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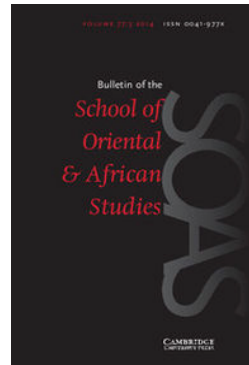
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# The world in Arab eyes: A reassessment of the climes in medieval Islamic scholarship\*

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## Abstract

Many Arabic geographical texts from the medieval period portray the oecumene as comprising seven latitudinal climes. In general the middle clime, in which the majority of Muslim territories were located, was viewed as possessing the best environmental conditions, which progressively deteriorated the further one travelled north or south of this central territory. This theory of the climes was combined with ideas of humoral pathology in order to argue that those living in the central zones of the oecumene received numerous physiological and psychological benefits. Conversely, those like the Africans and the Turks, living at the peripheries of the oecumene, had neither rationality nor proportionate physiognomies because their humours were distorted by the harsh environmental conditions of these regions. This article, however, seeks to nuance the outline given above. While secondary studies have generally been happy to adopt uncritically this superficial understanding of the medieval Islamic worldview, which is gained from skimming the introductions to a few geographical works, few have questioned what (and where) is meant by the centre of the world, where did human habitation supposedly end, and was the medieval understanding of the seven climes uniform. These are some of the questions posed by the present investigation. I then go on to assess how far the notions derived from the theory of the climes were implemented in ethnological accounts of the inhabitants of the far north and south. In doing so I shall conclude that the standard conception of the medieval Islamic worldview masks numerous disagreements and debates in the writings of medieval scholars.

**Keywords:** Humoral pathology, Climatic theory, Arabic ethnology, Arabic geography, Environmental determinism

In a pioneering study Aziz al-Azmeh outlined the importance of climatic theory and humoral pathology to the medieval Islamic worldview.<sup>1</sup> The latter influence was transmitted to Islamic civilization through the assimilation (and translation) of sixteen Galenic works and four Hippocratic treatises, and by practitioners of

\* I would like to thank Professors Robert Hoyland and Geert Jan van Gelder in particular for their help and invaluable advice which aided me in writing the study underpinning this article.

1 A. al-Azmeh, "Barbarians in Arab eyes", *Past and Present*, 134, 1992: 3–18.

Greek medical theory in regions conquered by the expanding Islamic empire of the seventh and eighth centuries. According to this theory every living thing consisted of the four Empedoclean elements: fire, water, air and earth, which were mixed with each other in a relationship called a temperament or a mixture (*mizāj*).

The nature of the temperament was dependent on the relative balance of the elements. There were four simple temperaments: hot, cold, dry and moist; four composite temperaments: hot-dry, hot-moist, cold-dry and cold-moist; and the balanced temperament in which no single element predominated. The temperament of individuals was inextricably linked with their four humours (*akhlāt*), which were the constituent parts of their organs. Yellow bile (*mirrah ṣafrāʾ*) was hot and dry, blood (*dam*) hot and wet, phlegm (*balgham*) cold and wet, and black bile (*mirrah sawdāʾ*) cold and dry. In the most basic terms, when one of the eight unbalanced temperaments was predominant in a person, the equilibrium of the humours altered within the body to reflect this, and certain psychological and physiological effects associated with the predominating temperament arose.<sup>2</sup>

The list of things influenced by the humours is far more extensive than the modern reader might expect, and covered all aspects of human physical, mental and social characteristics. Many incidents of this notion will be seen in the course of this investigation, so for now I will rely on the summary of the relationship between humours and these characteristics in the *Rasāʾil Ikhwān al-Ṣafāʾ* (The Epistles of the Brethren of Purity, c. tenth century):<sup>3</sup>

The differences of the temperaments of the humours cause differences in the characters of people, and their natures, their colours, their languages, their customs, their judgements, their beliefs, their actions, their crafts, their methods of planning, and their ways of governance.<sup>4</sup>

Climatic theory was also derived from classical antecedents, although its sources are less clear than those of humoral pathology. Miquel, in the second edition of *The Encyclopaedia of Islam (EI)*, simply noted that the model of the seven climes was inherited from the Greek tradition,<sup>5</sup> and some secondary works on Islamic geography have been happy to repeat this somewhat disinterested assertion.<sup>6</sup> Weir, in the first edition of *EI*, suggested that the possible originator of the

2 For humoral pathology and its transmission to the Islamic world see P.E. Pormann and E. Savage-Smith, *Medieval Islamic Medicine* (Edinburgh, 2007), 41–79, M. Ullmann, *Islamic Medicine* (Edinburgh, 1978), esp. 55–62, M. Dols, *Medieval Islamic Medicine: Ibn Riḍwān's Treatise "On the Prevention of Bodily Ills in Egypt"* (London, 1984), 10–17, and G. Strohmaier, "Reception and tradition: medicine in the Byzantine and Arab world", in M.D. Grmek (ed.), *Western Medical Thought from Antiquity to the Middle Ages* (London and Massachusetts, 1998), 139–69.

3 See the discussion by Y. Marquet, "Ikhwān al-Ṣafāʾ", in *EI* (second edition), vol. III, 1071.

4 *Rasāʾil Ikhwān al-Ṣafāʾ wa-Khillān al-Wafāʾ*, vol. I (Egypt, 1928), 233.

5 A. Miquel, "Iklim", *EI* (second edition), vol. III, 1076.

6 See, for example, P. Heck, *The Construction of Knowledge in Islamic Civilization* (Leiden, 2002), 108–09.

seven climatic divisions might have been Eratosthenes (d. 195 BC) or Hipparchus (c. 150 BC).<sup>7</sup> However, Fontaine has indicated that there is no proof that either of these figures can be demonstrably accredited with the climatic system.<sup>8</sup> Yet while the origins of the seven climes are unclear, the transmission of this idea to Islamic civilization has been largely attributed to Claudius Ptolemy,<sup>9</sup> who himself combined a theory of environmental determinism with his ideas about the earth's structure.<sup>10</sup>

There is much more information available on how the theory of the climes was understood in the medieval Islamic world than there is about its origins. Thus, for example, in Yāqūt's (d. 1229) immense dictionary of geographical lore, the *Mu'jam al-Buldān* (*Dictionary of the Countries*), he outlined four definitions of the term *iqḷīm*: that used by "mathematicians, philosophers and astronomers" defined the *aqālīm* as latitudinal bands running across the surface of the earth and established according to the length of the longest day of summer. These latitudinal bands were indicative of a place's distance from the sun which, in turn, determined the relative degree of its hotness or coldness. In Yāqūt's opinion the most rational way of dividing the inhabited world was into seven latitudinal climes in each of which the climatic conditions were approximately the same. The southernmost edge of the first clime began where the longest day in summer was 12½ hours and ran across the surface of the earth from the imagined south-easterly point of China to the west coast of Africa, while the northernmost edge of the seventh clime ended where the longest day in summer was 16½ hours and ran through unnamed territories inhabited by Slavs and Turks. Between these two extremities the centres of each of the seven climes were located at half-hour intervals.<sup>11</sup>

In the medieval Islamic worldview humoral pathology and the theory of the climes proved to be particularly well-suited bedfellows. Indeed, they provided medieval Muslims with a way of dividing the world into civilized and uncivilized zones. An excess of either heat or cold was thought to corrupt a person's humours, and this had a number of corollary, and unfavourable, effects on appearance, behaviour, habits and ability to think rationally; while conversely, temperate regions were thought to have a beneficial influence on a person's appearance and faculties.

7 T.H. Weir, "Iklīm", *EI* (first edition), vol. II, 460–61.

8 R. Fontaine, "Between scorching heat and freezing cold: medieval Jewish authors on the inhabited and uninhabited parts of the earth", *Arabic Sciences and Philosophy*, 10, 2000: 103.

9 See, for example, A. Nazmi, "The transmission of classical geographical knowledge to the Arabs. Some aspects and remarks on climes", *Studia Arabistyczne i Islamistyczne*, 7, 1999: 71–8; M. Tolmacheva, "Ptolemaic influence on medieval Arab geography", in S.D. Westrem (ed.), *Discovering New Worlds: Essays on Medieval Exploration and Imagination* (New York and London, 1991), 125–51; and G. Tibbetts, "The beginnings of a cartographic tradition", in J.B. Harley and D. Woodward, *Cartography in the Traditional Islamic and South Asian Societies* (Chicago, 1992), 90–107.

10 See Ptolemy's discussion of "Agisymba" in J.L. Berggren and A. Jones, *Ptolemy's Geography: An Annotated Translation of the Theoretical Chapters* (Princeton, 2000), 70.

11 W. Jwaideh, *The Introductory Chapters of Yāqūt's Mu'jam al-Buldān* (Leiden, 1959), 43.

Perhaps unsurprisingly, medieval Muslims generally located themselves in the regions possessing a temperate climate and were thus thought to benefit from a number of psychological and physiological advantages. Ibn al-Faqīh (c. 903), for example, in the extant abridgement of his *Kitāb al-Buldān* (Book of Countries), cited an authority who described Iraq as follows:

And one of the people of discernment said: “The people of Iraq are people of sound rational thought, commendable desires, and well-balanced characters. They have skill in every craft, with well-proportioned limbs and well-cooked humours. And they have a brown colour, which is the most equitable and balanced of colours”.<sup>12</sup>

These temperate regions were associated with the central zones of the inhabited part of the earth. On the other hand, the opposite conditions were experienced by those in the far north and south where the respective excesses of cold and heat led to deficiencies in the inhabitants. A good example of this is provided by a physician to the Saljūq rulers, Sharaf al-Zamān Ṭāhir al-Marwazī (d. after 1120), in his *Ṭabā’i’ al-Ḥayawān* (The Nature of Animals).<sup>13</sup> Al-Marwazī wrote:

As the habitat of the people living in the outlying parts of the oecumene and on the islands situated far away from the centre is remote from temperateness, so their morals, natures and mode of life are also remote from it. Their deviation from temperance is the result of either of two factors, namely, cold and heat in the North and South respectively.<sup>14</sup>

As stated above, this relationship between humoral pathology and the theory of the climes was stressed by Aziz al-Azmeh. Indeed, in his treatment of the medieval Islamic worldview al-Azmeh surveyed a number of medieval geographical works and concluded that: “Arabic ethnology, including the ethnology of barbarism, was governed by a natural-scientific ecological determinism mediated through the notions of humoral medicine”. For al-Azmeh, medieval Muslims divided the entire inhabited world into seven climes. Those in the central zones – the third and fourth climes – had harmonious constitutions, while the humours of those dwelling to the north and south suffered a degree of distortion commensurate with their distance from the centre of the seven climes. Those in the sixth clime, for instance, were given to savagery and warfare, and were mired in filth, had licentious sexual habits, and disturbing burial rites, but “were merely barbarous, and not consummately barbarian”. This dubious honour was reserved for the inhabitants of the first and seventh climes.<sup>15</sup>

12 Ibn al-Faqīh al-Hamadhānī, *Mukhtaṣar Kitāb al-Buldān*, in *Bibliotheca Geographorum Arabicorum*, vol. V (1885), ed. M.J. De Goeje, 161–2.

13 For the work and the author see A.Z. Iskandar, “A doctor’s book on zoology: al-Marwazī’s *Ṭabā’i’ al-ḥayawān* (Nature of animals) re-assessed”, *Oriens*, 27/28, 1981: 266–312.

14 Al-Marwazī, *Sharaf al-Zamān Ṭāhir Marwazī on China, the Turks, and India* (London, 1942), trans. V. Minorsky, p. 56.

15 Al-Azmeh, “Barbarians in Arab eyes”.

Here then, one can see the outline of a worldview which provided medieval Muslims with both a geographical model for how the earth was arranged and a way of making sense of the perceived differences between its inhabitants. This interpretation, however, is provided by a particular reading of the available medieval sources, and its relative simplicity fails to embrace the intricacies of climatic theory and ethnology in the medieval Islamic texts. This is by no means the fault of al-Azmeh, who was simply providing a brief introduction to a fascinating subject for a non-specialist audience. However, his study is too broad to serve as the final word on such a complex subject.

That there was no uniform understanding of the climes among medieval Muslims has been noted by modern scholars such as Miquel, Fontaine and Zadeh, while al-Azmeh himself argued that medieval Islamic ethnology, which was supposed to rest upon the twin pillars of climatic theory and humoral pathology, often failed to obey the established rules.<sup>16</sup>

What follows here is a brief overview of some of the key ways in which the theory of the climes was divergently understood and applied by medieval Muslims, and of competing influences on medieval Islamic ethnography. This investigation is by no means intended to be either comprehensive or systematic, and I shall largely satisfy myself with demonstrating the lack of uniformity in medieval Islamic texts in an attempt to nuance the model outlined by al-Azmeh. I should also note at the outset that much of this investigation will be non-synchronic and will take little account of the genre of the sources utilized. It is not possible to undertake an investigation of the origins of humoral pathology and the theory of the climes in the medieval Islamic world, and their development over time and in different genres, in an article of this scope. There will, however, be a limited attempt to impart a sense of chronology in the final section of this investigation, as I turn my attention to the possible reasons for evolving ethnological conceptions of northern lands in medieval Arabic texts.

## Climatic divisions and the structure of the world

As noted above, medieval Muslims drew ideas about the climes and the structure of the world from the works of Ptolemy. However, his works posed two major difficulties for his later readers. First, although Ptolemy's two most important works discussing the structure of the earth, the *Almagest* and the *Geography*, were widely translated and disseminated among medieval scholars, they present very different pictures of the earth's surface.<sup>17</sup> In the *Almagest* the inhabited part of the earth is firmly circumscribed to one of the globe's northern quarters. While Ptolemy was prepared to accept that there might be habitation in the

16 References for al-Azmeh and Fontaine found above. For Zadeh's acknowledgement of the diversity of medieval Islamic climatic theory see T. Zadeh, *Mapping Frontiers across Medieval Islam: Geography, Translation, and the 'Abbāsid Empire* (New York, 2011), 89. Also of interest is A.J. Silverstein, "The medieval Islamic worldview: Arabic geography in its historical context", *Geography and Ethnography: Perceptions of the World in Pre-Modern Societies* (Malden, Oxford and Chichester, 2010), 273–90.

17 M. Plessner, "Baṭlamīyūs", in *EI* (second edition), vol. I, 1100.

equatorial region he had heard no reliable reports of human settlement there. The southernmost point of human habitation was Taprobanē (Sri Lanka), which he located at  $4\frac{1}{4}^{\circ}$  north of the equator, while the northernmost inhabited region was the “lands of the unknown Scythians” at  $64\frac{1}{2}^{\circ}$  north of the equator. In his *Geography*, however, the inhabited region is much more extensive. Here the northernmost limit of human settlement was  $63^{\circ}$  north of the equator at Thule, yet the southernmost inhabited region now stretched far beyond the equator to just over  $16^{\circ}$  degrees to the south.<sup>18</sup> As we shall see, conflicting theories on the inhabitable extent of the earth’s surface, and in particular on whether there was human settlement beyond the equator, created a great deal of confusion among medieval scholars as to where the climes began and ended.

Second, the division of the world into seven climes is not the only schema present in Ptolemy’s works. The *Geography* eschews a climatic organization altogether, while the *Almagest* variously employs divisions of the world comprising thirty-three, eleven, and seven climes.<sup>19</sup> The lack of standardization in the Ptolemaic writings again allowed medieval Muslim scholars to move away from a uniform interpretation of the seven clime model when they wished. Given the lack of uniformity in the inherited Greek ideas assimilated by medieval Muslim society, there can be little surprise that differing notions developed about the centre of the inhabited world, its peripheries, and the influence of the sun in the east and the west, all of which had important implications for climatic theory.

### The centre

The suitability of the climatic model for the simplified understanding of humoral pathology of many medieval Muslim geographers should be clear. In a system in which a person’s character and appearance were excellent in temperate areas but worsened as either heat or cold increased, the division of the earth into seven latitudinal bands allowed the world to be neatly segmented into zones of greater and lesser civilization.

The middle (fourth) clime was considered the most temperate, and this caused its inhabitants’ temperaments and humours to become generally balanced. Conditions were slightly worse (but still relatively temperate) in the third and fifth climes, and were worse still in the second and the sixth. By the first and seventh climes, the respective excesses of heat and cold had distorted the temperaments of those living there to the extent that they had essentially lost the capacity for rational thought that elevated humans above animals.<sup>20</sup>

A clearly elaborated model, in which there is an incremental deterioration in intellect and civilization as one moves from the central clime to the outer climes, is present in the texts of numerous medieval authors, such as the *Muqaddima*

18 Berggren and Jones, *Ptolemy’s Geography*, 20–22 and Fontaine, “Between scorching heat and freezing cold”, 104.

19 O.A.W. Dilke, “The culmination of Greek cartography in Ptolemy”, in J.B. Harley and D. Woodward (eds), *Cartography in Prehistoric, Ancient, and Medieval Europe and the Mediterranean* (Princeton, 1987), 177–200.

20 S. Harvey, “A new Islamic source of *The Guide of the Perplexed*”, *Maimonidean Studies*, 2, 1991: 33–59, esp. 36–41.

(The Prolegomena) of Ibn Khaldūn (d. 1406),<sup>21</sup> the *Nukhbat al-Dahr fī 'Ajā'ib al-Barr wa-l-Baḥr* (Choice Passage of the Epoch about the Wonders of Land and Sea) of al-Dimashqī (d. 1327),<sup>22</sup> and the anonymous *Kitāb Gharā'ib* (Book of Curiosities) of the first half of the eleventh century.<sup>23</sup> This may be recognized as the standard model for the relationship between the climes and human behaviour, and was certainly the one detected by al-Azmeh.<sup>24</sup>

In identifying the central climes as providing the most harmonious conditions for humans, al-Azmeh was indicating the existence of a plethora of sources which described the fourth clime as the best suited to civilization. However, there was some uncertainty over which regions constituted the fourth clime: sometimes it comprised those regions considered to be on (very roughly) the same latitude as Mesopotamia, such as North Africa and Sicily, and these countries were perceived as being at the centre of the inhabited world.<sup>25</sup> Thus, for example, the illustrious belletrist al-Jāḥiẓ (d. 868/9) quoted a scholar who had apparently claimed: "Iraq is the centre of the world, and Baṣra is the centre of Iraq, and al-Mirbad<sup>26</sup> is the centre of Baṣra, and my home is at the centre of al-Mirbad".<sup>27</sup> This identification of the cities of Mesopotamia with the fourth clime went right back to the early transmission of Ptolemy's *Geography* into Arabic, when al-Khwārazmī (d. c. 847) added cities such as Kūfa, Baghdād, Wāsiṭ and Baṣra to Ptolemy's co-ordinates, and placed them in the fourth clime.<sup>28</sup> Subsequent mathematical geographies also included the Mesopotamian cities within the fourth clime.<sup>29</sup>

In a number of sources, and particularly in the works of Baghdādīs, Baghdād was equated with the centre of the inhabited earth.<sup>30</sup> Al-Mas'ūdī (d. 956), for example, who left Baghdād for Egypt, stated in his *Murūj al-Dhahab* (*Meadows of Gold*) that the most central of the climes was that of Babylon, and that the noblest portion of this clime was the City of Peace (Baghdād).<sup>31</sup> While Ibn Buṭlān (d. 1066), a Christian physician deeply steeped in Islamic

21 Ibn Khaldūn, *The Muqaddimah*, vol. I (London, 1958), trans. F. Rosenthal, 167.

22 Al-Dimashqī, *Kitāb Nukhbat al-Dahr fī 'Ajā'ib al-Barr wa-al-Baḥr* (Saint Petersburg, 1866), ed. A.F. Mehren, 272–5.

23 Emilie Savage-Smith and Yossef Rapoport (eds), *The Book of Curiosities: A Critical Edition* ([www.bodley.ox.ac.uk/bookofcuriosities](http://www.bodley.ox.ac.uk/bookofcuriosities)) (March 2007), fols 24b–25b. [I have followed Savage-Smith and Rapoport's guidelines for how this source should be referenced rather the style employed throughout the rest of this article].

24 Al-Azmeh, "Barbarians in Arab eyes", 6–7.

25 Savage-Smith and Rapoport, *The Book of Curiosities*, fol. 24b.

26 A celebrated market just outside of Baṣra.

27 This appears in an essay of al-Jāḥiẓ which goes under two titles. It is usually found as *Risālat al-Auṭān wa al-Buldān*, but the best critical edition of the text is that of Pellat where it appears as Al-Jāḥiẓ, *Kitāb al-Amṣār wa-'Ajā'ib al-Buldān*, *Al-Mashriq*, 60/2, 1966, ed. C. Pellat, 169–205. Baṣra as the centre of the world is on p. 196.

28 H. v. Mžik, *Das Kitāb Sūrat al-Ard des Abū Ġā'far Muḥammad ibn Mūsā al-Ḥuwārizmī* (Leipzig, 1926), 21–2. Rather than being a direct translation of Ptolemy, Tibbetts has argued that al-Khwārazmī took his co-ordinates from a Syriac map based on Ptolemy's work. See Tibbetts, "The beginnings of a cartographic tradition", 96–101.

29 H. v. Mžik, *Kitāb 'Ajā'ib al-Aqālīm al-Sab'a des Suhrāb* (Leipzig, 1930), 30.

30 M. Cooperson, "Baghdad in rhetoric and narrative", *Muqarnas*, 13, 1996: 99–113.

31 Al-Mas'ūdī, *Les Prairies d'or*, trans. C. Barbier de Meynard and A. Pavet de Courteille, vol. III (Paris, 1864), 131.

culture, wrote that: “The region of Baghdād is in the centre of a climate about which Aristotle says that it produces intelligent people”, and thus its inhabitants had pleasant appearances, pure characters, and noble natures.<sup>32</sup>

However, not all of the medieval sources identified Mesopotamia and Baghdād with the fourth clime. An alternative tradition located the fourth clime at a latitude slightly further to the north so that Khurāsān occupied the centre of the inhabited world. An early reference to this is Ibn Rusta (c. 903–913), who in his *Kitāb al-A’lāq al-Nafīsa* (*The Book of Precious Things*), described the fourth clime as comprising Khurāsān (including towns such as Samarqand, Bukhārā, Nīshāpūr, his native city Iṣfahān), the Jazīra, North Syria and Morocco.<sup>33</sup> This schema, which moved the fourth clime northwards, was copied by authors such as al-Hamdānī (b. c. 893),<sup>34</sup> al-Muqaddasī (d. after 985) who located the Mesopotamian cities in the third clime and many of the cities of Khurāsān in the fourth clime,<sup>35</sup> and al-Dimashqī who identified the central clime with places such as Bukhārā, Samarqand, Syria, Egypt and the south of al-Andalus.<sup>36</sup>

A particularly interesting case is the Persian city of Iṣfahān, which in reality was located at a slightly more southerly latitude than Baghdād, and was placed in the fourth clime by authors such as Ibn Rusta, al-Hamdānī and al-Muqaddasī.<sup>37</sup> However, al-Hamdānī is one of a number of scholars who placed Iṣfahān at the centre of the fourth clime, as the most central point of the inhabited world, but who nevertheless located Baghdād in the third clime. This was despite the fact that Baghdād was slightly north of Iṣfahān, and should have been located, according to his schema, in the fifth clime. The anomalous nature of Iṣfahān’s placing by some medieval scholars is reflected in Yāqūt, who placed it in both the third and the fourth climes,<sup>38</sup> and the city’s placement in the fourth clime at the expense of Baghdād was probably aided by the fact that Iṣfahān was also used to designate a large province stretching northwards as far as Rayy and Qirman.<sup>39</sup> It seems likely that the incongruous location of Iṣfahān is partly attributable to a number of scholars who wished to emphasize the centrality of their own city at the expense of Baghdād.

Wherever Iṣfahān was to be located in relation to Mesopotamia, it appears as the most equitable place on earth in a number of sources. Al-Faqīh, for example, cited an authority who described Iṣfahān as the navel (*surra*) of Iraq, before immediately quoting the description of the inhabitants of Iraq given above.<sup>40</sup>

32 See J. Schacht and M. Meyerhof, *The Medico-Philosophical Controversy between Ibn Butlān of Baghdad and Ibn Ridwān of Cairo: A Contribution to the History of Greek Learning among the Arabs* (Cairo, 1937), 89–90.

33 Ibn Rusta, *Kitāb al-A’lāq al-Nafīsa*, 97–8.

34 Al-Hamdānī, *Ṣifāt Jazīrat al-‘Arab* (al-Rīyād, 1974), 13–14.

35 Al-Muqaddasī, *The Best Divisions for Knowledge of the Regions* (trans. B. Collins, Reading, 2001), 56.

36 Al-Dimashqī, *Kitāb Nukhbat al-Dahr fī ‘Ajā’ib al-Barr wa-al-Bahr*, 274.

37 Ibn Rusta, *Kitāb al-A’lāq al-Nafīsa*, 97–8, Al-Muqaddasī, *The Best Divisions*, 56, and Al-Hamdānī, *Ṣifāt Jazīrat al-‘Arab*, 13–4.

38 Jwaideh, *The Introductory Chapters*, 46–7.

39 A.K.S. Lambton, “Iṣfahān”, in *EI* (second edition), vol. 4, 97.

40 See note 12, and al-Faqīh al-Hamadhānī, *Mukhtaṣar Kitāb al-Buldān*, 161–2.

The citizens of Iṣfahān, then, were the most superior of the residents of the fourth clime. Moreover, in the Persian translation of al-Māfarrūkhī's treatise on the good qualities of Iṣfahān (c. 1072–92), there is an anecdote which describes a scene at the Caliph's court in Baghdād, in which a notable of Iṣfahān, in a scene reminiscent of al-Jāḥiẓ's inhabitant of Baṣra, argued that his own house was the best in the whole world. The notable claimed that the fourth clime was the noblest of the seven climes, that Iṣfahān was at the centre of this clime, that the quarter of the city in which he lived was the most charming, and that his own residence was the best in this quarter. In this quarter of Iṣfahān the climate was so temperate that the water did not become contaminated and buildings did not deteriorate over time.<sup>41</sup> The idea that things did not corrupt in Iṣfahān is also present in the travelogue of Abū Dulaf (d. after 987),<sup>42</sup> a tenth-century poet, traveller and mineralogist, who stated that dead bodies did not decay in the city's soil and that an apple remained fresh there for seven years.<sup>43</sup>

A literary debate among medieval Islamic scholars over whether Baghdād or Iṣfahān enjoyed the superior status is found in a number of sources. For example, there is a report in the *Kitāb Maḥāsin Iṣfahān* (*Book of the Good Qualities of Iṣfahān*) of al-Māfarrūkhī which revises the history of the foundation of Baghdād by the Caliph al-Manṣūr (d. 755). In this report, the climate of the Caliph's new capital city made him ill, so he assembled the wise men of his time and the viziers of his kingdom to find a new site for his residence in a place possessing a more salubrious climate and sweeter water than Baghdād. This site was found on the bank of the river Zadarūdh, next to Iṣfahān.<sup>44</sup>

It is clear that the precise location of the fourth clime and the centre of the inhabited world was considered important by a number of medieval scholars. As has been seen with al-Jāḥiẓ and al-Māfarrūkhī this probably owed a great deal to the prestige attached to residing in the most perfect location on earth, and thus the inhabitants of different cities contended for this distinction.<sup>45</sup> The fact that different arguments could be marshalled for various places indicates that the issue was still the subject of great debate in the medieval Islamic world, and thus it is obvious that there was never a clear consensus on where the fourth clime and the centre of the oecumene were to be located.

41 J. Malcolm and E.G. Browne, "Account of a rare manuscript history of Iṣfahān. Presented to the Royal Asiatic Society on May 19, 1827", *Journal of the Royal Asiatic Society of Great Britain and Ireland*, July 1901: 419–20. The explicit reference to the seven climes in this account seems only to exist in the later Persian translation of this work as, while the Arabic account has the notable claiming that his house in Iṣfahān is best, by virtue of the superior climatic conditions there, he does not explicitly mention it being in the fourth clime. See al-Māfarrūkhī, *Kitāb Maḥāsin Iṣfahān* (Tehran, 1933), 9. For a description of the work and the author see J. Paul, "The histories of Iṣfahān: Mafarrukhi's *Kitāb maḥāsin Iṣfahān*", *Iranian Studies*, 33/1–2, 2000: 117–32.

42 See V. Minorsky, "Abū Dulaf, Miṣ'ar b. Muḥalhil al-Kḥazraḍjī al-Yanbu'ī", in *EI* (second edition), vol. I, 116.

43 Abū Dulaf, *Abu-Dulaf Miṣ'ar ibn Muḥalhil's Travels in Iran (circa A.D. 950)* (Cairo, 1955), trans. V. Minorsky, 60.

44 Al-Māfarrūkhī, *Kitāb Maḥāsin Iṣfahān*, 8–9.

45 This topic awaits sustained research. However, one example of a study in this field is G.J. van Gelder, "Kufa vs Basra: The literary debate", *Asiatische Studien/Etudes Asiatiques*, 50/2, 1996: 339–62.

### The periphery

Despite the exact placement of the central clime being a matter of some debate, it is clear from the descriptions above that it was a place of temperateness, civilization and good health. Yet while the centre of the inhabited world was the abode of the most rational, learned and cultured people, the peripheries of the inhabited world were almost diametrically opposed to this state of existence. For instance, al-Qazwīnī (d. 1283), the famous geographer and cosmographer, described, in his *Āthār al-Bilād wa-Akhhbār al-'Ibād* (*Landmarks of Countries and Stories of Peoples*), the lands outside of the central climes as places where torment was customary for the inhabitants.<sup>46</sup>

Yet while there was near unanimous agreement that the peripheries of the oecumene experienced excessive environmental conditions, there was little agreement on the precise delineation of the inhabited world. In many ways this lack of agreement was the result of the ambiguity in the classical tradition which medieval scholars had inherited. We have already seen the contradictory view of Ptolemy, and thus there can be little surprise that Muslim authors variously demarcated the northern limit of the oecumene at just over 50°,<sup>47</sup> 63°,<sup>48</sup> and 64°.<sup>49</sup> Moreover, for the southernmost limit of the inhabited region of the earth there was even more disagreement, most of which focused on whether there was an inhabitable region below the equator.

There are a number of references in the medieval literature to the seven inhabited climes north of the equator being paralleled by seven uninhabited climes south of the equator.<sup>50</sup> However, in reality there were a variety of different opinions on where the inhabited region to the south ended. A number of scholars were convinced that life was not possible either at the equator or beyond. Foremost among this category was al-Bīrūnī (d. after 1050) who held that while life was theoretically possible south of the equator, this absolutely could not be the case for the simple reason that there was not enough land there to permit the generation of life.<sup>51</sup> According to al-Bīrūnī the equator itself was completely uninhabitable due to the severity of the heat, and so he claimed that neither he nor any of his fellow scholars had heard of anyone who had either reached the equator or crossed it.<sup>52</sup> Al-Bīrūnī was followed in this assessment by Ibn Khaldūn.<sup>53</sup>

46 Al-Qazwīnī, *Āthār al-Bilād wa-Akhhbār al-'Ibād* (Beirut, 1984), 9.

47 According to al-Bīrūnī. See J. Ali, *The Determination of the Coordinates of Positions for the Correction of Distances between Cities: A Translation from the Arabic of Kitāb Taḥdīd Nihāyāt al-Amākin liṭaṣṣīh Masāfāt al-Masākin* (Beirut, 1967), 106. See also Tibbetts, "The beginnings of a cartographic tradition", 102.

48 See, for example, Al-Mas'ūdī, *Kitāb al-Tanbīh*, in *Bibliotheca Geographorum Arabicorum*, vol. VIII, 1894, ed. M.J. De Goeje, 25.

49 Ibn Khaldūn, *The Muqaddimah*, trans. F. Rosenthal, 105.

50 Jwaideh, *The Introductory Chapters*, 38 and A. Miquel, "Istiḥwā' (khaṭṭ al-)", in *EI* (second edition), IV, 273.

51 Ali, *The Determination of the Coordinates*, 25–31.

52 Al-Bīrūnī, *The Chronology of Ancient Nations: An English Version of the Arabic Text of the Athār-ul-Bākiya of Al-Bīrūnī* (London, 1879), trans. C.E. Sachau, 249.

53 Ibn Khaldūn, *The Muqaddimah*, trans. F. Rosenthal, 107–09.

However, a number of medieval scholars were convinced that land beyond the equator was inhabited. Al-Mas'ūdī, for example, following Ptolemy's *Geography*, fixed the southernmost limit of the inhabited world at just over 16° south of the equator.<sup>54</sup> Moreover, the anonymous author of the late tenth-century Persian geography, the *Hudūd al-'Ālam*, outlined a model of the world in which the temperature steadily increased from the North Pole down to the South Pole. Thus, five of the fifty-one countries of the oecumene were located below the equator, but beyond these countries life was not possible because of the great excess of heat towards the South Pole.<sup>55</sup> Finally, and most fascinatingly, Ibn Rusta provided detailed information on the kinds of things which existed south of the equator. He listed eggs resembling the eggs of the ostrich, elephants, an animal possessing a horn in its nose (presumably the rhinoceros), and people blacker, with bristlier hair, and more ugly than the black people found north of the equator as the unique denizens of this region. Ibn Rusta made clear that some of these things were not known to the ancients, but due to their importation into the Muslim world by merchants he had come to know about them. In a calculation which seems to reflect the calculations of some of the mathematical geographers that the northernmost limit of human habitation was just over 50°, Ibn Rusta also claimed that the southernmost limit of human habitation was 51° south of the equator.<sup>56</sup>

It is clear then, that when plotting the limits of the inhabited world there was no clear consensus on where the periphery was to be located. Moreover, a final ambiguity obfuscating the issue of the limits of the oecumene were the various opinions on whether the seven climes constituted the entirety of the inhabited world, or whether habitation was possible beyond the frontiers of the first and seventh climes. Many medieval scholars were prepared to admit that habitation could occur beyond the limits of the climes. Al-Khwārazmī, for example, devoted a section of his *Šūrat al-Arḍ* (*Picture of the Earth*) to the cities beyond the border of the seventh clime;<sup>57</sup> Ibn Rusta also described the inhabited lands beyond the seventh clime and, as we have seen, posited a large expanse of inhabited territory south of the equator;<sup>58</sup> and Yāqūt listed a number of territories beyond the seventh clime.<sup>59</sup> Conversely, authors such as al-Idrīsī (c. 1165) in his *Kitāb Nuzhat al-Mushtāq* (*The Book of Pleasant Journeys in Faraway Lands*) and al-Qazwīnī in his *Āthār al-Bilād* were able to fit all of the inhabited regions into the seven climes.<sup>60</sup>

### East and west

As well as disagreeing over where the centre and peripheries of the oecumene were to be situated, there was also a lack of consensus in the medieval Arabic

54 Al-Mas'ūdī, *Kitāb al-Tanbīh*, 25.

55 V. Minorsky, *Hudūd al-'Ālam: "The Regions of the World"*, second edition (Cambridge, 1970), 50–51, 83.

56 Ibn Rusta, *Kitāb al-A'lāq al-Nafīsa*, 100–01.

57 Mžik, *Das Kitāb Šūrat al-Arḍ des Abū Ğā'far Muḥammad ibn Mūsā al-Ḥuwārizmī*, 35–7.

58 See Ibn Rusta, *Kitāb al-A'lāq al-Nafīsa*, p. 98 and above.

59 Jwaideh, *The Introductory Chapters*, 50.

60 Al-Qazwīnī, *Āthār al-Bilād* and al-Idrīsī, *Opus Geographicum Sive "Liber ad eorum delectationem qui terras peragrare studeant"*, IX Volumes (Napoli, 1970–84).

literature over the relationship of the far east and far west of the inhabited world to temperature. This is particularly important because it added another layer of complexity to the “standard” model of the climes. A particularly illustrative example of this point is provided by al-Marwazī’s description of China. He located China in an unenviable position straddling the first, second and third climes, and yet despite its relative remoteness from the central clime it was described as possessing pure air, digestible waters, and good soil, and the Chinese themselves were described as the most skilful of people in craftsmanship. Al-Marwazī made clear that China’s excellent environment was afforded by its proximity to the rising of the sun in the east, and in doing so he contributed to another area of debate among medieval Islamic geographers.<sup>61</sup>

To some extent this debate reflected differences in opinion among the classical authors whose works were translated into Arabic. The highly influential writings of Hippocrates placed the well-constituted inhabitants of Asia in a middling position from the rising of the sun, and this reflected a view of the world which envisioned the east as being more moderate in temperature than the west.<sup>62</sup> The cause for this supposed clemency in the east was a deeply-rooted belief that the rays of the rising sun were more healthful than the scorching heat of the setting sun, and that the mists which were thought to blanket the west in the morning subjected the inhabitants of this region to greater variation in temperature.<sup>63</sup> However, in Polemon’s treatise on physiognomy, which was also widely read in the Islamic world, no such polarity existed between east and west. The north and south were envisioned as the two climatic extremes and all the regions located at the midpoint between them were seen as temperate, although proximity to the sea or hinterland could incline a region to one of the two extremes.<sup>64</sup>

A number of medieval scholars, to a greater or lesser degree, followed the Hippocratic conception of the world in which the east was much more temperate than the west. Such support ranged from al-Mas’ūdī, who stated that both regions were temperate “although the superiority of the east is more apparent and its temperateness is better known”,<sup>65</sup> to scholars such as the Christian physician Ibn Buṭlān who, in his *Risālat fī Shirā’ al-Raqīq wa-Taqlīb al-‘Abīd* (*On the Buying and Examination of Slaves*), after describing the numerous virtues of the inhabitants of the east, remarked: “all of these are because of the temperate occurrence of the sun in this region”, while the opposite dispositions were found in the inhabitants of the west “because the sun does not rise over them in the

61 Al-Marwazī, *Sharaf al-Zamān Tāhir Marvazī*, 14.

62 Hippocrates, *Kitāb Buqrāt fī-l Amrāq al-Bilādiyya* (*On Endemic Diseases (Airs, Waters and Places)*), (Cambridge, 1969), ed. and trans. J.N. Mattock and M.C. Lyons, 117–20.

63 J. Romm, “Continents, climates, and cultures: Greek theories of global structure”, in *Geography and Ethnography: Perceptions of the World in Pre-Modern Societies*, 221–3.

64 An investigation of the translation of the text, its dissemination, and the status of physiognomy in Arabic literature in general has been undertaken by R. Hoyland, “The Islamic background to Polemon’s treatise”, in *Seeing the Face, Seeing the Soul: Polemon’s Physiognomy from Classical Antiquity to Medieval Islam*, 227–80. Hoyland provides a translation of the treatise, “A new edition and translation of the Leiden Polemon”, at pp. 329–463 of the same volume. Particularly relevant are pp. 423–6.

65 Al-Mas’ūdī, *Kitāb al-Tanbīh*, 25.

mornings".<sup>66</sup> Similar statements on the superiority of the east are found in the *Kitāb Gharā'ib* and, as I have already noted, in the *Kitāb al-Ḥayawān* of al-Marwazī.<sup>67</sup>

The main opponents of this model were al-Bīrūnī and Yāqūt. Al-Bīrūnī had no place for any longitudinal differences in climate and, instead, the habitable world was to be divided into climes with extreme degrees of hot and cold in the far south and the far north respectively, and with more moderate conditions in the central climes. Each of the climes was uniformly temperate except for the climatic influence from the random distribution of mountains and seas.<sup>68</sup> He was followed in this assessment by Yāqūt.<sup>69</sup>

Another particularly interesting contribution was made by al-Qazwīnī, who in his *Āthār al-Bilād* asserted:

That which ends in the extreme east and which the light of the sunrise overcomes is loathsome because of the excess of its heat and the intensity of its burning. And so living beings are incinerated in it and vegetation does not grow. And that which ends in the extreme west is also loathsome because of its parity to the east in the concept which we have mentioned.<sup>70</sup>

Al-Qazwīnī offered a third model of the influence of the sun in the east and west.<sup>71</sup> Unlike al-Bīrūnī, al-Qazwīnī accepted that climatic conditions were different at varying longitudes, but rather than following the Hippocratic example he suggested that the rays of the sun were equally destructive in the far east and the far west. Once again then, my examination of the medieval texts has revealed that the Islamic view of the structure of the world and the climes was far from uniform.

## Medieval Islamic ethnography

Given the variation in the ways in which the theory of the climes was understood by medieval Muslim scholars, there can be little surprise that in the application of theory to ethnology not all of the stipulations were enforced. This point was recognized by al-Azmeh, who was careful to emphasize that, despite the environmental determinism which underpinned the worldview of many Muslim scholars, "it was social judgement which ultimately determined the degree to which credence would be given to geographical determinism".<sup>72</sup>

Owing to lack of space and the sheer volume of literature, both primary and secondary, focusing on the Islamic ethnography and ethnology of barbarism, I will investigate here just one aspect of the relationship of medieval Islamic

66 Ibn Buṭlān, *Risāla fī Shirā' al-Raqīq wa-Taqlīb al-'Abīd*, in Nawādir al-Makḥṭūṭāt, 4 (Cairo, 1954), 403.

67 Savage-Smith and Rapoport, *The Book of Curiosities*, fol. 26a.

68 J. Ali, *The Determination of the Coordinates*, 102–03.

69 W. Jwaideh, *The Introductory Chapters*, 42–51.

70 Al-Qazwīnī, *Āthār al-Bilād*, 9.

71 A similar view is espoused by a wise man in al-Mas'ūdī's *Murūj*, but he does not seem to have held the view himself. See Al-Mas'ūdī, *Les Prairies d'or*, vol. II, 123–4.

72 Al-Azmeh, "Barbarians in Arab eyes", 8.

ethnography with humoral theory and the climes: namely, the notion of a barbarous polarity between the denizens of the far north and the far south. It is hoped that this brief investigation will spur further research into a complex and fascinating topic.

The inhabitants of the far north and the far south receive short shrift in many medieval Islamic texts. One of the most comprehensive ethnological investigations of the north was undertaken by al-Mas'ūdī in his *Kitāb al-Tanbīh* (*The Book of Notification*). Discussing the northern regions, al-Mas'ūdī suggested that because of the distance from the zenith of the sun the conditions were cold and moist, and thus the warm humour was lacking among the inhabitants. This had all kinds of physiognomic and psychological effects: the bodies of the inhabitants were large and flabby, their colour became white and their hair lank, while their characters were coarse, dull-witted, and they were unable to hold religious beliefs firmly. This applied to peoples such as the Franks and the Slavs. However, for those even further north, such as the Turks, the effects on their appearances and natures were even worse because the environmental conditions were even more excessive. They were the most stupid, harsh and brutish of people, and their bodies were flabby, thick and of a reddish complexion.<sup>73</sup>

Similar physical descriptions of northerners feature in a number of accounts, focusing generally on their flabby bodies, whitish-red colouring and lank hair.<sup>74</sup> According to Ibn al-Faqīh the special physiognomy of northerners began in the womb. In his *Kitāb al-Buldān* he stated that the well-proportioned limbs and brown skins of the Iraqīs were attributable to their being well-cooked in the womb: “the womb does not send them out between pale-skinned, reddish, albino, and white, like those removed from the wombs of the women of the Slavs and those who are similar to and neighbour them”.<sup>75</sup> One of the most extreme physical descriptions of northerners is found in the *Kitāb al-Masālik wa al-Mamālik* (*Book of Roads and Kingdoms*) of al-Bakrī (d. 1094), in which the Andalusian scholar gave an account of a particular group of Slavs. He described their cold temperament as so fundamental to them that they perished in warm lands.<sup>76</sup>

Moreover, there were also statements similar to al-Mas'ūdī's on the bad characters of northerners. Šā'id al-Andalusī (d. 1070) described the inhabitants of cold regions, such as the Slavs and the Bulgars, as lacking precision of understanding and keenness of thought, and as overcome by ignorance and stupidity.<sup>77</sup> The author of the *Kitāb Gharā'ib* stated that the inhabitants of the sixth clime were inclined to war, bloodshed, ruthlessness and oppression, and possessed neither culture nor science,<sup>78</sup> while Ibn Abī al-Ash'ath (d. c. 970)

73 Al-Mas'ūdī, *Kitāb al-Tanbīh*, 23–4. A translation of this section on the northerners has been made by Hoyland in “The Islamic background to Polemon's treatise”, 254.

74 See, for example, Šā'id al-Andalusī, *Ṭabaqāt al-Umam* (Egypt, n.d.), p. 11 and *Rasā'il Ikhwān al-Šafā' wa-Khillān al-Wafā'*, vol. I, 233–4.

75 Ibn al-Faqīh al-Hamadhānī, *Mukhtaṣar Kitāb al-Buldān*, 161.

76 Al-Bakrī, *Juġhrāfiyat al-Andalus wa-Ūrūbbā min Kitāb al-Masālik wa al-Mamālik* (Beirut, 1968), 182–3.

77 Šā'id al-Andalusī, *Ṭabaqāt al-Umam*, 11.

78 Savage-Smith and Rapoport, *The Book of Curiosities*, fol. 25a.

described some of the peoples of the northern Caucasus as animals in constitution, who sold their children into slavery and had no religion or philosophy.<sup>79</sup>

I will examine below a number of descriptions of the inhabitants of the far south. For now, however, I will simply note that they were often described in similarly negative terms to northerners. For example, al-Mas'ūdī, in his *Kitāb al-Tanbīh*, stated that because of the intense heat and dryness of the far south, the inhabitants became black, with red eyes and savage souls,<sup>80</sup> and al-Andalusī attributed to them hot temperaments and fiery humours, and black skin, frizzy hair, and a lack of rational understanding and steadiness of mind.<sup>81</sup>

Al-Azmeh argued that the ethnological descriptions of southerners served as a counterpoint to the descriptions of northerners. Indeed, he asserted a polarity of equal aberrancy between northerners and southerners in the medieval Islamic worldview, arguing that: "The meridional and septentrional zones were therefore equivalent in polarity, and most visibly opposed by the polarities of heat and cold, blackness and whiteness, and light and darkness . . . The social life and temperaments of northerners and southerners shared some characteristics which resulted from shared deviance".<sup>82</sup>

However, a close examination of the texts of certain authors gives the impression that cold and whiteness at least were viewed as more favourable characteristics than heat and blackness by a number of Muslim scholars.

In a number of texts the cold temperament was portrayed as better than the hot temperament. Al-Qazwīnī, in his *Āthār al-Bilād*, described the influence of hot abodes as being to relax the faculties, weaken the natural heat of the body, loosen the soul, make the heart fearful and cause bad digestion. Conversely, the influence of cold abodes was to harden the body, strengthen the natural heat and create in the inhabitants of these regions courage, good faculties and an excellent digestion.<sup>83</sup> This is also the case for Ibn Sīnā, according to whom the denizens of hot countries had weak digestions, became old-aged at thirty, and were timid, while those residing in cold countries became robust, stronger and more courageous, with good digestions.<sup>84</sup> Moreover, as I will soon show, Ibn Khaldūn viewed heat as more destructive, and more inhibiting to civilization, than cold.<sup>85</sup> Finally, in the counterpart to Ibn al-Faqīh's description of the undercooked northerners which we saw above, he also described the overcooked southerners. Rather than simply influencing the colour of people, as it did in the case of the northerners, the excessive cooking of the south had broader implications. As well as black skin and frizzy hair, the overcooked southerners also had a stinking odour, unproportioned limbs, deficient

79 R. Kruk, "Ibn Abī-l-Ash'ath's *Kitāb al-Ḥayawān*: A scientific approach to anthropology, dietetics and zoological systematics", reprinted in *Islamic Medical and Scientific Tradition*, vol. II (Abingdon, 2011), 350.

80 Al-Mas'ūdī, *Kitāb al-Tanbīh*, 24.

81 Ṣā'id al-Andalusī, *Ṭabaqāt al-Umam*, 9.

82 Al-Azmeh, "Barbarians in Arab eyes", 11.

83 Al-Qazwīnī, *Āthār al-Bilād*, 9.

84 Ibn Sīnā in Avicenna, *A Treatise on the Canon of Medicine of Avicenna* (London, 1930), trans. O. Cameron Gruner, 205.

85 Ibn Khaldūn, *The Muqaddimah*, trans. F. Rosenthal, 107.

understanding and wicked desires.<sup>86</sup> Once again the cold temperament was viewed as less damaging than the hot temperament.

Whiteness and blackness were not always seen as equivalents. Al-Jāhīz, in his treatise “On the Boasts of the Blacks over the Whites”, repeated some of the arguments made for the supremacy of the black colour. Thus, for example, he cited arguments made for the Black Stone coming from Paradise, that copper was more valuable when it became darker, and that the excessive whiteness of the Franks, Byzantines and Slavs was much more repulsive than blackness. Al-Jāhīz, however, could not avoid addressing the oft-repeated claim that blackness was the result of divine punishment.<sup>87</sup>

Blackness as a result of divine punishment is mentioned in a number of medieval Islamic sources. Al-Qazwīnī, for example, repeated the common belief that “Noah, peace be upon him, cursed his son Ḥām, and so his colour became black”,<sup>88</sup> while there were also a number of Quranic allusions to the black faces of sinners on the Day of Judgement. According to Lange, the Quran suggests that the faces of the damned will be black because they will have been scorched by Hellfire while, conversely, the inhabitants of Paradise would have white faces. The consensus among exegetes seems to have been that “on the Day of Judgement the faces of sinners would literally be black”.<sup>89</sup> Moreover, in medieval Persian literature blackness was often identified as a defect and associated with evil.<sup>90</sup>

Al-Jāhīz then, was very much in the minority on this issue and, perhaps because of the Quranic association of black faces with sinners and white faces with the pious, his position on the superiority of blackness never achieved much traction in the Islamic scholarly tradition. In fact, it seems likely that al-Jāhīz’s defence of blackness was due more to his attempt to demonstrate his rhetorical prowess than to any belief in the superiority of black people, and that parody may have played a major role in the composition of the treatise.<sup>91</sup> Moreover, the reversed position was much more popular,<sup>92</sup> and the supremacy of whiteness over blackness was expounded at length by such authors as al-Marwazī. In his *Ṭabāʾiʿ al-Ḥayawān*, for example, Al-Marwazī connected whiteness with the light of the “noble heavenly bodies which God Almighty constituted as the causes of the existence of whatever there is in this world”, while blackness was opposed to this divine light and tried to negate it.<sup>93</sup>

86 Ibn al-Faqīh al-Hamadhānī, *Mukhtaṣar Kitāb al-Buldān*, 161.

87 Al-Jāhīz, *Kitāb Fakhr al-Sūdān ʿalā al-Bīdān*, trans. T. Khalidi, “The boasts of the blacks over the whites”, *Islamic Quarterly*, 25 1/2, 1981: 23.

88 Al-Qazwīnī, *Āthār al-Bilād*, 22.

89 C. Lange, “‘On that day when faces will be white or black’ (Q3:106): Towards a semiology of the face in the Arabo-Islamic tradition”, *Journal of the American Oriental Society*, 127/4, 2007: 429–45.

90 M. Southgate, “The negative image of blacks in some medieval Iranian writings”, *Iranian Studies*, 17/1, 1984: 3–36.

91 This was certainly the case for his *Bukhālāʾ*. See D. Beaumont, “Parody and lying in al-Bukhālāʾ”, *Studia Islamica*, 79, 1994: 27–49.

92 Lange, “‘On that day when faces will be white or black’”, passim and Southgate, “The negative image of blacks”.

93 Al-Marwazī, *Sharaf al-Zamān Ṭāhir Marwazī*, 54–5.

Why did a number of medieval Muslim scholars look upon the savages of the north with a less critical eye than those of the south? On the ethnological level there appear to be two major influences which allowed denizens of the south to be characterized with a greater degree of savagery. The first derives from a seminal text on the relationship between man and his environment that I have alluded to but not yet discussed: the Hippocratic treatise *Airs, Waters, Places*. This work was accessed by medieval scholars through the commentary on the text written by Galen: both the treatise itself and a compilation of the Hippocratic quotations taken from it circulated independently in Arabic manuscripts.<sup>94</sup> According to this treatise, the inhabitants of different regions were subjected to certain environmental influences according to the temperature, prevailing winds, surrounding water and topography of a particular locale.<sup>95</sup>

As we have seen, a particularly influential aspect of the treatise was that conditions in Asia were thought to be better than those in Europe, and consequently the inhabitants of Asia were good, of noble character, and had well-fleshed bodies. This was because conditions in Asia were perpetually like spring, and this temperate climate led to a balanced temperament within people.<sup>96</sup> The converse was true in Europe where people were given to anger, were rough and wild, and did not mix with other people well. This was because Europe, unlike Asia, did not have a balanced temperament, and intense heat and cold, and moisture and dryness, followed each other in quick succession. This led to mental disturbances in the minds of Europeans, which destroyed quietness and calmness in them.<sup>97</sup>

Yet, while it may seem that medieval Islamic scholars appropriated the Hippocratic model *in toto*, there are a number of crucial differences between the Greek and Islamic understandings of the relationship between environment and temperament. The most important of these for present purposes is that Hippocrates, despite the characterizations given above, viewed the inhabitants of Asia as being worse than those of Europe. The temperate conditions of Asia made it impossible for the inhabitants to be brave, industrious and hardworking, and so they were weak and contemptible.<sup>98</sup> In contrast, the inhabitants of Europe were brave, warlike, hardworking and tough.<sup>99</sup> It seems likely that these positive characterizations of the Europeans of northern latitudes had an influence on the ethnological conceptions of some medieval Muslims, although, in contrast, Hippocrates' reservations about the physical and mental weakness of the inhabitants of Asia had little influence on Arabic scholarship.

The second influence that may have predisposed Muslim scholars to look upon northerners more favourably is of particular interest because it represents a notion inherited from the ancient world which actually ran counter to humoral pathology. According to strict humoral theory, residence in the countryside was

94 G. Strohmaier, "Galen's not uncritical commentary on Hippocrates' *Airs, Waters, Places*", *Bulletin of the Institute of Classical Studies*, 47/2, 2004: 1–9.

95 Hippocrates, *Kitāb Buqrāt fī-l Amrāq al-Bilādiyya*.

96 *Ibid.*, 117, 119. English translation 118, 120.

97 *Ibid.*, 149, 151, 153. English translation 150, 152, 154.

98 *Ibid.*, 122, 136. English translation 121, 135.

99 *Ibid.*, 134, 154. English translation 133, 153.

preferable to city-dwelling. Thus, for example, the physician Ibn Riḍwān (d. c. 1067–68) wrote that “the people in the countryside are more active than the people in the cities. Therefore, their bodies are healthier because of the exercise that hardens their limbs and makes their bodies strong”.<sup>100</sup> Furthermore, Ibn Khaldūn suggested that the inhabitants of cities were overfed, and that excessive food increased the moisture in the body and created “many corrupt, putrid humours”.<sup>101</sup> However, both of these authors firmly believed that it was ultimately better to live in the city than in the countryside because human beings, for the proper conditions of life, required social organization complex enough to fulfil their various needs. Ibn Riḍwān, for example, wrote that a man “needs the many things that he finds in the city for the proper condition of his life”.<sup>102</sup>

One of the earliest Islamic exponents of this philosophical position was al-Fārābī (d. c. 950) who, drawing upon both Plato and Aristotle, argued that humans could not achieve perfection without a community to serve their needs for food, clothing and shelter.<sup>103</sup> Al-Fārābī argued, in his *On the Perfect City*, that the smallest social unit which would satisfy all of a man’s diverse needs was the city, and not “a society which is less complete than it” such as a village.<sup>104</sup> In social units of organization smaller than cities then, men could neither attain perfection nor a high degree of civilization.

This notion was reflected in a number of different ways in later Arabic literature, and seems to have evolved into the simple dichotomy between the good city and the bad countryside for some authors.<sup>105</sup> Urbanity was praised in a number of works,<sup>106</sup> while those living in less complex social organizations were frequently portrayed as barbarous and savage. Al-Andalusī made such a point in his discussion of the people without science. He argued that the populations of cities, whether they were located “in the east of the earth, or its west, or its south, or its north”, were restrained by royal authority and the laws of God, and the only exceptions to this were “some dwellers of the desert, and the barren steppes, and the wastelands”.<sup>107</sup> Indeed, cities came to be associated with religious learning and even Islam itself, perhaps owing to the Prophet’s saying: “I am the town of knowledge, and ‘Alī is its gate”.<sup>108</sup>

A particularly interesting manifestation of these sentiments was found in Islamic dream manuals, where the appearance of a city in a person’s dream was seen as considerably more fortuitous than a village. In the work of

100 Dols, *Medieval Islamic Medicine*, 92.

101 Ibn Khaldūn, *The Muqaddimah*, trans. F. Rosenthal, 177–8.

102 Dols, *Medieval Islamic Medicine*, 148.

103 See L. Marlow, *Hierarchy and Egalitarianism in Islamic Thought* (Cambridge, 1997), 49–52.

104 R. Walzer, *Al-Farabi on the Perfect State: Abū Naṣr al-Fārābī’s Mabādī’ Ārā’ Ahl al-Madīna al-Fāḍila* (Oxford, 1985), 229–31.

105 For aspects of this see G.E. van Grunnebaum, “Aspects of Arabic urban literature mostly in the ninth and tenth centuries”, in *Al-Andalus*, 20/2, 1955: 259–81.

106 For example Yāqūt, who opened his geographical dictionary with a celebration of urbanity. See Jwaideh, *The Introductory Chapters*, 1.

107 Ṣā’id al-Andalusī, *Ṭabaqāt al-Umam*, 12.

108 G.J. van Gelder, “‘Dream towns of Islam’: Geography in Arabic oneirocritical works”, in A. Neuwirth (ed.), *Myths, Historical Archetypes, and Symbolic Figures in Arabic Literature* (Beirut, 1999), 507–20, esp. p. 510.

pseudo-Ibn Sīrīn, for example, which was probably composed in the early fifteenth century by a certain al-Dārī, the author stated:

Sometimes a village may stand for this world and a town for the Hereafter, because its blessings are greater and its people more blessed with comfort and its buildings larger. Or a town may denote the world and the village a cemetery, because it is separated and isolated from the town, and its inhabitants are dull.<sup>109</sup>

An intriguing feature of this urban–rural polarity was the tendency for places completely lacking urbanity and civilization to be associated with the south. For example, after his assertion that only those dwelling far from the civilizing influence of cities were truly savage, al-Andalusī gave the examples of the Buja,<sup>110</sup> the “savages of Ghana”, and the “scum of the Zanj”, each of which were African peoples. Similarly Ibn Khaldūn wrote that: “most of the black people of the first zone dwell in caves and thickets, eat herbs, live in savage isolation and do not congregate, and eat each other”. Ibn Khaldūn did suggest that the Slavs in the far north exhibited these characteristics too, but there is a great deal of confusion in his argument and just a short time later he assigned the Slavs to the peoples of the north who had received prophecy.<sup>111</sup>

Indeed, we find in the *Muqaddima* of Ibn Khaldūn a unique perspective on there being greater civilization in the north than in the south. He suggested, for instance, that because heat was much more destructive than cold, “civilization is stronger and more abundant in the northern quarter”, and he specifically identified the sixth and seventh zones as being more abundant in civilization than the central zones.<sup>112</sup> In fact, in one of the manuscripts of the *Muqaddima* there is a unique passage which further explains Ibn Khaldūn’s theory on civilization being greater in the north. He noted that in the past there had once been powerful kingdoms and a great deal of civilization in the south, while the kingdoms of the north, for example the Turks, Franks and Slavs, had been greatly inferior. In his day, however, he claimed that the situation had been reversed: the great metropolises of the south lay in ruins and the cultivated land had disappeared except near the coasts. Meanwhile, Frankish and Turkish dynasties had become extremely powerful and, consequently, the centres of urban life had shifted northwards.<sup>113</sup>

Ibn Khaldūn’s claim that the balance of urban life had shifted to the north was without precedent in medieval Arabic literature: however, it was grounded in an evolving conception of the north as possessing important towns and cities. Of course, al-Khwārazmī, as early as the mid-ninth century, described the cities of the north. Yet he listed only twenty-five cities for the whole of the seventh climate, and many of these were completely unidentifiable or simply called

109 *Ibid.*, 510–11.

110 Nomadic tribes living between the Nile and the Red Sea. See P.M. Holt, “Bedja”, *EI* (second edition), vol. I, 1157.

111 Ibn Khaldūn, *The Muqaddimah*, trans. F. Rosenthal, 168–9.

112 *Ibid.*, 107.

113 M’barek Redjala, “Un texte inédit de la ‘Muqaddima’”, *Arabica*, 22/3, 1975: 320–23.

“city” or “city upon the sea”. Moreover, al-Khwārazmī’s information was drawn from his reading of ancient sources and not from contemporary knowledge.<sup>114</sup> The north was obviously not perceived as an urban landscape in any real sense. Some time later, however, Muslim geographers possessing new sources of information from merchants and travellers who had actually visited the cities of the north began, accurately and in detail, to sketch out the northern landscape.

The twelfth-century *Kitāb Nuzhat al-Mushtāq* by al-Idrīsī is a particularly good example of this greater engagement with the north by medieval Muslim scholars. Written at the court of the Norman king of Sicily, Roger II (d. 1154), al-Idrīsī’s immense geographical work drew upon both earlier Arabic works and the contemporary accounts of the travellers he met in Sicily, and thus it displays a far greater knowledge of the north than any previous Islamic geography.<sup>115</sup> Taking al-Idrīsī’s account of the seventh clime, one can see that the state of knowledge compared to al-Khwārazmī’s time had advanced considerably. No longer was Arabic geography solely dependent on the classical tradition, even though the *Kitāb Nuzhat al-Mushtāq*’s Ptolemaic structure was indebted to it, and new sources of knowledge had filtered into the medieval Muslim consciousness.<sup>116</sup>

Taking the chapter as a whole, al-Idrīsī was now aware of England, Ireland, Scotland, Poland, Sweden, Finland, Denmark, Norway, Russia, Cumania, the Volga Bulgars and various other steppe tribes of the north. Moreover, he was also aware of the cities of these lands, and while very few of them were described with anything more than stock expressions, al-Idrīsī assigned a great deal of urbanity to some of these places. Hastings, on the south coast of England, for example, was described as being located fifty miles along the coast from Shoreham, and al-Idrīsī said of it: “It is a prosperous, important town of great standing” with many inhabitants, markets, and successful merchants.<sup>117</sup> Indeed, al-Idrīsī had a detailed knowledge of the urban environment of England from Devon to the North East, and he characterized the English as a whole as possessing endurance, determination and stout-heartedness. These attributes are far removed from the normal ethnological assertions made about the inhabitants of the north.

It is only with countries lacking a pronounced urban environment, that some of the usual depictions of the monstrous northerners are found. Finland, for example, is described as a peninsula with cities near the coasts and an empty interior. It is here, away from the civilizing influence of cities, that true savagery was to be found. Al-Idrīsī reports, for instance, that: “It is said that in this peninsula are a savage people who dwell in the wilds. Their heads are attached to their shoulders, as they have no necks whatsoever, and they seek shelter in the trees, where they make dwellings in which they live”.

114 Mžik, *Das Kitāb Sūrat al-Ard des Abū Ġa’far Muḥammad ibn Mūsā al-Ḥuwārizmī*, 33–4.

115 S. Maqbul Ahmad, “Cartography of al-Sharīf al-Idrīsī”, in J.B. Harley and D. Woodward (eds), *Cartography in the Traditional Islamic and South Asian Societies* (Chicago, 1992), 156–74.

116 The following two paragraphs are based on al-Idrīsī, *Opus Geographicum Sive*, vol. IX, 943–63.

117 *Ibid.*, 945.

It is clear then that, despite a status independent of, and to some degree opposed to, humoral pathology, the perceived influence of urbanity played an important role in medieval Islamic ethnology. Authors like al-Idrīsī and Ibn Khaldūn had a keen appreciation of the civilized urbanity of many countries in the north, and this was predicated on a deeper familiarization with these places and a view of the city as a civilizing institution. Medieval Muslim scholars found it harder to maintain blanket assertions of the north as a wholly savage and barbarous environment, as the theories of humoral pathology and the climes stipulated, in the face of a greater awareness of the cities and kingdoms of this region.

## Conclusion

The fundamental conclusion of all I have discussed thus far has been frequently reiterated in this investigation: that medieval Islamic civilization did not possess a uniform view of the world rooted in a shared conception of climatic theory and humoral pathology. In many ways this conclusion is not a new one. Scholars such as Miquel and al-Azmeh have noticed this fact, and to some extent the present article has simply built on their reservations. However, these reservations have often been expressed as throwaway lines and casual comments, and so it has been considered necessary to demonstrate, thoroughly yet succinctly, some of the complexities of the various understandings of these theories in the medieval Islamic worldview.

In the present study I have addressed some of the most significant differences in how the theory of the climes was elaborated by medieval Muslim scholars. I have shown that the “standard” view of an excellent fourth clime, with steadily deteriorating conditions as one moved to the north and the south, is not an unreasonable characterization of the medieval Islamic worldview, but one which nevertheless misses the manifold disagreements about where exactly the fourth clime is, where human habitation ends, and about the perceived influence of the sun in the east and the west.

I have also shown that there was some degree of disconnect between the theory of the climes and medieval Islamic ethnology, despite the fact that on the surface they appear to have been working together to justify the supremacy of Islamic civilization. There was no true equivalent barbarousness between northerners and southerners. Rather, a number of other influences compelled Islamic writers to look more favourably on those in the sixth and seventh climes than those in the first and second. Some of these influences, such as the Hippocratic arguments for the bravery and industriousness of Europeans, were drawn from material inherited and assimilated by Islamic civilization, while the prejudice towards those with black faces perhaps came from a more local current.

I have spent some time on the evolution of the medieval Islamic worldview. The conclusions I have reached are no more than preliminary. However, it is clear that the actual experience of northern civilization may have modified ethnological conceptions of northerners. The unrivalled power of Islamic civilization had been explained, in part, both by its location in the centre of the oecumene and its possession of unparalleled urbanity. In the works of scholars such

as al-Idrīsī and Ibn Khaldūn, however, both their own experiences and new sources of information had helped to shape their view of Europe in particular as an urban environment. Indeed, in the thought of Ibn Khaldūn, this fact was so troubling that even the location of the core Islamic territories in the fourth clime could not prevent him from thinking that “civilization” might have shifted to the northern climes.

What all of this means then, is that the “standard” conception of the medieval Islamic worldview is no longer tenable. Even without extending this article to an unmanageable length by discussing ways other than the climatic system by which medieval Muslims conceived of the world – such as, for example, the *kishwar* model<sup>118</sup> – or, indeed, by looking more closely at different interpretations of humoral pathology in medieval medical works, it is clear that just within the literature on the climatic system there are enough contradictory opinions to enable us to reject the notion of a standard viewpoint held by medieval Muslim scholars. It is hoped that the present article, by beginning the process of unravelling the modern understanding of the medieval Islamic worldview, will stimulate further research into this fascinating topic.

118 I have previously outlined one of Yāqūt’s four definitions of *iqīm*. Another definition, used by “the Persians of old” and frequently employed in his own time, was as of one of the seven *kishwars*. A *kishwar*, from the Avestan *karshwar*, was a circular territory of the oecumene. As with the Greek climatic system there were seven of them. However, in the *kishwar* system there was a central circle surrounded by six outer circles. This system appears in a number of works such as, for example, the *Tārīkh Baghdād* of al-Khatīb al-Baghdādī (d. 1071), and was employed instead of the Greek system. See Jwaideh, *The Introductory Chapters*, 40–42, T. Daryaee, “Ethnic and territorial boundaries in late antique and early medieval Persia (third to tenth century)”, in F. Curta (ed.), *Borders, Barriers, and Ethnogenesis: Frontiers in Late Antiquity and the Middle Ages* (Turnhout, 2005), 123–38, and A.J. Silverstein, “The medieval Islamic worldview”, esp. 276–7.