Ibn Khaldūn's *Muqaddima* and the Maps of al-Idrīsī

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Abstract

It has long been noted that in compiling a geographical preface to his famous Muqaddima*, Ibn Khaldūn relied on the maps contained in the twelfth-century geographer al-Idrīsī's* Nuzhat al-mushtāq fī ikhtirāq al-āfāq*. Yet Ibn Khaldūn's reading of nearly seventy regional maps of al-Idrīsī has not to date been the subject of a detailed examination. This article seeks, first, to establish patterns in Ibn Khaldūn's map reading as recorded in the* Muqaddima*, noting the focus and direction of his reading as well as its omissions. In addition to his descriptions of the maps, it considers Ibn Khaldūn's use of the text of the* Nuzhat al-mushtāq *and occasional examples of his updating and addition of information. Second, this analysis leads to a discussion of the significance—or lack thereof—of al-Idrīsī's maps for the larger project of the* Muqaddima*: what role, in the end, did geography play within Ibn Khaldūn's theory of history?*

Of the acres of commentary on Ibn Khaldūn's *Muqaddima*, only a small portion has been devoted to that text's use of geography. The reasons for this relative neglect are not hard to find. Ibn Khaldūn included a lengthy description of the world as one of a series of prefaces to the *Muqaddima*, literally the "introduction" to his monumental *Kitāb al-ʿIbar*. But that preface seems to have only an oblique relationship to the facet of the *Muqaddima* that has most interested scholars: the articulation of a monumental theory of history, a "new science" whose methods, veering between political theory and a kind of proto-sociology, have resonances that extend to the present day. Moreover, the geography of Ibn Khaldūn's *Muqaddima* is almost entirely derivative, comprising in large part of a summation of the maps of the noted twelfth-century geographer al-Idrīsī. Even if, as some scholars have argued, the geographical section should be understood as integral to Ibn Khaldūn's project in the *Muqaddima*, in and of itself it adds little to the description of the world produced by al-Idrīsī over two centuries earlier.

Yet the derivative nature of Ibn Khaldūn's geography lies precisely at the heart of its most remarkable feature: it constitutes the most extended reading of a series of maps known from medieval literature. Several verbal descriptions of maps survive in medieval European and Islamicate sources, but they are all descriptions of individual maps, whether maps of the world, sea charts, or regional maps, and they tend to constitute separate works, rather

than sections of larger treatises.[1] Ibn Khaldūn's geographical preface to the *Muqaddima*, by contrast, records his reading of nearly seventy sectional maps from al-Idrīsī's magnum opus, the *Nuzhat al-mushtāq fī ikhtirāq al-āfāq* ("Promenade for the one eager to penetrate distant horizons," hereafter *Nuzhat al-mushtāq*), composed in the 1150s for Roger II of Sicily. In addition, Ibn Khaldūn reproduces the world map that appears in most manuscripts of the *Nuzhat al-mushtāq*. Obvious questions arise from Ibn Khaldūn's use of al-Idrīsī. How and to what end did Ibn Khaldūn read the maps in the *Nuzhat al-mushtāq*, and what use, if any, did he make of the text that accompanies them? More broadly, what significance did al-Idrīsī's maps have for Ibn Khaldūn's theory of history?

These questions have not as yet been addressed in a sustained manner. In his influential translation of the *Muqaddima*, Franz Rosenthal provided occasional comments on Ibn Khaldūn's geographical description on the basis of comparison with al-Idrīsī's maps.[2] By doing so, Rosenthal sought to resolve problematic aspects of the text, such as puzzling place-names and apparently mislocated sites, but he did not, quite understandably, attempt to draw broader conclusions about Ibn Khaldūn's reading of al-Idrīsī. Although other scholars have discussed the significance of Ibn Khaldūn's use of geography in general terms[3] and briefly addressed specific aspects of Ibn Khaldūn's geographical thought,[4] only

1. Maps are often asserted to be the basis of verbal descriptions of geographical space, not always with convincing evidence. Fairly secure European examples of this genre include the anonymous "Expositio Mappe Mundi" and Hugh of St-Victor's *Descriptio mappe mundi*, both descriptions of twelfth-century *mappae mundi*, and the *Liber de existencia riveriarum et forma maris nostri mediterranei*, a description of a sea chart datable to ca. 1200. See Patrick Gautier Dalché, *La "Descriptio Mappe Mundi" de Hugues de Saint-Victor* (Paris: Études Augustiniennes, 1988); idem, *Du Yorkshire à l'Inde: Une "géographie" urbaine et maritime de la fin du XII^e siècle (Roger de Howden?)* (Geneva: Droz, 2005), 49–82, 143–64; idem, *Carte marine et portulan au XII^e siècle: Le "Liber de existencia riveriarum et forma maris nostri Mediterranei" (Pise, circa 1200)* (Rome: École française de Rome, 1995). For a verbal description of a regional map, see Marino Sanudo's description of Pietro Vesconte's grid map of Palestine in Sanudo's *Liber secretorum fidelium crucis*: *The Book of the Secrets of the Faithful of the Cross*, trans. Peter Lock (London: Routledge, 2011), 392–98. The outstanding example from the Islamicate world is the influential ninth-century *Kitāb Ṣūrat al-arḍ* of al-Khwārazmī, which can be understood as a description of a map derived from Claudius Ptolemy's *Geographia*; see Jean-Charles Ducène, "Ptolemy's *Geography* in the Arabic-Islamic Context," in *Cartography between Christian Europe and the Arabic-Islamic World, 1100–1500: Divergent Traditions*, ed. Alfred Hiatt, 74–90 (Leiden: Brill, 2021), 78. Descriptions of a now lost map can be found in the works of both Ibn Saʿīd and al-ʿUmarī: Jean-Charles Ducène, "Quel est ce Kitāb al-Jughrāfiyā cité par al-ʿUmarī?," in *Egypt and Syria in the Fatimid, Ayyubid and Mamluk Eras*, ed. U. Vermeulen et al., 401–17 (Leuven: Peeters, 2016). For general discussion, see Patrick Gautier Dalché, "Maps in Words: The Descriptive Logic of Medieval Geography, from the Eighth to the Twelfth Century," in *The Hereford World Map*, ed. P. D. A. Harvey, 223–42 (London: British Library, 2006).

2. ʿAbd al-Raḥmān Ibn Khaldūn, *The Muqaddimah: An Introduction to History*, trans. Franz Rosenthal, 3 vols. (Princeton, NJ: Princeton University Press, 1958). See, for example, 1:120n77, 133n126a, 134n127, 137n135a, 144n155a, 149n163a.

3. See the final section of this article for bibliography and discussion.

4. H.-R. Idris, "Ibn Haldūn et la géographie," in *Maghreb et Sahara: Études géographiques offertes à Jean Despois*, 159–61 (Paris: Société de Géographie, 1973); Ali Oumlil, "ʿUmrān et géographie chez Ibn Khaldūn," *Bulletin de la Société d'histoire du Maroc* 4–5 (1972–73): 67–73; Charles Issawi, "Arab Geography and the Circumnavigation of Africa," *Osiris* 10 (1952): 117–28, esp. 125–27; Jenny Rahel Oesterle, "Arabische Darstellungen des Mittelmeers in Historiographie und Kartographie," in *Maritimes Mittelalter: Meere als Kommunikationsräume*, ed. Michael

relatively recently has attention been directed toward the role of al-Idrīsī's maps in shaping the *Muqaddima*'s geographical preface. Tarek Kahlaoui, in particular, has emphasized the importance of the *Nuzhat al-mushtāq* in imparting a more universalist framework on the *Muqaddima*. He rightly identifies the significance of al-Idrīsī's sectional maps for Ibn Khaldūn's geography, suggesting that the maps may have fed into the *Muqaddima*'s distinction between urban and desert spaces in general, and specifically between the life of city dwellers and that of nomads.[5] Kahlaoui's work constitutes a valuable advance on previous scholarship, which has not looked at Ibn Khaldūn's reading of the sectional maps in detail and has on occasion even given the impression that Ibn Khaldūn relied solely or primarily on al-Idrīsī's world map.[6] The following pages develop Kahlaoui's insights by considering the ways in which Ibn Khaldūn read al-Idrīsī's maps and text, as well as the points at which he inserted his own comments. This analysis reveals consistent patterns in the direction and detail of Ibn Khaldūn's reading, patterns apparently at odds with the emphases operating in the *Muqaddima* proper. The final section of this paper therefore returns to the question of the relationship between the geographical preface and the *Muqaddima* as a whole: was the former the manifestation of a jejune encyclopedism, a crucial element of the universalization of the author's outlook, or something else entirely?

The Geographical Preface to the *Muqaddima*

The geographical preface to Ibn Khaldūn's *Muqaddima* can be divided into three subsections. The first, termed by Rosenthal the "second prefatory discussion," begins with an account of the spherical shape of the earth, the relationship between water and dry land, the equator and its distance from the poles, and the extent of habitable earth north of the equator.[7] Drawing explicitly on Claudius Ptolemy's second-century CE *Geography* as well as the work of al-Idrīsī (which he terms the "Book of Roger"), Ibn Khaldūn briefly describes the division of the earth into seven climes, latitudinal bands covering the entire inhabited earth.[8] In an adaptation of the opening of al-Idrīsī's *Nuzhat al-mushtāq*, Ibn Khaldūn then outlines the extent of the Mediterranean Sea (*al-baḥr al-rūmī*) and the Indian Ocean as branches of the outer, encircling ocean. His description encompasses the Black Sea, the Adriatic (*baḥr al-Banādiqa*, or "sea of Venice"), the Red Sea (*baḥr al-Qulzum*), the Persian Gulf (*al-khalīj*

Borgolte and Nikolas Jaspert, 149–80 (Ostfildern: Thorbecke, 2016).

5. Tarek Kahlaoui, "Towards Reconstructing the *Muqaddimah* Following Ibn Khaldun's Reading of the Idrisian Text and Maps," *Journal of North African Studies* 13 (2008): 293–307; idem, *Creating the Mediterranean: Maps and the Islamic Imagination* (Leiden: Brill, 2018), esp. 172–78. See also idem, "The Maghrib's Medieval Mariners and Sea Maps: The *Muqaddimah* as a Primary Source," *Journal of Historical Sociology* 30 (2017): 43–56.

6. S. Maqbul Ahmad, "Cartography of al-Sharīf al-Idrīsī," in *The History of Cartography*, vol. 2, bk. 1, *Cartography in the Traditional Islamic and South Asian Societies*, ed. J. Brian Harley and David Woodward, 156–74 (Chicago: University of Chicago Press, 1992), 171.

7. ʿAbd al-Raḥmān Ibn Khaldūn, *al-Muqaddima*, ed. Abdesselam Cheddadi, 3 vols. (Casablanca: Bayt al-Funūn wa-l-ʿUlūm wa-l-Ādāb, 2005), 1:71–73; *Muqaddimah*, trans. Rosenthal, 1:94–97. All references to the Arabic text of the *Muqaddima* are to Cheddadi's edition, and all translations of the work are Rosenthal's unless otherwise indicated.

8. *Al-Muqaddima*, 1:73; *Muqaddimah*, trans. Rosenthal, 1:97.

al-akhḍar, or "Green Gulf"), the Caspian Sea (*baḥr Jurjān wa-Ṭabaristān*), and four major rivers of the world: the Nile, the Tigris, the Euphrates, and the Oxus.[9] A second subsection, the "supplementary note to the second prefatory discussion" in Rosenthal's translation, consists of a discussion of the geographical extent of human society and its confinement to a restricted part of the earth (essentially from the equator to the sixty-fourth parallel of latitude) because of the impossibility of habitation in areas of excessive heat or cold.[10] Here Ibn Khaldūn reprises some themes familiar from medieval European and Arabic-Islamic discussions of the climes. In Greek and subsequently Arabic-Islamic geography, each clime was characterized by certain physical features: the length of its longest day, the qualities of its climate, its peoples and notable cities, and, for some commentators, the influence of particular planets.[11] It was common to associate the central and more temperate climes with flourishing civilization while locating societies deemed more primitive in the apparently harsher outer climes, which were associated either with extreme heat or with intense cold. Ibn Khaldūn adopts an eccentric position in relation to this tradition, affirming that in the first two climes, those closest to the equator, there is indeed little *ʿumrān*—a term susceptible to various translations, generally implying habitation and urban development or, less neutrally, "civilization"—while asserting that all the other climes, including the sixth and the seventh, are conducive to *ʿumrān*.[12] At one point he even claims that the sixth and seventh climes support more *ʿumrān* than is to be found in the third, fourth, and fifth climes, because cold does less than heat to prevent "generation" (*takwīn*), which Ibn Khaldūn associates with moisture.[13] This schematization is in fact inconsistent with the description of the climes that follows, where al-Idrīsī's more standard model of the gradations of civilizations continues to operate, but it shows Ibn Khaldūn's tendency to disparage the far southern climes in favor of "the northern quarter" (*al-rubʿ al-shamālī*).

The third and by far longest subsection of the geographical preface to the *Muqaddima* is Ibn Khaldūn's description of the maps from al-Idrīsī's *Nuzhat al-mushtāq*. Here Ibn Khaldūn follows the unique format developed by al-Idrīsī and deployed in both his *Nuzhat al-mushtāq* and his less-known geographical work, the *Uns al-muhaj wa-rawḍ al-furaj* ("The entertainment of hearts and the meadows of contemplation").[14] This format retained

9. *Al-Muqaddima*, 1:73–78; *Muqaddimah*, trans. Rosenthal, 1:97–103; al-Idrīsī, *Opus geographicum sive "Liber ad eorum delectationem qui terras peragrare studeant,"* ed. E. Cerulli et al. (Naples: Istituto universitario orientale di Napoli, 1970–84), 9–13. All references to the text of the *Nuzhat al-mushtāq* are to this edition.

10. *Al-Muqaddima*, 1:78–89; *Muqaddimah*, trans. Rosenthal, 1:103–9.

11. For overviews, see Ernst Honigmann, *Die sieben Klimata und die poleis episēmoi: Eine Untersuchung zur Geschichte der Geographie und Astrologie im Altertum und Mittelalter* (Heidelberg: Winter, 1929); A. Miquel, "Iḳlīm," in *The Encyclopaedia of Islam*, 2nd ed., ed. H. A. R. Gibb et al. (Leiden: Brill, 1971), 3:1076–78; Alfred Hiatt, "The Transmission of Theoretical Geography: Maps of the *Climata* and the Reception of *De causis proprietatum elementorum*," in Hiatt, *Cartography*, 40–72.

12. *Al-Muqaddima*, 1:79; *Muqaddimah*, trans. Rosenthal, 1:103–4.

13. *Al-Muqaddima*, 1:82; *Muqaddimah*, trans. Rosenthal, 1:107.

14. For the *Uns al-muhaj*, see the partial edition of Jean-Charles Ducène, *L'Afrique dans le "Uns al-muhağ wa-rawḍ al-furağ" d'al-Idrīsī* (Leuven: Peeters, 2010), and the facsimile edition *The Entertainment of Hearts and Meadows of Contemplation: Uns al-muhaj wa-rawḍ al-furaj*, ed. Fuat Sezgin (Frankfurt am Main: Institute for

the traditional division of the known world into seven climes, commencing around the equator and proceeding north to the vicinity of the Arctic Circle. Al-Idrīsī's innovation to this ancient scheme was to subdivide each clime into ten longitudinal sections, with the result that the description of the entire inhabited world comprises seventy contiguous sections.[15] In the *Nuzhat al-mushtāq*, the maps of these sections appear at the start of each chapter and are followed by a verbal description of the relevant territory, often with a wealth of detail not represented on the maps. All of the sections in the *Nuzhat al-mushtāq* were supposed to be accompanied by a map, with the exception of section 7.10 (i.e., the tenth section of the seventh clime), which consisted entirely of ocean. Although most of the surviving manuscripts of the *Nuzhat al-mushtāq* are incomplete, it is clear that in at least some instances the scheme of the text and sectional maps was realized.[16] Clearly one such complete manuscript was available to Ibn Khaldūn, since he was able to describe the sectional maps while drawing on al-Idrīsī's accompanying text.

It is generally agreed that Ibn Khaldūn's description of al-Idrīsī's maps belongs to the final stage of his revisions to the *Muqaddima*, made in Cairo in or shortly before 1402.[17] He had started the work in the Maghrib, presenting an initial version to the Hafsid sultan Abū al-ʿAbbās Aḥmad II in Tunis in the hijri year 783 (1381 CE).[18] But it is clear that Ibn Khaldūn made substantial revisions to the *Muqaddima* after his arrival in Cairo in 1383, resulting in a "middle" version, which was presented to the Mamluk sultan al-Ẓāhir Barqūq around 1390, and a "late" version, completed by 1402 but subject to revision at least up to 1404.[19] This late version, represented most authoritatively by the manuscript in Istanbul's Aṭif Efendi Library (MS 1936), contains a note in Ibn Khaldūn's hand, which asserts that it is more correct than other versions of the text. Its numerous additions to the earlier versions of the *Muqaddima* include a copy of the world map that appears in manuscripts of al-Idrīsī's *Nuzhat al-mushtāq* and the lengthy description of the seventy sections of the inhabited world, based on al-Idrīsī's sectional maps.

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the History of Arabic-Islamic Science, 1984).

15. In the *Uns al-muhaj*, al-Idrīsī added an eighth clime, beneath the equator, thereby increasing the number of sections and sectional maps.

16. Complete or nearly complete manuscripts of the *Nuzhat al-mushtāq* are found in Paris, Bibliothèque nationale de France, MS arabe 2221 (world map and sixty-eight regional maps, ca. 1300 CE); Istanbul, Süleymaniye Kütüphanesi, Ayasofya, MS 3502 and St. Petersburg, National Library of Russia, MS Ar. n.s. 176 (sixty-six regional maps and two half maps, from the first half of the fourteenth century); Istanbul, Köprülü Kütüphanesi, MS 955 (world map and sixty-three regional maps, copied in AH 873/1469 CE); Oxford, Bodleian Library, MS Pococke 375 (world map and sixty-nine regional maps, copied in AH 960/1553 CE); Sofia, SS. Cyril and Methodius National Library, MS Or. 3198 (world map and sixty-nine regional maps, copied in AH 963/1556 CE).

17. *Muqaddimah*, trans. Rosenthal, 1:lxxxviii–xcix, esp. xcvi–xcvii; ʿAbd al-Raḥmān Ibn Khaldūn, *Le livre des exemples*, ed. and trans. Abdesselam Cheddadi, 2 vols. (Paris: Gallimard, 2002), 1:1292–1304; Kahlaoui, "Towards Reconstructing the *Muqaddimah*," 294–97.

18. Ibn Khaldūn, *Le livre des exemples*, 1:1294. Cf. *Muqaddimah*, trans. Rosenthal, 1:cv.

19. Ibn Khaldūn, *Le livre des exemples*, 1:1295–97. Cf. *Muqaddimah*, trans. Rosenthal, 1:xciii–xcviii, where Rosenthal notes that MS Bursa, Hüseyin Çelebi, 793, dated to 1404, shows Ibn Khaldūn continuing to make revisions to the text.

No definite identification of the manuscript(s) of the *Nuzhat al-mushtāq* used by Ibn Khaldūn is possible. It is evident that he was working with a copy that resembled the oldest surviving manuscript of al-Idrīsī's text (Paris, BnF MS ar. 2221, ca. 1300). At the same time, some of Ibn Khaldūn's descriptions of the maps are closer to a related but distinct line of transmission of the *Nuzhat al-mushtāq*, one represented by the fourteenth-century manuscript divided between Istanbul (Ayasofya, MS 3502) and St. Petersburg (National Library of Russia, MS Ar. n.s. 176) and later copies of its version.[20] Nor can it be established whether Ibn Khaldūn first encountered al-Idrīsī's *Nuzhat al-mushtāq* in Tunis, as has been conjectured,[21] or, as more often thought, in Cairo,[22] where manuscripts of the *Nuzhat al-mushtāq* were certainly in circulation during his stay.[23] In the final analysis, the more significant question concerns what Ibn Khaldūn did with al-Idrīsī's work when he got to it—how he read it, rather than when or where he did so. Accordingly, the following analysis of Ibn Khaldūn's reading of al-Idrīsī's *Nuzhat al-mushtāq* begins with an overview of Ibn Khaldūn's method of description of al-Idrīsī's maps. It then examines his sparse interjections in his report of al-Idrīsī's material and considers the moments at which he draws on al-Idrīsī's verbal description of the climes.

Ibn Khaldūn Reads al-Idrīsī I: The Maps

The governing proposition in the following discussion is that Ibn Khaldūn's description of the various sections of the climes in the *Muqaddima* relies primarily on the *Nuzhat al-mushtāq*'s maps, and only secondarily on its text. The basis for this proposition is that time after time, Ibn Khaldūn's description corresponds quite precisely with the maps in manuscripts of the *Nuzhat al-mushtāq*. By contrast, not only does the order in which he presents information differ notably from the *Nuzhat al-mushtāq*'s text, but much material from the latter does not appear in the *Muqaddima* at all. Other, seemingly minor details clinch the case. Ibn Khaldūn frequently refers to features in the northeast or northwest "corner" (*zāwiya*) of a section, a locution not present in al-Idrīsī but a natural mode of

20. These later copies are MS Köprülü 955, MS Pococke 375, and MS Sofia Or. 3198. For example, Ibn Khaldūn's description of the *jabal al-muqaṭṭam* (in the upper Nile) as a barrier accords better with sectional map 2.4 in MS Ayasofya 3502 than it does with MS BnF ar. 2221, which does not show a long vertical barrier; the sectional map 5.2 in MS BnF ar. 2221 lacks a reference to "Qalūriya" (Calabria), which appears in the *Muqaddima*'s description of Italy as well as in MS St. Petersburg Ar. n.s. 176; and in section 5.6, the city of "Sul" is mentioned in Ibn Khaldūn's description and in maps in the tradition of the St. Petersburg manuscript but not in MS BnF ar. 2221. I am grateful to Nil Palabiyik for facilitating access to digital copies of manuscripts of the *Nuzhat al-mushtāq* and the *Muqaddima* held in Istanbul libraries.

21. Kahlaoui, "Towards Reconstructing the *Muqaddimah*," 297.

22. Ibn Khaldūn, *Le livre des exemples*, 1:1299–1300; Jean-Charles Ducène, "Les œuvres géographiques d'al-Idrīsī et leur diffusion," *Journal asiatique* 305 (2017): 33–41, at 35; *Muqaddimah*, trans. Rosenthal, 1:xcvi.

23. Five of the surviving manuscripts of the *Nuzhat al-mushtāq* have their first localization in Cairo, including MS BnF ar. 2221 (though its place of copying is unknown and its script is *maghribī* rather than *naskhī*) as well as Istanbul, MS Ayasofya 3502 + St. Petersburg MS Ar. n.s. 176, and Oxford, MS Pococke 375: Ducène, "Les œuvres géographiques," 35–36.

description for someone looking at a rectangular map.[24] He also sometimes characterizes a feature such as a sea, a stretch of land, or an island as "round," "triangular," or more often "oblong" (*mustaṭīl*), when there is no corresponding adjective in al-Idrīsī's text, again suggesting that he was looking at the shape on a map.[25] Similarly, on at least two occasions Ibn Khaldūn describes a feature as situated to the right of another—a "right" and a "left" branch of the Nile in section 2.4, and an area "to the right of the mountain passes" in section 4.5—using a locution that does not appear in the *Nuzhat al-mushtāq*'s verbal description but is consistent with someone viewing a south-oriented map.[26] Finally, Ibn Khaldūn frequently begins the description of a section by referring to the amount of space taken up by the sea (e.g., "Most of the third section of the seventh clime is covered by water, except for an oblong portion in the south that is wider in its eastern part").[27] This formulation, too, points to a map as its basis, rather than al-Idrīsī's verbal description, in which the proportion of water to land in a section is not usually mentioned.

The point that Ibn Khaldūn primarily used the maps rather than the text of the *Nuzhat al-mushtāq* is significant as much for what he omitted from his description as for what he included. The material that is present in the text of al-Idrīsī's monumental work but not evident in the maps or in Ibn Khaldūn's description includes a wealth of historical detail and contextual information, anecdotes, marvels, nuggets of natural science, and the many itineraries that shape al-Idrīsī's description and inform his maps. I will return to the implications of at least some of these omissions at the conclusion of this article, but for now it is worth noting that Ibn Khaldūn's decision to prioritize the visual representation of geographical space over its verbal equivalent produced a far more compact description than would otherwise have been the case, one that emphasized topographic and sometimes ethnic detail without drawing connections to historical context or to human passage between places.

Ibn Khaldūn's approach to reading al-Idrīsī's sectional maps varied depending on the complexity of the map and his level of interest in it, but certain general characteristics can be identified. Once Ibn Khaldūn begins his detailed account of the climes, he follows methodically the pattern established by the *Nuzhat al-mushtāq*. He starts with the first section of the first clime and works his way through all seven climes, moving along each clime from the far west (section 1) to the far east (section 10). Al-Idrīsī's sectional maps typically extend across a single opening, or two pages, of a manuscript. In all cases, Ibn Khaldūn read the map with south at top, conforming to the standard orientation of Arabic maps, and he routinely started by describing what he found in the top right (southwest) corner. From that entry point, in a narrow majority of cases he then read the right-hand

24. See, for example, *al-Muqaddima*, 1:112, 114, 115, 120, 122, 123, 124, 125.

25. *Al-Muqaddima*, 1:94 (Sarandīb, "round"), 96 (triangular section), 106 (oblong section of ocean), 109 (Crete, "oblong"), 115 (triangular section of land), 122 (oblong section of land; oblong section of ocean), 124 (oblong section of land), 126 (oblong land; round island), 127 (Norway, oblong).

26. Ibid., 1:96, 110: *wa-ammā al-durūb, fa-ʿan yamīnihā.*

27. Ibid., 1:126: *wa-l-juzʾ al-thālith min hādhā al-iqlīm maghmūr aktharuhu bi-l-baḥr illā qiṭʿa mustaṭīla fī janūbihi, wa-tattasiʿu fī sharqihā*; *Muqaddimah*, trans. Rosenthal, 1:164, slightly modified.

page, or western half of the map, from the south to the north, before moving to the left-hand page, or eastern half, again reading from the top to the bottom of the page—that is, south to north. Often, however, Ibn Khaldūn's descriptions move from west to east along an upper plane, covering roughly half of the map, before returning to the lower half to read again from west to east. In either case, Ibn Khaldūn read from south to north and from west to east, usually ending his description of each section in the lower left (northeast) corner. The general direction, from right to left and from top to bottom, mimics the standard mode of reading Arabic text. That said, his descriptions of the maps show a generally sensitive and flexible response to the material. Frequently, description of the courses of natural features, especially rivers, mountain ranges, seas, and coastlines takes precedence over unidirectional reading patterns.

Space does not permit analysis of all of Ibn Khaldūn's map descriptions, but the essential aspects of his reading practice will be evident from an examination of three selected sections, 3.9, 4.6, and 5.2, each of which shows him treating the material in front of him in a different way but to the same overall end. I have selected these sections because their primary source is undoubtedly al-Idrīsī's maps and because they are broadly representative of Ibn Khaldūn's handling of different regions—East Asian, Islamic, and western European—and different configurations of space within the central climes. Although I refer to each sectional map in the singular, my discussion is based on the extant copies of al-Idrīsī's maps from the two main lines of transmission mentioned earlier. Any conclusions drawn from Ibn Khaldūn's descriptions of the maps must, of course, be tested against his descriptions of the outer climes and other maps within the central climes.

Sectional map 3.9 in al-Idrīsī's *Nuzhat al-mushtāq* is, at least by comparison with other maps in the volume, a relatively simple image (see Figs. 1a and 1b).[28] At the far east of the third clime, it encompasses lands inhabited by nomadic Turkic peoples, Tibet, parts of China, mountains, a lake, and several rivers. Ibn Khaldūn's reading of the image begins in the southwest corner, where he observes the land of Tibet extending to the middle of the section. Noting that India (*al-Hind*) lies to the south, he progresses to the southeast of the map, where he finds part of China (*al-Ṣīn*). He then moves to the lower (northern) plane of the map, identifying in the west a land that he reads as "al-Khazl.khiyya," which probably corresponded to *bilād al-kharlukhiyya min al-atrāk* ("land of Kharlukhiyya of the Turks") on al-Idrīsī's map.[29] Ibn Khaldūn then notes the connection of this region to the "land of Farghāna," which appeared on sectional map 3.8. Finally, moving east along the lower half of the map, he identifies the "land of al-Tughuzghuz of the Turks."[30] Notable here is the absence of any reference to a city or attempt to describe a natural feature. Instead, the reading is relatively cursory, essentially restricted to the regional names identified on the map.

28. MS BnF ar. 2221, fols. 178v–179r; MS Ayasofya 3502, pp. 317–18; MS Köprülü 955, fols. 149v–150r; MS Pococke 375, fols. 162v–163r; MS Sofia Or. 3198, fols. 161v–162r.

29. *Al-Muqaddima*, 1:105; cf. *Le livre des exemples*, 1:1312n45. Presumably a copying error has replaced the letter *rāʾ* (ر) in *kharlukhiyya* with a *zayn* (ز) to yield *khazlukhiyya*. Rosenthal notes two other variants, "al-Khazlajiyya" and "al-Ḥazlajiyya," which could be explained by a similar conversion of the *khāʾ* (خ) into either a *ḥāʾ* (ح) or a *jīm* (ج): *Muqaddimah*, trans. Rosenthal, 1:103n38.

30. *Al-Muqaddima*, 1:105.

Fig. 1a. Sectional map 3.9 in al-Idrīsī, *Nuzhat al-mushtāq fī ikhtirāq al-āfāq*. MS Paris, BnF, ar. 2221, fols. 178v–179r. South at top. The map shows four regions, three (including Tibet) inhabited by Turkic peoples, along with part of China (*al-Ṣīn*) in the southeast.

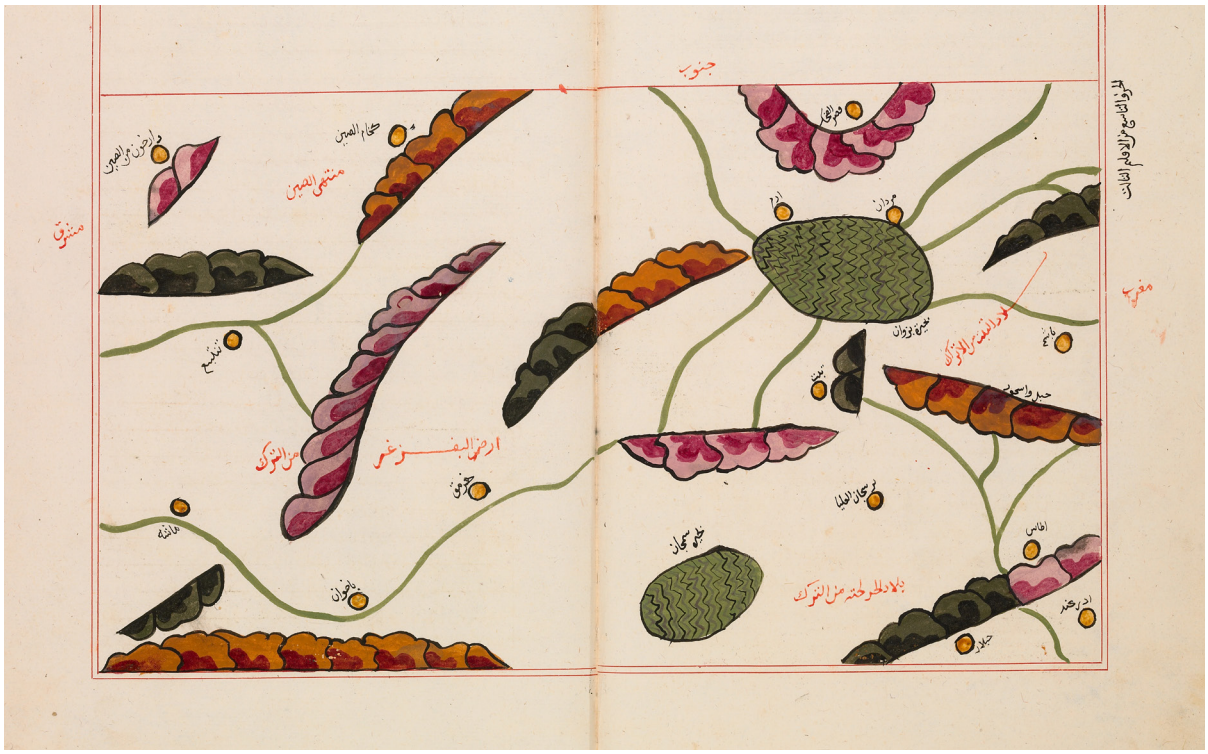

Fig. 1b. Sectional map 3.9 in al-Idrīsī, *Nuzhat al-mushtāq fī ikhtirāq al-āfāq*. MS Oxford, Bodleian Library, Pococke 375, fols. 162v–163r. South at top.

Fig. 2a. Sectional map 4.6 in al-Idrīsī, *Nuzhat al-mushtāq fī ikhtirāq al-āfāq*. MS Paris, BnF, ar. 2221, fols. 227v–228r. South at top. The map is dominated by a mountain range labeled in the north jabal Bārimmā (modern Zagros Mountains). In the west appears Iraq, including upper Mesopotamia, with the Tigris (*Dijla*) and the Euphrates (*al-Furāt*) meeting at Baghdad. To the east of the mountains are "al-Bahlūs" (now western Iran) in the south and Azerbaijan and Armenia in the north.

Fig. 2b. Sectional map 4.6 in al-Idrīsī, *Nuzhat al-mushtāq fī ikhtirāq al-āfāq*. MS Oxford, Bodleian Library, Pococke 375, fols. 211v–212r. South at top.

Fig. 3a. Sectional map 5.2 in al-Idrīsī, *Nuzhat al-mushtāq fī ikhtirāq al-āfāq*. MS Paris, BnF, ar. 2221, fols. 260v–261r. South at top. The map shows the south and east of France from Toulouse (top right) to Burgundy (bottom right), separated by the Alps (*jabal Munt Jūn*) from northern and central Italy, located between the Mediterranean (top) and Adriatic (bottom) Seas.

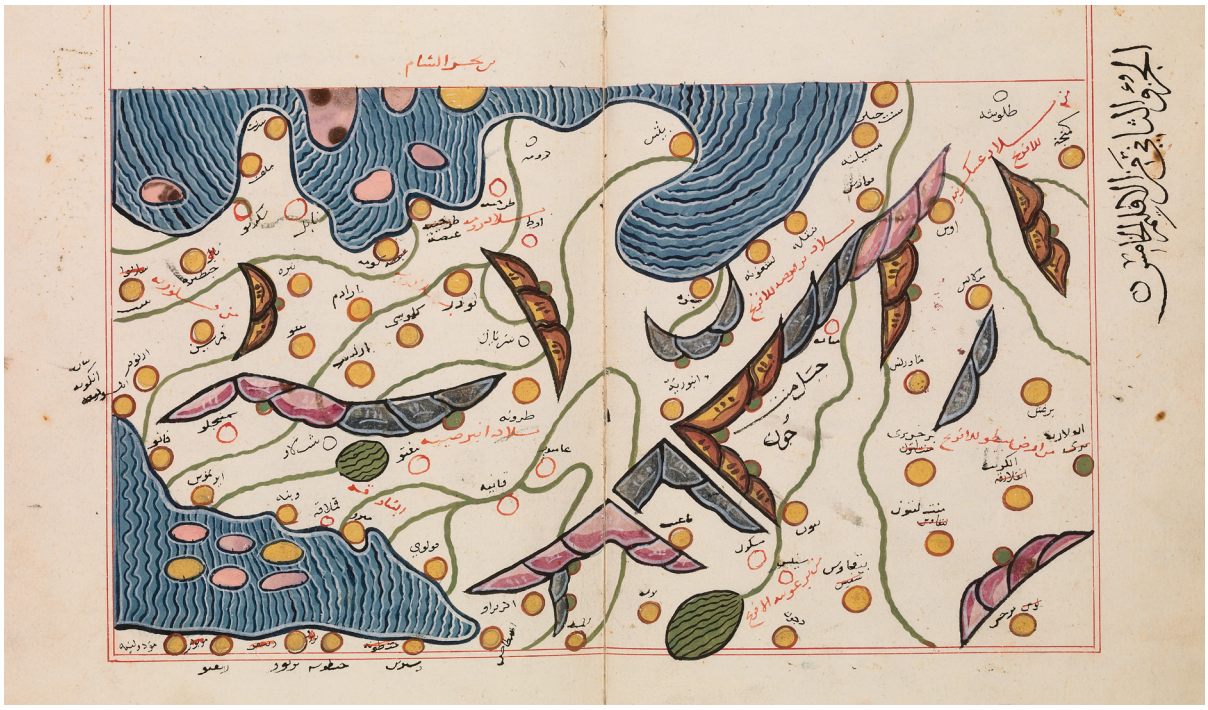

Fig. 3b. Sectional map 5.2 in al-Idrīsī, *Nuzhat al-mushtāq fī ikhtirāq al-āfāq*. MS Oxford, Bodleian Library, Pococke 375, fols. 243v–244r. South at top.

Sectional map 4.6 in al-Idrīsī's *Nuzhat al-mushtāq* (Figs. 2a and 2b) differs in notable ways from the map of section 3.9. It represents lands more familiar to Ibn Khaldūn's audience, comprising most of Iraq and parts of Armenia, Azerbaijan, and lands inhabited by the Kurds.[31] It has a prominent mountain range and an elaborate hydrography in the form of the Tigris and Euphrates river systems. Ibn Khaldūn begins his description of the map as usual in the southwest corner, noting the *bilād al-jazīra* (upper Mesopotamia) in the west and the large portion of Iraq occupying the map. But he swiftly moves to the "mountain of Iṣfahān" and describes its course across the map from the south in a northwesterly direction, consequently dividing the map into a western and an eastern section.[32] Ibn Khaldūn then provides a relatively lengthy description of the map's depiction of the Euphrates up to the point at which the river reaches Baghdad, after which he switches his attention to the route of the Tigris, observing its passage through Mosul and Takrīt, to Baghdad, and finally to the Persian Sea at ʿAbbādān in the third clime.[33] Turning to the eastern side of the map, Ibn Khaldūn works his way from south to north, noting various regions (al-Bahlūs, Nahāwand, Shahrazūr, al-Dīnawar) before reaching Armenia and what he identifies as its capital (*qāʿidathā*), al-Marāgha, as well as the nearby mountain, "Bārimmā, the dwelling places (*masākin*) of the Kurds" (following the inscription that appears on the map in MS St. Petersburg Ar. n.s. 176 and its derivatives).[34] Ibn Khaldūn closes the description by noting the presence of part of Azerbaijan in the section's northeast and a portion of the "sea of the Khazars" (*baḥr al-Khazar*), which he mistakenly identifies as part of the Black Sea.[35] His reading of this section follows the west-to-east and south-to-north pattern evident in other sections, but its central axes are the mountain range that divides the map and the Tigris and Euphrates river network that dominates it. Beyond Iraq, the focus of the reading returns to regional and ethnic divisions, once again with a notable lack of interest in identifying cities except as capitals or as markers of the passage of rivers.

Sectional map 5.2 in al-Idrīsī's *Nuzhat al-mushtāq* (Figs. 3a and 3b) extends across a large swathe of southern France, Burgundy, and northern and central Italy, as far as Rome and Naples. It shows the Alps running diagonally across the center of the map, a part of the Mediterranean Sea in the south, and part of the Adriatic Sea in the northeast of the image.[36] Ibn Khaldūn begins his description by noting Gascony in the southwest tip of the map, then moving north to Poitou and what may be "Bourges."[37] He notes an incursion of

31. MS BnF ar. 2221, fols. 227v–228r; MS St. Petersburg Ar. n.s. 176, fols. 43v–44r; MS Pococke 375, fols. 211v–212r; MS Sofia Or. 3198, fols. 206v–207r. The map is missing from MS Köprülü 955.

32. *Al-Muqaddima*, 1:111.

33. Ibid., 1:111–12.

34. Ibid., 1:112.

35. Ibid., 1:112.

36. MS BnF ar. 2221, fols. 260v–261r; MS St. Petersburg Ar. n.s. 176, fols. 75v–76r; MS Köprülü 955, fols. 231v–232r; MS Pococke 375, fols. 243v–244r; MS Sofia Or. 3198, fols. 236v–237r. On this section, see Wilhelm Hoenerbach, *Deutschland und seine Nachbarländer nach der großen Geographie des Idrīsī, gest. 1162 (Sektionen V-2 und VI-2)* (Stuttgart: Kohlhammer, 1938).

37. *Al-Muqaddima*, 1:116. The Arabic *b.r.gh.sh* does not seem to match any inscription on al-Idrīsī's sectional

the Mediterranean that "projects into this section like a molar" (*dakhalat fī hādhā al-juzʾ ka-l-ḍirs*).[38] At the base of the "molar" is Genoa, and to the north of that city lie the Alps (*jabal Munt Jūn*) and Burgundy. To the east of Genoa, another inlet of the Mediterranean forms a peninsula, with Pisa on its western side and Rome, "the capital of the European Christians and the residence of the pope, their highest religious dignitary," on the east.[39] Ibn Khaldūn's account of Rome at this point is one of the longest passages devoted to a city in his description of al-Idrīsī's maps, and it derives entirely from the relatively formulaic presentation in the text of the *Nuzhat al-mushtāq*.[40] After describing Rome, Ibn Khaldūn notes Lombardy to its north, Naples and Calabria to its east (where they appear on al-Idrīsī's maps), and finally the Gulf of Venice in the map's northeast corner.[41] His reading of al-Idrīsī's map is far from comprehensive, offering just a cursory description of France and Burgundy. By contrast, in Italy, the politically and economically powerful cities of Genoa, Pisa, and Venice are duly noted, and Rome is given especial prominence. This section shows Ibn Khaldūn drawing on the text of al-Idrīsī's *Nuzhat al-mushtāq* for the description of Rome, but the comparison of an inlet of the Mediterranean to a tooth appears to be his own observation, the only such comparison in his reading of al-Idrīsī's maps. In sharp contrast to his description of sectional map 4.6, Ibn Khaldūn here makes no attempt to describe river courses, and he makes only passing mention of the Alps, a dominant feature on the right (western) half of the map. Instead, his focus is on regions (Gascony, Poitou, Burgundy, Lombardy, Calabria), cities, and seas.

A key difference between the descriptions of these three maps in the *Muqaddima* concerns the number of cities mentioned, a significant point given the centrality of the city to Ibn Khaldūn's thinking about history. The description of sectional map 3.9 does not mention a single city, although al-Idrīsī's map contains twelve cities in MS BnF ar. 2221 (Fig. 1a) and fifteen in MS Pococke 375 (Fig. 1b) and other manuscripts in its line (subsequent figures for al-Idrīsī's maps cite MS BnF ar. 2221 first, followed by MS Pococke 375).[42] Similarly, Ibn

map; Cheddadi suggests Bourges or Périgueux at 116n80, whereas Rosenthal posits a probable confusion with Burgos in *Muqaddimah*, trans. Rosenthal, 1:151n170. Another possibility is that Ibn Khaldūn misread Burgundy in the lower right corner of al-Idrīsī's map.

38. *Al-Muqaddima*, 1:116; *Muqaddimah*, trans. Rosenthal, 1:151, modified ("tooth").

39. *Al-Muqaddima*, 1:116: *kursī malik al-Ifranja wa-maskan al-bābā, buṭrukuhum al-aʿẓam*; *Muqaddimah*, trans. Rosenthal, 1:151.

40. *Al-Muqaddima*, 1:116–17; *Nuzhat al-mushtāq*, V.2.47–54 (751–52). References to the *Nuzhat al-mushtāq* identify the number of the clime in Roman numerals and the number of the section in Arabic numerals, followed by paragraph number(s) and, in parentheses, page number(s) in the edition of Cerulli et al. For commentary, see Jean-Charles Ducène, *L'Europe et les géographes arabes du Moyen Âge (IXe–XVe siècle)* (Paris: CNRS, 2018), 201; Daniel König, *Arabic-Islamic Views of the Latin West: Tracing the Emergence of Medieval Europe* (Oxford: Oxford University Press, 2015), 243–44.

41. *Al-Muqaddima*, 1:117; cf. Giuseppe Mandalà, "La Longobardia, i Longobardi, e Pavia nei geografi arabo-islamici nel medioevo," *Aevum* 88 (2014): 331–86.

42. The numbers given for these manuscripts are intended only to be indicative of what Ibn Khaldūn might have had before him when looking at the maps of the *Nuzhat al-mushtāq*. The number of cities shown on the maps varies, sometimes considerably, from exemplar to exemplar, with MS BnF ar. 2221 generally containing

Khaldūn's rendition of sectional map 5.2 notes a mere eight cities, against the hundred in MS BnF ar. 2221 (Fig. 3a) and sixty-eight in MS Pococke 375 (Fig. 3b). But a different picture emerges in the description of sectional map 4.6. There Ibn Khaldūn mentions no fewer than thirty cities, more than a third of the eighty-four cities on this map in MS BnF ar. 2221 (Fig. 2a) and more than half of the fifty-five cities included in MS Pococke 375 (Fig. 2b). This pattern is broadly consistent across the other sectional maps, with cities in North Africa, al-Andalus, Syria, and Iraq far more likely to be noted than urban settlements in East Asia or Christian Europe. For the Maghrib (section 3.1), Ibn Khaldūn mentions twenty out of the sixty-five (BnF) or fifty-six (Pococke) cities on al-Idrīsī's maps; in Ifrīqiya and Libya (3.2), fourteen out of thirty-three or thirty-four. The highest percentages are connected to sectional maps 3.5 (Syria, 27 out of 44/41 cities mentioned) and 4.1 (al-Andalus, 57 out of 78/80 cities). The stark contrast with lands outside of the Arabic-Islamic regions is best illustrated by the figures for the map of al-Hind (2.7), where just a single city (Mulṭān) is mentioned out of a possible forty-two or thirty-nine, and the map of central Europe (6.2), with just one city noted out of seventy-four or fifty-five—and the one toponym mentioned, Aquileia, may better be considered a regional name. In these areas, Ibn Khaldūn habitually highlights not cities but the names of regions, which frequently refer to an ethnic group. Two obvious reasons could explain this dichotomy. The first is that Ibn Khaldūn was simply more familiar with city names in lands with significant Arabic-Islamic populations and was therefore more inclined to read and record them. The second possibility is that he had a greater interest in these spaces than he did in non-Muslim parts of the world. Nevertheless, some anomalies remain. Ibn Khaldūn mentions relatively few cities in Egypt, for example, naming just eighteen out of the seventy-two or fifty-two settlements that appear along the course of the Nile in al-Idrīsī's maps. Nor does he mention a large percentage of the cities in Arabia, listing just ten out of the forty-four or forty-three cities or towns in al-Idrīsī's sectional maps 2.5 and 2.6, which contain the bulk of the Arabian Peninsula.

The description of the Nile, however, is consistent with a key aspect of Ibn Khaldūn's reading practices. As has been noted by Kahlaoui, Ibn Khaldūn repeatedly connects the *Nuzhat al-mushtāq*'s sectional maps by describing a natural feature, such as a river, sea, or mountain range, that extends across several maps.[43] Examples include the Indian Ocean (sectional maps 1.6–10), the Mediterranean (3.1, 4.1), the mountains of Astarābādh (3.8, 4.7, 4.8), mountain chains around the Caspian Sea (5.6, 5.7), the Qūfāyā mountains (5.9, 6.9), and the Volga River (6.8). Representative of this feature is the following outline of the Adriatic Sea and the Hellespont. This passage is found at the start of Ibn Khaldūn's description of the fourth clime, but it ranges into the third, fifth and sixth climes and across the first six sections of the climes, providing a highly accurate description of the hydrography of al-Idrīsī's maps:

a higher count except where affected by damage to the manuscript, as in its map of section 4.1, in which the northern coast of Africa is missing.

43. Kahlaoui, "Towards Reconstructing the *Muqaddimah*," 300.

ويخرج من هذا البحر الرومي عند آخر الجزء الثالث منه وفي الجزء الثالث من الإقليم الخامس خليج البنادقة، يذهب إلى ناحية الشمال، ثم ينعطف عند وسط الجزء من جوفيه، ويمر مغربًا إلى أن ينتهي في الجزء الثاني من الخامس. ويخرج منه أيضًا في آخر الجزء الرابع شرقًا من الإقليم الخامس خليج القسطنطينة، يمر في الشمال متضايقًا في عرض رمية السهم إلى آخر الإقليم. ثم يفضي إلى الجزء الرابع من الإقليم السادس، وينعطف إلى بحر نِيطِش ذاهبًا إلى الشرق في الجزء الخامس كله ونصف السادس من الإقليم السادس . . .

At the end of the third section of the fourth clime and in the third section of the fifth clime, the Adriatic Sea branches off from the Mediterranean. It runs in a northern direction, then turns westward in the northern half of the section, and finally ends in the second section of the fifth clime. At the eastern boundary of the fourth section of the fifth clime, the Strait of Constantinople branches off from the Mediterranean. In the north, it makes a narrow passage only an arrow shot in width, extending up to the boundary of the clime and on into the fourth section of the sixth clime, where it turns into the Black Sea, running eastward across the whole of the fifth, and half of the sixth, sections of the sixth clime . . .[44]

The extract above—lifeless on the page, but vital when read alongside the maps it describes—follows the Adriatic across al-Idrīsī's sectional maps 4.3, 5.3, and 5.2, then tracks the passage of the Hellespont from map 5.4 to the Black Sea in 6.4, extending across maps 6.5 and 6.6. One is struck by the rapidity with which Ibn Khaldūn was able to expand his methodical trawl through al-Idrīsī's maps to move from a close regional focus to the supra- and cross-regional description of the Mediterranean basin and its connection to the Black Sea. It is tempting to speculate that such reading might have been facilitated by having all of the sectional maps assembled alongside each other, outside of the codex, but there is nothing to prove that Ibn Khaldūn viewed them in that way.

This example not only shows Ibn Khaldūn's interest in reading across al-Idrīsī's sectional divisions but also demonstrates the support the maps of the *Nuzhat al-mushtāq* provide for such reading practices. As Zayde Antrim has noted, the careful copying of the *Nuzhat al-mushtāq*'s maps preserved a scheme that actively promoted the connection of regional images through inscriptions, as well as the representation of mountains, rivers, seas, and lakes that crossed the work's essentially arbitrary divisions.[45]

Ibn Khaldūn Reads al-Idrīsī II: Additions and Interventions

One way of testing the above observations of Ibn Khaldūn's reading practices is to consider his use of the text of the *Nuzhat al-mushtāq* as well as the relatively rare interventions based on his own knowledge that appear in his descriptions of al-Idrīsī's maps. It should first be noted that Ibn Khaldūn commences his distillation of al-Idrīsī with an atypically long interjection in the form of a valuable commentary on European navigation in the Atlantic Ocean, based on the testimony of Canary Islanders who had been enslaved by Europeans

44. *Al-Muqaddima*, 1:106–7; *Muqaddimah*, trans. Rosenthal, 1:139–40, with the anachronistic and confusing translation of *iqlīm* as "zone" modified to "clime" throughout.

45. Zayde Antrim, *Mapping the Middle East* (London: Reaktion, 2018), 40–41.

and had subsequently found their way to the Maghrib.[46] Here Ibn Khaldūn clarifies that European mariners did not rely on sea charts to navigate in the Atlantic, as they did in the Mediterranean.

Ibn Khaldūn's subsequent interventions can mostly be divided into two categories. The first type of intervention consists of remarks about particular ethnic groups. Such remarks in general add information and occasionally make a critical judgment about a people. In the first clime, Ibn Khaldūn comments on the meager diet and cannibalism of the Lamlam, suggesting that they are subhuman—a remark repeated later in the *Muqaddima*.[47] Berbers, as Ibn Khaldūn calls the Amazigh peoples of northern Africa, feature in two comments: in the second clime Ibn Khaldūn locates the veiled Ṣanhāja (*al-mulaththamīn min Ṣanhāja*), while in the first section of the third clime he enumerates the various peoples (*umam*) of the region and alerts the reader that further discussion of them will come later in his *Kitāb al-ʿIbar*.[48] At the eastern end of the climes, Ibn Khaldūn notes "the domains of innumerable Turkic peoples" (*majālāt li-l-turk umam lā tuḥṣī*) in the tenth section of the third clime and inserts brief remarks on Turks in the sixth and seventh climes.[49] The only comment referring to a group of people in the Levant is an updating of an inscription on al-Idrīsī's maps concerning the sect of the "Assassins" in the fifth section of the fourth clime, to the effect that "at this time they are known as the Fidāwiyya" (*wa-yaʿrifūn li-hādhā al-ʿahd bi-l-fidāwiyya*), in addition to al-Idrīsī's term, *al-ḥashīshiyya*.[50]

This remark also represents a second, relatively rare, category of intervention: the updating of information provided in the *Nuzhat al-mushtāq*. Most such updates refer to changes in the control of territory. Two areas, in particular, attracted Ibn Khaldūn's attention: Africa south of the Maghrib and the Byzantine realm. In his description of the first three sections of the first clime, drawing on contemporary sources,[51] Ibn Khaldūn notes that since al-Idrīsī's time, the Mālī have taken control of cities on the western "Nile"; they now hold territory assigned by al-Idrīsī to the Ṣāliḥ dynasty and have made incursions into the land of the Gawgaw, leaving the area devastated.[52] In the fourth and fifth climes, he

46. *Al-Muqaddima*, 1:89–90; see Kahlaoui, "Maghrib's Medieval Mariners."

47. *Al-Muqaddima*, 1:91, 133; 2:294.

48. Ibid., 1:95, 98.

49. Ibid., 1:106, 124, 127.

50. Ibid., 1:110.

51. *Muqaddimah*, trans. Rosenthal, 1:118n67. Rosenthal states that Ibn Khaldūn's information on the Mālī derives from Ibn Saʿīd, but the sources he cites in support (Max Meyerhof, "An Early Mention of Sleeping Sickness in Arabic Literature," *Proceedings of the Royal Society of Medicine* 30, no. 6 [1937]: 670–71; idem, "An Early Mention of Sleeping Sickness in Arabic Chronicles," *Journal of the Royal Egyptian Medical Association* 24 [1941]: 284–86) do not mention Ibn Saʿīd; instead, they note that the information was shared with Ibn Khaldūn's contemporary, the prolific encyclopedist al-Qalqashandī, whose *Kitāb Ṣubḥ al-aʿshā* contains a lengthy account of the geographical reach of the Mālī.

52. *Al-Muqaddima*, 1:91. Al-Idrīsī showed a western branch of the Nile (the *nīl al-Sūdān*) extending from the Egyptian Nile as far as the west coast of Africa. The representation of a western Nile derived from ancient sources and was widespread in both Arabic and Latin maps and geographical texts; see Robin Seignobos, "L'origine occidentale du Nil dans la géographie latine et arabe avant le XIVe siècle," in *Orbis Disciplinae: Hommages en l'honneur de Patrick Gautier Dalché*, ed. Nathalie Bouloux, Anca Dan and Georges Tolias, 371–94 (Turnhout:

records formerly Byzantine territory, including the city of Bursa, now under the control of the Turks and ruled by Ibn ʿUthmān.[53] The sporadic nature of such updates indicates that Ibn Khaldūn was not keenly interested in constructing a coherent political geography.

Other types of intervention original to Ibn Khaldūn are represented by one or two instances only and include the addition of toponyms not present in al-Idrīsī's description or maps (3.1),[54] the previously mentioned comparison of a portion of the Mediterranean coastline to a tooth (5.2), and supplying a distance in miles where al-Idrīsī gives it in days (6.5).[55] The category of occasional interventions also encompasses linguistic remarks, such as a comment acknowledging two readings of the origin of the Nile, the "mountain of the moon (*qamar*)" or the mountain of the Qumr, following the voweling of the geographers Yāqūt and Ibn Saʿīd (1.4), and another suggesting that the "Ghuzz" Turks should more properly be known as the "Khūz" (5.7).[56] In short, then, the interventions made by Ibn Khaldūn generally reflect his interest in and knowledge of particular peoples, his awareness of conflicting presentations of geographical information in non-Idrīsian sources, or, in one case, his personal observation about the shape of a coastline. Such interventions appear in the descriptions of all seven climes, in roughly equal measure, with only the second and seventh climes receiving relatively little attention (a single intervention each), and with no appreciable bias toward western or eastern sections.

Ibn Khaldūn's use of al-Idrīsī's text presents a broadly complementary picture. Whereas the sections 1.6–10 and then from 2.1 onward rely predominantly on al-Idrīsī's sectional maps, Ibn Khaldūn's description of the first five sections of the first clime, until he reaches the Indian Ocean, shows him relying on the text to an unusual extent. For example, in sections 1.1–2, Ibn Khaldūn's remarks on the practices of the Lamlam, including scarification of the face and temples with fire, derive from al-Idrīsī's text[57] rather than anything in the relevant sectional maps. Similarly, the description of the sources of the Nile, its hydrography, the "mountain of the cataract," and the way travelers negotiate the cataract at Aswān in section 1.4 reproduces almost verbatim the text of the *Nuzhat al-mushtāq*, rather than the sectional map of 1.4.[58] In section 1.5, a reference to Ptolemy comes from the *Nuzhat al-mushtāq* rather than from Ibn Khaldūn's direct reading of the *Geography*.[59] This is not to say that Ibn Khaldūn did not also refer to the first five sectional maps; it simply means he made more consistent use of the accompanying verbal description in al-Idrīsī's work in his description of the opening sections than he did thereafter.

Brepols, 2017).

53. Ibid., 1:110, 118. ʿUthmān/Osman was the founder of the Ottoman dynasty; the patronymic is used generically here to refer to the dynasty.

54. Ibid., 1:98–99 (*balad Ārṣīlā wa-l-ʿArāʾish*; *balad Āshīr*).

55. Ibid., 1:123; *Nuzhat al-mushtāq*, VI.5.2 (905).

56. *Al-Muqaddima*, 1:92 (mentioning the works of Yāqūt and Ibn Saʿīd as authorities), 120. The remark on the Ghuzz/Khūz was originally a marginal note and was eventually incorporated into the main text: *Muqaddimah*, trans. Rosenthal, 1:156n184.

57. *Al-Muqaddima*, 1:91; *Nuzhat al-mushtāq*, I.1.6 (19), I.2.1 (22).

58. *Al-Muqaddima*, 1:92; *Nuzhat al-mushtāq*, I.4.2 (32), I.4.5–6 (37), I.4.9 (39), I.4.12 (40–41).

59. *Al-Muqaddima*, 1:93; *Nuzhat al-mushtāq*, I.5.1 (43).

After the first sections of the first clime, Ibn Khaldūn's use of the *Nuzhat al-mushtāq*'s text, as opposed to its maps, is far from systematic. The distribution of material derived from the text is rather uneven, with concentrations in the first, third, and seventh climes. In certain instances, Ibn Khaldūn's mode of working can be reconstructed. Section 3.8 in al-Idrīsī's *Nuzhat al-mushtāq*, which encompasses the provinces of Sijistān and Khurāsān, the land of al-Ghūr, Astarābādh, the cities of Balkh and al-Tirmidh, and the Jayḥūn/Oxus river, presents one of the most complicated maps in the entire corpus (Fig. 4).[60] It features intertwining mountain ranges, fanning river courses, a rash of cities, a lake, and a prominent gateway. Broadly speaking, Ibn Khaldūn's description of this map accords with the topography depicted by al-Idrīsī but differs from the toponymy on the sectional map in a number of instances. For example, he observes that:

ومدينة بلخ كانت كرسي مملكة الترك. وهذا النهر، نهر جيحون، مخرجه من بلاد وَخَّان في حدود بَدَخْشان، مما يلي الهند.

The city of Balkh was the seat of the Turkish realm. The Oxus comes from the country of Wakhkhān in the area of Badakhshān which borders on India.[61]

Fig. 4. Sectional map 3.8 in al-Idrīsī, *Nuzhat al-mushtāq fī ikhtirāq al-āfāq*. MS Paris, BnF, ar. 2221, fols. 165v–166r. South at top. The map is dominated by the Oxus (*nahr Jayḥūn*) and its tributaries. In the west appear the regions of Sijistān and Khurāsān as well as the land of al-Ghūr (Ghor in modern Afghanistan). The eastern half of the map contains part of Tibet (top left), the land of Wakhsh, and Farghāna (bottom left). The fortification on a mountain on the far left of the image marks a gate constructed to repel Turkic peoples.

60. MS BnF ar. 2221, fols. 165v–166r; MS Ayasofya 3502, pp. 299–300; MS Pococke 375, fols. 154v–155r; MS Sofia Or. 3198, fols. 155v–156r.

61. *Al-Muqaddima*, 1:103–4; *Muqaddimah*, trans. Rosenthal, 1:136.

Balkh appears on the sectional maps, but the remark that it was the seat of the Turkish realm comes from the *Nuzhat al-mushtāq*'s text: *hiya dār mamlakat al-atrāk*.[62] Neither the country of Wakhkhān nor Badakhshān appears on map 3.8, but again the text of the *Nuzhat al-mushtāq* provides the source: "This river comes from the land of Wakhān on the borders of Badhakhshān."[63] Other remarks in this section—that Ghazna is the "gateway to India"; that Khurāsān ends at the Oxus; that a portion of the Oxus is known as the "Kharnāb River"—confirm that Ibn Khaldūn consulted the text of the *Nuzhat al-mushtāq*, probably in an attempt to bolster his description of the Oxus.[64]

Ibn Khaldūn's use of the text of the *Nuzhat al-mushtāq* in his description of the seventh clime illustrates almost the opposite motivation. Here he seems to use al-Idrīsī's text not to clarify a complex visual image but to amplify relatively sparse ones. In section 7.4 the land is "permanently covered by snow" and has few inhabitants; the lake in section 7.6 "is constantly frozen because of severe cold, except for a short while during the summer"; section 7.8 contains a remarkable valley, "so deep that the bottom cannot be reached," where smoke is seen in the day and fire at night.[65] All these comments come from the text rather than the maps, with the tenth-century geographer al-Jayhānī cited as the ultimate source for the description of the valley.[66] Of course, such remarks also have the effect of emphasizing the harsh, sparsely inhabited, nature of the clime, observations that recur later in the *Muqaddima*[67] and that accord with the work's aim of identifying the crucial ingredients of *ʿumrān* and of another key concept, *ʿasabiyya* ("group feeling").

This comparison of Ibn Khaldūn's description of the climes with the sectional maps and the text of al-Idrīsī's *Nuzhat al-mushtāq* makes it evident that the description is based primarily on the maps, read systematically from west to east and from south to north, but with certain variations depending on the content of the map. Nevertheless, it is equally clear that Ibn Khaldūn was not solely reading the maps: sometimes he used the text of the *Nuzhat al-mushtāq* to add information or to clarify difficulties in the image, and sometimes he voiced his own observations, deductions, and personal or second-hand knowledge of particular regions. Above all, in working through the corpus of al-Idrīsī's sectional maps he repeatedly tried to read across them, following the paths of seas, rivers, and mountains to construct a coherent whole out of individual pieces. His reading offers a notable contrast to al-Idrīsī's own commentary on his maps. Whereas Ibn Khaldūn provides a focused if sometimes terse reading of each of the sectional maps, al-Idrīsī supplements the visual images in the *Nuzhat al-mushtāq* with lengthy and diffuse commentary that is by no means

62. *Nuzhat al-mushtāq*, III.8.35 (483).

63. Ibid., III.8.33 (481): *hādhā al-nahr makhrajuhu min bilād Wakhān fī ḥudūd Badhakhshān*.

64. *Al-Muqaddima*, 1:103–4: *furḍat al-Hind*; *Nuzhat al-mushtāq*, III.8.6 (469): *Ghazna furḍa li-l-Hind*. For the end of Khurāsān and the "Kharnāb," see *Nuzhat al-mushtāq*, III.8.1 (466), III.8.33 (481).

65. *Al-Muqaddima*, 1:127 (*wa-hiya dāʾiman al-thalūj*; *wa-hiya jāmida dāʾiman li-shiddat al-bard illā qalīlan fī zaman al-maṣīf*), 128 (*fasīḥ al-aqṭār, baʿīd al-mahwā, mumtaniʿ al-wuṣūl ilā qaʿrihi*); *Muqaddimah*, trans. Rosenthal, 1:165–66.

66. *Nuzhat al-mushtāq*, VII.4.1 (953), VII.6.5 (958), VII.8.1 (961); on al-Jayhānī, see Jean-Charles Ducène, "Al-Ǧayhānī: Fragments (extraits du *K. al-masālik wa l-mamālik* d'al-Bakrī)," *Der Islam* 75, no. 2 (1998): 259–82.

67. *Al-Muqaddima*, 2:294, 353–54.

restricted to what appears on the maps. Any reader of the *Nuzhat al-mushtāq* who tries to refer to the maps while reading al-Idrīsī's text constantly encounters places and peoples unmarked on the map and is waylaid (or entertained) by commentary on the qualities of cities, their histories, their distances from multiple other cities, and anecdotes based on the experiences of travelers and occasionally the author himself, not to mention details of natural history. This is precisely the kind of material that Ibn Khaldūn excludes from his account of the climes, a decision all the more curious given its relevance for his project.

Geography and Ibn Khaldūn's Theory of History

What significance, in the final analysis, does Ibn Khaldūn's reading of al-Idrīsī's maps hold for the *Muqaddima* as a whole? Is it in any way connected to the theories of history he goes on to outline in the work, and if not, why include such a lengthy description of the climes at all? Commentators on Ibn Khaldūn, when not ignoring his use of geographical material entirely, have taken different—sometimes diametrically opposed—positions on the role of the "second prolegomena" in the *Muqaddima*. At one extreme is the view, succinctly expressed by Robert Irwin in his recent intellectual biography of Ibn Khaldūn, that the geographical introduction to the *Muqaddima* is largely "irrelevant." According to Irwin, the section of the *Muqaddima* derived from al-Idrīsī and other geographers "reads more like a comprehensive encyclopedia than a closely focused thesis about the underlying forces in history."[68] Characteristically, perhaps, Irwin's analysis cuts against the general trend in academic writing on Ibn Khaldūn to find connection and compatibility between the geographic and historiographical material in the *Muqaddima*. That trend has not been without its own nuances and divergences, however.

Perhaps the most forceful statement of the integral nature of the *Muqaddima*'s discussion of geography was made in Muhsin Mahdi's *Ibn Khaldūn's Philosophy of History*, published in 1957. Mahdi insisted that Ibn Khaldūn's central concept of *ʿumrān*, which Mahdi thought should be translated as "culture" rather than "civilization," derived directly from Arabic geography. Indeed, this "technical term" was adopted from the geographers "to describe the subject of his new science."[69] As used by Ibn Khaldūn, *ʿumrān* expressed a concept of culture "extremely close to that . . . used in modern sociology and anthropology."[70] Fundamentally connected to the idea of habitation, *ʿumrān* could only exist in certain environmental conditions, requiring cultivation of the land or at least adequate supplies of food. From its origins in "primitive" forms of association, culture developed through expressions of social solidarity (Mahdi's translation of *ʿasabiyya*), reaching its highest point in the formation of cities, before experiencing disintegration and decline.[71] Ibn Khaldūn's

68. Robert Irwin, *Ibn Khaldun: An Intellectual Biography* (Princeton, NJ: Princeton University Press, 2018), 21.

69. Muhsin Mahdi, *Ibn Khaldūn's Philosophy of History* (London: Allen and Unwin, 1957), 185.

70. Ibid., 184n1.

71. Ibid., 193, translating Ibn Khaldūn's *ʿumrān badawī* as "primitive culture," as opposed to *ʿumrān ḥaḍarī* ("civilized culture"). Though Mahdi argued strongly otherwise, the distinction is probably better expressed as one between rural and urban cultures.

achievement, for Mahdi, was to give attention to the influence of the environment on social life, among other crucial conditions for its existence and expansion, in such a way that a universal history became necessary.[72] The rendition of al-Idrīsī's geography, one might infer, was crucial to that universalizing vision, in which culture extended across human society and found its limits in the parts of the earth whose climates did not support life other than that of wild animals. Mahdi's notion of a "philosophy of history" at work in Ibn Khaldūn's thought has been contested by subsequent commentators. But even those whose readings of the *Muqaddima* differ significantly from Mahdi's see the geographical section as playing an important role in the work.

Abdesselam Cheddadi, the prolific editor, translator, and commentator of Ibn Khaldūn's work, has significantly modified Mahdi's view of the *Muqaddima*. Cheddadi holds that Ibn Khaldūn's approach is not reducible to either political philosophy or to history, even if his questions about human society are philosophical in essence.[73] For Cheddadi, Ibn Khaldūn's concept of *ʿumrān* has the concrete sense of installation in a territory, but also the larger sense of social life. The role of geography, in this reading of Ibn Khaldūn's project, is auxiliary: "Elle a uniquement pour fonction de planter le décor pour l'exposé, qui doit venir par la suite, sur la science de la civilisation."[74] Strikingly, Cheddadi observes, Ibn Khaldūn largely ignores the rich ethnographical detail in the works of Arab travelers and geographers, preferring instead the "ligne de partage" offered by the system of the climes—a division between civilization and its antithesis, between temperate regions and extremes of heat or cold, between humanity and animal behavior. Cheddadi sees this division as replacing the more traditional distinction in Arabic letters between the familiar, on one hand, and the strange and marvelous, on the other: ultimately, geography, rather than history, determines the possibility of human civilization.[75]

Cheddadi's analysis of the pivotal function of geography in the *Muqaddima* bears some resemblance to that of Aziz al-Azmeh. Noting the common use of *ʿumrān* to designate habitation and habitability, al-Azmeh asserts that the second prolegomena to the *Muqaddima* is "a discussion whose aim is to eliminate certain parts of the globe from being party to civilization."[76] At the same time, and again thinking along similar lines to Cheddadi, al-Azmeh argues that Ibn Khaldūn did not conceive of a "genetic" relationship between ecology, geography, and civilization. Climate did not automatically produce civilization; it merely provided the essential conditions for its existence.[77] Against both Mahdi and Cheddadi, however, al-Azmeh argues that the *Muqaddima* should not be considered a new science. Nor is it an encyclopedia. Its realism is retrospective, not (in the manner of

72. Ibid., 291–93.

73. Abdesselam Cheddadi, *Ibn Khaldûn: L'homme et le théoricien de la civilisation* (Paris: Gallimard, 2006), 243.

74. Ibid., 254.

75. Ibid., 254–59.

76. Aziz al-Azmeh, *Ibn Khaldūn: An Essay in Reinterpretation*, 2nd ed. (Budapest: Central European University Press, 2003), 56.

77. Ibid., 61.

Machiavelli's) prescriptive, and it constitutes a Hegelian "cluster of discourses," without center, internal agency of integration, or unified articulation.[78] From this perspective, then, one might view the prolegomena as a critical but not fully integrated element of the *Muqaddima*.

It is notable that, apart from Kahlaoui, very few scholars have considered the particular ways in which Ibn Khaldūn read al-Idrīsī's maps, preferring instead to discuss the *Muqaddima*'s use of geography in quite general terms. As a result, certain difficult questions have been passed over. If, as Cheddadi and al-Azmeh claim, the purpose of the geographical prolegomenon to the *Muqaddima* was to construct a dividing line between civilization and non-civilization, that objective could have been achieved by a much shorter description of the seven climes, based on a simple diagram, or a world map such as the one that Ibn Khaldūn himself reproduced in the late version of the *Muqaddima*. If, on the other hand, climate (that is, the physical conditions that pertain within the different climes) was so important for his theory of *ʿumrān*, why did Ibn Khaldūn not make more mention of the latter in reading al-Idrīsī's maps? Why talk so often of mountains, rivers, and seas without drawing conclusions about the effect they had on human society? For his part, Kahlaoui has suggested that the maps may have complemented Ibn Khaldūn's emphasis on urban spaces against waste or nomad spaces;[79] similar remarks have been made by Gabriel Martinez-Gros, along with the assertion of a fundamental division between east and west (marked by the line dividing the fifth and sixth parts of each clime in the Idrīsian scheme) in the thought of Ibn Khaldūn.[80] Yet one finds very little explicit commentary on such matters in the *Muqaddima*'s account of the *Nuzhat al-mushtāq*'s maps, where the emphasis is not on drawing lines between civilized and uncivilized, between urban and nomad, or between east and west, but rather on connecting the diverse spaces represented by al-Idrīsī.

My own observation of the description of the sectional maps of al-Idrīsī by Ibn Khaldūn leads instead to two rather different conclusions—one obvious, the other more speculative. The obvious conclusion is that as Stephan Dale has suggested, and contrary to the arguments of Mahdi, Cheddadi, Kahlaoui, and others, the lengthy description of the climes is only partially integrated into Ibn Khaldūn's text.[81] While some aspects, such as the cannibalism of the Lamlam in the first clime or the frozen lakes and sparse population of the seventh clime, are commensurate with Ibn Khaldūn's theories concerning the development of human society, there is in general a lack of explicit connection between the description of the world as shown by al-Idrīsī and the reflections on history contained in the *Muqaddima*. Even if one searches for implicit links, one finds contradiction as much as, or even more than, coherence. The most striking example in this regard is the lack of consistent attention given to cities in Ibn Khaldūn's reading of al-Idrīsī's maps. Not only are large and important

78. Ibid., 133, 143–44.

79. Kahlaoui, "Towards Reconstructing the *Muqaddimah*," 300; idem, *Creating the Mediterranean*, 176. Kahlaoui gives only a single example, in the description of lower Egypt, to support this point.

80. Gabriel Martinez-Gros, *Ibn Khaldûn et les sept vies de l'Islam* (Arles: Actes Sud, 2006), 113–16.

81. Stephen Dale, *The Orange Trees of Marrakesh: Ibn Khaldun and the Science of Man* (Cambridge, MA: Harvard University Press, 2015), 166–67.

cities ignored or mentioned merely in passing; clusters of cities indicating concentrations of populations in a particular region escape mention. This omission is particularly surprising given the importance of the city as a marker of civilization in Ibn Khaldūn's thought. There could be several explanations for this apparent lack of integration into the *Muqaddima* as a whole, not the least important of which may be a simple lack of time: as a late addition, the Idrīsian geography sits attached but outside the central body of thought in the *Muqaddima*.

Yet one could go further and argue that the generally extraneous nature of this section of the work supports a view of Ibn Khaldūn as an eclectic and to a certain extent eccentric thinker, prone to ad hoc accretions, rather than a master theorist always in command of disparate materials, drawing them together with an overarching aim in mind. To take the former view does not, or should not, entail diminishing the achievements of the *Muqaddima* and the *Kitāb al-ʿIbar*. Nor does it mean characterizing Ibn Khaldūn's practices as some kind of empty encyclopedism. But acknowledging the unfinished, even messy, nature of sections of the *Muqaddima* might allow us to reckon with the Ibn Khaldūn we actually find on the page, rather than the one we might like to construct—the Machiavelli, Vico, or Marx of the Arab world. "A person who creates a new discipline does not have the task of enumerating the problems connected with it," Ibn Khaldūn disarmingly noted in his conclusion to the *Muqaddima*.[82] That self-conception as a creator of a new discipline, or art, led Ibn Khaldūn to reach far, incorporating within his theory of civilization not only geography, but also the histories of music, poetry, language, and religion, in addition to ethnographic, political, and economic history. If the price—those problems that Ibn Khaldūn grandly declined to enumerate—was a lack of coherence and universal applicability, and most of all the sense that his theory could not, in the end, satisfactorily account for the wealth of material he assembled, it was justified by the ambition of his undertaking.

My speculative conclusion is that Ibn Khaldūn's reading of al-Idrīsī's maps might not be fully integrated into the *Muqaddima* because it contained a threat to his central argument. Ibn Khaldūn was evidently possessed of a sound grasp of geography, especially that of the Maghrib and Ifrīqiya, which he was well able to express in writing by adopting a maplike perspective, with geographical space seen from a single, elevated viewpoint. One significant example of this skill must suffice to prove the point. In the *ʿIbar*, Ibn Khaldūn's account of the Berbers begins with a magisterial description of the Maghrib, based in part on Ptolemy (in the version of al-Khwārazmī) and al-Idrīsī's *Nuzhat al-mushtāq* but clearly incorporating his own knowledge of the region and ready to challenge authority on its basis:

> فعرف اهل الجغرافيا انه بحر القلزم المنفجر من بحر اليمن هابطا على سمت الشمال وبانحراف يسير الى المغرب حتى ينتهى الى القلزم والسويس . . . ويدخل فيه اقليم مصر وبرقة وكان المغرب عندهم جزيرة احاطت بها البحار من ثلاث جهاتها كما تراه واما العرف الجارى لهذا العهد بين سكان هذه الاقاليم فلا يدخل فيه اقليم مصر ولا برقة وانما يختص بطرابلس وما وراءها الى جهة المغرب مثل افريقية والزاب والمغرب الاوسط والمغرب الاقصى والسوس الادنى والاقصى هذا هو المغرب في العرف لهذا العهد وهو الذى كان في القديم ديار البربر ومواطنهم.

82. *Al-Muqaddima*, 3:345: *fa-laysa ʿalā mustanbiṭ al-fann istiqṣāʾ masāʾilihi*; *Muqaddimah*, trans. Rosenthal, 3:481.

> The geographers reckon that [the eastern border of the Maghrib] is the Red Sea, flowing from the Sea of Yemen, descending to the north, and turning to the west until it ends at al-Qulzum and Suez. . . . It includes the region of Egypt and Barqa; the Maghrib, according to them, is a peninsula surrounded by the sea on three sides as you look at it. But current knowledge among the inhabitants of these regions holds that the Maghrib neither includes the region of Egypt nor that of Barqa; it only pertains to Tripoli and what is beyond it to the west such as Ifrīqiya and al-Zāb, the central Maghrib, the far Maghrib, and al-Sūs [both] near and far. This is the Maghrib according to the knowledge of this time, and it was of old the abode and homeland of the Berbers.[83]

Who were the geographers who extended the Maghrib to the Red Sea? Earlier in this passage Ibn Khaldūn identifies Ptolemy and Roger of Sicily (i.e., al-Idrīsī) as geographical authorities, but neither author could have been the source for the enlarged Maghrib he criticizes. Instead, Ibn Khaldūn seems to have in mind the debate sparked by the thirteenth-century geographer Ibn Saʿīd's inclusion of Egypt within the Maghrib in the *Kitāb al-Mughrib fī ḥulā al-Maghrib*, a view rebutted by the fourteenth-century geographer al-ʿUmarī in the *Masālik al-abṣār fī mamālik al-amṣār*.[84] Yet it is notable that in returning to the more orthodox configuration of the Maghrib, Ibn Khaldūn cites inhabitants of the region in preference to textual authority, thereby apparently privileging experience "on the ground" over book learning, while invoking the long history of habitation in the region. As these remarks indicate, this geography was not a minor matter: it was intimately connected to the history Ibn Khaldūn unfolds. Further on, he prefaces his account of the rise of the Almohads with a description of the Deren (i.e., Atlas) mountain range:

> من اعظم جبال المعمور رسا في الثرى. . . ومثلت سياجا على ريف المغرب
>
> Among the largest mountains in the inhabited world, rooted deeply in the earth [the Deren range] resembles a fence around the countryside of the Maghrib.[85]

The protection of the mountains enabled the formation of an autonomous region, effectively an "island" (*ka-l-jazīra*),[86] in which peoples such as the Maṣmūda, the (according to Ibn Khaldūn) austere and pious ancestors of the Almohads, emerged and went on to form states.

Ibn Khaldūn was entirely at home with geographical description, in full possession of a mental map of the North African coastline and interior topography, and able to connect it

83. Ibn Khaldūn, *Kitāb Tārīkh al-duwal al-islāmiyya bi-l-Maghrib/Histoire des Berbères et des dynasties musulmanes de l'Afrique septentrionale*, ed. William MacGuckin de Slane, 2 vols. (Algiers, 1847), 1:123; my translation. Note, too, the remarkable verbal description of the Maghrib that Ibn Khaldūn claims to have given Tamerlane during his interview with the conqueror outside Damascus in 1401: Walter Fischel, *Ibn Khaldūn and Tamerlane* (Berkeley: University of California Press, 1952), 34–35.

84. See Víctor de Castro León, "Ibn Saʿīd al-Maghribī: Egypt as Part of the Maghrib," in *The Mashriq in the Maghrib: Knowledge, Travel and Identity*, ed. Maribel Fierro and Mayte Penelas, 79–96 (Berlin: de Gruyter, 2021).

85. Ibn Khaldūn, *Tārīkh al-duwal al-islāmiyya*, 1:295–96; my translation.

86. Ibid., 1:81.

to the ethnographic information at his disposal. His geography was consequently learned, subtle, and compatible with his other intellectual interests and tastes. Why, then, did Ibn Khaldūn need al-Idrīsī's maps?

The draw of al-Idrīsī's *Nuzhat al-mushtāq* (effectively, Ibn Khaldūn suggests at one point, the Ptolemy *de nos jours*)[87] must have been the systematic exposition of a world geography in visual form.[88] But therein lay the work's challenge to the *Muqaddima* and what followed it in the *Kitāb al-ʿIbar*. Would the world geography encapsulated in al-Idrīsī's sectional maps support Ibn Khaldūn's theories of urban development and destruction, of *ʿumrān*, in the same way the topography of the Maghrib could be made to support the narrative of the rise of particular groups in the *Kitāb al-ʿIbar*? Or would it contain an implicit corrective to the *Muqaddima*'s major thesis that the essential element in the rise of civilizations is *ʿasabiyya* and that its loss heralds the inevitable decline of once mighty societies and states?

Here the nature of Ibn Khaldūn's reading of the *Nuzhat al-mushtāq*'s maps is suggestive. His was predominantly a horizontal reading, one that moved along a west-east axis across each clime. But his attempts to "join up" al-Idrīsī's sectional maps drew him into vertical readings in which he followed mountains and rivers in various directions—north-south, south-north, east-west, west-east—from one clime to the next, in cases such as the Volga starting in the sixth clime, moving to the seventh, then back to the sixth, and ending in the fifth clime.[89] In some ways, such a reading was compatible with the ideas about the connection between geography, ethnography, and history at work in the *Kitāb al-ʿIbar*, as seen in Ibn Khaldūn's account of the Almohads or in his observations that the protective quality of mountains explained the tendency of Arab nomads to gain control only over flat areas, while well-provisioned hill people had softer natures than did those who dwelt in harsher environments.[90] The effect of stripping al-Idrīsī's maps back to their orographic and hydrographic structures was to reveal fundamental elements shaping human society, in the same way that the Deren mountains had shaped the Maghrib. Topographies that preceded and determined aspects of human behavior were indeed the *Muqaddima* to history.

Yet taken to its logical extent, reading the maps for their rivers and mountains more than for their urban populations not only distorted al-Idrīsī's emphasis on urban geography; it also suggested an explanation for historical processes that differed from that famously advanced in the *Muqaddima*. Reading the *Nuzhat al-mushtāq*'s maps as records of topographic formation implied that topography might be a more important factor than either climate or "group feeling" in the rise and fall of civilizations. The Tigris and the Euphrates, the Oxus, the Volga, the Danube, the Nile—might these and other great rivers depicted on the *Nuzhat al-mushtāq*'s maps, where they are liberally dotted with cities, have had more to do with the spread of urbanization than the factors identified by Ibn Khaldūn? Could the same be said for maritime spaces such as the Mediterranean, the Indian

87. *Al-Muqaddima*, 1:78, 89.

88. A point noted by Kahlaoui in *Creating the Mediterranean*, 176.

89. *Al-Muqaddima*, 1:125.

90. Ibid., 1:246 (Arabs), 141–42 (hill people); *Muqaddimah*, trans. Rosenthal, 1:302, 177–79. Similar points are made in the *ʿIbar*: Ibn Khaldūn, *Tārīkh al-duwal al-islāmiyya*, 1:26–27, 47, 81.

Ocean, and the Black Sea? Correlation with the text of al-Idrīsī would have not only offered numerous examples of cities flourishing in spite of the pitfalls of dynastic decadence but also drawn attention to the important role of trade networks in sustaining and explaining urban growth. Did Ibn Khaldūn's reading of the sectional maps of al-Idrīsī contain the seeds for a critique of his own work, nestling implicit and unspoken at its very outset? If so, such a supplementary reading was not pursued, and probably never could be pursued. Perhaps, then, despite its paradoxical position near the start of Ibn Khaldūn's work, the description of al-Idrīsī's maps should be seen as the first step toward the expansion and inevitable revision of the ideas developed in the *Muqaddima* and the *Kitāb al-ʿIbar*.

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