and even employed Gidelli to aid him in translating the Qur'ān into Spanish and Latin. He had also worked at the faculty of religious studies at Salamanca, prior to turning his attention to Arabic studies, the Qur'an, and "the problem of Islam."43 Others continued to engage humanist scholars, as did Nicolas Cleynaerts around 1530.44 But finally, one could study Arabic at the University of Salamanca in the fifteenth century. 45 In fact, the university had received papal funds to employ a professor of

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⁴² Karl H. Dannenfeldt, "The Humanists and the Knowledge of Arabic," *Studies in the Renaissance*, 2 (1955): 107.

⁴³ Leyla Rouhi, "A Fifteenth-century Salamancan's Pursuit of Islamic Studies," in *Under the influence: questioning*

the comparative in medieval Castile eds. Cynthia Robinson and Leyla Rouhi (Leiden: Brill, 2005), 24; Gerard Wiegers, Islamic literature and Spanish and Aljamiado, Yça of Segovia (fl. 1450), His Antecedents & Successors (Leiden: Brill, 1994).

⁴⁴ Assured that he could find Arabic instruction at the University of Salamanca, Cleynaerts, a Flemish grammarian, traveled to the university city. He found no official courses in the language, though Hernan Nuñez, the professor of Greek and rhetoric in Salamanca, had studied it. He gave Cleynaerts a manuscript copy of the four gospels in Arabic, the Arabic grammar composed by Pedro de Alcalá some two or three decades previously, and further assisted him with lessons on vowel markings in Arabic. Eventually Cleynaerts procured a more thorough grammar composed by "Abucasim." Dannenfeldt, "The Renaissance Humanists and the Knowledge of Arabic," 114.
⁴⁵ The scholars mentioned above – Hernán Núñez de Toledo, Diego Hurtado de Mendoza, Juan de Segovia, and Cleynaerts – were all eventually attached to the University of Salamanca in some capacity. But they did not study

Arabic following the Council of Vienne of 1311. Under the encouragement of two Dominican jurists of Iberian extraction, Ramón de Penyaforte and Ramón Llull, who argued for the centrality of Arabic in the conversion of Muslims, the council decreed the establishment of chairs of Arabic at the *studia generalia* of Salamanca, Paris, Bologna, and Rome. ⁴⁶ Even if the teaching of Arabic was oriented toward the Christian evangelization movement (and the longstanding desire to produce good translations of the Qur'ān in Latin and Castilian), it is just possible that someone might gain an entrée into the language at Salamanca which he might apply to reading and even translating texts in other fields.

Taken together, the available evidence strongly links the Castilian translator to Salamanca. It is unclear how someone in that city might have come across an Arabic manuscript of al-Zuhrī's work, but it suffices to say that both people and texts moved frequently. Whether the translator encountered the text while traveling, or whether the text traveled to Salamanca, we cannot say. That said, the translation does not appear to have been derived from any of the extant copies of the Arabic treatise.⁴⁷ But beyond the translator's geographical origins and evident interest in and knowledge of "treatises on the sphere," we can further locate him in fifteenth-century Castile and León. We know from the first folio of the work, for example, that the translator was a Christian. Written across the top of that folio, before the text begins, he wrote a

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Arabic at the university, but rather sought other means to acquire the language. It is notable, however, that all of them with the exception of Juan de Segovia lived during the sixteenth century, when the teaching of Arabic at Salamanca had apparently declined, and at times the subject was simply not offered. Though evidence of the Arabic program in the fifteenth century is scant, it appears to have been more robust than in the following century. For a general discussion, see Dannenfeldt, "The Humanists and the Knowledge of Arabic," *passim*.

⁴⁶ Karl H. Dannenfeldt, "The Humanists and the Knowledge of Arabic," 98-99. The Council established the chairs explicitly for the Arabic instruction of Christian scholars for purposes of

evangelization. The expenses of the Arabic chair were funded by the papal curia and ecclesiastical taxation.

⁴⁷ Bramon, *El mundo en el siglo XII*, xxxii. Moreover, only one extant manuscript, that held at the BnF (2220 anc. 596), is early enough (1400-01) to have been used by the translator. The others date from the eighteenth century or later. Hadj-Sadok, *Kitāb al- Dja'rāfiyya*, 17-20.

single word: "Ihesus," Jesus. ⁴⁸ This Christian faith was of the utmost importance for the translator, so much so that scripture became a mental screen through which he judged the veracity of the Arabic text. ⁴⁹ The first paragraph of the Castilian text includes a reference to the "third day of creation of the world," from the Genesis narrative. ⁵⁰ In the Arabic original we find nothing of this. And throughout, the Holy Land is called the *tierra de Promisión*, the promised land. This tendency is perhaps clearest in the translator's treatment of the description of the source of the Nile in the Mountains of the Moon, south of the equator, though it also appears elsewhere. In this example, the translator read the Arabic text not only through Christian scripture but also through Ptolemy. Al-Zuhrī's text called the Nile a great river, the source of which was found in the Mountains of the Moon which, in turn, were "on the equator." ⁵¹ Here, rather than simply translating the Arabic passage, the translator elected to present a commentary on the source of the Nile. It is worth quoting this part of the translation and commentary at length, though it is admittedly difficult to follow its logic:

And among the marvels of the land of Egypt is the Nile River which originates in the Mountain of the Moon which is, according to Ptolemy, in the northern quarter, in the part north of the equator. And according to other learned people, it is in the southern part of the uninhabited quarter of the earth. And furthermore, [one ought] believe the view (*seso*) of Ptolemy in this [matter] over the others, because it is certain, according to the Holy Scripture, that this Nile River originates in earthly paradise. The learned do not doubt [the existence of] this earthly paradise on the equator in one of the places below the equinox. And therefore, [one ought to] believe that this Mountain of the Moon, where they say this river originates, is in the northern part and that the river comes to it from paradise and men think that it originates there [in paradise]. And if this said mountain where the river originates were in the part to the south of the equator, then the said river would originate

⁴⁸ Salamanca Ms. 2086, fol. 1r.

⁴⁹ On reading practices and mental "screens," see Carlo Ginzburg, *The Cheese and the Worms* (Baltimore: The Johns Hopkins University Press, 1976), esp. 31-32.

⁵⁰ Salamanca Ms. 2086, 1r.

⁵¹ Hadj-Sadok, *Kitāb al- Dja'rāfiyya*, 262-263.

⁵² "Equinoçio" in the translation.

before paradise and come to paradise from the other part, which would be counter to Holy Scripture.⁵³

Here the translator expressed concern over the location of the source of the Nile River. According to Ptolemy and al-Zuhrī, the Nile originated in the so-called Mountain of the Moon. The translator knew, however, that there was debate over the location of this mountain. Ptolemy, as the Castilian text claimed, had placed it north of the equator. He noted, however, that "according to other learned people," the Mountain of the Moon was situated south of the equator. Here we should be careful to note that al-Zuhrī made no such claim, but clearly stated that the Mountain was on the equator. In any case, the translator argued that one should follow Ptolemy's claim that the Mountain was north of the equator, based on evidence from Holy Scripture according to which the Nile originates in the earthly paradise, *not* at the Mountain of the Moon. Moreover, "learned people" agreed that earthly paradise lies on the equator. Thus the Nile must also begin on the equator, given that that was the location of the earthly paradise. From there it flowed north and eventually reached the Mountain of the Moon (again, north of the equator according to Ptolemy). Anyone who claimed that the Mountain of the Moon was south of the equator and the source of the Nile would thus be making a claim against God, that is, against Holy Scripture. In this latter and, for the translator erroneous conception, the Nile would begin at the Mountain of the Moon and from there flow to the earthly paradise.

This passage reveals much about the translator. It demonstrates, of course, his appreciation of Holy Scripture as the ultimate authority regarding the earth's geography. Beyond this, it also places him in the context of fifteenth-century European debates over the geography

⁵³ Salamanca Ms. 2086, fol. 34v-35r.

of the Nile and the location of the earthly paradise. Christian travelers and writers had long viewed the Nile as one of the rivers of earthly paradise, usually identifying it with the Gihon, which along with the Tigris, Euphrates, and Pishon issued from the Garden of Eden, that is, the earthly paradise. 54 When the translator appealed to Scripture, he doubtless had in mind passages from Genesis relating to the Gihon. But this understanding of the Nile is also reflected in early Christian geographical works. Paulus Orosius (d. c. 418 CE) and Cosmas Indicopleustes (fl. sixth century CE) both asserted, for example, that the Nile emerged from the earthly paradise, whch they located somewhere in the east. Others argued that the earthly paradise was actually located either on the equator or south of it. Indeed, the notion of earthly paradise as located either on or below the equator eventually displaced claims that it was vaguely located somewhere in the east.⁵⁵ The modern Italian scholar Alessandro Scafi has suggested that the popular division of the world into five parallel zones by European geographical writers, in which a torrid, uninhabitable equatorial zone was surrounded by two habitable zones, one to the north and one to the south, influenced medieval scholars in their claims that the earthly paradise lay either to the south of the torrid zone, in the southern inhabitable quarter, or on the equator. While medieval scholars did not come to a consensus on the source of the Nile and the location of earthly paradise, some details from the debate had clearly reached the anonymous translator.⁵⁶

But Holy Scripture was not the translator's only geographical authority. He also pointed to Ptolemy as a definitive source of geographical knowledge. In the fifteenth century European notions of the geography of the Nile had begun to be transformed, due in part to the translation

⁵⁴ Genesis 2:13 called the Gihon the second of the four rivers that flowed out of the Garden of Eden. It flowed around whole of the land of Cush.

⁵⁵ Manual João Rãmos, "Blue Nile," *Literature of travel and exploration: an encyclopedia* Vol. 1, Jennifer Speake (ed.) (New York: Routledge, 2003), 109-111.

⁵⁶ Scafi, Maps of Paradise (Chicago: University of Chicago Press, 2013), 82.

of Ptolemy's Geography into Latin in 1406-07 by Jacobus Angelus.⁵⁷ This work challenged some of the received notions from scripture and classical writers, both of which had hugely influenced Latin geography throughout the medieval period. Here, however the translator had to confront differing views of the geography of this part of the world. He had never traveled to the Nile himself and apparently knew of no other travelers who had been there. And thus, he was presented with two visions of the origin of the Nile, one which claimed an origin south of the equator and another, which he believed derived from Holy Scripture, claiming an origin on the equator. The translator thus leveraged Ptolemy to support his own Christian vision of the world. Al-Zuhrī's text played little, if any part in his commentary. Perhaps he had mistakenly believed that al-Zuhrī had claimed that the Mountain the Moon and the source of the Nile were located south of the equator.⁵⁸ This is unclear from the text, and as we will see, since the translator made plenty of errors in his translation, he may possibly have made one here. Finally, though, it bears mentioning that this kind of critical commentary occasionally crops up in the translation, sometimes directed against al-Zuhrī and sometimes against other concepts that challenge the translator's Christian view and understanding of the world.

Other signs of his having translated *al-Ja 'rāfiya* through his Christian lens abound. Consider an early passage in al-Zuhrī's text on the shape of the earth, where he wrote that his predecessors had debated the shape of the earth, in particular whether it was round or flat. He wrote that some "believe that it is flat," though they have no evidence to support their claim.

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⁵⁷ We should also recognize the importance of increasingly frequent travel to Egypt and especially Ethiopia, and dreams of encountering the legendary Prester John somewhere in eastern Africa. Moreover, the Ethiopian embassy to the Council of Florence in 1439 must be seen as an important site of the exchange of knowledge of the geography of that region. Contemporary traveler information, however, does not seem to have influenced the translator of al-Zuhrī's text. He rather pointed to Ptolemy, not firsthand accounts, as his authority.

⁵⁸ Al-Zuhrī's knowledge of the Mountain of the Moon came from the works of al-Mas'ūdī, or so he claimed earlier in his text. See Hadj-Sadok, *Kitāb al- Dja'rāfiyya*, 298 where al-Zuhrī referred his readers to the *Murūj al-Dhahab* if they wished to learn more about the Mountain of the Moon.

Rather they can only base their contention on the word of God, namely that "'After that He spread the earth.' Only learned men understand this verse. If God – let Him be exalted – had flattened out the earth, no one could settle on it, and this is what he said – let Him be honored and exalted – 'That you may follow therein roads of passage...' He added that those who maintain that the earth is spherical have many, solid proofs, among them that the water circulates along its surface, because of "certain features" of the celestial sphere (which he did not elaborate), and the varying length of shadows and length of days and night.. The translator dealt with this passage in two ways. First, he jettisoned the citations from the Qur'ān. Instead he wrote that though some ancients believed that the earth was flat, people later demonstrated "with clear proofs that it was not thus" but rather that "it was round like a ball. And the proofs that they brought are many, which are not convenient to discuss at length here, except that we know that the truth is that all the earth is round like an apple." Here, then, the translator eliminated – as he always did – Qur'ānic citations.

Al-Zuhrī frequently cited the Qur'ān in his text and whenever these passages appeared, the translator eliminated them from his version of the text. But this does not indicate that the translator was familiar enough with the Qur'ān to recognize passages in al-Zuhrī's work. Rather, he knew when al-Zuhrī was citing the Qur'ān because the Arabic text always introduced passages from the holy book with invocations and blessings such as "may he be exalted" or "blessed" or "honored." The few references to hadīth in al-Ja'rāfīya were also removed completely and were introduced with appropriate respect. For example, al-Zuhrī cites a hadīth

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⁵⁹ Qur'ān, 79:30. The ellipsis is from the edition of Hadj-Sadok.

⁶⁰ Hadj-Sadok, *Kitāb al- Dja 'rāfiyya*, 303. Qur'ān, 71:20. Again, the ellipsis is from the edition of Hadj-Sadok.

⁶¹ Apparently based on the belief that water only circulated on spherical, not flat, surfaces.

⁶² Hadj-Sadok, Kitāb al- Dja 'rāfiyya, 302-303.

⁶³ Salamanca Ms. 2086, 2v-3r.

from 'Abd al-Malik ibn Ḥabīb, the ninth-century Islamic jurist of al-Andalus, about Muḥammad's prediction that one day a peninsula named al-Andalus would be conquered by Muslims and that those who lived there would live happily and die as martyrs. ⁶⁴ Al-Zuhrī noted that the Andalusīs lived in constant danger, face to face with the enemy, ready for combat and *jihād*, never wavering from the Muslim religion. One only finds people in al-Andalus with "vigilant eyes for the love of God." The *ḥadīth*, al-Zuhrī noted was thus authentic and in agreement with the Qur'ān and the *Sunnah*. The translator rendered this rather long passage from the Arabic in two sentences: "And there is still fighting with *their* neighboring enemies. And for this reason they say that in the ancient time he who lived in Spain (*España*) had to always have his eyes open." The Castilian version did not clarify to whom "their" referred. But that he eliminated all references to the *ḥadīth*, *Sunnah*, Qur'ān, *jihād*, and martyrdom suggests that he had little interest in producing a translation of al-Zuhrī's text that conveyed any signs of its Muslim origins.

Here we begin to see another mental screen through which the translator read al-Zuhrī's text. For he approached his project with a deep animosity toward Islam and the "Moros." He introduced the second part – "la climia segunda," the second climate – of the earth according to al-Zurhī's text by stating that up to this point all appeared to follow the order of Ptolemy. ⁶⁶ This commentary on whether al-Zuhrī's text matched that of Ptolemy was an interpolation of the translator. It formed part of his running critique of it. The first part of al-Zuhrī's model of the world included the lands of China, Sind, and India and it seems that the translator believed that those places or at least some portions of them belonged to Ptolemy's first latitudinal climate,

⁶⁴ Hadj-Sadok, *Kitāb al- Dja'rāfiyya*, 226-227.

⁶⁵ Salamanca Ms. 2086, fol. 45r.

⁶⁶ Salamanca Ms. 2086, fol. 31r.

hence he believed that he had been translating a work based on Ptolemy. Of course al-Zuhrī had not followed the Alexandrian's seven climates in any way. In any case, the Castilian version continued,

And that from this point forward it seems that others have added or diminished [that which Ptolemy said], and it seems this way because in this book they greatly prolonged this chapter in talking of the city of Mecca and of the house which is [there], which the Moors believe is a holy thing. And it tells of many miracles that are done there. And this is doubtless what is said by Moors who wished to favor their law. And therefore I have no interest nor desire in elaborating the said marvels that are said in this book of the said house of Mecca because certainly they are doubtful things.⁶⁷

And the translator followed through with his stated intention in that he included nothing on the details of Mecca in his translation. Al-Zuhrī discussed the *qibla* (prayer direction toward Mecca), Muslim pilgrimage, the marvels of Masjid al-Ḥarām – the "Sacred Mosque" – in Mecca, and the Ka'ba. He described the nearby mountains in which the Prophet and Abū Bakr hid during the night of their Hijra to Medina. None of this appears in the Castilian version. Instead, the translator continued to critique al-Zuhrī's text, adding that not only did it contain falsities of the "Moros," but also according to Ptolemy "this second climate begins in the east of the lands of China and passes through the lands of India and Sind." He apparently found difficulty in following al-Zuhrī's unusual division of the earth, probably in large part because like Ptolemy, al-Zuhrī had it divided into seven parts, which the translator called "climates." The Castilian version added the names of a few cities in this "climate," among them Mecca, but also a number of unidentified toponyms such as "Hajar," "Talef," "Java," and "Açaguen."

⁶⁷ Salamanca, Ms. 2086, fols. 31r-31v.

⁶⁸ Hadj-Sadok, *Kitāb al- Dja'rāfiyya*, 270.

Finally, throughout his geography, al-Zuhrī cited his authorities, nearly all of them Muslims with Arabic names and titles. The translator had a method for dealing with these names: he removed them completely. Hence, when al-Zuhrī cited al-Mas'ūdī and Ibn al-Juzzār as authorities on the lighthouse in Alexandria, the Castilian version did not include their names or suggest any alternative source. He simply cut any reference to an authority. On several occasions, al-Zuhrī claimed to have reported information that he derived from the *History* of al-'Udhrī (d. 1085 CE). Based on his treatment of all other authorities with Arabic names, we know that the translator had no interest including al-'Udhrī in his translation. But, he repeatedly translated the phrase "*History* of al-'Udhrī" as the "history of the virgin," *la estoria de la donsella*! Anative of Almería, al-'Udhrī was a geographer and historian of al-Andalus in the eleventh century who likely took his name from the *Banū 'Udhra*, the Arab tribe of 'Udhra. The translator, unacquainted with the historian and geographer cited by al-Zuhrī, read the name not as a *nisba* indicating a tribe of origin, but rather as a noun from the root '*udhr*, signifying virginity.

The anonymous translator of al-Zuhrī's *al-Ja'rāfiya* harbored feelings of distaste toward Islam and what he viewed as the untruths peddled by "Moros." In some ways, then, his decision to translate an Arabic geography was paradoxical. His knowledge of Ptolemy and reference to the "*tractados de la espera*," reveal that he was familiar with and interested in geography and astronomy. Moreover, his knowledge of Arabic, if imperfect, nevertheless suggests a familiarity with if not an outright interest in Arabic texts and learning. A great number Arabic works of astronomy had been translated into Latin in Toledo and elsewhere in the Iberian Peninsula.

⁶⁹ Hadj-Sadok, *Kitāb al- Dja'rāfiyya*, 259; Salamanca Ms. 2086, 36v.

⁷⁰ For example, Salamanca Ms. 2086, fols. 18r, 20r, and *passim*.

⁷¹ 'Udhra, for instance, denotes virginity and virginhood; 'adhrā' is defined as virgin.

Clearly the translator's scholarly interest drew his attention to this project. But at the same time his unwillingness to consider those parts of the text that involved discussion of Islam in any way led to his omission of considerable portions of the text. His commentary and critique of the Arabic text show that he approached the project not only as a means of learning of the world from al-Zuhrī's text, but also out of a desire to corroborate his own view of the world. The question, then, is how did he translate other parts of the text and, in particular, what kinds of geographical knowledge might he have gained through this translation?

Translation

In what manner did the fifteenth-century translator approach the al-Zuhrī project? That is, beyond reading the Arabic text through the screens of Holy Scripture, the *Geography* of Ptolemy, and his aversion to Islam and "Moros," did he read and translate the *al-Ja'rāfiya* with any translation theory or approach in mind? By sketching out a general picture of how he translated the text, we will see that he produced a work that can hardly be called a translation, that conveyed little of the sense of al-Zuhrī's original Arabic text, and because of the near constant omissions, additions, mistranslations, and misinterpretations resulted in a composition that would have been of little use to anyone who wished to know of the geography of the world, whether through the eyes of al-Zuhrī or otherwise.

Around 1420, perhaps about the same period when the Salamanca translator undertook the al-Zuhrī project, the Italian humanist Leonardo Bruni wrote a short text on the theory of translation called "On correct translation." In this work, he argued in favor of his method of translating "according to the sense" rather than that method his critics favored, word-for-word

translation. 72 The point here is not to suggest that the translator of the Salamanca manuscript had read Bruni's work or that he had engaged in debates over the translation techniques, but rather to demonstrate that his contemporaries, at least in Italy, had engaged in an active debate over methods of translation, and desired to produce translations that aimed to accurately convey the meaning of the original text. But the Salamanca translator had no interest in such notions of producing an accurate translation, at least concerning his translation of al-Zuhrī. In fact, although up to here in this chapter I have referred to his work as a "translation" and occasionally as a "version" of the Arabic text, it is doubtful whether we should consider it a translation at all. Before turning to the discussion of the Salamanca translation, it is worth noting that translating a work of geography is not a simple task. Geographies, after all, contain numerous technical terms regarding the measurement and divisions of the earth, and so on and plentiful foreign nomenclature whether in the form of place names, the names of people, or even the names of animals. Moreover, in the middle of the fifteenth century finding materials to aid one in such a translation – for instance a bilingual dictionary a reference work on geography, or even model translations – was not a simple task and in most cases probably impossible. But even acknowledging all of this, the Salamanca translator made only a modest attempt at translating al-Zuhrī's work. Indeed, rather than a translation, it is a mixture of translation (and mistranslation), bawdlerization, additions, skipped passages, and personal commentary. Indeed, no single passage in the translation can be considered either a "word-for-word" or "according to the sense" translation. Instead, the translator modified everything that he 'translated.' And because of this, hereafter I will refer to his work as a 'translation' (in inverted commas), a version, or an

⁷² James Hankins, *Humanism and Platonism in the Italian Renaissance* (Rome: Edizioni di Storia e Letteratura, 2003), 1: 12.

interpretation and I will refer to the anonymous Christian who undertook the project as the 'translator.'

From the very first folio, the 'translator' demonstrated little concern with following the Arabic text. As we have seen he mentioned in the first line of this work that those who had seen "treatises on the sphere" knew that the sky was round like a ball. He continued to explain that the earth was covered with water and had been at the beginning of the "growth" of the world. Due to the piety of God and his mercy, he made it habitable for humans and animals "on the third day of creation." The earth, he added, is "generally round like a massive sphere and half of it is submerged in water."⁷³ In contrast, the first passages of the Arabic text begin first with the basmala and al-Zuhrī's invocation of the blessing of God (and in on manuscript, his name). Perhaps the 'translator' felt such information superfluous. In such a scenario, we might imagine the translator would then begin with the next section, at the point when al-Zuhrī began the geography proper. In al-Zuhrī's text, this would have been the passage in which he explained his project, that is that he had based his work on the Ja'rāfiya of al-Fazārī who in turn had copied that produced under Hārūn al-Rashīd by seventy scholars in Iraq – information that seems critical to understanding the work. This, however, found no place in the Castilian version. ⁷⁴ Again, when al-Zurhī's text described the size of the oikoumene and circumference of the earth, the 'translator' ignored it.⁷⁵ And in the very next passage al-Zuhrī described the seven parts into which he divided the earth, and again, the 'translator' disregarded it completely. This may well explain why the 'translator,' as we saw above, had confused al-Zuhrī's seven parts of the earth with the seven latitudinal Greek climates. ⁷⁶ In any case, this is stunning. Without knowing the

⁷³ Salamanca Ms. 2086, fol. 1r.

⁷⁴ Hadj-Sadok, *Kitāb al- Dja'rāfiyya*, 306.

⁷⁵ Hadj-Sadok, *Kitāb al- Dja'rāfiyya*, 302.

⁷⁶ Hadj-Sadok, *Kitāb al- Dja 'rāfiyya*, 302.

order of al-Zuhrī's geography, the text appears to follow an almost arbitrary path over the geography of the earth. The resultant 'translation' would seem an unsystematic collection of information about distant and probably unfamiliar lands. But when al-Zuhrī named those seven climates and the regions of the earth that belonged to each climate, the 'translator' found room for those.⁷⁷

What parts, then, of al-Zuhrī's text did were translated? This is a question that has no simple answer. In fact, it is easier to delineate which parts he did not translate. First, as we have seen, the 'translator' only made it through 252 of the 383 sections of the original Arabic text. But this does not mean that he translated those 252 sections. And in fact, he skipped 31 of them completely. And there appears to be no pattern behind his decision to disregard some passages but not others. Moreover, he shortened all of the passages that he attempted to translate. That is, he never translated a passage in full. In all, he probably translated about a third or perhaps even less of the original Arabic text.

The question that we then must ask is why did the translator omit so much from his interpretation? The only clear criterion for omitting parts of the original related to his Christian faith and unwillingness to incorporate passages relating to Islam and Muslims. But he omits more than mere information relating to Islam. We might also consider his mediocre level of Arabic as an explanation. We have already seen his misreading of the "*History* of al-'Udhrī." But the text has many small mistakes. Consider, for instance, al-Zuhrī's description of the rhinoceros, which he located in China, near the island of Waqwāq. He described the rhinoceros – *karkaddān* in Arabic – as a large animal, "similar to the camel, but twice as large. Its neck is long and

 77 Hadj-Sadok, Kitāb al- Dja 'rāfiyya, 297; Salamanca Ms. 2086, 19r.

reaches the ground, such that it can drag its chin."⁷⁸ The Salamanca 'translator' rendered this passage by stating that the "*corquedan*" is "a large beast, in the manner of a mule, except that it is more than twice as tall. And it has a long nape [of the neck, *çervis*] and it casts it on the ground and it carries its tail dragging on the ground."⁷⁹ In the Arabic version the animal drags its chin on the ground, whereas in the Castilian version, it drags its tail. Moreover the translator, perhaps not surprisingly, did not know translation of the Arabic term for rhinoceros. But he appeared to convey the general idea of the passage. Moreover, here he has also performed an act of domesticating the foreign: the camel has become a mule, an animal far more familiar to an Iberian audience. That said, it is unclear whether he did this because he thought other Castilian speakers might read his work and he wished to ease their reading comprehension or because he did not know the Castilian word for a camel.

But his shortcomings as a translator of Arabic did not cause him to omit much of the original text. We might ask whether there were there instances in which he simply did not comprehend the passage in question and hence determined to disregard it. The simple answer is no. In general, when the geographer did attempt to translate passages from the Arabic, he usually made small errors of interpretation yet capture the general idea that they conveyed, as in the 'rhinoceros' example above. A lack of comprehension does not appear to have been a major cause of his disregarding parts of al-Zuhrī's text. For instance, in his introduction to the section in which he dealt with the region of Yathrib, that is, Medina, al-Zuhrī wrote, "Its limits [the region of Yathrib] are Mecca, al-Qulzum [the Red Sea], Khaybar, the city of Babylon, the land of Midian, the beginning of Syria to the north and the city of Tayma' to the east." The

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⁷⁸ Hadj-Sadok, *Kitāb al- Dja'rāfiyya*, 295.

⁷⁹ Salamanca Ms. 2086, 20r.

⁸⁰ Hadj-Sadok, Kitāb al- Dja 'rāfiyya, 270.

Salamanca 'translator' rendered this as, "And this second region is from the said island until the Red sea where the city of 'Yetrib' is." He made no attempt to capture the names of the cities or regions mentioned by al-Zuhrī. Did the 'translator' omit them because did not comprehend them as place names? Given the wording of this passage, this is doubtful, and moreover, some of them – Mecca, Babylon, Syria – appear elsewhere in the text. There is no obvious explanation for having left them out of the text: he knew they were place names and they were not attached to Islam or Muslim sources in this passage. And yet, they are absent from the Castilian version. Here the 'translator' removed geographic information from his translation, though not because of lack of comprehension. We see, then, that mediocre Arabic fluency does not explain all (or even most) of the omissions. And further, we know that he understood the Arabic text well given that he managed to eliminate all of the elements of it that dealt with Islam.

Because the 'translator' removed so much of the original Arabic text, his Castilian version offered little in the way of clarity regarding the geography of the world. As we have seen, he only attempted to translate a portion of the Arabic treatise, cut numerous passages from those portions that he did examine, and drastically abridged the original text. But more than this, his unfamiliarity with much of the geographical nomenclature and insufficient Arabic combined to produce numerous perplexing place names. We see *Alhirac* and sometimes *Alirac* for Iraq, *Aldilam* for Daylam, *Baça* for Basra, and *Coram* and sometimes *Coarcan* for Khwārizm. But these are distant, unfamiliar places in particular for a resident of fourteenth-century Salamanca, and that one might attempt transcribe such unfamiliar Arabic names is not surprising. In any case, the 'translator' made similar mistakes even close to the Iberian Peninsula, in places that he

⁸¹ Salamanca Ms. 2086, 32r. The "island" mentioned here is the "isla de Aravia," the 'island of Arabia.' The 'translator' has read the Arabic term "*jazīra*" as 'island,' a perfectly sound translation, though here it means 'the peninsula of Arabic.'

surely knew by name. Pisa, written $B\bar{\imath}ja$ by al-Zuhr $\bar{\imath}$, became Beneja in the 'translation'; Flanders, written Aflanda in the Arabic text, became Balacra, and Narbonne (Narbona), $Arb\bar{u}na$ in Arabic, became "Ariona" in Castilian. Not only are these names far from their Castilian equivalents, they are not even transcriptions of the Arabic. ⁸² In short, the Castilian version was of extremely limited utility as a guide to the geography of the world.

Conclusions

The anonymous fifteenth century translator of al-Zuhrī's al-Ja'rāfiya likely had a connection to the University of Salamanca. As the preeminent center of the study of astronomy and cosmography in Castilian-speaking lands, it would have provided the translator with the "treatises of the sphere" that he mentioned on the first page of his interpretation as well as access to Ptolemy's Geography, a text that he had certainly studied. The translator's familiarity with these texts betray a deep interest in these fields of study. In all probability it was his interest in the study of the earth that drew him to the geographical treatise of al-Zuhrī. Indeed, perhaps the name of al-Zuhrī's work, al-Ja'rāfiya, had drawn him to it as it matched the name of Ptolemy's great work which had meant so much to him. Perhaps he felt he could gain insight into Ptolemy through this Arabic text. He did, after all, complain when he thought al-Zuhrī's text had diverged from Ptolemy. In any case, in spite of his apparent interest in Arabic geography, his manner of approaching it through the mental screens of his Christian faith, aversion to Islam and "Moros," and his previous reading of Holy Scripture and Ptolemy meant that rather than reading it as

⁸² The Castilian for these place names is as follows: Pisa = Pisa; Flanders = Flandes; Narbonne = Narbona. These Castilian forms appear in the fourteenth century *Libro del conoscimiento de todos los reinos*. Cf. Nancy Marino (ed., trans.), *El Libro del conoscimiento de todos los reinos* (*The Book of Knowledge of All Kingdoms*), (Tempe, Arizona: Arizona Center for Medieval and Renaissance Studies, 1999).

source of new information about the world; he judged it against these screens. Based on these screens, he omitted and modified passages and added his own commentary in which he critiqued the Arabic text and author. When al-Zuhrī's text delivered information contrary to his understanding of the world, he critiqued his source. In this way, the translator read the Arabic as much to learn about the world as to confirm his own comprehension of it.

The survival of this Castilian interpretation of al-Zuhrī's text provides evidence of the translation of Arabic geography into a Romance language. And in this case, had the translator followed Leonardo Bruni's advice in translating – and of course, had he greater fluency in Arabic – this Castilian version might have preserved the transmission of a view of the world from eighth-century Baghdad to fifteenth-century Salamanca. But, more to the point, 'translation' can only be said to be a vague rendering of al-Zuhrī's text. In any case, the translation of a geography from Arabic was exceedingly rare, at least judging from the historical sources available. Translations of geographical texts, whether from Arabic to Romance or Romance to Arabic were almost never undertaken. Perhaps this was the case because works of geography tended to contain, as does the geography of al-Zuhrī, a considerable amount of 'cultural' information, possibly including stories from Islamic history or from the Qur'an. Might other geographers have found such information as distasteful as did the anonymous Salamanca translator? Another concern that translators may have had was that translating such works was exceedingly difficult. The sheer quantity of foreign nomenclature regarding distant lands combined with a lack of translation aids or previous translations to look to for comparison, may have made such an undertaking unappealing. Or perhaps geography was so rarely translated because it was not seen as having much utility. Works of astronomy, medicine, mathematics, and so on were translated in great numbers as they were viewed as useful. They could teach about the earth in the cosmos, help heal the ill and injured, and teach people how to calculate numbers across numerous fields. Geography, on the other hand, allowed one to learn of distant parts of the world, but perhaps it was seen merely as a form of entertainment or amusement. In any case, the 'translator' felt little compulsion to produce a faithful rendering of the geography, whether because of a shortcoming in his Arabic or because of the cultural 'baggage' contained in al-Zuhrī's text.

The foreign nomenclature surely presented a considerable obstacle to the anonymous translator since he committed numerous mistranslations and misunderstandings. These errors as well as his readiness to completely jettison considerable portions of the Arabic text and decision to leave the project uncompleted resulted in a Castilian version that was clearly based on the text of al-Zuhrī yet which conveys little of the sense of the original. It, too, made the Castilian interpretation of little value as a source of geographical information. We no information about the use of this text over the centuries. It appears that it had been housed at either the library of the Colegio de San Bartolomé from perhaps sometime around 1500, if not earlier, until it was removed to the king's private library in the nineteenth century. In the intervening years, there is no record of the text having been consulted and the sound state of the manuscript's paper suggests that it was not consulted extensively. And it is no surprise given its shortcomings and not infrequent dialogue between translator and the text he translated.

Chapter 6:

Sacred Geographies: The Atlases and World Map of 'Alī al-Sharafī

Toward the end of the first decade of the nineteenth century, Maḥmūd b. Sa'īd Maqdīsh al-Safāqusī (d. Kairouan, 1813), a historian of his native Sfax, a small port town on the Gulf of Gabès in present-day Tunisia, completed his life's work, a history of his hometown from the Islamic conquest through his own lifetime, with biographies of its distinguished inhabitants. Among the numerous prominent individuals and families, he devoted several pages to some of the later members of the al-Sharafī family. From Maqdīsh's text it seems that the al-Sharafīs were a family of scholars of Islamic law and religious sciences. Muḥammad al-Sharafī, for example, was the head of Islamic law and sciences, expert in hadith, Qur'ānic exegesis, and recitation of scripture in the eighteenth century. He left his native Sfax and settled in Cairo where he worked as a technical astronomer at al-Azhar Mosque, remembered as a "master of the knowledge of the zīj." Later, Aḥmad al-Sharafī al-Ṣafaqūsī, also a resident of Cairo and scholar at al-Azhar from at 1676-77, became a scholar of mathematics and expert in the use of quadrants and timekeeping at the mosque. Other less illustrious family members founded madrasas and earned their keep as imams at mosques in Sfax. The al-Sharafīs, then, were no ordinary family,

¹ Zīj: a kind of astronomical handbook usually comprising a list of coordinates of various celestial phenomena (sun, moon, stars, etc.). The tables could also enable trained astronomers to calculate the time of day or night based on calculations of solar or stellar altitudes. Moreover, by following a set of calculations based on the *zīj* tables and certain geographical data the astronomer could compute the *qibla* of any given locality. See *El*² s.v. *Zīdj* (F.C. de Blois, D.A. King, J. Samsó). See Maḥmūd Maqdīsh, *Nuzhat al-anzār fī 'ajā'ib al-tawārīkh wa-l-akhbār*, ed. 'Alī al-Zuwārī and Muḥammad Maḥfūz (Beirut: Dār al-Gharb al-Islāmī, 1988), Vol. 2, 390-391.

² On the al-Sharafī family, see Maqdīsh, *Nuzhat al-anzār*, 390-400.

at least in Maqdīsh's telling. They were a devout family, trained in Islamic sciences and familiar with the mathematics and astronomy of their day.

About a century before the earliest member of the family mentioned by Maqdīsh, 'Alī al-Sharafī, a native of Sfax and resident of the holy city of Kairouan, composed some remarkable cartographic works.³ Like his descendants, he was a devout Muslim, schooled in Qur'ān and hadith, a follower of the Mālikī school of jurisprudence, and familiar with the astronomy of his day. Working from Kairouan in the mid-sixteenth century, 'Alī composed a handful of extraordinary works that combined the fields of cartography, geography, and astronomy. Three of these have survived to the present day, among them two nautical atlases dating from 1551 and 1571 and a world map that he completed in 1579. Taken together, these works preserve the ways in which one curious, educated, and well-read man portrayed his world from Ifrīqiya, as well as the sources of knowledge – the texts and maps – through which he learned of that world and formulated his understanding of it.

This chapter examines how 'Alī, the best documented member of the al-Sharafī clan, conceived of his world as revealed in his three extant works. The object is to enunciate the sources to which he had access, dissect the ways in which he leveraged them in composing his works, and how he adopted, combined, and modified the views and knowledge of his sources to produce his own view of the world. The world that he wrote was traditional and innovative, grounded in works of scripture, geography, astronomy, and cartography. His works, too, are Mediterranean texts: they reflect his proximity to the sea and access to knowledge from its northern shores. Ultimately, though, he produced his work and understood the world through the

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³ El² s.v. "al-Kayrawān" (M. Talbi). Talbi called Kairouan a "holy and venerated" city, a status it has held – according to Talbi – from its founding through the twentieth-century.

lens of Islam and the Mālikī rite. We will begin our exploration of 'Alī and his works via an analysis and evaluation of his two nautical atlases. I argue that although these two works bear the marks of nautical cartography and incorporate knowledge ultimately from European charts, albeit indirectly, they are nevertheless meant as guides for the observation of Islamic obligations of fasting and prayer. The second section of the chapter considers 'Alī's world map of 1579, a copy of a chart drawn by his grandfather some years previously. I trace the sources he used and blended together in compiling this chart, in particular a Mallorcan nautical chart and the cartography of al-Sharīf Idrīsī. 'Alī combined disparate traditions to produce a remarkable representation the world, and yet though it is less palpably influenced by his faith, he nevertheless inscribed on this map a view inspired by the Qur'ān and hadiths. Finally, the third and final section draws conclusions regarding the limits to 'Alī's knowledge of geographical configuration of his world.

Sacred Geography

"Praise be to God and may God pray for our master and Lord Muḥammad, the messenger of God. This *ṭabla* is the work of the poor slave at the mercy of his Master, 'Alī bin Aḥmad al-Sharafī, al-Ṣafāqusī by origin and birth, al-Qarawī by residence and dwelling, and of the Mālikī rite (*madhhab*)." 'Alī thus began his 14-folio nautical atlas, adding that he completed it at the end of the Islamic month of *Jumādā al-Ākhira*⁵ in the year 979 of the hijra, that is sometime in mid- to late-November 1571, about a month after the Ottoman defeat at the Battle of Lepanto. In just a few brief lines of text, he had revealed much about himself. His *nisba* "al-Safāqusī"

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⁴ Bodleian Library, Ms. Marsh 294. All translations of this manuscript and others cited in this chapter are my own unless otherwise noted.

⁵ The sixth month of the Islamic calendar.

indicates that he was a native of Sfax, a port city in present-day Tunisia. At around the same time that 'Alī was completing his atlas, Luis del Mármol Carvajal, a Spanish chronicler and traveler, described Sfax as "a small place of some six hundred souls, on the edge of the sea... The inhabitants devote themselves for the most part to ships or fishing... Some hunt along the coast of Christendom in the company of the Turkish corsairs, while others are merchants and conduct trade in Turkey and Egypt." 'Alī left his seaside place of birth and settled in al-Qayrawān (henceforth Kairouan), a once flourishing metropolis that stands about 130 km to the northeast of Sfax and 55 kilometers from Sousse, the nearest port. Leo Africanus, who visited the town in 1516, described it as "formerly among the great cities," yet it nevertheless retained some "noble" aspects. This commercial power had waned by the time of Leo's visit, it endured as a venerated and holy city, at least among Sunnis. Kairouan was home to the Great Mosque, the oldest and preeminent religious building in the Islamic west, and it retained its status as a regional spiritual capital. It was also a center of the Mālikī madhhab, one of the four schools of Sunni jurisprudence, and like the majority of the inhabitants of North Africa in his day, the school to which 'Alī declared his allegiance.⁸

'Alī, it appears, composed his nautical atlas while resident in Kairouan, at a considerable distance from the sea. Nor was the atlas that he had completed in 1571 his first endeavor in the genre; he had in fact produced a similar, yet shorter atlas – this earlier version contains only eight folios, again as resident of Kairouan, twenty years previously, in 1551.⁹ His two extant atlases, both highly decorative productions, exhibit his technical aptitude in reproducing portolan charts.

⁶ Descripción general de África, 243.

⁷ Leo Africanus and Description de l'Afrique, tierce partie du monde. Escrite par Jean Leon African. Premièrement en langue arabesque, puis en toscane et à présent mise en françois Vol. 3 (Paris: E. Leroux, 1896-1898), 163.

⁸ On Kairouan, see *El*² s.v. al- Kayrawān (Mohamed Talbi)

⁹ Bibliothèque Nationale de France (henceforth BnF), Ms. Arabe 2278. According to an inscription on this atlas, it was completed on 1 Ramadan 958 AH (2 September 1551).

For each of the atlases comprises a full set of seven nautical charts, each of which depicts a portion of the Mediterranean basin and which together describe an area extending from Iberia to the Black Sea. Yet the atlases encompass far more than merely these charts; they further comprise a mixture of calendrical tables, a world map, *qibla* directions, and assorted astronomical charts. Tables 1 and 2 present a folio-by-folio overview of the two works. The atlases are clearly related to one another and derive from the same set of sources, though they are not identical.

Table 1. Contents of 'Alī al-Sharafī's 1551 Atlas (Bibliothèque nationale, France, Ms. Arabe 2278). 10

Foliation	Contents
1a	Front page, authorship, date
2a	Calendrical table of lunar mansions
2b	Qibla Directions
3a	Circular world map
3b	Nautical chart of the Iberian Peninsula and
	western Maghrib
4a	Nautical chart of the west central Mediterranean4v
4b	Nautical chart of Italy and Adriatic Sea
5a	Nautical chart of Black Sea
5b	Nautical chart of eastern Mediterranean
6a	Nautical chart of Aegean Sea and east-central
	Mediterranean
6b	Nautical chart of central Maghrib w/ Sicily
7a	Circular table of shadow lengths

 $^{^{10}}$ This and the next table are based, in part, on those of Mónica Herrera-Casais, "The nautical atlases of 'Alī al-Sharafī," *Suhayl* 9 (2008), 245-246.

7b	Table: Monthly almanac from January to June
8a	Table: Monthly almanac from July to December;
	Colophon

Table 2. Contents of 'Al $\bar{1}$ al-Sharafī's 1571 Atlas (Bodleian Library, Ms. Marsh 294).

Foliation	Contents
1a	Front page, authorship, date.
1b	Instructions for first two tables; instructions for the
	scheme of moon phases
2a	Description of cosmology scheme; Instructions for
	qibla directions; Description of the nautical wind rose
2b-3a	Description of shape of earth and the seas of the
	world
3a	Definition of sea chart of the world; first colophon
3b	Table 1: First calendrical table for finding weekday in
	which Arab months and years begin
[Missing	Table 2: Second calendrical table of Arab months and
folio?]	years; scheme of phases of the moon.
4a	Cosmology scheme
4b	Qibla chart
5a	Nautical wind rose of 32 directions
5b	Circular world map
6a	Nautical chart of central Maghrib w Sicily
6b	Nautical chart of Italy and Adriatic Sea
7a	Nautical chart of Iberian Peninsula and western
	Maghrib
7b	Nautical chart of west central Mediterranean

8a	Nautical chart of Aegean Sea and east-central
	Mediterranean
8b	Nautical chart of Black Sea
9a	Nautical chart of eastern Mediterranean
9b	Calendrical table of lunar mansions
10a	Calendrical table for finding weekday in which
	"foreign" (Julian) months and years begin
10b	Table of shadow lengths
11a	Blank
11b	Instructions for lunar mansions table (fol. 9v) and the
	table for determining weekday of "foreign"
	months/years (10r)
12a	Instructions for the table of shadow lengths (10v)
12b	Description of Mediterranean and the Atlantic
13a	List of sources; second colophon.

'Alī's atlases were very much the products of the Mediterranean. The set of nautical charts depict the Mediterranean and the ports that stretch along its coastlines. But more than this, the atlases themselves bear a striking resemblance to numerous atlases written in Romance languages and produced in a number of port cities along the northern shores of the sea beginning in the early fourteenth century. Consider the layout of the atlases. They comprise a handful of astronomical and calendrical tables, a set of nautical charts of the Mediterranean, and a world map. The later atlas includes a few additional tables, among them an Aristotelian-Ptolemaic universe system and a large color diagram of a 32-direction wind-rose. When compared to atlases drawn along the northern shores of the Mediterranean in European ateliers, the basis of their layout becomes apparent. To take but one example of a particularly influential

contemporary from the European shores, consider the atlases of the Genoese Battista Agnese (c. 1500 – d. 1564) who set up his workshop in Venice. His atlases followed a standard sequence in which a title sheet was followed by sheets depicting an armillary sphere, a zodiac calendar often presented alongside an Aristotelian-Ptolemaic universe system, a table of solar declinations, then three nautical charts that together formed a world map, six separate portolan charts of the Mediterranean, and a world map in an oval projection. The model promulgated by Agnese was popular enough to attract a considerable following to the extent that historians of cartography today write of "the Battista Agnese standard atlas." ¹¹ Earlier atlases produced in the ateliers of the European Mediterranean coast, too, encompass a similar mixture of astronomical and cartographical materials. The three surviving maps of Giovanni Leardo, a Venetian cosmographer of the mid-fifteenth century, all include elaborate calendars that incorporate the zodiac, the dates of Easter, and the Dominical Letters, the latter a means of determining the days of the month on which Sunday fell. 12 The similarity between the kinds of information presented on the sheets of 'Alī's atlases and those produced in European ports is too great for mere coincidence. Given that 'Alī's two atlases are the only surviving Arabic exemplars of the genre, it is probable that relatively few Arabic atlases were produced, at least in comparison to their Romance-language counterparts. Moreover, the late date of 'Alī's works suggests that the layout that he favored had reached him via a Romance model.

While the form of the atlases 'Alī made was grounded in charts produced along the northern shores of the Mediterranean, that he deliberately imitated a "European" chart is less than certain. He may have had access to an Arabic-language atlas upon which he might pattern

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¹² Harley, *The History of Cartography*, 1: 316-318, 327, Plate 20.

¹¹ See Corradino Astengo, "The Renaissance Chart Tradition in the Mediterranean," in *The History of Cartography* Vol. 3, part 1 ed. David Woodward (Chicago: University of Chicago Press, 2007), 214 and references therein.

his own works. In a passage from his 1571 atlas he did, after all, claim that he had copied the nautical charts from a work that was probably written in Arabic. On the last folio of his atlas he wrote, "As for the work of the countries and anchorages of the sea and the pages upon which the land beginning at the Strait of Ceuta [and continuing] to the Levant and the lands of the Sea of Kafā [Black Sea], I followed a tabla I have seen which was written by an inhabitant of Istanbul, the wise Abū al-'Abbās Ahmad al-Andalusī, not that *tabla* which I know from the work of my father and grandfather." ¹³ Though the Abū al-'Abbās and his atlas mentioned by 'Alī is unknown, this suggests that he had access to a full set of Arabic-language nautical charts which he freely copied. 14 While we cannot be certain that the atlas of Abū al-Abbās was written in Arabic, it is nevertheless probable given that a community of Moriscos, refugees from the Iberian Peninsula, had recently settled in the Galata neighborhood of Istanbul. ¹⁵ His *nisba* – "al-Andalusī" – suggests that he had origins in al-Andalus. Finally, based on 'Alī's wording, it appears that the atlas of Abū al-'Abbās, or at least the part he used, comprised only nautical charts, themselves ultimately based on charts first drawn in Genoa, Venice, and Palma de Mallorca. Whether 'Alī knew that this variety of nautical cartography had first been used in European ateliers we cannot say. Still, that he repeatedly referred to atlases as *tabla* suggests a Romance-language source; *tabla* likely derived from the Latin *tabula*, a term which could signify table and map. 16

¹³ Ms. Marsh 294, fol. 13b. The "*tabla*" made by 'Alī's father and grandfather appear to have been world maps, rather than a series of nautical charts or even an atlas. See below.

¹⁴ Whether he used this set of charts in the drawing of the charts of his 1551 atlas is uncertain.

¹⁵ See Mónica Herrera-Casais, "The nautical atlases of 'Alī al-Sharafī," 251 and references therein; Tijana Krstić, "Moriscos in Ottoman Galata, 1609-1620s," in Mercedes García-Arenal and Gerard Wiegers eds., *The Expulsion of the Moriscos from Spain, A Mediterranean Diaspora* (Leiden: Brill, 2014), 269-285; Halil İnalcık, "Ottoman Galata, 1453-1553," in *Essays in Ottoman History* (Istanbul: Eren, 1998), 324-327; Luce López Baralt and Awilda Irizarry, "Dos itinerarios secretos de los moriscos del siglo XVI," in *Homenaje a Álvaro Galmés de Fuentes*, Vol. 2 (Oviedo, Spain: Universidad de Oviedo, 1985), 547-582.

¹⁶ For instance, Pietro Vesconte, author of the oldest known nautical atlases of the Mediterranean, described his own maps using the Latin terms *carta* and *tabula* Tony Campbell, "Portolan Charts from the Late Thirteenth Century to

'Alī may have based the charts found in his 1571 atlas on the atlas of Abū al-'Abbās Ahmad al-Andalusī, probably an Arabic-speaking Muslim inhabitant of Istanbul, yet his nautical charts nevertheless closely resemble charts composed in various southern European port cities. The intricate twists and turns of the coastlines of his charts, complemented as they are by a scattering of red dots and black crosses that signified shallow waters and shoals, are characteristic of the genre. Whether his charts align with any extant chart, whether Romance, Arabic, or even Turkish, is unknown, and there exist in any case simply too many charts against which it might be measured. Moreover, while the contours of the coastlines of his 1571 atlas resemble those of his 1551 composition, there are minor differences. To take but one example, on his 1551 nautical chart depicting the Aegean Sea and east-central Mediterranean, the name Aynbarkhtī, the Turkish name for Lepanto, is clearly written in red ink along the northern coast of the Gulf of Corinth. On the corresponding map in his 1571 atlas, again, completed only a month after the Ottoman defeat at Lepanto, the name has disappeared. Whether this was due to partisan motivations in the wake of the recent Ottoman defeat or simply because 'Alī ran out of space in inserting place names (and the space on his map in this portion of the Peloponnese is certainly overcrowded with place names), we cannot say.

Another important difference between the two atlases is that the 1551 atlas lacks a true rhumb line network. Rather than draw a network of wind-roses and rhumb lines, as had nearly all

^{1500,&}quot; in *The History of Cartography*, Vol. 1 eds. J.B. Harley and David Woodward (Chicago: University of Chicago Press, 1987), 375 and n. 47. A perhaps for well-known example of "tabula" as map is in the title of the "Tabula Peutingeriana," a thirteenth-century copy of a late antique map of the *cursus publicus* of the Roman Empire, named after On the various significations of the Latin term *tabula*, see *Brill's New Pauly*, s.v. "Tabula" (H. Blanck). The term *tabla* is attested in Arabic, albeit not with any signification that would fit 'Alī's use of the term. For instance, it has been used to indicate a collection of bells either attached to board or threaded on a chain or rope, probably from the Hebrew, *tablā* (see *EI*² s.v. "Ṣandj" (H.G. Farmer)). It also may refer to any instrument in the drum family (see *EI*² s.v. "Ṭabl" (H.G. Farmer)). Hans Wehr gives "drum," "lock," and "table" (furniture), *Arabic-English Dictionary: The Hans Wehr Dictionary of Modern Written Arabic, 4th Edition* (Urbana, IL: Spoken Language Services, 1994), 647. Lane gives "tray" (probably from Persian), *An Arabic-English lexicon*, Book I (London: Williams and Norgate, 1863), 1828.

nautical cartographer from the inception of the genre in the late thirteenth century, 'Alī drew a simple diagram of 32 winds, as demonstrated in Figure 13. One has to turn back to the ca. 1373-1383 atlas by the Venetian Francesco Pizigano to find nautical charts with the same 32-direction wind-rose. 17 Though the coastlines of 'Alī's early charts resemble those of other nautical charts from the previous two centuries or more, the lack of a rhumb line network would have rendered the charts impractical for navigation. 'Alī, then, never intended his atlas to be used on board a ship. The elaborate decoration and ornamentation of the 1551 atlas, too, confirms this, as Mónica Herrera-Casais suggested in her descriptive essay on 'Alī's nautical atlases. 18 On every sheet of the atlas, whether they depict maps, tables, or diagram, 'Alī drew an intricate arabesque border in vivid green, red, and black inks (see, for instance, the border of the nautical chart in Figure 14). Figure 15 depicts the frontispiece of the atlas, the border of which comprises two different arabesque motifs and elaborate, if somewhat artless calligraphic script with full vocalization of Arabic – an uncommon practice in texts of this nature, though customary in important religious works such as the Qur'an and hadith, and thus bestowing upon the atlas a sense of importance and authority. Even if on his 1571 atlas 'Alī inserted rhumb line networks that may have made his charts more suitable for practical use at sea, this later atlas, is also a work of art, albeit a less decorative one than its predecessor. 'Alī certainly did not compose it with shipboard use in mind.

¹⁷ Milan, Biblioteca Ambrosiana, SP 10, 29 (SP II, 2).

¹⁸ Mónica Herrera-Casais, "The nautical atlases of 'Alī al-Sharafī," 237.



Figure 13. Diagram of the 32-winds by 'Alī al-Sharafī. (Bodleian, Ms. Marsh 294, fol. 5a)

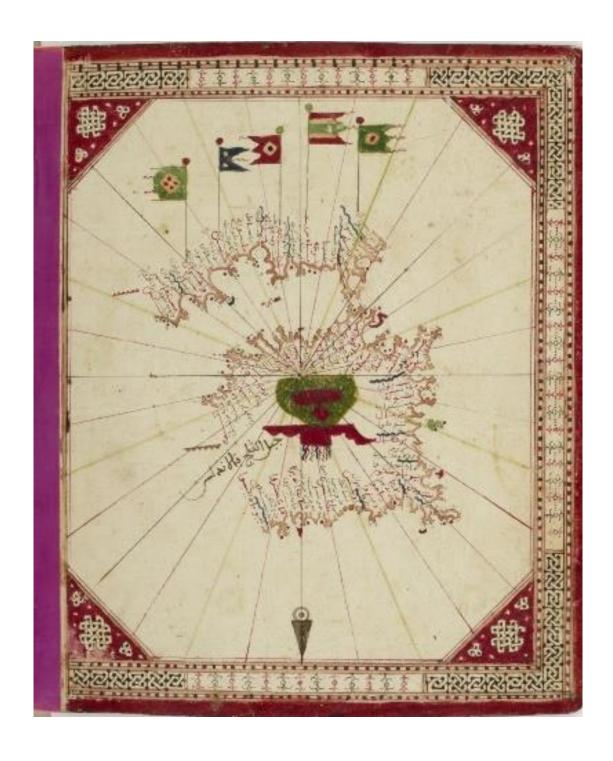


Figure 14. Fol. 3b, Iberian Peninsula and Maghrib Coast (1551) (BnF, Ms. Arabe 2278). 'Alī superimposed a simple 32-direction wind-rose over his depiction of the Iberian Peninsula. Note, too, that south is at the top of the sheet.

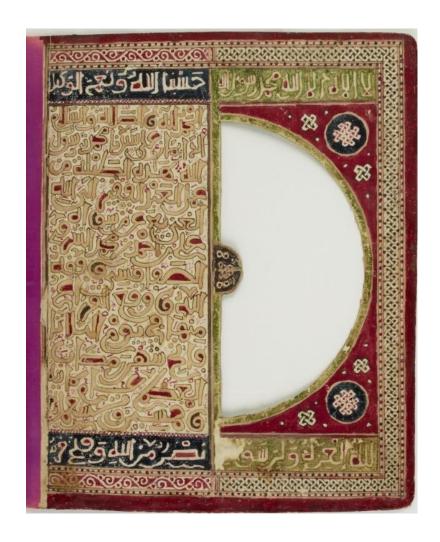


Figure 15. Frontispiece of 'Alī's 1551 nautical atlas, fol. 1b. (BnF, Ms. Arabe 2278).

If he did not intend these atlases for shipboard use, for whom might 'Alī have composed them? This is a question that cannot be conclusively answered, given that we know almost nothing of the ownership of these atlases prior to their arrival at the Bodleian and BnF. We know, however, that the earlier atlas was brought to the royal library in Paris shortly before 1739 from Istanbul. At some point someone inscribed the names of the eight principal winds in

Ottoman Turkish. 19 The 1551 atlas remains in excellent condition, suggesting that it was cared for and perhaps little used in its lifetime. The 1571 chart at the Bodleian also shows signs of use in a Turkish-speaking environment, as someone labeled the island of Sardinia in an Ottoman Turkish hand on the nautical chart of the central Mediterranean. That 'Alī's charts should have been used in an Ottoman environment is unsurprising, given that the Ottomans ruled over both towns associated with 'Alī, Sfax and Kairouan, in the second half of the sixteenth century.²⁰ While we cannot know who these Turkish-speaking users were, if the pattern of ownership in the Arabic- and Turkish-speaking Mediterranean matched that of Europe, then we might conjecture that if they were the owners of the atlas, they were likely from the wealthy classes. In his survey of the literature regarding ownership of nautical atlases in sixteenth-century Europe, Corradino Astengo found that numerous luminaries owned highly-ornamented nautical atlases, including Charles V, Philip II (received as a gift from his father, Charles), various Medici family members, Alfonso II d'Este, Duke of Ferrara, Modena, and Reggio, the Bishop of Feltre, various aristocratic households, and Henry VIII of England (r. 1509-1547). Astengo identified only one instance in which a less affluent individual owned such an atlas, a Greek sailor around 1600. At various points in his essay "The Renaissance Chart Tradition in the Mediterranean," Astengo discussed the use of charts as navigation aids on board ships. He did not identify a single atlas that was used on a ship. Moreover, he suggests throughout that highly decorative charts and

¹⁹ This was pointed out by Mónica Herrera-Casais in her essay on 'Alī's nautical charts, "The nautical atlases of 'Alī al-Sharafī," 237. The names of the winds were not labeled on any other chart in the atlas. Someone wrote the Turkish terms, rather than Arabic, for the winds. *Lòdoss*, for example was used for "southwest," *yìldiz* for north, and *kèshishlémé* for southeast. See James W. Redhouse, *Redhouse's Turkish Dictionary in two parts, English and Turkish, and Turkish and English* (London: Bernard Quaritch, 1880), 298, 206, and 303. I have followed Redhouse's transcription style.

²⁰ Other signs of use – and the 1571 atlas is in a fragile state suggesting extensive use – come from the hand of the French orientalist and professor of Hebrew and Latin at Oxford (ca. 1670-1740). Gagnier inscribed the first folio of the atlas with a Latin translation of 'Alī's introductory paragraph. In the same hand, he added six place names to the nautical chart depicting the Levant. Writing in the Latin alphabet, Gagnier added the names of Ascalon, Jafa, Acco, Tyrus, Said, and another illegible location.

atlases, charts with elaborate wind rose illustrations, and small-scale charts were not used at sea. All of his examples come from Romance traditions rather than Arabic, though there is little reason why Arabic-speaking sailors would not have held the same preferences.²¹

We might, then, imagine that 'Alī composed his atlas with a wealthy patron in mind. Beyond this, we cannot be certain how these atlases were used or who used them, though as noted above, they likely served a didactic purpose, in particular the 1571 version, given its detailed description of the various tables and maps contained in the atlas as well as its instructions, some of them detailed, on how to read and even to use the charts. Here I will center my analysis on the later atlas, since it includes this explanatory text and thus offers greater insight into the sources used by 'Alī and some of his motivations for composing the atlas.

What, then, did 'Alī convey to his readers in this text? He begins, as we saw above, by identifying himself as the author of the work. This self-identification, though, is peculiar in that 'Alī labels himself a follower of the Mālikī rite. That he followed that rite is not surprising; that he felt the need to identify himself as such in a nautical atlas, however, is somewhat more startling and conveys a sense that he took his status as a follower of that rite seriously. And indeed, when he begged "those who read or hear read" his atlas to pray to God and invoke his pardon, mercy and satisfaction "for the author [that is, 'Alī], his parents, as well as for all Muslims," in the next lines, he further expressed his Muslim sentiments. 22 He belonged to the most prominent Sunnī school of jurisprudence in North Africa and apparently felt himself enough a member of the Muslim community to urge readers to ask God to grant mercy to "all Muslims." As we shall see, his motivations for composing this nautical atlas stem directly from

²¹ See "The Renaissance Chart Tradition in the Mediterranean," 178-182, 211, passim.

²² Ms. Marsh 294, fol. 1a.

these sympathies: he intended his atlas to be used as a guide to aid dutiful Muslims in the correct practice of their faith, at least according to the Mālikī rite. Indeed, he directed his work at believers who wished to perform certain obligatory rituals of Islam which were informed by basic observations of the moon, sun, and earth:

- The observance of a sacred month of fasting, the timing of which is governed by a lunar calendar in which the beginning of months are determined by the appearance of the crescent moon.²³
- The performance of five daily prayers at specific times as determined by the position of the sun in relation to the local horizon, measured by the length of a shadow during daylight hours, sunset and sunrise, and by lunar cycle during the night.²⁴
- The orientation of prayer, recitation of the Qur'ān, the call to prayer, slaughter of animals, and burials in the direction, known as *qibla* in Arabic, toward the Ka'ba in Mecca ²⁵

Consider 'Alī's description of the first table in his atlas, which he entitled "The first table for knowledge of the beginning of the Arab months and the beginning of their year." This otherwise impenetrable chart required explanation: in order to determine the beginnings of the Arab months, one needed to do a few arithmetical calculations – simple addition and subtraction for the most part – involving known Hijrī years and observations of the appearance of the crescent moon. A reader might imagine any number of uses for a chart that allowed one to

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²³ See *El*² s.v. "Hilāl" (R. Ettinghausen); s.v. "Taʾrī<u>kh</u>, I. Dates and Eras in the Islamic World" (F.C. De Blois, B. Van Dalen); s.v. "Sawm" (C.C. Berg).

²⁴ See El² s.v. "Salāt" (G. Monnot); s.v. "Mīkāt" (A.J. Wensinck, D.A. King).

²⁵ See El² s.v. "Kibla" (A.J. Winsinck, D.A. King)

²⁶ Ms. Marsh 294, fol. 3b.

calculate the starting dates of Arab months; for instance, it might prove useful for a merchant who wished to track the date for commercial purposes and contracts. 'Alī, however, incorporated the table into his atlas not to aid merchants commercially, but rather for spiritual purposes: knowing when the Arab months began was essential for Muslims who wished to comply with the obligations of ritual fasting. But more than this, 'Alī directed his text at those who, like himself, followed Mālikī interpretations regarding when one ought to begin and end one's fast. More precisely, he noted that according to the "well-known doctrine (madhhab) of Mālik," that is, Mālik ibn Anas (d. 795 CE), after whom the Malikī school was named, the determination of the beginning of months is determined solely through the sighting of the crescent moon, "without taking into account the calculations of the astrologers or anyone else."²⁷ The ability to accurately determine when a month begins is important, in that it alone permits one to begin fasting during the sacred month of Ramadan at the prescribed time. And for 'Alī, that one must determine the start of the month and fast following the prescriptions of Mālik ibn Anas was particularly important. Indeed, he continued his explanation, stating that a saying attributed to Mālik proclaimed, "'Do not begin the fast until you see it [the new moon] and do not break the fast until you see it.' And in another [saying], "If the new moon is obscured from you, then calculate [when it should be],' that is count to thirty [days] because it has been said in the hadith that carrying out the fast to completion is absolute... This is the celebrated doctrine of Mālik, may God be pleased with him. And by him [we] act. God knows best."28 Here 'Alī partially quoted

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²⁷ Ms. Marsh 294, fol. 1b.

²⁸ Ms. Marsh 294, fol. 1b.

Mālik's great work, the *Kitāb al-Muwaṭṭa*', a survey of law, ritual, and practice of religion based on the consensus of the scholars of Medina, the *sunna* of Medina.²⁹

Nor is the first table the one that enabled a pious follower of the Mālikī madhhab from ensuring dutiful, correct observance of religious practices. The second chart, which aided readers in tracking the phases of the moon over the lunar month, also had a ritual purpose, namely to ensure that users of the text would fast for the required thirty days, "according to that which the Prophet said." He explained that given that the night is twelve hours long, just like the day, one can follow the movement of the moon and thus "calculate the passage of the night," the knowledge of which aided in determining the times of prayer after sunset.

And yet, not all of the tables and charts in the atlas had a singularly spiritual purpose. The third table of the atlas, "Description of the spheres of the circle from what al-Jaghmīnī said in some of his epistles," had no direct use as a guide for fasting or prayer. This diagram comprises a series of concentric celestial spheres of the moon, planets, and stars, with the earth at its center, labeled as "the sphere [kura] of the earth." The figure ultimately derives from diagrams of the Aristotelian-Ptolemaic universe, though it complicates these by adding divisions for the seven latitudinal climates (Figure 16). Nor does the atlas mention Aristotle. Like the classical system upon which it was based, the spheres are labeled in the following order as earth, moon, Mercury, Venus, the sun, Mars, Jupiter, and Saturn. 'Alī identified the next spheres as the "Ecliptic and the fixed stars" and, finally, the "Great Surrounding Celestial Sphere." Such diagrams were meant as visual aids to viewers, to illustrate the orbits followed by celestial bodies as they circled the

²⁹ On this book, see EI^2 s.v. "Mālik b. Anas" (Joseph Schacht). Here 'Alī al-Sharafī's text mirrors that, with slight variations, various selections of the eighteenth book of the *Muwaṭṭā*', a collection of hadith with isnād related to fasting, among them Book 18, Hadith 633, 634, 635.

³⁰ Title, Ms. Marsh 294, fol. 4b.

earth. Indeed, the ecliptic sphere drawn by 'Alī represented the path of the sun as it orbited the earth, and he explained as much in his description of the diagram, writing that it "describes the stars and their rotation: the first star, in yellow, represents the moon." Exactly why he included this folio in his atlas remained unstated, though we may posit two simple reasons. First, it may have had a didactic purpose as a graphic aid to demonstrate how the earth related to celestial phenomena, which ultimately may have elucidated the lunar table that preceded it and which demanded observation of lunar movements. Second, numerous atlases produced along the northern shores of the Mediterranean included similar diagrams of the celestial bodies as well as tables of lunar movements. At least as presented by 'Alī, the diagram of the Aristotelian-Ptolemaic universe served no purpose for navigation.

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³¹ Ms. Marsh 294, fol. 2a.

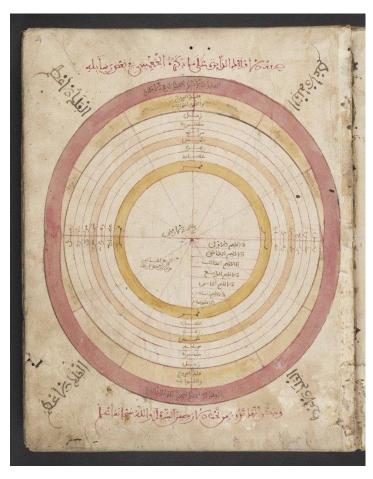


Figure 16. Aristotelian-Ptolemaic System. 'Alī stated that he had taken this table from the work of al-Jaghmīnī. (Bodleian, Ms. Marsh 294, fol. 4a)

'Alī may have inserted a diagram of the celestial spheres whose origin can be traced back to the fourth century BCE, but his source for it, al-Jaghmīnī, had written far more recently in the thirteenth century, still around three centuries before 'Alī composed the atlas.³² A native of Khwārizm (Uzbekistan), al-Jaghmīnī composed in Arabic a work of simplified elementary astronomy³³ entitled *al-Mulakhkhaṣ fī 'l-hay'a* (Epitome of Astronomy) in which he described the configuration of the earth and the celestial sphere. That 'Alī al-Sharafī had consulted a work

³² On al-Jaghmīnī see *The Biographical Encyclopedia of Astronomers*, s.v. "Jaghmīnī: Sharaf al-Dīn Maḥmūd ibn Muḥammad ibn 'Umar al-Jaghmīnī al-Khwārizmī" (Sally Ragep).

³³ Al-Jaghmīnī's modern biographer Sally Ragep has defined "simplified" astronomy as a text lacking [mathematical] proofs.

of astronomy suggests that he had a deep interest in the subject. That he had read a work of simplified astronomy, however, suggests that he was not a specialist in this complex subject. As we will see, 'Alī further mentioned three other specialists in astronomy – Abū Migra' (fl. 13th or 14th century), Ibn al-Bannā' (fl. 13th century), and one al-Safīqī, an unidentified writer, but rather than citing technical aspects of their works, he merely encouraged his readers to seek out their texts regarding rules of aligning the lunar Islamic calendar with Gregorian dates, should they desire to know more. In his mind, then, these astronomers were authorities. In all, 'Alī mentioned al-Jaghmīnī three times in roughly seven and a half pages of written text; in describing the earth as "round like a ball," he added that he followed al-Jaghmīnī and on the last sheet of his atlas, he noted that what he has said regarding the configuration of the earth and spheres "is from the epistles of al-Jaghmīnī."34 Al-Jaghmīnī's modern biographer, Sally Ragep, called al-Mulakhkhas a "ubiquitous" work, given the "enormous number of extant commentaries and supercommentaries."35 While its popularity may explain how 'Alī al-Sharafī, writing from Kairouan, may have got hold of the text – to be sure, Kairouan had a reputation as a center of scholarship and while there 'Alī may have had sufficient access to a range of texts on astronomy. David King's contention that al-Jaghmīnī was central to Ottoman astronomy after the time of Sultan Mehmet II (d. 1481) suggests the possibility that Ifrīqiya's inclusion in the Ottoman domain had made the text available to 'Alī. 36

Of all the diagrams in the 1571 atlas that solidify its status as a text concerned with sacred geography, the most striking is Alī's depiction of the Kaʿba. An explanatory text written above this scheme reads "The circle for determining the *miḥrāb*s of the lands and indicates the

³⁴ Ms. Marsh 294, fols. 2b and 13b.

³⁵ The Biographical Encyclopedia of Astronomers.

³⁶ David A. King, "Astronomical Timekeeping in Ottoman Turkey," in *Proceedings of the International Symposium on the Observatories in Islam, 19-23 September 1977* (Istanbul: Millī Egitim Basımevi, 1980), 246.

direction to the Noble Ka'ba. God the Magnificent [al-'azīm] said in his wise book 'wherever you may be, turn your faces to it." Here 'Alī cited the Qur'ānic verse that attested to Muhammad's having adopted the Ka ba as the earthly focus of the Muslim community. The mihrāb is the prayer niche in a mosque which is positioned so that those who pray before it face the sacred direction, toward the Ka'ba (Figure 17). In the figure, the viewer's eyes immediately focus on the object at the center of the page, namely the Ka'ba, represented as a black square, its corners aligned with the four cardinal directions. 'Alī has sketched in and labeled the Black Stone, correctly locating it at the structure's eastern corner. Nearby one sees the stone of Ismā'īl (Ishmael), here situated to the southwest of the Ka'ba, the Zamzam Well, and Station of Abraham (Ibrāhīm). 'Alī has labeled the four corners of the Ka ba following a tradition dating probably from the time of the Prophet as the Syrian, Iraqi, Yemeni, and the Western corners. The reader's eye is drawn to the elaborate ring which encircles all of this. It is divided into forty equally-sized sections, each of which contains the name of different regions of the lands of Islam. Thirty-two lines emanate from the very center of Ka'ba, drawn in alternating green and red ink. In now-faded black ink, one can just make out the names of the eight main wind directions, thus evoking in the viewer's mind a map superimposed on a wind network, just as one might see it employed on a Mediterranean nautical chart. The scheme, then, is a map of the world, or at least of the world of Islam, centered on the Ka'ba.

³⁷ Ms. Marsh 294, fol. 4b. Here 'Alī quotes from the Qur'ān 2:144, here quoted in full: "Many a time We have seen you [Prophet Muḥammad] turn your face towards Heaven, so We are turning you towards a prayer direction that pleases you. Turn your face in the direction of the Sacred Mosque: wherever you [believers] may be, turn your faces to it [the Sacred Mosque]. Those who were given the Scripture know with certainty that this is the Truth from their Lord: God is not unaware of what they do." Translation by M.A.S. Abdel Haleem, *The Qur'an* (Oxford: Oxford University Press, 2005), 16-17.



Figure 17. Qibla chart with Ka'ba at the center (1571). (Bodleian, Ms. Marsh 294, fol. 4b)

'Alī's scheme may well be a map, but it is not a map in the usual sense of term. For instance, it does not allow viewers to locate countries or regions with any kind of precision, nor does it reveal anything about the topography of a region. Rather it is a map intended to illustrate the *qibla*, the direction toward the Ka'ba, toward which inhabitants around the lands of Islam must face in prayer. Muslims had long concerned themselves with the problem of determining the direction of Mecca and the Ka'ba for various places in the Muslim world. Mathematical geographers and astronomers had solved the problem by means of inserting geographical coordinates into complicated trigonometric formulae, though the complexity of such calculations limited the practicality of these methods. Scholars working in the folk astronomical tradition,

though, had developed a set of methods of determining the *qibla* that were free from complicated equations, among them diagrams of the Muslim world arranged around the central Ka ba. Indeed, schemes that placed the Ka ba at the center of the world had a long heritage, even when 'Alī wrote in the sixteenth century. Already in the ninth century, the 'Abbāsid geographical writer Ibn Khurradādhbih had described an Islamic world centered on Mecca, its various regions divided into four sectors defined by their *qibla*. ³⁸ David King notes that one manuscript copy of the geography of al-Muqaddasī (d. 991 CE) contains an eight-sector scheme.³⁹ In the succeeding centuries, scholars – most were legal scholars – further developed the Ka'ba-centered model; whereas Ibn Khurradādhbih wrote of four distinct sectors arranged around the Ka'ba, Muḥammad b. Surāqa al-'Āmirī (d. 1019 CE), a Yemini jurist, had refined the number of distinct sectors that were arranged around Mecca, proposing models of eight, eleven, and twelve sectors. 40 Ibn Surāqa further noted certain celestial phenomena that allowed believers to ensure that they faced the appropriate direction in prayer. 41 By 'Alī's time, numerous schemes and diagrams of a Mecca-centered Muslim world had been copied, transmitted, and modified, typically in the works of scholars who wrote folk astronomy guides or Arabic geographical treatises such as those by Yāqūt (fl. ca. 1200), Ibn al-Wardī, and al-Qalqashandī (d. 1418), all of whom incorporated twelve-sector diagrams into their works. That said, some copies of Ibn al-Wardī's work include schemes of 18, 34, 35, 36, or even 72 sectors. 42

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³⁸ See de Goeje, *Bibliotheca geographorum arabicorum*, Vol. 6, 5. In a short section of his text, Ibn Khurradādbih surveyed the lands of Islam, grouping various regions together according to the direction Muslims should face, the *qibla*, while praying. The inhabitants of Yemen, for instance, should turn toward the "Yemeni" corner. His work did not include a diagram of this arrangement, though it is possible, based on the manner in which he described the arrangement of regions around the Kaʿba, that as he wrote he had before him such a diagram.

³⁹ David A. King, "Astronomy and Islamic society: Qibla, gnomonics and timekeeping" in Roshdi Rashed ed., *Encyclopedia of the History of Arabic Science* (New York: Routledge, 1996), 138.

⁴⁰ EI² s.v. "Makka, 4. As the centre of the world" (David A. King).

⁴¹ For example, he described how one should stand in relation to the risings and settings of certain stars and the four winds, Ibid.

⁴² Ibid.

Of his own Ka'ba scheme in his 1571 atlas, 'Alī suggested it had been copied from another such diagram, asserting that the diagram depicted the Ka'ba, "toward which God commands men to orient themselves for their prayers....As for the lands which surround it [the Ka'ba], they have been reproduced from a copy."43 We do not know the source(s) to which 'Alī had access, and moreover his scheme depicts forty sectors around the Ka'ba, a number not found in any other extant manuscript. That fact that his is the only extant chart included in a nautical atlas and superimposed on a 32-direction wind-rose suggests that he used either a lost source or that he innovated considerably. Earlier versions of such Ka'ba diagrams had associated each of the regions arranged around the Ka ba with a wind, a tradition that doubtless dates to early Islamic meteorological folklore in which the four corners of the Ka'ba were associated with the four cardinal winds. 44 In his explanation of the utility of his diagram, 'Alī's use of the second person meant that he intended for the text to act as a guide. Beyond this, he seems to have directed his text at sailors, or at least people familiar with marine navigation. In order to determine the *mihrāb* of all the countries, he wrote, one must align the pole star, "which sailors call al-Samīya,"45 with the direction of "your" country. Upon determining the wind direction of your qibla – recall that a 32-direction wind-rose underlay his qibla scheme – the reader should then consult the following "circle," that is, the next sheet of the atlas which contains a diagram of the 32-direction wind-rose on which 'Alī labeled all of the wind directions. 46 Again, he refers to

⁴³ Ms. Marsh 294, fol. 2a.

⁴⁴ EI² s.v. "Makka" (King).

⁴⁵ In his explanatory text and the wind-rose diagram, 'Alī spelled this with a $s\bar{\imath}n$, as al- $Sam\bar{\imath}ya$, whereas his qibla diagram renders the term as $Sam\bar{\imath}ya$, that is with a sad.

⁴⁶ Ms. Marsh 294, fols. 2a (textual explanation of the diagram) and 5a (wind-rose diagram).

sailors: the title of his wind-rose diagram states that sailors manage to travel at sea through their knowledge of these winds.⁴⁷

Here, then, we see apparently distinct elements of 'Alī's atlas functioning as a single unit. But more than this, by incorporating the wind rose into his atlas, 'Alī's work followed that of numerous chart and atlas makers from the northern shores of the Mediterranean. And yet he adapted the form to fit his message. Rather than having a merely decorative function or serving as an aid for navigating the seas, 'Alī's wind rose played the critical role of allowing believers to identify the sacred direction of prayer. In fact, some medieval Arabic works on jurisprudence (not works of astronomy) which treat the legal compulsion to face the qibla in prayer, identify the qibla by means of wind directions linked, as 'Alī had done, to stellar phenomena.⁴⁸ Finally. 'Alī's earlier 1551 atlas included a similar, albeit distinct, qibla diagram (see Figure 18). This scheme also depicted a square Ka ba surrounded by a circle divided into 40 sectors, each containing different regions of the Muslim world. There are, however, important differences. Perhaps the most obvious is that the Ka'ba itself appears to have been drawn with a distinct orientation: whereas the Stone of Isma'īl is situated to the southwest of the Ka'ba in the 1571 atlas, in the earlier version it is to the northwest. The Black Stone, however, remained in the east in both schemes. Like the later version, the 1551 atlas includes the names of eight wind directions; however this earlier work did not include a wind rose, and hence 'Alī either assumed that the users already had such knowledge, or else he deemed it unnecessary. More pressingly,

⁴⁷ David King discusses 'Alī's *qibla* diagram in the above-cited essay in *El*². He notes, among other observations, that the author of the diagram did not present any "*kibla* indications." That is, King claims that 'Alī did not indicate how his chart might help readers use it to find local *qiblas*. King is right insofar as the diagram itself does not provide *qibla* indications; 'Alī's text, however, does provide this information through his discussion of using the pole star and winds to determine one's *qibla*.

⁴⁸ EI² s.v. "Makka" (King); David A. King, "Astronomy and Islamic society: Qibla, gnomonics and timekeeping," in Roshdi Rashed ed., Encyclopedia of the History of Arabic Science (New York: Routledge, 1996), 128-184.

at least from the perspective of anyone who attempted to determine a local *qibla* using these schemes, the names of the regions that circle the two charts do not match one another, nor do they always match the real-world locations of the regions, thus rendering the charts inaccurate and unreliable. Indeed, based on what 'Alī wrote at the end of his treatise (as we will see), such a mistake was a sin of ignorance, a sin against God.

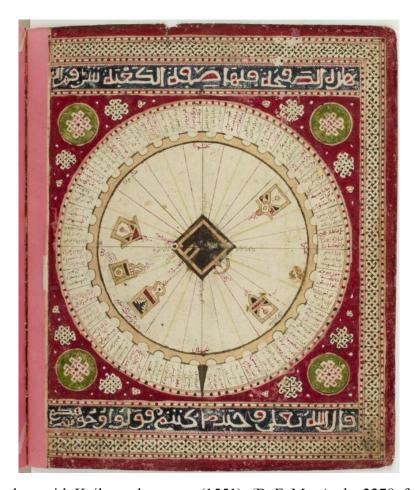


Figure 18. Qibla chart with Ka'ba at the center (1551). (BnF, Ms. Arabe 2278, fol. 2b)

Immediately following the *qibla* scheme and figure of the wind rose, 'Al $\bar{1}$ inserted a circular map of the world (see Figure 8), what he called a "description of geography (*al*-

jughrāfivā) which according to the scholars (hukamā') is the description of the earth."⁴⁹ The few modern scholars who have written about these atlases have noted that 'Alī based them on Idrīsī's geography. 50 This is true, at least in part. In fact 'Alī named two sources for his world map, one "the author" of the *Nuzhat al-mushtāq fī ikhtirāq al-āfāq*, the other Ibn al-'Attār. ⁵¹ The identity of the first source is simple enough, even if 'Alī did not know his name and only referred to him as "the author of the Nuzha...," an obvious reference to Idrīsī. The second is more difficult to identify. On his 1579 chart, discussed below, 'Alī claimed that Ibn al-'Attār had written a book entitled *Ikhtirāq al-aqtār* (Traverse of the Countries). Only Carlo Alfonso Nallino attempted to identify this author, noting in his 1916 work that regarding this author, "I find no other news [about him]; the book must be later than al-Idr $\bar{s}\bar{s}$." 52 It is possible, however, that Ibn al-'Att \bar{a} r refers here to the anonymous author (d. 1426-27) of a treatise on the construction of astronomical instruments, in particular quadrants, which had been invented during the fourteenth century. 53 If this is identification is correct, then it further characterizes 'Alī al-Sharafī as a curious man with a deep interest in correctly measuring time, as we have seen, to ensure precision in prayer schedules.

In any case, the presence of a world map in 'Alī's works mirrors atlas practices of the northern shores of the Mediterranean. His map only depicts Africa, Asia, And Europe, nor did he present these using any kind of projection. His work is qualitatively inferior to that of Agnese's chart, as well as nearly all world maps included in other sixteenth-century nautical atlases. The

⁴⁹ Ms. Marsh 294, fol. 2b. In the 1551 atlas, 'Alī wrote at the top of his circular world map "Description of geography according to the words of the philosophers and preeminent scholars of the science of the earth." Ms. Arabe 2278, fol. 3a.

⁵⁰ See, for instance, Herrara-Casais, "The nautical atlases of 'Alī al-Sharafī," 243.

⁵¹ Ms. Marsh 294, fol. 13a; Ms. Arabe 2278, fol. 3a.

⁵² Nallino, "Un mappamondo arabo...," 536, n. 7.

⁵³ François Charette, *Mathematical instrumentation in fourteenth-century Egypt and Syria, the illustrated treatise of Najm al-Dīn al-Mīṣrī* (Leiden: Brill, 2003), 19-20, n. 94 and 95, and references therein.

world map included in the 1571 atlas is especially coarsely drawn: in contrast to his 1551 version, here 'Alī or a copyist opted to render the chart without the colors – blue for the ocean in particular – used in the earlier atlas, which makes differentiating land from sea very difficult indeed. The continent of Africa, placed at the top of the chart, hooks far to the east and creates a southern coast for the Indian Ocean. There is no sign of the discoveries of the New World or Pacific passages. Rather, the chart resembles those that had been included in centuries-old manuscripts of Idrīsī's works, as well as the *Book of Curiosities*. ⁵⁴ Like these earlier works, 'Alī's world was encircled by the Surrounding Ocean, dating at least from the classical period, perhaps earlier, and promulgated in Arabic texts since the ninth century. Unlike the majority of the world charts included in manuscripts of the Nuzhat al-mushtāq, 'Alī's world map does not depict the seven climates. The wavy red pattern that he used to represent mountains on his 1551 world map – the lines are absent in his later work – does not match any known manuscript copy of the Nuzha, either in color or in the location of the mountains represented. 'Alī also added elements not found on any extant world map attributed to Idrīsī. Most notably, he superimposed his chart on a 32-direction wind rose scheme. Exactly why he chose to do so is unclear. The winds are not labeled, nor does the center of this wind rose have a particularly significant location: had he centered the world on, say, Mecca, then we might ascribe a clear Islamic meaning to the map; yet Mecca is not even labeled on the maps. Instead, 'Alī centered his maps on the eastern Mediterranean. If a similar wind rose had been inscribed on most copies of Idrīsī's world maps, the center of the chart would have been somewhere over western Arabia. Accordingly, the maps are not in any way precise copies of Idrīsī. Curiously, 'Alī has drawn a

⁵⁴ Bodleian Library, MS. Arab. c. 90, fols. 27b-28a; Emilie Savage-Smith and Y. Rapoport, *Medieval Islamic Views* of the Cosmos: the Book of Curiosities, a critical edition, translation and analysis of an 11th-century Arabic cosmography, available at: http://www.bodley.ox.ac.uk/bookofcuriosities.

circle with a wavy outer edge around his map, labeled four times on the 1571 chart as "The mountain of Qāf, surrounding the entire earth." This mountain did not appear on any known charts ascribed to Idrīsī, nor did he discuss it in his *Nuzha*. Instead, this appears to have been 'Alī's own addition which, given his inclination to follow Qur'ānic prescriptions, further enmeshes him in such a context. The "Mountain of Qāf," *Jabal Qāf*, is described by the early twelfth-century geography of Yāqūt as a mountain, mentioned in the Qur'ān, se surrounding the earth and is comprised of green crystal. The green of the sky, Yāqūt added, is a reflection of the green of this mountain, of which the peak nearly reached heaven. Others, among them the Sunni exegete Ibn Kathīr (d. 1373), contended that it was both a symbol of Paradise on earth as well as a link between the physical world and heaven. So while the map itself is not particularly Islamic in nature, by including the mountain of Qāf in his maps, 'Alī, a man deeply concerned with following Islamic scripture, nevertheless portrayed a world inspired by Qur'ānic interpretations, surrounded by the heavens which converged with the realm of humankind at the edges of the earth.

Finally, in his description of the map, 'Alī essentially reproduced the prefatory material from Idrīsī's introduction, in particular he copied the section of the introduction on *sūrat al-ard*.

⁵⁵ Ms. Marsh 294, 3a.

⁵⁶ Here Yāqūt certainly refers to the Qur'ān 50:1, the first verse of sūrat Qāf.

⁵⁷ Yāqūt, *Mu'jam al-buldān*, s.v. Qāf. See, too, On the use of the term *Qāf*, see T. Fahd, "La naissance du monde selon l'Islam," *Sources Orientales. La naissance du monde* (Paris: Éditions du Seuil, 1959), 237-251. The mountain of Qāf is also said to have been the place on which Adam stood so as to look into heaven after his expulsion from the Garden of Eden. See, Scott B. Noegel, Brannon M. Wheeler, *The A to Z of Prophets in Islam and Judaism* (Toronto: The Scarecrow Press, Inc., 2010), 158-159.

⁵⁸ Ibn Kathīr wrote, "Beyond this earth God created a sea surrounding it. Then he created beyond that sea, a mountain which is called Qāf; the heavens of this world are supported by it. Then, beyond that mountain, he created an earth like this earth, seven times. He created, beyond that earth, a sea which surrounds it, and he created beyond that a mountain called Qāf supporting the second heaven, until the number of earths, seas, mountain, and heavens reached seven. This is the word of God: 'and the sea stretched behind it for seven seas.' (Qur'ān 31:27)." As quoted in Brannon M. Wheeler, *Moses in the Qur'an and Islamic Exegesis* (New York: Routledge Curzon, 2006), 96. See also 95-110 for discussion of the "mountain called Qāf" in Islamic exegesis.

For instance, 'Alī followed Idrīsī nearly word for word in describing the extent of the celestial sphere, noting that it measured 360 degrees around and that "a degree comprises 25 farsakhs... a mile is 400 cubits, a cubit is 24 fingers, and a finger is 6 grains positions in a row side by side; as a result of these reports, the circumference of the earth measures 132,000,000 cubits, which is 11,000 farsakhs and 33,000 miles, according to the calculation of the people of India. As for Hermes, he determined the circumference of the earth..." While 'Alī copied this material from Idrīsī, some of it in fact dates from the ninth-century writings of Ibn Khurradādhbih. 'Alī then explained that the earth is round like a ball, with only half of it visible "like an egg plunged in water," again following Idrīsī. On the following two pages he described, as Idrīsī had done, the seven seas of the world. 60

If the format of 'Alī's atlas with its nautical charts, world map, wind-rose, and so forth broadly follow that of contemporary works produced in Europe, then his inclusion of two tables for determining the date of the Julian calendar suggests the possibility of direct contact with that world on the part of those who learned from the atlas. By means of relatively simple arithmetic, primarily addition and subtraction, 'Alī explained how one could calculate the Julian month and day of the week based on the lunar month and date. He listed the various Julian months, Yanāyir, Fabūrāyir [sic], Mārs, and so forth, and even mentioned the leap year. On a basic level, the presence of these tables suggests the expectation that users might enter into a space where the Julian calendar was in use or that its users might at least be curious about, as 'Alī described them, the "non-Arab months" (al-shuhūr al-'ajamīya) used by their Mediterranean neighbors. The fact that 'Alī produced his work in Ifrīqiya, a place with extensive and frequent contact with

⁵⁹ Ms. Marsh 294, fol. 2b.

⁶⁰ See Ms. Marsh 294, fol. 3a.

⁶¹ Ms. Marsh 294, fols. 9b, 10a, 11b. 'Alī suggests that in a leap year, one must add an intercalary day to the month of December such that it will consist of 32 days, fol. 11b.

the inhabitants of Europe, who lived according to the Julian calendar, suggests that the inclusion of a Julian-Islamic concordance in his atlas targeted an audience who might have expected to encounter such a calendar. 'Alī also suggested that readers consult the works of astronomers from the western Islamic world, Abū Mugrī (or Migra, fl. 1331) and Ibn al-Bannā' (d. c. 1321), that is, writers who, because of their geographical context, would have been certain to include concordance charts and instructions for the Julian months in use along the northern shore of the Mediterranean. 62 The rules put forth by these scholars were still accurate, 'Alī claimed, in spite of those who considered them outdated. 63 And indeed, according to 'Ali, the "non-Arab" solar calendar "is used by sailors," by which he presumably meant local Muslim sailors. Though 'Alī remained silent on these sailors' motivation for employing a solar calendar, rather than the Islamic calendar they would have likely used it at home in Ifrīqiya, I would suggest it was because the Islamic lunar calendar is unhelpful regarding sailing seasons, whereas with the Julian calendar, a solar calendar, one could predict seasonal sailing conditions.⁶⁴ In fact, red points on the first of the two tables indicate the beginnings of the four seasons, winter, spring, summer, and autumn. Whether he mentioned the calendrical practices of sailors merely as a curious, related observation, perhaps from his days on the coast in Sfax, or because he intended sailors as his audience is unclear. 'Alī himself subscribed to the Islamic calendar, dating his three extant works according to that calendar. In any case, given 'Alī's fixation on establishing the beginnings and endings of the Islamic months and the sacred direction for prayer, one gets the impression that he

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^{62 &#}x27;Alī also mentioned al-Saqīfī as a source, though I have not been able to identify him. Ms. Marsh 294, fol. 11b.

⁶³ The solar calendar familiar to the likes of Abu Murqrī and Ibn al-Banna' would have been the Julian calendar (and perhaps others). Pope Gregory did not introduce the eponymous Gregorian until 1582.

⁶⁴ Contemporary Arab sailors on the Indian Ocean, among them Aḥmad ibn Mājid, relied on the solar calendar, probably one based on Persian maritime customs, rather than the Islamic lunar calendar of 354 days which is "not helpful in working out the sailing seasons." See Abdul Sheriff, "Navigational Methods in the Indian Ocean," in Ruth Barnes and David Parkin eds., *Ships and the development of maritime technology on the Indian Ocean* (New York: RoutledgeCurzon, 2002), 213.

included these tables so that travelers, either sailors using the "non-Arab" calendar or others who might end up in places where such a calendar was in use, could continue to correctly perform Islamic rituals and practices by correlating the Julian and Islamic calendars.

The final chart that 'Alī included in his 1571 atlas brought to the fore his commitment to instructing his readers on the finer points of timekeeping as it related to Islamic ritual practices. Here he composed a table intended to allow one to identify hours of prayer "by shadow length (lit. "prayer by foot") and latitude." As is well known, Muslims are obligated to perform five ritual prayers daily. Perhaps less well known is that the timing of these prayers, at least during daylight hours, has traditionally been determined by the angle or altitude of the sun relative to the local horizon. Prayer times also corresponded to sunrise, sunset, and the rising and setting of lunar mansions after sundown. But the timing of the afternoon prayers of *zuhr* (midday) and 'asr (afternoon) were particularly difficult to regulate, so that the ancient practice of measuring one's own shadow lengths, ⁶⁶ which change throughout the day according to the altitude of the sun, had become widespread due to its simplicity. As an ardent Mālikī, 'Alī would surely have been familiar with Mālik's al-Muwatta' in which the first book, "Book of the times of Prayer," offers various hadīth regarding the determination of prayer based on shadow lengths.⁶⁷ Hence, when 'Alī noted that sharī'a and God only permit determination of prayer times by shadow length, he surely had in mind examples in Mālik's traditions from the Companions of the Prophet. He was a man of tradition and custom. And yet, he noted that he had "heard from his father, may God have mercy on him, that the shadows serve to determine the hours in the country in relation to

⁶⁵ Ms. Marsh 294, 11b and 12a.

⁶⁶ King claimed that in pre-Islamic Arabia the shadow length was used to describe the time of day. See David A. King, *In Synchrony with the Heavens: Studies in Astronomical Timekeeping and Instrumentation in Medieval Islamic Civilization. Volume 1* (Leiden: E. J. Brill, 2004), 465.

⁶⁷ Hadiths 6, 9, and 13 of the first book treat prayer times as established by shadow length.

latitude."68 The table in the atlas works for any latitude, though in his text 'Alī mentions "32 or 33 degrees of latitude" as an example, almost certainly because this parallel passes through Ifrīqiya. If 'Alī's text was didactic in nature, instructing users on the calculation of times of prayer according to shadow length, he also stated that it was "the duty of the believer to know the hours of prayer" by using the approaches in the text, namely by the trajectory of the moon at night and by shadow length. He added that one may disregard the statements of ignorant people who claim that the use of methods other than those stipulated by tradition. The believer who does not pray at precise times doubly sins, first by praying at the incorrect hour, and second by negligence of the hour. The believer, he concluded, "must accept and acknowledge this truth, even if it is bitter."69

In composing his two atlases 'Alī al-Sharafī took up an atlas format and layout common in Europe and incorporated nautical charts in the style developed centuries previously in the ports of southern Europe. And yet, he modified the contents and message to suit his own view of the world and that most likely of relevance to his, one assumes, Ifrīqiyan users and readers.

Experiments in Mapping the World

Though today it is much faded and worn, when 'Alī completed his world map in late June of 1579⁷⁰ it surely would have commanded the attention of viewers (Figure 19). Even from a distance it would have drawn the eye, and not only because of its considerable size, though that

⁶⁸ Ms. Marsh 294, fol. 12a.

⁶⁹ Ms. Marsh 294, fol. 12a.

⁷⁰ A caption on the map states that it was completed in early in the month of *Jumādā al-Awwal* (the fifth month of the Islamic calendar) in 958 AH (late June 1579).

too clearly played a part: 'Alī drew his map on two pasted-together sheets of parchment measuring in full some 135 x 59 centimeters, that is nearly four and a half feet by two feet. Its vivid colors also stood out. 'Alī scattered bright blues, reds, and greens across the map and enclosed it within an elaborate red border.



Figure 19. 'Alī al-Sharafī's world map completed in 1579 (Istituto italiano per l'Africa e l'Oriente). Note that south is at the top of the chart and correspondingly, the east is on the left-hand side.

Unable to take in the entirety of the map at once, viewers might begin their visual journey across at these vibrantly-painted borders, across which 'Alī inscribed, in Maghribī script, short passages describing that which the nearby portions of his map depict. At the top, where he drew the southern reaches of the world, he wrote,

Praise be to God. These places are some of the lands of the Blacks. Beyond them are deserts and sands, and after these is the southern Surrounding Sea, which connects to the western and eastern parts of the Sea of Darkness. Beyond this [sea] is the mountain of

Qāf, which surrounds the entire earth, both land and sea. What is beyond it, only God the powerful and glorious knows.⁷¹

The inscription along the lower border, too, describes the surrounding Sea of Darkness, which to the east envelops the lands of Gog and Magog before continuing to the Indian Ocean, known to 'Alī as the Sea of China, Sind, Hind, and Yemen, and ultimately extending to the southern and western reaches of the Surrounding Sea. 'Alī thus conveyed to those who "read and those who heard read" his map the conception of a world enclosed by a great, surrounding sea. A number of other passages are also dispersed across the chart, each of them, like those of the borders, informing readers of some particular aspect or element of the map. 'Alī apparently thought it necessary to tell his viewers just what they were looking at. A map of this nature, after all, would have been foreign to their eyes and would have required explanation. 'Alī grounded his depiction of the world on disparate sources, one a genre of cartography developed in the ports of southern Europe, the other a genre of cartography fashioned in twelfth-century Sicily.

Turning back to the map, a viewer might have begun to explore its intricacies with what was familiar to him, namely his homeland of Ifrīqīya and, more broadly, the Mediterranean.

There hewould have encountered intricately-rendered coastlines, a network of rhumb lines and, lining the coast, a dense list of place names stretching from the Atlantic coast of Africa around the entire Mediterranean basin and then north along the Atlantic coast of Europe. Along the border at the top of the chart he might also have noticed a distance scale, though given that 'Alī

⁷¹ 'Alī al-Sharafī's 1579 world map is today held in Rome at the Istituto italiano per l'Africa e l'Oriente, an institution which has been closed for many years due to financial constraints. As such, I have not examined this chart in person. Instead I have relied on photo of the map in the *History of Cartography*, Vol. 2, Book 1, Plate 24. I have attempted to read all Arabic passages from this photo, though I have often relied on Nallino's 1916 Italian translation of the chart's main inscriptions. Regrettably, Nallino did not provide his readers with a transcription of the Arabic text. See Carlo Alfonso Nallino "Un mappamondo arabo disegnato nel 1579 da 'Alī ibn Aḥmad al-Sharafī di Sfax," *Bollettino della Reale Società Geografica Italiana* 53 (1916): 721-736, reprinted in *Raccolta di scritti editi e inediti a cura di Maria Nallino* Vol. 5 (Roma: Istituto per l'Oriente, 1944), 533-548, as quoted on 534.

did not label it, it seems unlikely that uninitiated viewers would have recognized it. In short, the parchment upon which 'Alī drew the Mediterranean basin, the eastern shores of the Atlantic, much of Europe, North Africa, and the Black Sea closely followed the aesthetic conventions, codes, and signs of nautical charts.

And yet, as the viewer's gaze moved to the western half of the map, across the line marking the junction between the two sheets of parchment, it encountered a wholly distinct form of cartography. There the nomenclature, so rich along the coasts of the Mediterranean and Atlantic, suddenly becomes less abundant and in many places, completely absent, though at the same time, far more place names – most of them now faded beyond legibility – were scattered across inland areas. 'Alī has jettisoned the distance scales in the west, and the coastline, so meticulously delineated along the Atlantic and Mediterranean shores, gives way in the east to smooth and rounded, indeed almost schematic lines. The interior of the lands of Asia is crowded, far more so than the inland regions of North Africa and Europe. Green lines, ostensibly representations of rivers, stretch across the lands of Asia; various thick, undulating red lines denoting mountain ranges, mark the east; and various more arcane shapes and symbols, most drawn in green ink, dot the landscape. The oceans and seas, too, left uncolored in the Black Sea, the Mediterranean, and the Atlantic, are portrayed in still-vibrant blue pigments. Moreover, whereas the major bodies of water remain unlabeled in the west, here in the east 'Alī labeled them.

All in all, 'Alī's chart depicts a world that extended from west to east from the Canaries and the British Isles to the furthest reaches of the Sea of Darkness, along the eastern shores of continental Asia. And though the map does not depict the lands in the far south and north, both regions that 'Alī contended were enclosed by the Surrounding Sea, the eastern coast of Africa

curiously turned eastward, as in Ptolemy and early works of Arabic-Islamic cartography, where it acts as a southern limit of the Indian Ocean . In making this chart, he combined two very different forms of cartography in a single map, one, as we have seen, grounded in portolan charting techniques birthed along the Geneose-Pisan coastline in the late-thirteenth century and practiced primarily along the northern shores of the Mediterranean. The other charting tradition upon which 'Alī based the eastern regions of his world map dated from a still earlier period: this map was constructed from the twelfth-century geography of al-Sharīf Idrīsī. But 'Alī's world map was not original to him. Rather, as he noted in an inscription on his chart,

I have copied this *jughrāfiyā* from [another] designed by my grandfather, Muḥammad, may God have mercy on him. He had copied the Syrian Sea [Mediterranean] and its ports from a *qunbāṣ* made by the people of Mallorca, may God exterminate them. The significance of the word *jughrāfiyā*, according to what is said in the book *Nuzhat almushtāq fī ikhtirāq al-āfāq*, is the description of the earth.⁷²

The map drawn by 'Alī's grandfather has not survived, though it is likely that the 1579 map closely followed the original work. 'Alī, after all, directly admitted that he had copied the chart. But beyond this, his own son, Muḥammad, had in turn made a copy of either 'Alī's or his greatgrandfather's chart, in 1600-1601. This latter chart is nearly identical to that of 'Alī, the main differences being in the inscriptions on the chart, chiefly in that the son wrote less than his father had done. Whether the son copied the extant 1579 chart is uncertain, especially given that in his 1571 atlas, 'Alī claimed to have drawn three works of "*jughrāfiyā*," a term he used to signify a world map. Whatever the case, 'Alī's chart, as he claimed, likely closely followed his grandfather's prototype map.

⁷² Nallino, "Un mappamondo arabo," 538-539.

What was this *qunbās* made by the people of Mallorca, and how might 'Alī's grandfather have gotten his hands on it? The term *qunbās* undoubtedly derived from the Romance term compasso, a word that denoted, on the one hand, a compass for plotting one's travel through the use of a map, and on the other, a written guide for pilots.⁷³ Arabic speakers, it seems, adopted the term as *qunbās* and used it as a designation for "nautical chart."⁷⁴ That 'Alī used this term suggests that he was familiar with the Mediterranean terminology related to this form of charting. That is, to own such a nautical chart was distinct from knowing the Arabic term by which such a chart was called. 'Alī's grandfather, then, had come into contact with a Mallorcanmade nautical chart. He undoubtedly knew that it had been produced in Mallorca, rather than any number of ports active in the composition of such charts, because the cartographer probably inscribed the chart with his name, date, and place of manufacture, just as 'Alī did for his own works. There are other clues that support 'Alī's claim that this chart was a copy of one produced in Mallorca, in particular the decorations and embellishments of the inland portions of North Africa and Europe. Nautical charts produced in the ateliers of Genoa and Venice, for instance, tended to minimize such decoration, whereas the chartmakers of Palma de Mallorca frequently ornamented inland areas with mountain ranges, the courses of rivers, and the outlines of ovalshaped lakes, as preserved on 'Alī's depiction of mainland Europe. 75 We may also infer that the chart copied by Muḥammad the grandfather was a large-format portolan that depicted the eastern Atlantic, Europe and North Africa, and the entirety of the Mediterranean basin. Hundreds of

⁷³ For a late thirteenth- or early fourteenth-century example of *compasso* as sailing guide, see Alessandra Debanne, *Lo Compasso de navegare* (New York: Peter Lang, 2011).

⁷⁴ *Qunbāṣ* as a term denoting "nautical chart" is well attested in Arabic sources. See, for instance, Ibn Khaldūn, *Muqaddima*, trans. F. Rosenthal, 1:117.

⁷⁵ Though it does not hold for all known charts, in general charts made in Mallorca included far more extensive inland decoration than their Italian counterparts. See Tony Campbell, "Portolan Charts from the Late Thirteenth Century to 1500," in *History of Cartography*, Vol. 1, 393.

Romance-language maps depicting these regions are still extant today, but the point is that this $qunb\bar{a}\bar{s}$ was different from the small-scale nautical maps that 'Alī copied in his two atlases.

Where 'Alī's grandfather might have come across a Mallorcan map is a matter of speculation. He was an inhabitant of Sfax, that small town characterized by Mármol as having a close relationship with the sea, a place of piracy, corsairs, and overseas merchants. Surely this place abounded in opportunities for encountering such a map, either through piracy or legitimate trade and exchange. Indeed, 'Alī's own call to God to destroy the Mallorcans may suggest a route of exchange. Across the first three quarters of the sixteenth century, the Ottomans had attacked the Balearics, a Spanish Habsburg Mediterranean outpost. ⁷⁶ Might the map have been captured during these assaults? Historians, after all, have long argued that around the year 1501 the Ottoman admiral Kemal Reis had captured a Spanish ship which had on board a map of parts of the New World drawn by Columbus or a cartographer on one of his ships. It was this map, they contend, that Piri Reis used in composing a chart in 1513 that depicted parts of the New World.⁷⁷ Still, getting one's hands on Mallorcan nautical chart is not the same as producing an accurate copy of it. We do not know how 'Alī's grandfather had learned to copy such a map, whether he could read the place names written in Latin script or required the assistance of a translator, or whether he understood the numerous symbols and signs that dotted the map. He

⁷⁶ The Ottomans had attacked various sites in the Balearics over the first half of the sixteenth century, beginning in 1501 under the admiral Kemal Reis. Attacks continued intermittently until the 1571 Battle of Lepanto.

⁷⁷ See Gregory McIntosh, *The Piri Reis map of 1513* (Athens, Georgia: University of Georgia Press, 2000), 131 and *passim*; Paul Kahle, "Eine Amerika-Karte, gezeichnet auf Grund einer Columbus-Karte und portugiesischer Karten vom Türken Piri Re'is im Jahre 1513," *Actes du XVIIIe Congrès Internationale des Orientalistes*, Leiden (7-12 September 1932): 105-106; Kahle, "Impronte columbiane in una carta turca del 1513," *La Cultura Moderna* 10 (1931): 775-785; Kahle, "A Lost Map of Columbus," *Geographical Review* 23 (1933): 621-638.

had either already been familiar with such charts and how to make them or he had acquired the assistance of someone familiar with them.⁷⁸

As for the eastern half of 'Alī's world map, it derived from the work of the "author" of the *Nuzhat al-mushtāq*, known today as Idrīsī. It seems that 'Alī did not know his name, probably because Idrīsī neglected to mention his own name in the *Nuzha*. Regardless, 'Alī, apparently by way of his grandfather, considered Idrīsī the authority par excellence regarding the configuration of the physical world. Across the world map 'Alī wrote nine captions describing in text what chart presented. In three of these captions, 'Alī mentioned Idrīsī's work by name. ⁷⁹ For example, in an inscription in the southeast of the chart he described the "Sea of China, Hind, Sind, and Yemen," that is the Indian Ocean. His entire description of the sea, it length in miles, the number of islands it contained, and so forth came directly from the Nuzha. Just as in his 1571 atlas, he urged readers curious to know more to "consult the book Nuzhat al-mushtāq fī ikhtirāq al-āfāq," before adding that they may also turn to "Ibn al-Attār in [his book called] Ikhtirāq alaqtār."80 Most of the other captions on the map, too, derive from Idrīsī, usually in the form of passages taken verbatim from the Nuzha. But the sections of the Nuzha cited by 'Alī are all found in introductory section of the text, from what I have called the "sūrat al-arḍ," section, that is, the part of the preface in which Idrīsī described the earth as a whole, its major land masses and the seven seas, and which he himself claimed was a "jughrāfiyā." 'Alī never delved deeper

⁷⁸ That 'Alī and his son knew how to draw and produce such charts is less difficult to explain. We know of several families of nautical cartographers in which knowledge of the craft passed from father to son. To point to only those examples from the sixteenth and seventeenth centuries we might identify the Prunes of Mallorca and the Olives, a Mallorcan family who worked in Marseilles, Naples, and Messina. Numerous earlier examples of such families are also known.

⁷⁹ Moreover, four of the captions are too short for mention of anything about Idrīsī. For instance, one caption merely states, "This is the sea of the al-Khazar, of Giurgiān (the Caspian), and of al-Daylam." Hence, that 'Alī mentioned Idrīsī's text three of the remaining five captions underscores his central position as a source for the eastern reaches of this map.

⁸⁰ Nallino, "Un mappamondo arabo," 536-537.

into the text of the *Nuzha*, or at least he did not cite anything beyond the preface here, or indeed in his 1571 atlas. Idrīsī was undoubtedly the chief text through which 'Alī learned of the geography of his world. But he also mentioned, just as in his earlier atlas, Ibn al-'Aṭṭār. As noted above, this may have been the fifteenth-century author of treatises on timekeeping, instrumentation, and tables of longitudes and latitudes of cities of the world. And yet, none of these texts would have proved useful for anyone hoping to learn of the configuration of the earth, at least as described on 'Alī's world chart. Ibn al-'Aṭṭār, though, remains a mystery, and in any case, 'Alī repeatedly quoted Idrīsī and typically only mentioned Ibn al-'Aṭṭār as a postscript.

It was not only the passages inscribed on the map that derived from Idrīsī's Nuzha. Indeed, the entire eastern half of the chart appears to have come from the cartography of Idrīsī. But 'Alī, or rather his grandfather, did not simply copy a world map found in the *Nuzha*. The circular world map commonly associated with Idrīsī (Figure 20) and, more recently, the Book of Curiosities was not the source of the 1579 map. Indeed, Idrīsī never mentioned such a circular world map in his text. It is possible that it is a later addition by a copyist or was included only as a late addition. In any case, 'Alī's grandfather did something far more complex and interesting, namely, uniting into a single chart about half of the 70 sectional charts from the *Nuzha*. Idrīsī famously divided the world into a grid-like structure with seven latitudinal climates further subdivided by ten longitudinal sections, thus forming seventy sections. In the Nuzha, he described each section, one by one, and provided his readers with a drawing of the lands described in each section. To our knowledge, Idrīsī never put these sectional charts together to form a single map, nor did anyone else prior to 'Alī's grandfather. As proof that 'Alī based the eastern half of his map on one drawn using this method, we can compare the 1579 map to that composed by the German orientalist Konrad Miller in the 1920s following the same method

(Figure 21).⁸¹ Placed side by side, the eastern halves of 'Alī's chart and Miller's have more than a passing similarity. The shapes and sizes of the bodies of water, mountain ranges, and even many of the unusual signs and symbols broadly match one another. Indeed, they are clearly drawn from the same, or at least very similar, source material. There are differences to be sure, though these may be explained by the skill and precision of the copyist and variations in the manuscript copies of the *Nuzha* used by 'Alī's grandfather and Miller.⁸²

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⁸¹ Konrad Miller, *Mappae arabicae: Arabische Welt- und Länderkarten des 9.-13. Jahrhunderts*, 6 vols. (Stuttgart, 1926-1931), Band 1, Heft 2. Unlike the charts drawn by the Sharafī family, Miller's maps includes number of the individual sections (numbered 1 through 70), as well as numbers of the seven climates and ten longitudinal sections. Of note, in the early seventeenth century, Pierre (Petrus) Bertius (1565-1629), a Dutch cartographer and eventual Royal Cosmographer of Louis XIII of France, also produced a chart in which he pieced together the seventy sectional charts from the then recently published (1619) partial Latin translation of the *Nuzha*. The map is currently held at the Newberry Library in Chicago. Neither the Latin translation or the 1592 partial Arabic edition which formed the basis of the Latin translation contained maps. Rather, it appears that Bertius had access to a manuscript of the *Nuzha* at the Royal Library in Paris, though it seems that he could not read Arabic. See Marina Tolmacheva, "Bertius and al-Idrīsī: an Experiment in Orientalist Cartography," in *Terrae Incognitae*, 28:1 (1996): 36-45.

⁸² Miller had access to the maps from a number of manuscripts the *Nuzha*, and thus he could afford to find individual sections from different manuscripts that he felt best suited his project. It merits mentioning that not manuscript copies contain maps of the equal quality and precision.



Figure 20. Circular world map attributed to Idrīsī. This map is from Bodleian, MS. Pococke 375, fols. 3b-4a. The topmost portion of the chart depicts the landmass of Africa, with the Mountain of the Moon on the right. Note the two Nile Rivers which derive from these mountains, one heading north to the Mediterranean, the other west across Africa to the Atlantic.

Elements of this "Idrīsīan" cartography even encroach onto the western half of the chart, in particular in Egypt and parts of Saharan Africa. Notably, the Red Sea, nearly always rendered in red ink on Mallorcan nautical charts, is not red here but blue, just like the other seas and oceans in the east. But perhaps more interestingly, 'Alī's map depicts the Nile River not as it appears in nautical charts or even in extant copies of the sectional maps of the *Nuzha*, but rather as it appears on the circular world map attached to the prefatory section (the section with which 'Alī and his grandfather seemed to have the greatest level of familiarity) of many copies of Idrīsī's text. That is, it depicts the source of the Nile as the Mountains of the Moon, water from

which fed into three great lakes before branching off in three directions, to the north as the Nile, to the east, and to the west across the southern Sahel of the Sahara, again described as the Nile. Like many medieval Arabic geographies, Idrīsī discussed this western Nile extensively in the Nuzha. It does not, however, appear on any extant nautical charts, whether drawn in Mallorca or elsewhere. Whether 'Alī included this representation of the Nile because he thought that it more accurately represented reality, or simply because his grandfather had included it on his chart, and he wished to remain faithful to family tradition, is unclear. Moreover, what convinced 'Alī's grandfather to combine a Mallorcan nautical chart with a map comprised of Idrīsī's sectional charts? For instance, why did he not simply compose a world chart based entirely on sectional charts from the *Nuzha*? In truth, there is no obvious answer. Perhaps he thought the Mallorcan chart was more accurate, and wishing to portray the entire world but lacking a similarly detailed chart of the east, he elected to take material from the main geographical authority to which he had access, the *Nuzha* of Idrīsī. Alternatively, he may have simply wished to conduct a cartographical experiment. Or, though unlikely, perhaps he had heard of a map like the Catalan Atlas (ca. 1375), which was similarly based on a nautical chart in the west and a more schematic eastern world and which, like 'Alī's chart, included numerous captions and legends describing what the chart depicted.



Figure 21. Konrad Miller's compilation of Idrīsī's 70 sectional maps. The south is at the top of the chart.

'Alī, via his grandfather, composed a chart based in part on a European nautical chart, in part on the cartography and geography of Idrīsī, and perhaps in some unknown fashion, on the work of Ibn al-'Aṭṭār. These works taught the Sharafīs about the geographical configuration of their world, about its limits and variety. And yet, 'Alī and perhaps his grandfather, ultimately viewed this knowledge through the lens of Islam. Just as in his 1571 atlas, 'Alī here wrote of the mountain of Qāf, as we have seen, as surrounding the entire earth, a mountain inspired by the Qur'ān, described in hadith, and understood as either an earthly paradise or as the interface between earth and heaven. The mountain made no appearance in the *Nuzha* and, of course, never appeared on nautical charts. The chart also gives prominence to the lands of Gog and Magog, the apocalyptic peoples mentioned in biblical and Islamic eschatology. Like Idrīsī, he located these lands in the extreme northeast of the oikoumene. On the world map we can see in the northeast an undulating red line, a mountain range, that widens into a broad, rectangular barrier. Across it 'Alī wrote, "This is the barrier mentioned by God in his eloquent book," a reference to the wall

erected by Dhū al-Qarnayn, usually identified as Alexander the Great, against the hoards of Gog and Magog. In the Nuzha, Gog and Magog appear, though not via a reference to the Qur'ān, but rather though a travel account of a party dispatched by a caliph to that region. 'Alī, however, possibly not having read this section of Idrīsī (it is not in the preface), and digesting the world through Islamic tradition, preferred to allude to the Qur'ānic passages about these lands.⁸³ Elsewhere, in the longest inscription on the chart, along the eastern side, 'Alī wrote of the length of the earth according to the hadith of Ibn 'Abbas, a paternal cousin of the prophet Muḥammad regarded as the "great doctor" and the "ocean [of science]" because of his studies in Qur'ānic exegesis. 84 According to Ibn 'Abbās, as related in the hadith collection attributed to him, a journey across the earth requires 500 years in total, 200 by sea, 200 through deserts, 80 through the lands of Gog and Magog, 18 in the Lands of the Blacks, and two elsewhere. Yāqūt al-Hamawī (fl. ca. 1200) related a similar account in his geography, as did the geographical writer and author of *Kharīdat al-'ajā'ib wa-farīdat al-gharā'ib* ('The pearl of wonders and the uniqueness of strange things') Ibn al-Wardī (d. 1348-1349). 85 Finally, in another caption on the western edge of the map, 'Alī described the seas of the world, and in so doing, cited Sūrat Luqman (31:27) a Qur'ānic verse that states that everything in the heavens and earth belong to God. While composing a map of the world, 'Alī thus praised the wonders of its creator.

⁸³ For the biblical tradition, see, for instance, Ezekiel 38, 39, and Apocalypse 20. In the Islamic tradition, Dhū al-Qarnayn constructed a barrier intended to confine Gog and Magog until the end of time when the peoples of their lands would be released, whereupon God would destroy them, thus ushering in the Day of Resurrection. See EI^2 s.v. "Yādjūdj wa- Mādjūdj" (E. van Donzel and Claudia Ott).

84 EI³ s.v. "'Abdallāh b. 'Abbās" (Claude Gilliot)

⁸⁵ Yāqūt wrote that, "Others have disagreed as to the area of the earth and its size. It has been related that Makhūl has said that from the narest to the farthest part of the earth there is a walking distance of 500 years. Of these, 200 are submerged by the sea, 200 are uninhabited, 80 are inhabited by Yājūj and Mājūj and 20 are inhabited by the rest of mankind." As quoted in Yāqūt, The introductory chapters of Yāqūt's Mu'jam al-Buldān, Wadie Jwaideh trans.,

See also, Ibn al-Wardī, Kharīdat al-'Ajā'ib wa-farīdat al-gharā'ib (Cairo: al-Maṭba'a al-'Āmira al-Mulayjiyya, 1324 AH [1906]), 10-11.

Writing the World from Kairouan

Like his grandfather and father before him, 'Alī al-Sharafī, native of Sfax and resident of Kairouan, had continued his family's tradition of mapping the world. From his home in Kairouan he produced a set of remarkable works among them two extant nautical atlases, an extant large-format world map, and, according to a note in his 1571 atlas, at least three other world maps. These works betray his familiarity with knowledge from works of various genres, from nautical cartography, to the geography and cartography of Idrīsī, to works of astronomy. The most important works in constructing his world view, however, were works of folk astronomy, the knowledge of which permitted him to live his life and to convey to others in his own textual productions how to live as dutiful, virtuous Muslims, secure in their knowledge that with his guidance, they could perform certain ritual obligations in an accurate and timely fashion. From the various sources of knowledge that he brought together in compiling his atlases and world map he learned about his world, though it was through his beliefs and conviction as a Muslim, a follower of the Mālikī rite, well-acquainted with Qur'ānic teachings and the hadith, that he ultimately made sense of the world.

Though we know nothing of 'Alī beyond what we can glean from his own works, his self-identification as a Muslim and an adherent to Mālik's teachings, as well as his preoccupation with ascertaining when lunar months begin and end, the length of the night, and the hour of the day, all of which permitted a strict observance of obligatory prayer and fasting schedules, suggest that he took his faith seriously. And although this is purely speculative, we might surmise that 'Alī held an official position as timekeeper at a mosque, perhaps even the Great

Mosque of Kairouain. David King has shown that beginning in the thirteenth century, mosques in the western Islamic world in particular began to engage the services of a professional astronomer known as a muwaqqit, essentially a timekeeper responsible for the calculation and regulation of the times of prayer, predicting the appearance of the lunar crescent, and establishing the sacred direction of the *qibla*. 86 King has also demonstrated that some of these muwaqqits composed calendrical tables as well as instruments which aided in timekeeping, mainly sundials, astrolabes, and quadrants, frequently marked with the times of prayer. Though his atlas advocates the relatively simple techniques of timekeeping of folk astronomy, he wrote in his 1571 atlas that as for "anyone who desires to have the most precision [in calculating the times of prayer]," they should refer to sundials, astrolabes, and quadrants "because they are more precise."87 And though not directly relevant to the life of 'Alī, it bears mentioning that his descendant, perhaps a grandson or great-grandson, Ahmad al-Sharafī al-Şafāqusi, moved from Ifrīqiya to Cairo where he became a teacher and *muwaqqit* at the al-Azhar Mosque, and composed a work on the use of the almucantar quadrant. 88 Perhaps like the family tradition of cartography, an interest in and knowledge of timekeeping and sacred geography passed from generation to generation.

⁸⁶ EI² s.v. "Mīķāt" (A.J. Wensinck, David A. King); David A. King, In synchrony with the heavens, studies in astronomical timekeeping and instrumentation in medieval Islamic civilization, Volume 1, The call of the muezzin, 467-468.

⁸⁷ Ms. Marsh 294, fol. 12a.

⁸⁸ Maḥmūd Maqdīsh, *Nuzhat al-anzār*, Vol. 2, 390ff., 394-397, 400. His work on the quadrant was entitled *al-Durar al-fākhirāt fī al-amal bi rub* '*al-muqanṭarāt fī jamī al-aqṭār wa* '*l-jihāt*, 'The Luxurious Pearls regarding the use of the almucantar quadrant in all regions and directions.' Two copies of the manuscripts of this work are extant. BnF, Ms. Arabe 2551 (autograph ms.) dated 1682 CE and at the Sultānīya Library in Cairo (Mīqāt 58), as noted by Nallino, "Un mappamondo arabo," (1944 ed.), 541, n. 3. A quadrant, *rub* 'in Arabic astronomical terminology, is a device used to measure meridian altitudes of the sun and stars. These measurements could then be used to calculate local latitudinal and stellar coordinates. By the ninth century Muslim astronomers had developed different types of quadrants for calculating the time, as determining the precise time, knowledge of which was required for ritual prayer and the times of fasting. One of these quadrants was known as the *rub* '*al-muqanṭarāt*, the almucantar quadrant, a device probably first conceived of in eleventh or twelfth-century Egypt and popular in the Ottoman Empire. See *EI*² s.v. "Rub'" (David A. King).

As we have seen, 'Alī learned of his world through a range of texts that spanned a variety of fields. That said, what he knew of his world, at least as presented in his world map and atlases, derived from a limited number of texts, and more precisely, old texts. In terms of geography, that he relied on the *Nuzha* of Idrīsī and the mysterious work of Ibn al-'Aṭṭār (alongside, of course, nautical charts) in composing both his world map of 1579 and his nautical atlas of 1571, suggests that his view of the geographical configuration of the world was informed by a small number of texts and primarily by the work of Idrīsī. The fact that 'Alī focused his attention, again as demonstrated in his map and atlases, and not only in the preface of his main source, the *Nuzha*, shows that although he drew a number of world maps, he likely had a limited familiarity with the geography of the world, which he wheeled out for every iteration. After all, the passages he cited in his atlas, just like those of his world map, all derive from the preface of the *Nuzha*.

But beyond this, and probably the best evidence that he had limited access to geographical sources, is the astonishing fact that although he composed his works some sixty or more years after Columbus's discovery of the New World and Dias's rounding of the Cape of Good Hope, and at least three decades after Magellan circumnavigated the globe, none of these breakthroughs appear on any of his maps. Even Ottoman knowledge of the lands and coastlines of South Asia and beyond were completely absent from his work. He lived in an era when learned Europeans and the court and chief cartographers of the Ottomans had learned much of the geography of the world, and yet he continued to promulgate a view of the world predicated on a geography, the *Nuzha*, written four centuries previously. By the mid-sixteenth century, all European cartographers drew world maps that included the New World, a circumnavigable Africa, and a navigable Pacific. And Ottoman cartographers of the sixteenth century produced numerous works of cartography, geography, and navigation that presented these newly

discovered lands. In *The Forgotten Frontier*, Andrew Hess argued that what he saw as an "Ottoman turn toward the old routes of Turko-Mongol expansion in Eurasia" resulted in "a decreasing curiosity about the geography of the world outside the Mediterranean."89 He nevertheless recognized that at least for much of the first half of the sixteenth century, Ottoman mariners and cartographers (most of them also sailors) still expressed interest in the lands beyond the Mediterranean. Piri Reis depicted portions of the New World on his maps of 1513 and 1526. And in the mid-sixteenth century, the Ottoman admiral Seyid Ali Reis composed his Kitābü lmuḥīt (Book of the Ocean) a Turkish navigational manual based in part on Arabic guides to sailing the Indian Ocean. The Muhīt included a chapter on the New World and an account of the Portuguese discoveries, including Magellan's circumnavigation of the globe. 90 Again, in midcentury Hacı Ahme, composed a heart-shaped world map based on a cordioform projection on which he drew the New World. 91 During the reign of Murād (r. 1574-1595), selections of European works of geography which described the New World were translated into Turkish at the Ottoman court. The decline in Ottoman interest in the world beyond the Mediterranean, as Andrew Hess would have it, did not take place until the seventeenth century. 92 When 'Alī compiled his first atlas in 1551 from Kairouan, an inland town of Ifrīqiya caught between a political and military tug of war between the Spanish Habsburgs and Ottomans, he would have had no special access to Ottoman merchandise and knowledge. He would have lived under Hafsid rule, then an independent Shābbiyya tribal government, and finally, after January of 1558, Ottoman rule. In the nearly decade and a half between the Ottoman takeover and his 1571 atlas,

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⁸⁹ Andrew Hess, *The Forgotten Frontier* (Chicago: University of Chicago Press, 1978), 190.

⁹⁰ EI2 s.v. "Sīdī 'Alī Re'īs (S. Soucek).

⁹¹ V.L. Ménage, "The Map of Hajji Ahmed and its Makers," *Bulletin of the School of Oriental and African Studies*, 21 (2) 1958: 291-314.

⁹² Hess, *The Forgotten Frontier*, 191.

'Alī apparently acquired no new sources regarding the geographical configuration of the earth, for he continued to depend on Idrīsī and to a lesser extent, Ibn al-'Attār.

Due to this intellectual isolation vis-à-vis geographical knowledge, 'Alī continued to produce a long-since obsolete view of the world. And it also seems that he viewed the world through that same lens, informed by centuries-old texts and maps. Even if his atlas, as we have seen, had a format so similar to those produced in the Mediterranean ports of Europe that it had to have been based on them, the charts he placed in his work could not compare to those of the Europeans in terms of precision and breadth of knowledge, given the new mapping techniques and discoveries. It is impossible to know who used 'Alī's works and who learned about the world from them. The fact that he wrote instructions on the use of his charts in his 1571 atlas and in a series of captions describing the lands depicted on his 1579 chart suggests that he saw a didactic purpose in his work. He wanted readers – users – to understand what they held before them. And yet his work had virtually no influence on later geography and cartography, in large part because he presented an antiquated view of the world. It might draw the interest of the likes of Jean Gagnier, an Oxford professor of Arabic and Hebrew who in the 1720s composed his own geographical and astronomical treatise, compiled from works of Arabic astronomies and geographies held at the Bodleian Library. Beyond Gagnier, however, 'Alī's work has left little mark. 93 It is, nevertheless, important as a record of what an educated, curious man living in midsixteenth century Ifrīqiya could learn about his world and the texts – and maps – through which he learned of his world.

⁹³ For a detailed list of the folios of Gagnier's manuscript, see Alexander Nicoll, *Bibliothecae Bodleianae codicum manuscriptorum orientalium catalogi partis secundae volumen primum, Arabicos complectens* (Oxford: Clarendon Press, 1821), 233 (doc. CCLXVI). See *Oxford Dictionary of National Biography* s.v. "John Gagnier (c. 1670-1740)" (Michael J. Franklin); On Gagnier's appointment as professor of Arabic at Oxford in 1717, see *The Oxford Ten-year Book, made up to the end of the year 1860* (Oxford, 1863), 57.

Conclusion

This dissertation has examined the encounter between Muslim and Christian inhabitants of the western Mediterranean region between the twelfth and sixteenth centuries. These were centuries packed with religious and political conflict and change across the region. Early on the Crusaders maintained and attempted to extend their states across the Holy Land, the *Reconquista* endured in the Iberian Peninsula, and King Roger of Sicily conquered the entire coastline of Ifrīqiya. Later the Marīnids struggled to control the Strait of Gibraltar and the Ottomans and Spanish Hapsburgs faced off against one another. And yet, amid this violence and hostility, people moved, goods were exchanged, and ideas traveled across the sea. Among these were geographers and cartographers and the compositions that they produced, full of information about and conceptions of the world both near and far. This study has approached the encounter between Muslims and Christians in the Mediterranean in these centuries through the lens of these geographers and cartographers and the works they produced. In particular, it has asked how they responded to and received geographical information that had reached them across political, religious, and linguistic lines.

This is not an inconsequential question. The forms of geography and cartography practiced along the southern and northern shores of the sea varied tremendously. Or put another way, the geographical and cartographical traditions of the Arabic-speaking Muslim inhabitants of the Mediterranean differed greatly from those of their Latin and Romance-speaking Christian counterparts. These differences ultimately stem from disparities in the classical and late antique

heritage geography that had reached Europe and the Islamic world. European and Arabic-Islamic traditions of geography had begun from different starting points, and after centuries of development in diverse historical contexts, by the period upon which this study centers, the traditions were quite distinct, as Muslim and Christian geographers and cartographers portrayed their worlds in very different ways. This is, of course, not to suggest that all geographers in, say, Latin Europe subscribed to the same view of the world, but rather that *in general* they tended to share viewpoints and concerns that differed from the geographers of the Islamic world. In any case, in practice this meant that not only did those who produced geographical works in Latin Europe and the Arabic-Islamic lands understand and imagine the world in distinct ways, but that so too did those who inhabited these vast regions and who learned of their world, in part, through these texts and maps. Nor were these works of geography and cartography produced in isolation from the discourses and ideas of their surrounding societies and cultures. Indeed, they were frequently marked with signs of contemporary and local political concerns and issues, and by religion as well.

This study, then, is founded upon the recognition of the Mediterranean as a region in which these differing views of the world coexisted alongside considerable political and religious tensions. As numerous historians, foremost among them Fernand Braudel, have repeatedly demonstrated, the Mediterranean is both divided and connected. Thus, while differences in geographical and cartographical practices persisted along the shores of the sea, they also came into contact with one another. People moved and carried along with them their possessions and ideas. A sailor carried nautical charts across the sea and left one or, perhaps seeking to add to his profits, sold one at his destination. An Arabic geographical treatise composed in al-Andalus sat untouched for two centuries, only to be ferried across the peninsula into the hands of a Castilian-

speaking cosmographer who could read some Arabic and who took an interest in the work. A Muslim scholar of geography crossed the sea to work in the court of Christian king, bringing with him his ideas and notions of the world, while remaining open to learning from his hosts. The point is that this kind of geographical encounter took place in various forms and contexts. Similarly the responses to and reception of these 'imported' texts and geographical knowledges varied according to local conditions and individual proclivities. One geographical writer might resist knowledge that challenged his own worldview, while another might embrace it.

This dissertation has explored these geographical encounters, this coming together of distinct geographical traditions and conceptions of the world between Muslim and Christian geographical writers and cartographers around the Mediterranean. On the one hand, it has sought to view the exchange of geographical texts as a channel through which knowledge and information about the world and of the 'other' crossed linguistic, religious, and political lines. On the other hand, it has assessed the reception and uses of geographical knowledge, the ways in which geographical writers and cartographers combined this 'imported' knowledge and viewpoints into their own works. It has done so through the close examination of four cases of geographical encounter between 1150 and 1600. These cases have been explored across six central chapters.

The first three chapters focused on the life and work of the Muslim geographical writer al-Sharīf al-Idrīsī. This *adīb*, or gentleman-scholar, believed to have descended from the Prophet Muḥammad and a caliphal line, produced an extensive work of geography, the *Kitāb nuzhat almushtāq fī ikhtirāq al-āfāq* (*The Book of Entertainment for People who Desire to Traverse the Regions of the World*), on behalf of his patron, King Roger of Sicily (d. 1154 CE). The king had summoned Idrīsī to his court in Palermo in part because of his exalted lineage and in part

because of his knowledge of the geography of the world. But when the king ordered him to compose a description of the world and its peoples, he put Idrīsī in a difficult position, perhaps unknowingly. For Idrīsī's knowledge of the world was based on his reading of Arabic-Islamic works of geography. These works had been written by Muslims for a Muslim audience and tended to produce a world that privileged that faith and presented it as surrounded by lands of unbelief. These chapters follow Idrīsī as he composes his work, with the goal of elucidating the ways in which he used and modified his Arabic sources, as well as the new knowledge and views he learned while in Palermo, in order to present a world suitable for his patron. But, he also envisioned a Muslim audience. And thus his work is a balancing act between the expectations and needs of these two audiences.

The first chapter places Idrīsī in the mid-century Sicilian milieu where Roger ruled over a cosmopolitan population of Christians, Muslims, and Jews. But he was also an ambitious ruler who brought new territories in Italy and Ifrīqiya under his rule, but also drew the ire of powerful opponents who sought to unseat him both through military and propagandistic means. Though the ruler of an expanding, wealthy kingdom, Roger continued to face public denunciation of his legitimacy as a monarch. In this context he commissioned Idrīsī to compose a geography, a project through which he could on the one hand, satisfy his desire to learn about his own growing territory as well as about the rest of the world, and on the other hand, construct an image of himself as a powerful, rightful ruler. The text that Idrīsī produced fulfilled both these desires. The *Nuzha* described the known world, but Idrīsī also inscribed it with a discourse of legitimacy on behalf of his patron. This chapter, then, introduced twelfth-century Sicily as the site of a geographical encounter in which Idrīsī brought his knowledge which he had learned through

Arabic geographical texts, to the Christian court in Palermo and a king who openly courted this imported knowledge.

Chapter Two considered the way in which Idrīsī presented the earth and its divisions in the Nuzha. Works of geography in both the Islamic world and Latin Europe from the period often include a section dedicated to these themes. While works of descriptive geography depicted the various regions and peoples of the earth, the practice of beginning their works with a portrayal of the earth as an entity allowed geographical writers to set their work in a broader cosmographical context. But writers in both Arabic and Latin traditions also divided the earth, or at least the inhabitable portion of it. In part, this division provided them with a means of organizing their descriptions, but it also related to the way in which they understood their world. In describing the earth, Idrīsī confidently reproduced an account written by one of his Arabic sources in the ninth century, Ibn Khurradādhbih. Because both his audiences shared, at least at a basic level, an understanding of the earth from an astronomical or cosmographical perspective, the earth as it had been described three centuries previously suited his project. Finding an acceptable manner of dividing the earth, however, was more challenging. Idrīsī's Arabic-Islamic texts would have provided numerous models, but tended to result in a depiction of the oikoumene centered on the lands of Islam. As a solution, Idrīsī turned to a method of dividing the earth used in astronomical works, namely the seven latitudinal climates. This model allowed him to move beyond notions of a world centered on Islam, or as in Latin works, a Christian conception of the world.

The third chapter explored $Idr\bar{s}\bar{s}$'s portrayal of the lands of Islam of the $R\bar{u}m$. More broadly, it centered on the ways in which he presented Islam and Christianity in his work. This chapter again centers on how $Idr\bar{s}\bar{s}$ modified his sources, most of them Arabic works of

geography that privileged Islam, in order to present these two religions in a way that offended neither of his audiences. He adopted writing strategies that produced an impartial image of Islam and Christianity, one of the only (if not the only) medieval works of geography in the Mediterranean to do so. He accomplished this by stripping his Arabic sources of certain elements of the full expression of Islam. Hence, when he copied Ibn Ḥawqal's descriptions of the frontiers of the lands of Islam, he removed all references to *jihād*, *ribāt*s, and especially descriptions of those who faced Islam across the frontier as "unbelievers" or "polythesists." Elsewhere, rather than center his description on religious elements of the lands he described, he minimized these. Even in 'hotspots' of interfaith hostility of the period, such as the Holy Land and al-Andalus, he was reluctant to portray conflicts as predicated on religious difference. This chapter, then, has argued that Idrīsī modified his geographical mentality, based as it was on his reading of Arabic geographical literature, in order to produce a world that suited his imagined Christian and Muslim audiences.

Chapter Four analyzed an exceptional navigational map drawn in the mid-fourteenth century. Written in Maghribi Arabic script, it depicts the western Mediterranean basin. At first glance, the map looks nearly identical to the dozens of contemporary charts drawn in Genoa, Venice, and Mallorca. Its visual representation of space – the shape of the coastlines, the 100-mile distance scales, abstract symbols indicating sailing hazards, the ink colors used on the map, in short, nearly everything – matches that of European charts so closely that there can be no doubt that the Maghribi cartographer based this map on a European model. This resemblance is remarkable, because it demonstrates the transmission of geographical knowledge from north to south, from Romance-language to Arabic. But more than this, the cartographer did not merely copy a European map. Rather, he inscribed his chart with a view of the Mediterranean world that

betrayed his Islamic faith as well as his longing for a return of Muslim rule to Iberia, a view in deep conflict with the maps he used as models.

Chapter Five turned to the reception of an Arabic treatise of geography by a Christian translator in the Iberian Peninsula. In the mid-fifteenth century, an anonymous Christian who hailed from the Castilian-Leonese linguistic frontier, probably around the university city of Salamanca, produced a curious translation of the twelfth-century *Book of Geography* of al-Zuhrī. He read the Arabic text through a series of mental screens, most important among them his Christian faith, his reading of Holy Scripture and Ptolemy's *Geography*, and his aversion to all things relating to Islam. In some ways this translation project is paradoxical: a Castilian-speaker with a distaste and distrust of Muslims who nevertheless knew some Arabic undertook to translate a geography clearly written by a Muslim. This chapter demonstrated that he did so out of an overriding interest in cosmography and geography, developed through his readings of various works on these themes at the libraries of the University of Salamanca, then a center for the study of these fields. Because of his mediocre command of Arabic, his decision to omit a great deal of the original Arabic text, and his approaching the project through his own mental screens, the translator composed a text that is more interpretation than translation. However, this chapter shows that he undertook this 'interpretation' as much to learn of the geography of the world as to confirm his own scripturally-informed understanding of it.

Finally, the sixth chapter explored a series of remarkable works of cartography produced by 'Alī al-Sharafī, a native of the Ifrīqiyan port city of Sfax in the second half of the sixteenth century. 'Alī had been born into a prominent family of scholars of Islamic law and religious sciences, and on the basis on some of his works of cartography it appears that he also took a great interest in these topics. But some members of his immediate family also had a longstanding

interest in geography and cartography. His father had produced some charts, as had his grandfather. Indeed, 'Alī copied a map drawn by his grandfather which merged a nautical chart based on a Catalan model together with the geography and cartography of Idrīsī. The family, then, had access to nautical charts which had reached them from across the sea. At the same time, 'Alī produced at least two nautical atlases which comprised a series of portolan charts, a diagram of an Aristotelian-Ptolemaic cosmographical scheme, and a series of calendrical tables. The atlas's format and arrangement reflected contemporary European practices. And yet, 'Alī used this format to produce a sacred geography. That is, he inserted into his atlases a *qibla* chart indicating the direction that a Muslim must face during daily prayers. He surrounded this chart with tables for calculating the times of prayer and manners of calculating the date for the proper observation of Islamic rituals. The nautical charts suggest that the guide may have been directed at travelers, though it is unlikely that they were used on board a ship.

This dissertation, then, centers on these four case studies of geographical encounter. It asks how geographical writers and cartographers received and used the knowledge they came upon when confronted with 'imported' geographical knowledge that had reached them across confessional, linguistic, and political lines in a period of hostilities across these very lines. This study argues that regardless of these tensions and even violence, geographical knowledge moved and was received between cultures. The model of a Mediterranean closed off along confessional lines proposed long ago by Pirenne does not hold true for the period studied here. That Idrīsī worked in a Christian court during a time of Crusade, *Reconquista*, and even his own patron's conquest of the coastline of Ifrīqiya runs contrary to such a conception. But tensions predicated on religious difference and prejudice nevertheless played a central role in Muslim-Christian relations, at least according to the ways in which geographical knowledge was received by

geographers and cartographers. The anonymous Castilian translator distrusted the information that he learned from al-Zuhrī, a Muslim "Moro." Meanwhile, 'Alī al-Sharafī took up Europeanstyle nautical atlases, but used them to promulgate a sacred geography of Islam. Finally, Idrīsī judiciously reduced the place of religion in his work, at least when compared to his Arabic sources, so as to construct a world that privileged neither Islam nor Christianity. Conceptions of Islam and Christianity, then, were central to the way in which these geographers and cartographers conceived of the world, but they did not necessarily draw rigid lines between them. Historians of the medieval and early modern Mediterranean would do well to allow for a view of interfaith relations in which religion played an important role, but did not inevitably indicate that the people they study saw religion as a hostile dividing line between them and the 'other.'

The study also demonstrates that generally speaking, geographical writers and cartographers received 'imported' knowledge in piecemeal fashion. That is, they adapted it – or selected certain elements of it – and modified it to fit it into a traditional structure. For example, the anonymous author of the Maghrib chart took up a form of mapping that had developed in Europe, but adapted it to his local context and view of the world. He changed its place names and inscribed the map with elements from his own culture, and thus turned the chart to his own purposes. Here we might consider Idrīsī as well. When he incorporated new information about the geography and people of Europe which he learned by virtue of his connection to the court in Palermo, he fitted this information into traditional schemes of understanding which he had learned from his Arabic sources. For Idrīsī, like some of his Arabic sources, the inhabitants of Europe remained the $R\bar{u}m$. In none of the four examples studied in this dissertation did the individual geographer or cartographer completely transform their conception of the world based on the new geographical knowledge that he had encountered and received. Change came in small

doses. Again, even Idrīsī, who modified his Arabic sources considerably in some cases, nevertheless produced a world that excerpted, often word for word, his Arabic sources. Perhaps he presented a relatively impartial view of Islam and Christianity, but much of the rest of his work looked a lot like that of his sources. These encounters, then, provoked change in how people represented their world, but they did so in controlled way.

It is worth noting that the kind of encounter examined in this dissertation was rare or at least appears to have been so, given the small number of texts and maps which have survived and which bear the marks of such encounters. There are no known Arabic translations of Latin or Romance geographies from the period, and the interpretation of al-Zuhrī's treatise by the Castilian translator is one of two known translations of an Arabic geography, the other one also being Iberian, though far earlier. In the field of cartography, only nautical charts clearly exhibit signs of exchange across the sea. And though historians of European cartography (beyond portolans) have posited influence from Arabic-Islamic geography, solid evidence is generally lacking. Why, then, was such encounter apparently so limited? There may be two explanations for this, the first cultural and the second one of utility. First, the cultural. If we consider again the anonymous Castilian translator's refusal to incorporate any information from al-Zuhrī relating to what he viewed as the falsehoods of the "Moros," we can see that at least in some cases, views of the 'other' proscribed the incorporation of certain information. Since many works of geography in particular, but of cartography as well – for instance, the medieval European mappae mundi – were marked by culture and religion, it may be that translators and others preferred not to engage

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¹ The *Akhbār mulūk al-Andalus* by Aḥmad b. Muḥammad al-Rāzī (d. 955 CE), a text of geography, history, and an account of the Muslim conquest of Iberia was translated into Portuguese by Gil Peres (d. 1325). This Portuguese version is now lost, though a Spanish translation from the Portuguese was produced around 1430 by Pedro del Corral. See Diego Catalán and Andrés Soledad, *Crónica del moro Rasis. Versión del Ajbār mulūk al-Andalus* (Madrid: Editorial Gredos, 1974).

with them. Here we may have an explanation for the paucity of these geographical encounters, to some small extent, but not a very convincing one. For instance, even if the Salamanca translator mistrusted his Arabic source, he nevertheless found it worthwhile to produce a partial translation of it. But a second explanation may prove more convincing, though perhaps less than completely compelling, namely that of utility. Numerous works of astronomy, medicine, mathematics, and other fields had been translated into Latin and vernacular languages across much of southern Europe, and were viewed as sources of practical information. Through them one could learn of the cosmos and the earth, how to treat and cure the ill and injured, and so forth. Geography, by contrast, was less practical in nature. Though Idrīsī's geography, for example, might teach a reader about much of the world, it was useless as a guide for traveling to and from cities. *Mappae mundi* and the maps tucked into numerous medieval and early modern Arabic geographies were equally inadequate as guides for practical purposes. It is only in nautical charts, that is, maps that had a practical use value, that we see a considerable level of exchange.

Finally, if geographical encounters across the medieval and early modern Mediterranean were relatively few in number, to what extent did they affect conceptions of the world? To judge from the four examples examined in this study, the answer must be that they had a limited impact. The manuscript of the Castilian interpretation almost certainly spent far more time on the shelf than being consulted by readers. And though one of 'Alī al-Sharafī's atlases appears to have been consulted many times, judging from the state of the manuscript, it did not inspire others to produce similar atlases. The Maghrib chart is one of a handful of medieval examples of Arabic-language nautical charts, and toward the end of the period discussed here, in the sixteenth century, numerous Turkish cartographers took up portolan charting. Finally, Idrīsī's manuscripts circulated among Arabic writers and were only re-introduced to Europe in the sixteenth century,

first in a partial Arabic edition printed by the Medici press, and about three decades later in a Latin translation of that partial edition. This initially drew the attention of scholars, but more as a curiosity than as a source of geographical knowledge. But even if their impact was limited, these works nevertheless offer an important window onto the culture of geography and cartography, as well as the broader cultural and societal milieus within which they were produced.

Appendix

Dating the Maghrib Chart

For more than a century historians have deliberated the age of the Maghrib chart. As an undated, anonymous chart of unknown provenance written in Arabic, a language seldom found on nautical charts, it has resisted historians' efforts to determine an accurate date of production. No record exists of its arrival at the Biblioteca Ambrosiana in Milan. No legend explains the chart in any way. In fact, the writing on the chart consists primarily of place names, written along the coastlines. It contains no vignettes or political divisions that might hint at a specific date of production. The handwriting – a Maghribī Arabic script – tells us that the chart was drawn by a Maghribī cartographer, yet this script has proven particularly impervious to dating via paleographical analysis. In short, the chart offers few straightforward clues regarding its age.

From the early efforts of Theobald Fischer in 1881 to the recent arguments of Ramon Pujades in 2007, historians have proposed a range of dates for the Maghrib chart that span a period of nearly

¹ Because the Maghribī script extended across the Iberian Peninsula and most of the Maghrib, paleographical analysis cannot tell us the geographical origin of the cartographer. Some historians have turned to paleographical analysis in dating the chart. Antonio Ceriani, a nineteenth-century archivist at the Biblioteca Ambrosiana, where the Maghrib chart is preserved, ascribed it to the first half of the fourteenth century, based on examination of the script. See Paolo Revelli, *I Codici Ambrosiani di contenuto geografico con XX tavole fuori testo* (Milan, 1929), 181. In spite of Ceriani's claim, paleography has proven ineffective as a dating aid in the case of the Maghribī chart, primarily because no good paleographical tool exists for most Arabic scripts, but especially for the Maghribī script used on this chart. In fact, I presented a color digital copy of the chart to two leading specialists in Arabic paleography, François Déroche and Adam Gacek, in early 2013. I asked them to estimate the age of the chart based on analysis of the handwriting. Neither could accurately date the chart based on paleography. Indeed, Gacek initially suggested a sixteenth-century date of production, based on the geographical accuracy of the chart, rather than the handwriting. After I explained to him that charts from the early fourteenth century exhibited the same level of accuracy, Gacek confessed that paleographical analysis could not help much and that the chart may well date from "much earlier." Personal communication, 6 March 2013.

four centuries. Fischer, for instance, suggested that the chart dates from the thirteenth century, whereas only a few years later A.E. Nordenskiöld argued that it was drawn in the mid-sixteenth.² The lack of a consistent, accurate method for dating nautical charts means that historians have relied on different tools and criteria for determining the age of charts. In the case of the Maghrib chart, this has resulted in a wide range of proposed dates of production.

The Maghrib chart does, however, bear an unmistakable resemblance to charts drawn in other Mediterranean port cities, many of which have their date of production inscribed in their margins. In theory, a historian might determine the age of the Maghrib chart by comparing it to charts with known dates of production. Indeed, when Fisher and Nordenskiöld proposed their widely divergent dates for the Maghrib chart, they did so by comparing it to other nautical charts. Unfortunately, neither Fisher nor Nordenskiöld provided readers with detailed arguments for

² For Fischer's thirteenth-century proposed date, see Fac-Simile della Carta Nautica Araba, Carattere Magrebino del XIII secolo, Illustrata da Teobaldo Fischer, L'Originale si conserva nella R. Bibl. Ambrosiana di Milano. (Venice, 1881). Fisher gave no justification or reasoning for this date, and a year later it seems that two Italian historians, Pietro Amat di San Filippo and Gustavo Uzielli had accepted it without question in Studi biografici e bibliografici sulla storia della geografia in Italia (Rome: Società geografica italiana, 1882), 229. Fischer, however, revised this dating to the late-fourteenth century in a work published five years later, Sammlung mittelalterlicher Welt- und Seekarten italienischen Ursprungs: und aus italienischen Bibliotheken und Archiven. (Venedig: Ferdinand Ongania, 1886). In 1897 Nordenskiöld suggested that the chart dates from the mid-sixteenth century and wrote that "It is not impossible, that this work [the Maghrib chart], once supposed to be the oldest portolano [nautical chart] existing, was only due to the speculation of some portolan-manufacturer in Venice, contemporary with the muchdiscussed Turkish reproduction of Orontius Finaeus' heart-shaped map of the world. Besides, the absolute incompetence of the Arabs in cartography does away with all idea of finding among them the authors of the most perfect cartographic work of the Middle Ages." Periplus, 1897, 46-47. Borrowing heavily from Fischer's short chapter on the chart in Sammlung mittelalterlicher, Joan Vernet nevertheless arrived at an early fourteenth century dating for the chart. See "The Maghreb Chart in the Biblioteca Ambrosiana," Imago Mundi 1 (1962): 1-16. In an essay in The History of Cartography Tony Campbell suggested a dating in the mid-fourteenth century. See "Portolan Charts from the Late Thirteenth Century to 1500," in *The History of Cartography*, 1:418. In a short essay, in part on methods for dating nautical charts, James E. Kelley, Jr. wrote of the Maghrib chart that "Vernet-Gines argues for an early date on the basis of the few number of placenames [sic]. But this might be explained from the small size of the chart (23.5 by 16 cm.). The chart does appear to be fourteenth century in spite of the fact that there are no known comparable Arabic survivors from the same period. The distance from C. St. Vincent to C. Finisterre in the Maghrib Chart is about 427 mia. Before 1400 this distance averages 416 mia in the portolan charts; after 1400 it is about 475 mia. However, the mile scale design seems a little more developed than for the early fourteenth century. Tentatively I would put the Maghrib chart in the middle of the [14th] century." (My emphasis.) See Kelley, Jr., "The Oldest Portolan Chart in the New World," Terrae Incognitae 9 (1977): 24-25. Finally, Ramon Pujades recently argued that the chart dates from the first third of the fifteenth century. See Les cartes portolanes: La representació medieval d'una mar solcada (Barcelona: Lunwerg, 2007), 296-300.

their suggested dates, although the latter did suggest a late date based on what he saw as the "absolute incompetence of the Arabs in cartography" in the medieval period. More empirical work on dating the chart would have to wait until 1962 when Joan Vernet published a descriptive essay on the Maghrib chart in which he contended that it dated from the early fourteenth century. He based his conclusion on comparison of the density of place names in "remote localities" discovered by "southern navigators in the course of these centuries [i.e. thirteenth through fifteenth centuries]."⁴ Basing himself on E.T. Hamy, Vernet argued that early cartographers would have had imperfect, even scant knowledge of coastlines, whereas later cartographers, by comparison, would have had far greater knowledge of coastlines by virtue of the greater knowledge of the era in which they lived. He compared toponyms in Ireland, England, and the Atlantic coast of Europe – areas that he considered "remote" from the perspective of an Arabicspeaking cartographer – and found that the density of toponyms in those areas on the Maghrib chart most closely matched the density in these areas on charts drawn before 1350.5 One historian has suggested that the small size of the Maghrib chart – it measures approximately 23.5 x 16 cm – explains its relatively low density of toponyms, and thus does not provide useful information for dating purposes. 6 In his survey of medieval nautical charts, however, Campbell

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³ *Periplus*, 1897, 47.

⁴ Vernet, "The Maghreb Chart," 3. Vernet here employed a dating method proposed by E.T. Hamy in 1889, that is, just three years after Fischer published his *Sammlung*. On this method, see *Études historiques et géographiques* (Paris: E. Leroux, 1896), esp. 1-96, 'Origines de la cartographie de l'Europe septentrionale.'

⁵ Vernet, "The Maghreb Chart," 4. This method, however, must be employed with great caution. The author of the Maghrib chart, after all, may have drawn the chart at a late date, though with a restricted list of toponyms that did not reflect the extent of knowledge at the time of the chart's production. Alternatively, the Arabic-speaking North African sailors from whom the cartographer may have obtained toponymic data, only infrequently sailed to Ireland, England, and the Atlantic coast of northwestern Europe; hence, one might reasonably expect that an Arabic-speaking cartographer would have a less knowledge of these areas than did contemporary Catalan and Italian chartmakers. It is notable that Vernet found that the density of place names on the Maghrib chart mostly closely match pre-1350 charts, but before accepting this date, other evidence should be assessed as well. Vernet here employed a dating method proposed by E.T. Hamy in 1889, that is, just three years after Fischer published his *Sammlung*. On this method, see Études historiques et géographiques, 1-96, "Origines de la cartographie de l'Europe septentrionale."

⁶ "The Oldest Portolan Chart in the New World," 27.

dismissed this argument and unequivocally stated: "No instance has yet been encountered of a chartmaker's reducing the number of names to fit a smaller format." Campbell's survey included the Maghrib chart.⁷

Campbell, too, turned to toponymy as a tool for dating charts, although unlike Vernet, he did not concentrate on toponymic density. Instead, he compiled an extensive list of place names gathered from the oldest-known Mediterranean nautical charts. By carefully examining the changes in place names over time, especially by determining the first dated appearance of particular toponyms on a nautical chart, he could then ascertain a chart's "most logical chronological position in the documented evolution of the toponymy found on dated charts."8 Such an approach, Campbell warned, could only give an approximate date and moreover, could not "distinguish between a later copy and its model, nor can it readily give credit for any innovations that might be present on an undated chart." Using this method, he found that the bulk of the toponyms on the Maghrib chart matched those found on Catalan- and Italian-made charts, and moreover, that all of these names were in use in nautical cartography by the year 1339 or earlier. He concluded that at earliest, the chart dates from the first half of the fourteenth century. 10 Campbell conducted his analysis nearly three decades ago. At present we have access to a far more extensive list of place names that derives from a far wider range of charts than that previously available to Campbell.¹¹ Toponymic comparison between the Maghrib chart and this more extensive list of names yields the same conclusion that Campbell reached: all of the names,

⁷ Campbell, 'Portolan Charts from the Late Thirteenth Century to 1500,' 1986, 421.

⁸ Campbell, 'Portolan Charts from the Late Thirteenth Century to 1500,' 423.

⁹ Campbell, 'Portolan Charts from the Late Thirteenth Century to 1500," 423.

¹⁰ Campbell, 'Portolan Charts from the Late Thirteenth Century to 1500," 418. My emphasis.

¹¹ This far more extensive list of toponyms is available courtesy of Tony Campbell who maintains a website dedicated to historical cartography. The section of the website dedicated to nautical charts is available at http://www.maphistory.info/portolanchapter.html and the list of toponyms – what Campbell calls "significant names" in nautical cartography – is available at http://www.maphistory.info/SigNamesFullTable.doc.

barring a handful of names that turn up on no other charts, were in use in nautical cartography by 1339.

Campbell's proposed dating of the chart has not gone unchallenged. Recently Ramon Pujades ascribed the Maghrib chart to the first or second decade of the fifteenth century. For Pujades, all medieval nautical charts "written in Arabic are late, slavishly copy previous western models and are crammed with Italianisms and Catalanisms phonetically transcribed into the Arabic alphabet." He based his dating of the chart on three points of evidence: what he saw as the chart's fifteenth-century toponomy, the form of the distance scale, and the manner in which the cartographer drew the coastline. None of these arguments, however, when examined one by one can, stand up to close scrutiny.

First, Pujades argued that the "very problematic" toponomy of the chart demonstrates that it could only have been drawn after the turn of the fifteenth century. Of the nearly 300 place names on the Maghrib chart Pujades singled out three, each of which he contends did not appear on nautical charts until after the year 1400: $Qan\bar{\imath}t$, on the Mediterranean coast of France, $L\bar{\imath}na$, on the Catalan coast, and $Q\bar{a}b$ d[a?] $K\bar{\imath}nik$, also on the Mediterranean coast of France. $Qan\bar{\imath}t$, in fact, appears on the earliest-known nautical chart, the so-called $Carte\ pisane\ (ca.\ 1270-1300)$ as caneto, 13 and subsequently appears on numerous early fourteenth-century charts. The two other

¹² Pujades, Les cartes portolanes, 2007, 508.

¹³ The *Carte pisane*, like the Maghrib chart, is an undated, anonymous work. It, too, has been ascribed a range of dates, ranging from the twelfth through the late-fourteenth centuries. Most scholars accept that the chart dates from the early fourteenth century, though some have suggested that it dates from the late fourteenth century or later. Gautier Dalché questioned whether the chart may have been a "une copie maladroite tardive." See Patrick Gautier Dalché in *Castrum* 7, (2001), 11-12. Ramon Pujades has further tested this hypothesis. See his "The Pisana Chart, Really a Primitive Portolan Chart Made in the 13th Century?" *Comité Français de Cartographie* 216 (2013) 17-32. Tony Campbell, however, has stated that he is "currently engaged in an in-depth work - to be issued as a further section on my portolan chart pages on Map History – arguing strongly against Pujades's re-dating of the Carte pisane from c.1290 to possibly as late as the 1430s" (personal communication, 14 July 2014).

toponyms, $L\bar{\imath}na^{14}$ and $Q\bar{a}b$ d $K\bar{\imath}nik$ are unique to the Maghrib chart, or at least cannot be accurately matched to toponyms on any other charts, and accordingly cannot be used as evidence for dating the chart.

Second, Pujades suggested that two graphic elements of the chart – the particular design of the distance scale and the thick ochre line drawn just inland of the coastline, itself drawn in fine black ink – confirm a fifteenth-century date of production. Regarding the distance scale, he asserted that "the characteristics of the manner of representing the graphic scales using semi-circular traces that reinforce the top and bottom of each line that segments it, confirm that the Christian model reproduced here dates from the first quarter of the fifteenth century." Indeed, the distance scale does contain green semi-circles (Figure 22) and no fourteenth-century chart renders the lines of the distance scale in this way. Nonetheless, it is also true that no fifteenth-

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¹⁴ Pujades believes that this place name, Līna, was not used in nautical cartography until the fifteenth century. He rendered this name as Lisana, though he notes that Vernet transcribed it as Liyana "because using al-Idrīsī as a reference, he identified it with La Jana. But La Jana is the name of a small, interior town that is some twenty kilometers from the coast, this the reason why it never appears on any medieval navigational charts. This toponym designates in reality the mouth of the river of the Sénia and it appears for the first time on the chart of Francesco Beccari of the year 1403." My translation from the Catalan, Les cartes portolanes, 297. In fact, it was Fischer who first proposed the reading of Liyana, not Vernet. Sammlung mittelalterlicher, 236. Fischer's reading of this word as Liyana is a conjecture. The Arabic word, $L\bar{\imath}na$, as written on the chart presents no written short vowels (harak $\bar{\imath}t$), hence we cannot know the correct reading of this word. Among many possible readings we find Līna, Līana, Līuna, as well as Fischer's reading of *Līyana*, but not Pujade's suggestion of *Lisana* (it is not clear from where this s derived, but it is not in the Arabic name on the chart or in Idrīsī). Moreover, the name "La Jana" that Vernet and Pujades claim that Idrīsī used does not appear in Idrīsī's Book of Roger. The term that does appear in that book is Yāna, which he described as a village near the Wādī Yāna river (Guadiana in present-day Spanish). No one has managed to definitively identify this town (see 270, n. 1 in Bresc and Nef, *Idrīsī*, *La première géographie de* l'Occident, on which the authors write of this place "Non localisé. Nom putatif tiré de Guadiana (Wādī Yāna, 'fleuve de Yāna')?"). Moreover, even though in English (or Romance languages) Līna and Lāna seem to have a close spelling, in Arabic the difference between the second letter -ya' and alif - is so great that this is unlikely to be a mistake in transcription. Hence, the term in $Idr\bar{s}\bar{s}$'s text, $L\bar{a}na$, is unlikely to refer to the same place as the place name on the map, Līna. Finally, Lisana, the name Pujades proposed, does not appear on the chart of Beccari in 1403. In sum, this place name does not make a useful piece of evidence for determining the age of the Maghrib

¹⁵ Les cartes portolanes, 508.

century charts did so either. The design of the distance scale of the Maghrib chart is unique and hence does not facilitate the dating of the chart.¹⁶



Figure 22. Distance Scale on the Maghrib Chart. The phrase above reads *Hādihi al-amyāl kull bayt bi-mi'a*, which may be read as "These are the miles, every increment is 100." ¹⁷

Regarding the thick ochre line traced inside the coastlines, Pujades claims that this characteristic first appeared in nautical cartography in the 1420s and 1430s, and that it is "found in no extant work from the fourteenth century" and that the "first dated work that features any kind of inner line is Giroldi's atlas from 1426." In fact, the same kind of thick, inner line appears on at least two charts from the early fourteenth century drawn by the Genoese cartographer Pietro Vesconte

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¹⁶ I have compared this distance scale to those found on nearly all extant pre-1500 works and none of them closely resemble the scale of the Arabic chart.

¹⁷ The German historian Theobald Fischer translated this phrase as "These are the miles, each subject (house) is one hundred." ("Dies die Meilen; jedes Fach ("Haus") zu hundert,"). Confusion arises from the use of the Arabic word bayt in the phrase. Bayt most frequently signifies 'house.' However, in the medieval period it sometimes signified 'increment,' which I believe fits this phrase better than Fischer's translation. See Fischer, Sammlung Mittelalterlicher Welt-und Seekarten, Italienischen Ursprungs und aus Italienischen Bibliotheken und Archiven, (Venice, 1886). See, too, Lane, Edward William, and Stanley Lane-Poole. An Arabic-English Lexicon (London: Williams and Norgate, 1863-1893).

¹⁸ Les cartes portolanes, 508.

(Figure 23).¹⁹ Contrary to Pujades's claim, the thick ochre line²⁰ inside the coastline was introduced early to nautical cartography, even if it was not widely employed on charts until the fifteenth century.

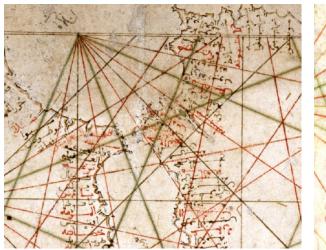




Figure 23. Maghrib Chart, Strait of Gibraltar.

Vatican, BAV, ms. Pal. Lat. 1362a, f. 7r, Pietro Vesesconte, 1321.

The fact that three of Vesconte's extant atlases contain this thick inner line may be more significant than what they reveal about the possible mid-fourteenth century date of production of the Maghrib chart. The chart bears many similarities to maps drawn by Pietro Vesconte. A majority of the place names used by the Arabic-speaking cartographer appear to have been introduced to nautical cartography on charts drawn by Pietro Vesconte.²¹ Moreover, there are

¹⁹ These three charts date from 1321 (Vatican, BAV, Mss. Pal. Lat. 1362A, fols. 1v-8v) and 1321 (Vatican, BAV, Mss. Vat. Lat. 2972). Note that Pudjades does not believe Pietro Vesconte drew BAV, Vat. Lat. 2972, but rather that it derives from the Vesconte atelier in Venice. Note that Pietro Vesconte's 1318 chart (Österreichische Nationalbibliothek, Vienna, Ms. 594) has thick lines drawn on top of the coastlines. These thick lines do not resemble those on the Maghrib chart, the two Vesconte charts from 1321, or other charts with thick inner coastlines, so I do not list it as evidence of a thick inner line. Moreover, there is reason to believe that this line was drawn long after the chart.

²⁰ This thick line was not always ochre in color, though it was typically of a lighter colored ink than that used to outline the coastline.

²¹ The two other Vesconte charts that introduced numerous toponyms to nautical cartography are a chart held in Florence, Archivio di Stato, C.N. 1 that dates from 1311 and another dating from 1313 held at the Bibliothèque nationale de France, Cartes et Plans, DD 687.

reasons to suspect that the Maghrib chart is a single sheet of a multi-sheet atlas, similar to extant multi-sheet atlases drawn by Vesconte. First, charts that represent only a portion of the Mediterranean, as does the Maghrib chart, are typically found in atlases rather than stand-alone maps. Indeed, a chart that depicts a similar region – the western Mediterranean and eastern Atlantic – is found on the seventh sheet of Vesconte's 1318 atlas now conserved in Vienna. ²² Second, the scale of atlases tended to vary slightly from the scale of stand-alone nautical charts of the entire Mediterranean region. Pujades has estimated that each 0.7 cm of space on the Maghrib chart represents 50 miles of actual distance. This same measurement is found on sheets of two atlases drawn by Vesconte in 1318, including the Vienna manuscript. ²³

Pujades further suggested a *terminus ante quem* for the Maghrib chart. He noted that the cartographer did not homogenize the scale at which the Mediterranean and Atlantic coastlines were drawn, indicating that the cartographer did not make use of the "Beccarian revolution of

In fact, two words in particular stand out on this chart, just as on the Arabic chart: across the center of the Iberian Peninsula is written the word "Ispagna" and in the center of the Strait of Gibraltar is the world "Gibiltera." I will explore later the implications of these two places names on the Arabic chart at the Biblioteca Ambrosiana. Note that a third place name, "Africa" is written in the interior of the North African landmass on the Vesconte chart, but not on the Maghrib chart. Below is a fragment of the sheet here discussed from Vesconte's 1318 (Vienna) atlas. The words *Ispagna* and *Gibiltera* are clearly visible. Some scholars have suggested that someone added these two words to the chart long after the chart was first drawn.



²³ The other atlas is conserved in Venice at the Museo Correr, port. 28.

²²Österreichische Nationalbibliothek, Vienna, Ms. 594.

An anonymous atlas produced in Venice in 1421 (Biblioteca Berio, *Luxoro Atlas*), a 1430 atlas now held in Siena (BC, SV2), and two other mid- to late-fifteenth century atlases also have sheets with the same scale. Only one standalone nautical chart that drawn in 1456 by Pere Rossell (Catalan) has this scale (Chicago, Newberry, NL, MS. Ayer Coll. map 3).

Pujades stresses that these scales are approximations only.

homogenisation of scales."²⁴ Around 1403 the Genoese cartographer Battista Beccari introduced to nautical cartography a homogenized method of depicting the Atlantic and Mediterranean coastlines. Most charts drawn after the first decade of the fifteenth century incorporated this method. Prior to this, as historians of cartography have long noted, cartographers drew the Atlantic and Mediterranean coasts at two different scales. The anonymous cartographer of the Maghrib chart employed, as on "pre-Beccari" maps, two distinct scales for the Atlantic and Mediterranean regions of the map, suggesting that the chart dates from before 1410.

A few scholars, then, have attempted to date the Maghrib chart through comparative study of its toponymy and a handful of minute graphic details. This toponymic comparison, in spite of arguments to the contrary put forth by Pujades, strongly indicate a mid-fourteenth century date of production. The graphic elements, at least those examined by Pujades, do not help in establishing the age of the chart. Finally, the cartographer's use of two distinct scales in rendering the Atlantic and Mediterranean supports the claim that the chart dates, in all likelihood, from before the first decade of the fifteenth century. Though no single dating tool offers incontrovertible evidence of the chart's date, the more elements of a chart that point toward a particular period of production, the more reliable the dating of a given chart. For the Maghrib chart, as we have seen, a number of elements point toward a mid- to early-fourteenth century dating. A handful of other features of the Maghrib chart, including two minute graphic elements as well as the material upon which the chart is drawn, further demonstrate that the Maghrib chart dates from the early- to mid-fourteenth century.

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²⁴ Les cartes portolanes, 508.

In the late 1970s J.E. Kelley, Jr. demonstrated that comparative study of features of "seeming unimportance" that are shared across all, or at least most, nautical charts can aid in determining dates of production. Just as Campbell saw an "evolution" in chart toponomy, Kelley noted that certain features of charts show "evolutionary forms" that "tend to group into model types" and can be arranged diachronically. 25 Certain characteristics of nautical charts – for instance the shape of a river delta – changed over time, and hence comparison of these characteristics can reveal approximate dates of production. Kelley compared two small details, the depiction of a reef known as Skerki Bank that presented a hazard for sailors and the shape of the delta of the Rhone River, across a number of charts drawn between the late thirteenth and the fifteenth centuries. Because these two elements appear on nearly all charts and their depiction changed over time, they make for useful points of comparison. When we place these elements as drawn on the Maghrib chart alongside the depictions of these same two elements on nearly two hundred charts drawn between the late thirteenth and fourteenth centuries, a clear picture emerges: the depiction of these two elements on the Maghrib chart matches those of other charts drawn in the mid-fourteenth century.

Some of the most crucial features of nautical charts are those concerning marine hazards faced by navigators – reefs, shoals, and river deltas. Navigators demanded accurate, reliable identification of such sailing hazards so as to maximize their safety at sea. Consequently, cartographers had strong incentives to precisely and consistently represent them on charts.²⁶

²⁵ Campbell, 'Portolan Charts from the Late Thirteenth Century to 1500,' 423; Kelley, Jr., 'The Oldest Portolan Chart in the New World,' 29.

²⁶ An excerpt from the *Chronicon Societatis Jesu* (5, 644) from 1594 demonstrates the level of trust navigators placed on nautical charts:

[&]quot;In the night we moved toward the shoals, but the captain did not want to believe in their existence because they were not marked on his map, although a chart owned by a sailor showed evidence of them. The captain was stubborn. Father Quadros went off to find the commander of the fleet and, using his authority, forced him to sail the ship away from the shoals. 'Had it not been done, the ship would have sunk on the spot, as they were soon going to

Cartographers marked these hazards either with a black cross or a red or black dot.²⁷ The Skerki Bank, an area of shallow sea – a reef – situated between Tunisia, Sicily, and Sardinia in the Strait of Sicily, roughly between Carthage and Ostia, the main port of ancient Rome, was marked at various times with a black cross, red dots, or black dots, and frequently, some combination of these markings.²⁸ Often cartographers wrote the name of the reef on their maps alongside these markings.²⁹ As the table below – borrowed from Kelley– demonstrates, the symbol used to represent the Skerki Bank evolved over time. The cartographer of the Maghrib chart depicted the Skerki bank with a simple black cross, a symbol widely used in nautical cartography from the late thirteenth century through around 1370.³⁰

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see with their own eyes." François de Dainville, 1940, 112, as quoted in Christian Jacob, *The Sovereign Chart*, *Theoretical Approaches in Cartography throughout History*, Tom Conley (trans.), Edward H. Dahl (ed.), (Chicago: The University of Chicago Press, 2006), 277.

²⁷ Piri Reis, an admiral in the late-fifteenth and early-sixteenth century Ottoman navy explained these markings as follows: "There are a number of reefs: these are shown by black dots. / Shallows that are entirely sandy are shown with red dots. / Hidden reefs in the sea since ancient times have been shown by means of crosses. / If one wishes to show tiny islets, points are marked equal to their number. / Now if you can remember all this, I have told you all about the markings of maps." Pirî Reis., Ökte, E. Zekâi. *Kitab-ı bahriye*. (Istanbul: Historical Research Foundation, İstanbul Research Center), 1988, 89.

²⁸ Kelley , Jr. 'The Oldest Portolan Chart in the New World,' 26-29 compared symbols used to indicate the Skerki Bank on 60 charts. He determined periodizations for the various symbols used which are also used here. My own analysis expanded upon Kelley, Jr.'s and included nearly 200 pre-1500 nautical charts.

Sailors have known about this reef for millennia. In the 1980s and 1990s, investigators discovered eight shipwrecks there dating from between the first century BCE and the nineteenth century. For more on these shipwrecks see 'An Early Imperial Shipwreck in the Deep Sea off Skerki Bank,' *Rei Cretariae Romanae Favtorum Acta*, 37, 2001, 257-264.

²⁹ The spelling of the name varied from chart to chart. The list of possibilities includes *quilbo*, *chilbo*, *quelp*, *chixbo*, *chelbi*, and *chirbo*.

³⁰ Only one post-1370 chart, an undated, anonymous Genoese chart – the so-called Medici Atlas – depicts the Skerki Bank with a plain black cross. The dating of the Medici Atlas is uncertain. Some maintain that it dates from the fourteenth century, while others argue for a fifteenth-century date of confection.

Table 3. Skerki Bank on nautical sea charts. The first symbol on the list, a black cross, was used on the Maghrib chart.³¹

SKERKT BANK IN THE PORTOLAN CHAR	SKERKT	BANK	TN	THE	PORTOLAN	CHART
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SYMBOL	PERIOD	NO. CASES		
+	1275-1370	7 plu	s Library of	
++	1311-1318	2	gress chart	
•	1330	1		
(4.F)	1380	1		
;;;	1339-1425	3		
	1400	1		
	1403-c1500	30		
	1435-1436	2		
#	1436	1		

Medieval cartographers also consistently depicted the Camargue, the delta of the Rhone River, on their charts. Technically speaking, the Camargue is the expanse of land that sits between the two arms of the Rhone. Stretching some 1500 kilometers, it is the second largest delta in the Mediterranean, just after that of the Nile. Cartographers *always* drew it on nautical charts with an elaborate illustration that evolved over time. Often this illustration included two or three distinct stretches of land, possibly reflecting the actual evolution of the physical landscape of the Camargue. Unfortunately, much of the pigment used to color the western portion of the Camargue on the Maghrib chart has flecked off. Nevertheless, the eastern side of the delta – the side still in good repair on the Maghrib chart – is more critical as a basis for comparing these depictions over time, because the major changes introduced to cartographic representations occurred on the eastern end of the delta. After comparing the representation of the Camargue on the Maghrib chart to some 200 other nautical charts dating from the fourteenth

³¹ Original table found in Kelley, Jr. 'The Oldest Portolan Chart in the New World,' 25.

³² Kelley compared the depiction of the Rhone Delta across some 60 charts. See "Oldest Portolan Chart," 28-29.

through late-fifteenth centuries, two conclusions become clear. First, the depiction of the delta on the Maghrib chart does not closely match that of any other chart, though it most closely resembles the Giovanni da Carignano chart dating from ca. 1305-1327.³³ Second, the depiction of the Camargue underwent a major shift in 1403. In that year, Battista Beccari introduced a new way of depicting the delta, and most fifteenth-century charts then followed his model. The Rhone delta on the Maghrib chart bears no resemblance to the Beccari model (Figure 24).³⁴ Moreover, even when fifteenth-century charts do not follow the Beccarian model, they do not resemble the Camargue depiction on the Maghrib chart. While the poor state of the western side of the Camargue on the Maghrib chart prevents a complete analysis, the comparison nonetheless strongly suggests that the Maghrib chart dates from the fourteenth century, most likely the first half.³⁵

³³ Historians have proposed various dates for the Giovanni da Carignano map (destroyed during World War II). Beazley suggested 1300-1305; Desimoni proposed 1306; Nordenskiöld claimed 1310; Campbell argued 1327. See Charles Raymond Beazley, *The Dawn of Modern Geography A History of Exploration and Geographical Science*, Volume 3. (London: J. Murray, 1906), 516; Cornelio Desimoni, 'Elenco di carte ed atlanti nautici di autore genovese oppure in Genova fatti o conservati,' *Giornale Ligustico*, II, 1875, 44; Nordenskiöld, *Periplus*, 689; Campbell, *The History of Cartography*, 1986.

³⁴ The Beccarian model (New Haven, BRBML, 1980.158) indicated two islands on the eastern side of the delta whereas the Maghrib chart has a single island.

³⁵ Campbell briefly mentions the Rhone Delta, concluding that across all known charts, the "variety [of depictions of the delta] is too great for meaningful conclusions (http://www.maphistory.info/PortolanColourFeatures.html#23). Campbell is doubtless correct that the variety is too great for a precise conclusion. Nevertheless, that the Camargue on the Maghrib chart is unlike all fifteenth-century exemplars, though does come close to one early fourteenth-century exemplar, suggests that the Maghrib chart is not a fifteenth-century production.



Figure 24. The Camargue on the Maghrib chart (left) and Beccari's 1403 chart (New Haven, BRBMC, 1980.158). Beccari depicted the eastern side of the Rhone Delta with two blue islands. The majority of maps drawn after the first decade of the fifteenth century follow this model. The depiction of the Camargue on the Maghrib chart does not match any other charts, whether drawn in the fourteenth or fifteenth century, though it most closely resembles the map of Carignano, ca. 1307-1324.

In addition to the comparative analysis of place names and graphic characteristics, the material upon which a cartographer drew a chart can reveal clues regarding geographical and chronological provenance. The Maghrib chart is one of only two medieval nautical charts from the Mediterranean drawn on paper. This should not, perhaps, come as a surprise, for in the "Islamic manuscript tradition, the most commonly encountered material for the writing surface in extant manuscript codices is paper." The earliest descriptions of the chart, most written by Italian historians, describe the paper as "bombicino." According to Jonathan Bloom, nineteenth-century European scholars took up this term from medieval Byzantine sources which describe

³⁶ The other chart on paper dates from 1425-1450 (BAV, Rossi 676). All other charts were drawn animal skin. One other nautical chart, the "Lesina chart," which likely dates from the first quarter of the sixteenth century, is also on

³⁷ Evyn Kropf and Cathleen A. Baker, "A Conservative Tradition? Arab Papers of the 12th-17th Centuries from the Islamic Manuscripts Collection at the University of Michigan," *Journal of Islamic Manuscripts* 4 (2013): 2.

Arab-produced papers with words like *bambuxinon* or *bambaxeron*. Based on this nineteenth-century usage, then, these Italian scholars evidently believed the paper of the Maghrib chart to have silk or cotton content and to have been produced by Muslims, perhaps in North Africa, though perhaps elsewhere. Unfortunately, determining the origin of paper based on plant fibers is a difficult and, at present, unproven technique.

The Maghrib chart was drawn on handmade paper produced on a mold. Certain properties of this kind of handmade paper, however, can aid in establishing its origin and age. First, mold characteristics, especially the distribution of laid and chain lines, can help in the determination of the geographical origin of paper.³⁹ The kind of mold that produced the paper of the Maghrib chart consists of a wooden frame with a screen of parallel rows of thin threads, perhaps grass or strands of hemp, held together by perpendicular rows of another thin thread, probably the hair of a horse. The threads of this screen leave an impression on each sheet of paper it produces. The "parallel rows" of threads form the laid lines, while the "perpendicular rows," fewer in number, form chain lines. Paper historians have noted some general patterns in these chain lines that aid in distinguishing between European-produced paper and non-European

³⁸ These scholars believed that the term referred to *bombax*, which signifies 'cotton' or 'silk' in Greek, and took this to mean that Arab paper was produced using cotton or silk fibers. Bloom, like other historians of Arab paper, dismisses this notion – Arab paper was not produced using (mainly) cotton and silk. Bloom holds instead that the term *bambuxinon* referred to the Syrian city of Manbij, known to the Byzantines as Bambyke, and hence the Greek term refers to the place of origin, not the content of the paper. *Paper Before Print, The History and Impact of Paper in the Islamic World*, (New Haven: Yale University Press, 2001), 56.

³⁹ See Jean Irigoin, 'Les papiers non filigranés: état présent des recherches et perspectives d'avenir,' in *Ancient and Medieval Book Materials and Techniques (Erice, 18-25 September 1992)*, Studi e Testi 357-358, Marilena Maniaci and Paola F. Munafo, eds., (Città del Vaticano: Biblioteca Apostolica Vaticana, 1993), Vol. I, 265-315; Don Baker, 'Arab Papermaking,' *The Paper Conservator*, 15, 1991, 28-35; Jean Irigoin, 'Les types des forms utilisés dans l'Orient méditerranéen (Syrie, Égypte) du XIe au XIVe siècle,' *Papiergeschite*, 13, 1963, 18-21; Irigoin, 'Papiers orientaux et papiers occidentaux,' in *La paléographie grecque et byzantine: Paris, 21-25 octobre, 1974*, (Paris: Éditions du Centre National de la Recherche Scientifique, 1977), 45-54; Malachi Beit-Arié, 'Quantitative Typology of Oriental Paper Patterns,' in *Le papier du Moyen Âge: histoire et techniques*, Monique Zerdoun Bat-Yehouda, ed., (Turnhout: Brepols, 1999), 41-53; Geneviève Humbert, 'Papiers non filigranés utilisés au Proche-Orient jusqu'en 1450: Essai de typologie,' *Journal Asiatique*, 286, 1, 1998, 1-54; and Kropf and Baker, 'A Conservative Tradition?', *Journal of Islamic Manuscripts*, 4, 2013, 1-48.

paper. For medieval papers produced in Islamic lands, including the Maghrib, chain lines typically do not leave a mark, while laid lines appear as irregular, thick lines, often exhibiting a sagging or curved shape. In contrast, European-produced medieval paper nearly always contains visible chain lines and straight, rigid laid lines. The pattern of these lines on the Maghrib chart follow a pattern of paper produced in Islamic lands: the chain lines are not visible and the laid lines appear as gently sagging lines that run along the north-south axis of the chart. This suggests that the paper was almost certainly produced somewhere outside of Europe.⁴⁰

The presence of watermarks further distinguishes European-made and Islamic-made paper. As Bloom explains, in contrast to European paper, "Islamic papers were never watermarked, and they can be dated only by reference to the texts written on them and to the scripts in which the texts were written." In contrast, European-made paper nearly always contained watermarks. The paper of the Maghrib chart does not have a watermark. While this further suggests that the Maghrib chart was drawn on non-European paper, we must bear in mind that the sheet of paper used for this chart was cut from a large sheet. It remains a possibility that a watermark may have decorated the larger sheet from which the sheet used for the chart was cut. In spite of this caveat, based on the sagging laid lines and imperceptible chain lines, the Maghrib chart was almost certainly drawn on paper produced somewhere outside of Europe.

Whereas the Islamic world exported paper to Europe through the eleventh century, by the early thirteenth century, European-produced paper, especially that made in Italy, was widely

⁴⁰ Unfortunately, the typologies for ascertaining the geographical origin of paper often only permit an investigator to distinguish between European-made and non-European papers. Specifying a site of production for a single sheet of paper is unfeasible. See, too, Adam Gacek, *Arabic Manuscripts, A Vademecum for Readers*, (Leiden: Brill, 2009), esp. 187-193.

⁴¹ Paper Before Print, 10.

exported to the Islamic world. ⁴² By the mid-fourteenth century, Andalusī and Maghibī paper production had declined greatly, displaced primarily by Italian papermaking. ⁴³ Maghribī chancelleries, for instance, already used European-produced paper by the mid-fourteenth century: in 1350 the sultan of Tunis sent a letter to the king of Aragon written on watermarked, European-made paper. ⁴⁴ The kind of paper upon which the Maghrib chart was drawn – non-watermarked, non-European paper – would have been more readily available in the fourteenth century than at later dates. To be sure, even in the face of the penetration of European-made paper in the Maghrib and Iberia, some mills in these two areas continued to produce paper into the late fourteenth century. ⁴⁵

⁴² Bloom, 86; Gacek, *Arabic Manuscripts*, 187. Gacek claims European paper began to replace locally-produced paper in the Islamic world in the fourteenth century.

⁴³ Bloom, 209.

⁴⁴ Bloom, 86.

⁴⁵ For instance, documents show that in the fourteenth century papermills in Fez exported paper to Majorca and Aragon. Bloom, 86. The paper upon which the Maghrib chart is drawn does not display any "zigzag" markings, a characteristic of Iberian and western Maghribī papers. Hence, the Maghrib chart may have been drawn on paper produced in a Maghribī mill, though perhaps one outside of *al-Maghrib al-āqsā*, the far western Maghrib. See Bloom, 68 and "Zigzag Paper," 297 in Gacek, *Arabic Manuscripts*. Gacek contends that this is characteristic of "[m]any Spanish and Moroccan papers between 1166-7 and 1360." "Zigzag," in Gacek's words refers to a "diagonal cross form running from the upper to the lower margin. These were drawn with a brush or some other implement while the paper was still moist...This mark is also found on Italian watermarked papers."

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