The British Journal for the History of Science (2022), **55**, 459–475
doi:10.1017/S0007087422000346

RESEARCH ARTICLE

Islamic philosophy and the globalization of science: Ahmed Cevdet's translation of the sixth chapter of Ibn Khaldun's *Muqaddimah*

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Abstract

This article contributes to the study of the globalization of science through an analysis of Ahmed Cevdet's nineteenth-century translation of the sixth chapter of Ibn Khaldun's (d. 1406) *Muqaddimah*, which deals with the nature and history of science. Cevdet's translation and Ottomanization of that text demonstrate that science did not simply originate in Europe to be subsequently distributed to the rest of the world. Instead, knowledge transmitted from Europe was actively engaged with and appropriated by scholars, who sought to put that material within their own cultural context in a manner that could serve their own intellectual and practical needs. Cevdet's case is particularly interesting because it demonstrates that (1) Islamic conceptions of human nature, the soul and the nature of knowledge provided particularly fertile soil in which empiricist and positivist traditions could take root, and (2) aspects of modern science – specifically its ostensive separation from metaphysical debates – made it more attractive to Islamic theologians than was, for example, the work of Aristotelian philosophers. Through an exploration of Cevdet's career and a close analysis of his historiographical treatment of Ibn Khaldun's account of sciences, this article foregrounds the agency of non-Europeans in the late nineteenth-century circulation of scientific knowledge.

The traditional narrative of modern science has been that it arose in early modern Europe and spread throughout the world from there.[1] In this view, Europeans were the active producers of scientific knowledge, whereas non-Europeans were its passive receivers. This Eurocentric narrative may be challenged in two ways. The first is to point out the contributions of non-Western and non-European peoples to the development of modern science and its proliferation, as demonstrated by scholars who highlight the contributions of colonial scientists as well as those of other civilizations.[2] The second is to show that non-Europeans not only had their own scientific traditions, but also engaged with and were active appropriators of modern science.[3]

1 George Basalla, 'The spread of Western science', *Science* (1967) 15, pp. 611–21; Toby Huff, *The Rise of Early Modern Science: Islam, China, and the West*, Cambridge: Cambridge University Press, 1993.

2 Harold John Cook, *Matters of Exchange: Commerce, Medicine, and Science in the Dutch Golden Age*, New Haven, CT: Yale University Press, 2007; Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650–1900*, New York: Palgrave Macmillan, 2007; George Saliba, *Islamic Science and the Making of the European Renaissance*, Cambridge, MA: MIT Press, 2014.

3 For the appropriation of modern science in the Ottoman Empire see Marwa Elshakry, *Reading Darwin in Arabic, 1860–1950*, Chicago: The University of Chicago Press, 2013; M. Alper Yalçınkaya, *Learned Patriots: Debating*

It is this latter kind of contribution and agency of non-Europeans that this article seeks to highlight by looking at a case of the historiography of science in the late Ottoman Empire – a period defined by a significant increase in Ottoman engagement with European science and by the large-scale administrative reforms, centralization and modernization of the Ottoman state known as the Tanzimat (1839–76). It was during this period that the scholar and statesman Ahmed Cevdet (d. 1895) translated into Ottoman Turkish the sixth chapter of the *Muqaddimah* (or *Prolegomena*, 1377), the introduction to Ibn Khaldun's (d. 1406) monumental work of universal history. Cevdet's undertaking provides a window onto the local dynamics of the globalization of modern science in the Ottoman Empire. As will be shown, the existing philosophical and scientific tradition encouraged Ottomans such as Cevdet to engage with and appropriate modern science.

A comparative study of Ibn Khaldun's Arabic work and Cevdet's Ottoman Turkish translation reveals that previous Islamic philosophical learning informed late Ottoman approaches to science in two ways: first, human beings were understood to have an unchanging and universal essence that possesses a rational soul; second, advances in science were understood to occur over time, through a process of intellectual production and exchange between nations. Modern science, by distancing itself from metaphysical discourse and presenting evidence that challenged Aristotelian cosmology, enabled Cevdet to maintain previous criticisms of Islamic philosophical metaphysics while welcoming its findings.

Ibn Khaldun's *Muqaddimah* and its reception in the Ottoman Empire

Ibn Khaldun was a fourteenth-century North African Muslim scholar, judge and bureaucrat. He is well known for his theory of history and civilization articulated in the *Muqaddimah* (*Prolegomena*), a draft of which was completed in 1377.[4] Ibn Khaldun initially conceived of the text as an extended introduction to his world history entitled *Kitāb al-ʿIbar* (The Book of Lessons). In the *Muqaddimah*, Ibn Khaldun established a discipline – a systematic way of investigating a subject – that would provide readers with the requisite knowledge and critical apparatus to evaluate historical accounts and judge their accuracy. Thus, in the *Muqaddimah*, Ibn Khaldun treated issues that can be viewed as the principles of human history. As such, he divided the *Muqaddimah* into six chapters in which he treated aspects of civilization including forms of living together in general, nomadic and rural lifestyles, dynastic and other forms of political rule, settled civilizations, arts and crafts, and sciences.

According to Ibn Khaldun, human beings are, by nature, prone to living in groups. This social life takes various forms and brings with it the authority of a ruler over a group. Initially, humans lived in smaller, more scattered settlements throughout the world, but over time they established villages, towns and cities. As they built larger settlements, the features of collective human life changed and different crafts, arts and sciences

Science, State, and Society in the Nineteenth-Century Ottoman Empire, Chicago: The University of Chicago Press, 2015. For an earlier case of appropriation of science in Islamic history see A.I. Sabra, 'The appropriation and subsequent naturalization of Greek science in medieval Islam: a preliminary statement', *History of Science* (1987) 25(3), pp. 223–43.

4 The *Muqaddimah* has been subject to numerous studies in the modern period. Some recent studies on Ibn Khaldun and his *Prolegomena* are the following: Syed Farid Alatas, *Ibn Khaldun*, Oxford: Oxford University Press, 2013; Stephen Frederic Dale, *The Orange Trees of Marrakesh: Ibn Khaldun and the Science of Man*, Cambridge, MA: Harvard University Press, 2015; Allen Fromherz, *Ibn Khaldun: Life and Times*, Edinburgh: Edinburgh University Press, 2010; Robert Irwin, *Ibn Khaldun: An Intellectual Biography*, Princeton, NJ: Princeton University Press, 2018. In this article I consulted the following edition of the *Muqaddimah*: Ibn Khaldun, *al-Muqaddima*, (ed. Abdesselam Cheddadi), 5 vols., al-Dar al-Bayda: Khizānat Ibn Khaldūn, Bayt al-Funūn wa l-ʿUlūm wa l-Ādāb, 2005.

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

emerged in urban civilizations. Thus, knowing the various forms human societies may take will help a person assess what is possible and what is not possible in historical reports of events.

The sixth and last chapter of the *Muqaddimah*, the one translated by Cevdet, constitutes over a third of the book and is devoted to the sciences. Therein, Ibn Khaldun provides a history of transmitted (*naqlī*, religious) and rational (*ʿaqlī*, philosophical) sciences and discusses pedagogical issues, as well as Arabic linguistics and literary sciences. The initial sections of the chapter include preliminary discussions on thinking as a foundational feature of humans that differentiates them from other animals and enables them to produce scientific knowledge (more on this below). Ibn Khaldun also ties the sciences to the subject matter of the book, *ʿumrān*, stating that the sciences grow in abundance as civilization grows.

Today, Ibn Khaldun's *Muqaddimah* is acknowledged as a remarkable intellectual achievement. The book is salient in the modern day for several reasons, perhaps the most interesting being its utilization by the French to advance colonial ambitions in North Africa.[5] The work is also controversial for its adoption by nationalists in the Middle East on the basis of a few of its views, one of them being Ibn Khaldun's association of certain nations with advances in certain kinds of science. Both colonialism and nationalism have played a role in its widespread reception in the modern period, and its popularity was intensified by the relevance of Ibn Khaldun's ideas on society, politics, economy and urbanization for modern social scientists.[6] Besides the natural interest of social scientists in the subject matter of Ibn Khaldun's work, the author's analytical and clear writing style contributes to the overall readability and recognition of the book.

However, the *Muqaddimah* did not always enjoy the popularity that it does today. In the fifteenth and sixteenth centuries, for instance, it did not have widespread circulation, a fact confirmed by the gap between its composition in the last quarter of the fourteenth century and its reception in the Ottoman domains during the seventeenth century, when people in the region first began to engage with Ibn Khaldun's ideas.[7] This is after the Ottomans gained control of Egypt in 1517, at which time manuscript copies of the book were available but seem not to have been appropriated by the newly dominant power.[8] By the early seventeenth century, however, the Ottomans began to develop an affinity for some of the ideas in the *Muqaddimah*. Ibn Khaldun's Ottoman audience mainly consisted of bureaucrats and clerks, as evidenced by their ownership of manuscript copies

5 For a study of the French interest in Ibn Khaldun and a translation of his volume on the history of the Berbers see Abdelmajid Hannoum, 'Translation and the colonial imaginary: Ibn Khaldûn orientalist', *History and Theory* (2003) 42(1), pp. 61–81.

6 For a select bibliography of sources which consider Ibn Khaldun as a forerunner of social sciences, or find his work comparable to that of leading Western social theorists, see the annotated bibliography in Alatas, op. cit. (4), pp. 138–42.

7 Secondary scholarship on Ottoman interest in Ibn Khaldun includes Ziyaeddin Fahri Fındıkoğlu, 'Türkiye'de İbn Haldunizm', in *60. Doğum Yılı Münasebetiyle Fuad Köprülü Armağanı/Mélanges Fuad Köprülü*, Ankara: Türk Tarih Kurumu Yayınları, 2010, pp. 153–63 (first published 1953); Bernard Lewis, 'Ibn Khaldun in Turkey', in Lewis, *Islam in History: Ideas, People, and Events in the Middle East*, Chicago: Open Court, 1993, pp. 233–38; Cornell Fleischer, 'Royal authority, dynastic cyclism, and "Ibn Khaldunism" in sixteenth-century Ottoman letters', in Bruce B. Lawrence (ed.), *Ibn Khaldun and Islamic Ideology*, Leiden: E.J. Brill, 1984, pp. 46–68; and Yavuz Yıldırım, '*Mukaddime*'nin Osmanlı dönemi Türkçe tercümesi', *DİVÂN İlmî Araştırmalar* (2006) 21(2), pp. 17–33.

8 According to Fleischer, op. cit. (7), p. 47, the earliest year an Ottoman scholar acquired a copy of the *Muqaddimah* was 1598, when Veysî (also a poet) acquired his from Cairo. Marinos Sariyannis suggests that Ibn Khaldun's work had an earlier influence on an Ottoman ethical–political treatise based on similarity. See Marinos Sariyannis, 'Ottoman Ibn Khaldunism revisited: the pre-Tanzimat reception of the *Muqaddima*, from Kınalızade to Şanizade', in Marinos Sariyannis (ed.), *Political Thought and Practice in the Ottoman Empire (Halcyon Days in Crete IX: A Symposium Held in Rethymno, 9–11 January 2015)*, Rethymno: Crete University Press, 2019, pp. 251–8.

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

of the book. Hence we can see a growing interest in Ibn Khaldun in the seventeenth and eighteenth centuries among the bureaucratic elite and historians, such as Katip Çelebi (d. 1657), who praised and used the *Muqaddimah* in his bibliographical work.[9]

By the first half of the eighteenth century, the *Muqaddimah* had acquired enough interest among Ottoman elites to inspire a Turkish translation of the text by Pîrîzâde Mehmed Sahib (d. 1749), a man of the learned class (*ilmiye* branch) of the Ottoman government. Between 1726 and 1730, Pîrîzâde translated the first five chapters of the *Muqaddimah*, making that portion of the text available to new readers.[10] However, it is noteworthy that nobody attempted a full translation of the remaining sixth chapter concerning the history of sciences until 130 years later. According to its eventual translator, Cevdet, the sixth chapter, though useful and beneficial, was the most difficult chapter of the *Muqaddimah* since it concerned the sciences and could not readily be translated into rough Turkish. He suggested that the Turkish language of the eighteenth century was still not developed enough to permit translations of scientific works. However, the Egyptian publishers of Pîrîzâde's first five chapters suggested another reason for the lack of interest in translating the sixth, namely that there already were plenty of works on the sciences available in Turkish. Ottoman readers did, indeed, have access to many books on sciences, as well as some important works on the related subject of classification, including Taşköprüzâde's *Mevzuâtu'l-Ulûm*. However, I would argue that the 130-year gap between Pîrîzâde's (1730) and Cevdet's (1860) translations suggests that it was the nineteenth-century modernization project, and the renewal of interest in the sciences, which motivated the translation of the sixth chapter.

By the mid-nineteenth century, the first print publications of the *Muqaddimah* appeared in Cairo (1857) and Paris (1858).[11] It was also during this decade that Pîrîzâde's translation was published by the Bulaq Press in Cairo, in March of 1858.[12] A noteworthy feature of the Bulaq edition is that, included along with Pîrîzâde's Turkish translation of the first five chapters, was the sixth chapter in its original Arabic. A year after the Bulaq edition, Pîrîzâde's translation was printed in Istanbul, in early March of 1859.[13] Cevdet's translation of the sixth chapter, though completed soon afterward, was eventually published in

9 See Katib Çelebi, *Kashf al-Ẓunūn*, Lebanon: Dar al-Kutub al-Ilmiya, 2008, vol. 1, p. 327.

10 In fact, a translation of the initial sections of the sixth chapter does exist as well, but it is not clear whether Pîrîzâde produced it. A note on the Bulaq edition indicates that Pîrîzâde attempted it but ultimately left the sixth chapter untranslated. Ahmed Cevdet, however, asserted that this section was translated later by somebody else, based on stylistic differences as well as the fact that Pîrîzâde's drafts do not include it. Some reports, Cevdet noted, identified the translator of the initial sections of the sixth chapter as İsmail Ferruh (d. 1840), who was the Ottoman ambassador to London during Selim III's reign, and established an informal scientific society in Istanbul after his return. Apparently, the said section was appended to copies of Pîrîzâde's translation that belonged to İsmail Ferruh. This, Cevdet believed, corroborated the reports. See Ahmed Cevdet, *Mukaddime-i İbn Haldunun Fasl-ı Sâdisinin Tercümesi*, Istanbul: Takvimhane-i Amire, 1860, p. 3.

11 For bibliographic information on these editions of the *Muqaddimah* see ʿAzīz ʿAẓmah, *Ibn Khaldūn in Modern Scholarship: A Study in Orientalism*, London: Third World Centre for Research and Publishing, 1981, p. 243. ʿAẓmah provides further information on partial editions and translations into other languages. He also includes an annotated bibliography of secondary scholarship. For more information on the 1857 Bulaq edition of the *Muqaddimah* see Ahmed El Shamsy, *Rediscovering the Islamic Classics*, Princeton, NJ: Princeton University Press, 2020, pp. 83–7.

12 Pîrîzâde's translation of the *Muqaddimah* was published by Bulaq Press in the beginning of *Şaban* 1274 AH (p. 626); Mustafa Vehbi Efendi was the editor (pp. 261–74). A year later, in 1859, an apparently lithograph edition was published. Pîrîzâde, *Terceme-i Mukaddime-i İbn Haldûn*, Cairo: Topoğrafya Destgâhı, 1859. For more information on translation in Egypt and these editions of Pîrîzâde's translation see Ekmeleddin İhsanoğlu, *Mısırda Türkler ve Mirasları*, Istanbul: IRCICA, 2006, pp. 147–9.

13 The first volume of the Istanbul edition came out in early March 1859. Pîrîzâde, *Terceme-i Mukaddime-i İbn Haldûn*, Istanbul: Takvimhâne-i Âmire, 1859, vol. 1, p. 352. This edition includes a purported depiction of Ibn Khaldun. The second volume of the translation was published in July 1859. For more information on the Istanbul edition, cf. Yavuz Yıldırım's introduction in İbn Haldun, *Mukaddime: Osmanlı Tercümesi* (tr. Pîrîzâde

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

November 1860. As we can see, Cevdet was drawn to translating the sixth chapter at a time of transregional interest in the work of Ibn Khaldun, as evidenced by the simultaneous printing of the *Muqaddimah* in Egypt and France, and its translation into Turkish as well as French. Clearly, interest in the work was related to larger global transformations, such as the emergence of colonial empires and nationalist movements in Europe and the Ottoman Empire. In the following section, I will look at Cevdet's education and early career, as well as the sociopolitical context in which he produced his translation, to show how local and global dynamics interacted in its making.

The dynamics of Cevdet's reformist translation of the sixth chapter of *Muqaddimah*

Translation of the sixth chapter, as far as we know, was undertaken by Cevdet without any external prompting. However, the larger interest in the work shows that his personal interest and endeavour were shaped by the sociopolitical transformations of the time, amidst which the translator rose to prominence as an Ottoman scholar and bureaucrat. Therefore I situate Cevdet's translation at the intersection of his personal upbringing, his early career and network, the larger sociopolitical changes in the reform period of the Ottoman Empire, the growing authority of the sciences in the nineteenth century, and an international interest in the work of Ibn Khaldun.

To begin with the personal element, considering the wide range of sciences that are discussed in the last chapter of the *Muqaddimah* – Islamic law and theology, mathematical sciences, logic, natural philosophy, medicine, magic, alchemy, Arabic linguistics and literary sciences – clearly Cevdet could not have undertaken its translation without himself having benefited from comparably wide learning. Born in 1823 in Lofça (currently Lovech, in Bulgaria) to an established family of the town, Ahmed received an extensive education, and was hence well equipped to translate most of the last chapter of the *Muqaddimah*.[14] A pivotal step in Ahmed's education was the decision to seek higher education in Istanbul. There he attended classes of prominent scholars both at the *madrasas* and at public lectures at the Fatih mosque. Moreover, Ahmed participated in study circles at Sufi centers and exchanged lessons with a professor at the new military school, as well as consulting with the chief astronomer of the Ottoman Empire with regard to difficult problems. Ahmed also frequented literary salons of the time and wrote poetry under the pen name Cevdet.[15] All of these reflect his desire to become familiar with a wide range of knowledge and skill, which would prove crucial to rendering the last chapter of the *Muqaddimah* into Ottoman Turkish.[16]

Cevdet's career choice was also a significant factor in the making of this translation. As noted previously, the *Muqaddimah* enjoyed the attention of a very specific audience during

Mehmed Sâhib, ed. Yavuz Yıldırım, Sami Erdem, Halit Özkan, M. Cüneyt Kaya), Istanbul: Klasik Yayınları, vol. 1, p. xxviii.

14 Some sources on Cevdet's biography include Richard Leon Chambers, 'The education of a nineteenth-century Ottoman alim, Ahmed Cevdet Paşa', *International Journal of Middle East Studies* (1973) 4(4), pp. 440–64; Chambers, 'Ahmed Cevdet Paşa: the formative years of an Ottoman transitional', PhD dissertation, Princeton University, 1968; Fatma Aliye, *Ahmed Cevdet Paşa ve Zamanı*, Dersaadet: Kanaat Matbaası, 1913. For his autobiography see Ahmed Cevdet, *Tezâkir*, 4 vols., Ankara: Türk Tarih Kurumu Basımevi, 1991, vol. 4.

15 Cevdet, op. cit. (14), pp. 6–14.

16 Figures such as Cevdet and Ibn Khaldun are seen as exceptional. However, throughout Islamic history and lands we find numerous scholars whose training is wide-ranging. For some examples in Egypt see Peter Gran, *Islamic Roots of Capitalism: Egypt, 1760–1840*, Syracuse, NY: Syracuse University Press, 2014. Gran discusses works of 'Attār, al-Jābartī, Tahtāwī and others whose scholarship follows a trajectory similar to Cevdet's. Elshakry, op. cit. (3), mentions many more scholars from later nineteenth-century Arabic-speaking areas of the Ottoman Empire.

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

the seventeenth and eighteenth centuries – the administrative bureaucratic branch of the government. Hence it is not a mere coincidence that both Pîrîzâde and Cevdet were either responding to the needs of that segment of the Ottoman state structure or de facto a part of it. Had Cevdet remained a mere scholar and professor in the *madrasas*, where students – unlike the professional governing class – were familiar with Arabic, it is unlikely he would have been inspired to translate the sixth chapter. His early works, written while he was still mastering the rational and religious sciences, predictably had focused on annotations and glosses for textbooks of the *madrasas*.[17] However, early in his scholarly career, Cevdet attracted the attention of the two most influential figures of the Ottoman state at the time, namely the grand vizier Mustafa Reşid Pasha (d. 1858) and the *şeyhülislam* (chief of the scholarly judicial branch) Arif Hikmet Beyefendi (d. 1859). By writing laudatory panegyrics for these two figures, Cevdet managed to secure some rise in his salary and further funds. Alongside his scholarly and financial ambitions, Cevdet enmeshed himself in the political-bureaucratic branch through his association with these figures, especially Reşid Pasha, to whose children he became a tutor.[18] Cevdet thus joined Reşid Pasha's circle, which included Âli Efendi (d. 1871) and Fuad Efendi (d. 1869), both of whom would later become grand viziers. Cevdet was increasingly assigned certain bureaucratic duties to accompany these leaders, particularly Fuad Efendi. As his professional affiliation with such political figures grew, Cevdet continued to be promoted through the scholarly branch, although without actually working there.

Cevdet received his first significant scholarly promotion by finishing up a commentary on a poetry collection that had been left incomplete at the death of one of his mentors in literature. After presenting this work to Reşid Pasha, Cevdet secured a salary for the family of the deceased, while he himself received a promotion and a monetary gift.[19] As a result of this connection, Cevdet was appointed a member of the Council of Public Education (Meclîs-i Maârif-i Umûmiyye) in 1850, which, according to his autobiography, was a turning point in his life. Thereafter, his work served the needs of the new institutions and schools then being established by the administrative bureaucratic branch. For instance, Cevdet wrote *Malumât-ı Nafi'a* (Useful Knowledge), a treatise containing basic information on religions and sects with a special emphasis on Islam, for the newly established middle schools (*rüşdiye mektebi*).[20] Another early work in this line was *Kavâid-i Osmâniyye*, a grammar of Ottoman Turkish, for which Cevdet received his second noteworthy promotion.[21] Cevdet was also rewarded for the first three volumes of his *History* (*Tarih-i Cevdet*), commissioned by the Ottoman Academy of Sciences.

Considering the shift in his intellectual and social circle from the scholarly to the bureaucratic branch, and the benefits he accrued through publication of the above-mentioned works, it seems likely that an important incentive for Cevdet in translating the sixth chapter of the *Muqaddimah* was the possibility of further career advancement. It is also evident from his memoir that Cevdet expected that professional advancement would result from this project. However, it appears that the *şeyhülislam* Sâdeddin Efendi (d. 1866) initially resisted such a promotion, insinuating that Cevdet was writing too many works, and that continuing to promote him for each and every publication would violate established scholarly norms. Eventually, this *şeyhülislam* was forced by a grand vizier to grant the

17 Cevdet, op. cit. (14), p. 7.

18 Cevdet, op. cit. (14), p. 7.

19 Cevdet, op. cit. (14), p. 24

20 Cevdet, op. cit. (14), p. 39.

21 Cevdet, op. cit. (14), p. 57. For a recent study of *Kavâid-i Osmâniyye* as reflecting internal dynamics rather than Western influence see Michiel Leezenberg, 'Internalized orientalism or world philology? The case of modern Turkish studies', *History of Humanities* (2021) 6(1), pp. 209–19.

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

promotion, an honour that Cevdet would have preferred to secure on the basis of his translation's merit, not because of the intervention of higher authorities.[22]

Cevdet was both pragmatic and responsive to the exigencies of his time and immediate context. Hence the choice of this translation was not happenstance but, I would argue, a calculated decision to enhance his relevance within the administrative bureaucracy and to respond to the needs of his new professional setting. One would expect further details from his autobiography on the immediate network of patrons that stimulated Cevdet; he is, however, conspicuously silent on this, except for one passing clue. In the preface to his translation of the sixth chapter, Cevdet mentions that the Pîrîzâde translation of the *Muqaddimah* was incomplete. However, he does not explain his particular reason for taking on the remaining chapter, aside from noting that the appreciators of knowledge in that age (*maârif-şinâsân-ı asır*) recognized the need for a Turkish rendering of the text.[23] Although he does not identify the particular people who encouraged him, given his word choice in referring to them (*maârif-şinâsân*), he must be alluding to a class other than the *ulema*. There is a long history of contrasting theoretical scientific knowledge (*ilim*), the purview of the *ulema*, with particular and practical knowledge or information (*marifet*). In this context, Cevdet seems to be referring to the practice-oriented reformist bureaucrats of the period who had already utilized *maârif* as a key word to catalyse reform.[24] Hence this could imply that one of his two major patrons, Reşid Paşa or Arif Hikmet Bey, had encouraged him to take on the translation of the sixth chapter, but both died before its publication. In any case, Cevdet does seem to have considered the opinions of other figures of the Tanzimat in deciding whether the sixth chapter was worth translating.

Certainly, recent political developments played a major role in setting the discursive context of Cevdet's scholarship.[25] During the 1840s and 1850s, the Ottoman government was responding to international as well as local challenges with a series of reforms or blueprints for reform, the most noteworthy being the Edict of Gülhane (Tanzimat Fermanı) of 1839, which initiated Tanzimat reforms just as Cevdet was starting his education in Istanbul.[26] Not only was Cevdet coached by the leading figures of the Tanzimat, but he also became an active agent in reforming the empire himself shortly after completing his education. He played a major role in restructuring various fields such as language, law, historiography and legal and educational institutions in his capacity as a member of newly established institutions, including the Ottoman Academy of Sciences (Encümen-i Dâniş), the High Council of Reforms, and the Council of Education (Meclis-i Maârif). Cevdet's history of the empire, from 1774 until 1826, was commissioned by the Ottoman Academy of Sciences in October 1853.[27] Although it is not clear exactly when Cevdet began translating the sixth chapter, it appears to have been undertaken while he was researching and

22 Cevdet, op. cit. (14), p. 79; cf. Cevdet, op. cit. (14), vol. 2, pp. 126–7.

23 Cevdet, op. cit. (14), pp. 3–4.

24 For more information on the concept of *maârif* see Aytaç Yıldız and Mustafa Gündüz, 'Maarif: transformation of a concept in the Ottoman Empire at the beginning of the nineteenth century', *History of Education* (2019) 48(3), pp. 275–96.

25 For more information on larger transformations that happened immediately before and during Cevdet's life see Niyazi Berkes, *The Development of Secularism in Turkey*, Montreal: McGill University Press, 1964; Christine Philliou, *Biography of an Empire: Governing Ottomans in an Age of Revolution*, Berkeley: University of California Press, 2011; Carter Vaughn Findley, *Bureaucratic Reform in the Ottoman Empire: The Sublime Porte, 1789–1922*, Princeton, NJ: Princeton University Press, 2012; Şükrü Hanioğlu, *A Brief History of the Late Ottoman Empire*, Princeton, NJ: Princeton University Press, 2010.

26 For a discussion of the Edict of Gülhane see Butrus Abu-Manneh, 'The Islamic roots of the Gülhane Rescript', *Die Welt des Islams* (1994) 34(2), pp. 173–203.

27 Prime ministry Ottoman Archives (BOA), İ. DH. 282/17685.

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

writing that history. The two projects were certainly interconnected in that Ibn Khaldun was a well-known historian and his *Muqaddimah*, as mentioned before, was a work on the principles of history.

In addition to his personal education and early career, and the contemporary reformist environment, I would argue that Cevdet's interest in the *Muqaddimah* was also encouraged by a transregional interest in Ibn Khaldun's work. I have already noted that its original Arabic and translations were published in Cairo, Paris and Istanbul in about this period. The rise of Mehmed Ali Pasha (d. 1849) in Egypt seems to have exerted a more direct influence on interest in Ibn Khaldun's works. Mehmed Ali was captivated by the *Muqaddimah* and ordered that its manuscript be copied and taught to students. It is through his orders that the *Muqaddimah* was eventually published in Egypt. Mehmed Ali also commissioned Abdullatif Subhi (d. 1886) to translate the proper history sections of Ibn Khaldun's *ʿIbar* into Turkish. Apparently, Mehmed Ali and his son Ibrahim (d. 1848) died while Subhi was still at work translating the second book of the *ʿIbar*. After the death of his patrons, Subhi and his family moved to Istanbul, where he restarted the translation, this time having in mind the Ottoman Sultan as the dedicatee. Subhi completed a volume of translation, entitled *Miftâhu'l-İber* (The Key of Lessons), in October 1853.[28] We know that Subhi, like Cevdet, was a member of the Ottoman Academy of Sciences, which commissioned Cevdet to write his *History*. So Cevdet's interest in Ibn Khaldun might also have been inspired by conversations with Subhi. While there was a long-standing interest in Ibn Khaldun in Istanbul, as evidenced by the copies of the *Muqaddimah* in translation held by Turkish libraries, Cevdet also may have encountered Egyptian interest in Ibn Khaldun when he travelled to Cairo in 1852 as an assistant to Fuad Efendi, in order to resolve some inheritance issues of the khedival family. Even if Cevdet was prompted by reasons altogether different from the ones suggested here, the fact that his translation coincided with the publication of Pîrîzâde's translation in two rival cultural centres, Cairo and Istanbul, confirms a strong transregional interest in Ibn Khaldun's works at the time.

Cevdet's translation was also a response to the increase in demand for Turkish-language books among the emerging literate audience and prospective university students. Cevdet himself considered vernacularization to have been an important step on the path to modernization in Europe. The fact that the contemporary Ottoman demand for vernacular texts was created by a state-sponsored modernization effort is reflected in his reformist translation.[29] Thus Cevdet adopted the style of Ibn Khaldun to expand the original narrative where it was too short and to explain what were only brief allusions in the original text, as well as to provide information on scholars and bibliographic resources that were not mentioned by Ibn Khaldun at all. Cevdet also extended the history of certain sciences beyond the fourteenth century, thereby enlarging the scope of the sixth chapter.[30] Such interventions show that the *Muqaddimah* was translated not as a relic of Islamic intellectual history, but rather as a still-relevant source of knowledge on its subject matter. Below, I will analyse representative sections that indicate the philosophical basis for the globalization of science and demonstrate Cevdet's reformation of his source text.

28 Abdullatif Subhi, *Miftâhu'l-İber*, Dersaadet: Matbaa-i Âmire, 1860, p. 3.

29 For a study showing that Cevdet's political views were evident in his historiography as well see Christoph K. Neumann, *Araç Tarih Amaç Tanzimat: Tarih-i Cevdet'in Siyasi Anlamı* (tr. Meltem Arun), Istanbul: Tarih Vakfı Yurt Yayınları, 2000.

30 Cevdet's efforts to reform his source text seem to reflect common practice at the time. Subhi, for instance, in his above-mentioned translation of the history sections of Ibn Khaldun's *ʿIbar*, acknowledges that he revised and updated the text by correcting misspellings, tracing reports of other nations back to their original sources, and critiquing certain accounts. Subhi, op. cit. (28), pp. 3–4.

Essentialism and the appropriation of modern science

As a representative of premodern Islamic philosophy, Ibn Khaldun adhered to an essentialist view of human nature. In fact, the sixth chapter of the *Muqaddimah*, which includes descriptions of various disciplines, begins with a discussion of human thinking as a distinct feature of humanity.[31] According to Ibn Khaldun, there are two kinds of perception, direct perception in which animals perceive external objects with the five senses, and an indirect or rational perception which is particular to human beings. This latter kind of perception occurs through powers that are contained in the brain, which act on former perceptions in order to abstract different forms. Thinking (*fikr*) is the mind's movement and operation over the latter forms. This is basically an Aristotelian view that distinguishes human beings from other animals by their ability to think.

According to Ibn Khaldun, there are three levels of human thinking: (1) differentiating reason (*al-ʿaql al-tamyīzī*), (2) practical reason (*al-ʿaql al-tajrībī*) and (3) theoretical reason (*al-ʿaql al-naẓarī*). The first, differentiating reason, is the level of comprehending external order, be it natural or conventional. It enables human beings to acquire what is useful for them and their livelihood, and to defend themselves against dangers. The second level, practical reason, provides humans with views and manners to interact with their kind and arrange their politics. Most of this level is related to assertions (apperceptions) acquired through accumulated experience.[32] The third level of thinking, theoretical reason, is that which is useful in bringing about knowledge and assumptions by seeking what is beyond the senses and what does not relate to practice. It consists of both concepts and assertions organized by specific conditions, which produce other knowledge of its kind, either conceptual or assertoric. These concepts and assertions are further organized together with some other material, which in turn produce new knowledge in the same manner. Ibn Khaldun alludes to syllogisms and other forms of reasoning here.[33] According to him, the purpose of theoretical reason is to perceive existence as it really is with all its categories. Thinking is therefore perfected in its reality and becomes pure intellect and perceptive soul. This, Ibn Khaldun asserts, is the meaning of 'the essence of humanity' (*al-ḥaqīqa al-insāniya*).[34]

Cevdet concurred with Ibn Khaldun's depiction of thinking as a distinguishing feature of human beings. A lengthy comment of Cevdet's not only indicates that he shared this essentialist view of human nature, but also previews his upcoming engagement with the text: rectifying and updating Ibn Khaldun's narrative. To begin, Cevdet provides some further details on psychology which are lacking in Ibn Khaldun's narrative. Though Ibn Khaldun mentions that human beings share only 'perception' with other animals, the perception of the five senses in particular, Cevdet adds that humans and animals share internal senses as well, which include common sense (*hiss-i müşterek*), imagination (*hayal*), the power of composition (*kuvve-i mütesarrife*), the power of estimation (*vehm*) and the power of memory (*hafıza*). Humankind's distinguishing trait, Cevdet notes, is intellect, or reason (*akıl*). Through this intellect, human beings apply the power of composition (*kuvve-i mütesarrife*) to the knowledge of particulars stored in memory and imagination

31 Ibn Khaldun, op. cit. (4), vol. 2, pp. 337–8; cf. Ibn Khaldun, *The Muqaddimah: An Introduction to History*, 2nd edn, 3 vols. (tr. Franz Rosenthal), Princeton, NJ: Princeton University Press, 1967, vol. 2, pp. 411–13.

32 Ibn Khaldun, op. cit. (4), vol. 2, p. 338.

33 In the section on the correct manner of teaching, Ibn Khaldun discusses how to use thinking to arrive at middle terms in an argument, which shows that he had syllogisms and analogies in mind. Ibn Khaldun, op. cit. (4), vol. 3, pp. 215–17.

34 Ibn Khaldun, op. cit. (4), vol. 2, p. 338.

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

to derive knowledge of universals.[35] Cevdet thus adds further details to the account while agreeing with Ibn Khaldun on an essential difference between humans and the rest of the animal kingdom: 'rational thought'.

Ibn Khaldun's and Cevdet's metaphysical and universal conception of human beings assigns them the ability to arrive at knowledge of things as they are, although with limitations. Since this capacity is shared by all human beings regardless of their race or religion, it provides a basis for the production and circulation of knowledge among various nations. In fact, based on this aspect of human nature, Muslim scholars, including Ibn Khaldun and Cevdet, divided the sciences into rational sciences, which are not particular to any nation, and transmitted (traditional or religious) sciences, which are particular to some nations and religions. This metaphysical understanding of human beings and their capacity to arrive at knowledge untainted by culture underlies the late Ottoman acceptance of science from Europe. Ibn Khaldun and Cevdet's essentialist view of both science and human nature paved the way for the appropriation of modern science in Ottoman lands; their metaphysical approach thereby advanced the globalization of science.

Modernizing criticism of Peripatetic metaphysics

While an essentialist understanding of human beings played a key role in the globalization of science, a critical stance against metaphysics with regard to scientific inquiries also played a role in its acceptance. Modern European philosophers such as Kant, Comte, Marx, Heidegger and the logical positivists had increasingly shunned metaphysics, preferring instead to regard modern science as more of an empirical and phenomenal investigation of the world. In this way, previous historical conflicts over metaphysics between theologians and philosophers could be sidestepped. Modern positivist science, ostensibly limited to experimental and empirical facts, could be more appealing to a Muslim audience when it was not seen as propagating contentious metaphysical claims. Ibn Khaldun's critical stance against Peripatetic metaphysics and cosmology and Cevdet's engagement on the topic corroborate this view.

In the post-classical period of Islamic thought (*c.*1200–1600), four metaphysical approaches consolidated. These, as noted by Cevdet, were the paths of (1) Peripatetic philosophers, (2) rationalist theologians, (3) illuminationist philosophers and (4) sufis.[36] In terms of metaphysics, both Ibn Khaldun and Cevdet adhered to the world view of rationalist theologians and were critical of some of the Peripatetic philosophers' views. Their concerns regarding Peripatetic metaphysics, which can be dated to earlier Muslim theological objections to Neoplatonized Peripatetic views of the world and of God, were not a wholesale rejection of metaphysics, but rather a criticism of those ideas that ran counter to Islamic theological principles. Ghazali (d. 1111), in his famous critique, for instance, pointed out three Peripatetic views that contradicted Islamic beliefs: the eternity of the world, the rejection of bodily resurrection and the denial of God's knowledge of particulars. Ibn Khaldun, on the other hand, drew attention to the epistemic limits of metaphysics; that is, the difficulty of arriving at certainty on abstract matters by reasoning, thus casting doubt on the metaphysical doctrines of the Peripatetics. Cevdet concurred on this point, but unlike Ibn Khaldun he gave more weight to reason as a judge of proper religious

35 Cevdet, op. cit. (10), pp. 7–8. I believe Cevdet's account of psychology here is based on commentaries and glosses on an Avicennan handbook of philosophy, Athīr al-Dīn al-Abharī's *Hidāyat al-Hikma*, which was taught in Ottoman *madrasas* together with Qādī Mīr Maybūdī's commentary on it. Cevdet's autobiography indicates that he not only studied but also taught this text. Cevdet, op. cit. (14), vol. 4, pp. 7, 12.

36 Cevdet, op. cit. (10), p. 68.

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

beliefs, and noted that modern physics and chemistry had become more empirical and useful and thus were not to be avoided, as had been suggested by Ibn Khaldun.[37]

Paralleling the three levels of thinking noted above, Ibn Khaldun identified three planes of existence: the world of sensory perception, the world of the human soul or intellect and the world of the angels.[38] He confirmed the existence of the soul by pointing to the acquisition of scientific knowledge that goes beyond sensory perception. The angelic world, according to him, is best evidenced by dreams that come true. Since in sleeping one is deprived of sense knowledge, the source of accurate knowledge in dreams that come true must be the world of Truth. Ibn Khaldun then went on to note that the philosopher–metaphysicians (the Peripatetics) were wrong about the details and order of the essences which they called intellects (the angels), since they did not have demonstrative knowledge about them based on the rules of logic.[39] This comment, made in passing on the philosophers' inadequate understanding of the angelic world, exemplifies the divergent metaphysical claims of theologians and Peripatetic philosophers.

In another rather long comment on this section, Cevdet discussed some of these contentious metaphysical issues. Included are the ancient philosophers' conception of the soul and their related cosmology, which entailed ten intellects and nine heavenly spheres. They considered the human soul to be a spiritual substance which, if properly nourished by theoretical and practical virtues, would survive death and unite with the intellects. Souls of corrupt people, by contrast, were thought to suffer from a lack of theoretical knowledge. These doctrines do not overlap with Islamic theological beliefs concerning angels and life after death. Hence Cevdet criticized the views of the Peripatetic philosophers (*meşşâî*), despite conceding that they were generally right in their proof of the existence of the soul and the angelic world.[40] In line with Ibn Khaldun, he asserted that the philosophers' mistakes were in the details (*tafsilât*). Their limitation of the intellects to ten, for example, is rejected by the noble shari'a (*şer'-i şerîf*), as the number of angels in Islamic belief is not limited.

Rather than resort to religious discourse, however, Cevdet utilized new developments in the sciences to disprove some of the Peripatetic philosophers' beliefs. For instance, in his refutation of philosophical cosmology, which is intertwined with metaphysical and ontological views of God and the soul, Cevdet maintained that there must be more than the ten intellects assumed by ancient philosophers (*hükemâ-yı mütekaddimîn*), since modern philosophers (*hükemâ-yı müteahhirîn*) had discovered many more planets. Therefore the new philosophy (*hikmet-i cedîde*) disproved the ancient philosophers' statements on the ten intellects.[41] The point being made here is that the ancients determined the number of intellects based on the number of planets known at that time. However, new astronomy points out many more planets, as well as other findings which challenge philosophers' ontology because the latter was based on an outdated astronomy.

37 Cevdet, op. cit. (10), p. 205.

38 Ibn Khaldun, op. cit. (4), vol. 2, p. 343; cf. Cevdet, op. cit. (10), p. 13. The ontology of human and angelic intellects is addressed in a few other places in the *Muqaddimah*, such as in the last introductory discussion on various types of human beings that have supernatural perception, and in the section on the science of dream interpretation in the sixth chapter.

39 Ibn Khaldun, op. cit. (4), vol. 2, pp. 343–4. Ibn Khaldun explains his view on the limits of philosophy in another section devoted to its rejection and the corruption of its impersonator. Ibn Khaldun, op. cit. (4), vol. 3, pp. 178–86. For a study of his criticism of philosophy see Zaid Ahmad, 'A 14th century critique of Greek philosophy: the case of Ibn Khaldun', *Journal of Historical Sociology* (2017) 30(1), pp. 57–66.

40 For a special issue of *Muslim World* on the soul in the medieval Islamic thought see Ayman Shihadeh (ed.), *The Ontology of the Soul in Medieval Arabic Thought*, Malden, MA: Wiley-Blackwell, 2012.

41 Cevdet, op. cit. (10), pp. 15–16.

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

Cevdet also mentioned some natural philosophers' denial of the existence of an immaterial soul and life after death. His rejection of the materialist critique of the soul is noteworthy because in it he appealed to new medical knowledge. In his proof of the existence of the soul, Cevdet referenced extraordinary people (clairvoyants) who have knowledge of external events without having observed them. He claimed that, although modern surgery had identified the locations of particular thought processes in the brain (e.g. storage of memories), the brains of people who could foresee events did not exhibit any physical anomalies that could account for their ability, proving for him that the soul exists.[42] He also mentioned what the French called *somnambule* (actually transliterating rather than translating the word), explaining that it referred to sleepwalkers (*seyrülnevm*) who go to places they would not dare to tread while awake, as well as eating and drinking what they find while asleep. If, the next morning, they are asked about such activities, they remember nothing. Considering that such activities could occur while their senses were not in use, and that medical operations could not identify any anomalies in sleepwalkers' brains, Cevdet claimed that their actions while asleep must have been prompted by spiritual conditions, hence proving the existence of the human soul.[43] Cevdet, as we can see, invoked modern medical science in his proof of the soul, and his use of the word *somnambule* in this context indicates that he was reading or following contemporary French discussions.

However, despite his utilization of new knowledge, Cevdet concluded this ontological discussion of the soul with a conservative view, shared by Ibn Khaldun, that our reason cannot grasp or understand the soul's essential reality, and thus reason was discharged (*ma'zul*) from this inquiry. He suggested instead that the details of the world of spirits (*âlem-i ervâh*) and the next world (*dâr-ı ukbâ*) be left to religious proofs, to ensure that the path to salvation and peace is retained. Furthermore, Cevdet asserted that appealing to the way of reason and philosophy in dealing with this issue would result in devastation and regret.[44] This rather pessimistic note on the inquiry into the soul and the afterlife stemmed from Cevdet's observation that previous inquiries into metaphysics by the Peripatetics had been proven false by modern science. Thus, joining a long history of critiques of Peripatetic philosophy in Islamic intellectual history, Cevdet sought peace of mind by refraining from such inquiries.[45] This also seems like a strategy to avoid contentious metaphysical issues, since judgements on such issues could be falsified by future science. Therefore both a traditional attitude and the impact of a progressive history of science led Cevdet to shun the Peripatetics' philosophical metaphysics and to continue to hold to traditional religious beliefs.

Cevdet's remarks on the topic of the soul show that he found rationalist and scientific inquiries regarding metaphysical issues to be limited, and also imply that science packaged as positivist knowledge would have been appealing to him. Elsewhere, his comments on the relationship between practical and theoretical philosophy demonstrate that, in fact, modern science did appeal to him because it was more empirically grounded than metaphysical. Engaging Ibn Khaldun's ideas on theoretical and practical reason, Cevdet stated that the purpose of theoretical philosophy was to know things as they exist (in themselves), and since the ancient philosophers assumed that human happiness was possible through theoretical philosophy, they put their efforts into knowing things

42 Cevdet, op. cit. (10), pp. 17–18.

43 Cevdet, op. cit. (10), p. 18.

44 Cevdet, op. cit. (10), p. 18.

45 See al-Ghazālī, *The Incoherence of the Philosophers/Tahāfut Al-falāsifah: A Parallel English–Arabic Text* (tr. Michael Marmura), Provo, UT: Brigham Young University Press, 1997; al-Shahristani, *Struggling with the Philosopher* (ed. and tr. Wilfred Madelung and Toby Mayer), London: I.B. Tauris & Company, 2001; Ibn Khaldun, op. cit. (4).

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

in themselves. According to Cevdet, much of this effort was in vain, as they only gained doubtful and uncertain knowledge (*vehm u şekk*) as a result. However, Cevdet claimed, European philosophers followed the path laid out by Ibn Khaldun – that is, the path of experience – even as they entered somewhat into theoretical philosophy. Cevdet believed that Europeans perfected the mathematical and natural sciences beyond imagination and developed arts (*sanâyi*) to a surprising level by focusing on primary intelligibles (*makulât-ı ûlâ*) by way of experience, while theorizing to a lesser extent on secondary intelligibles.[46] For Cevdet, what really distinguished contemporary European philosophers was their interest in things that seemed closer to empirical reality, such as the mathematical and natural sciences, and their immersion in experimental sciences. The point made by Ibn Khaldun, which Cevdet also embraced, was that the more remote the abstraction, the more likely it was that one would lose sight of reality and fall into falsehood. Therefore, in place of occupying oneself too much with logic and metaphysics, they both called for intense study of the natural and mathematical sciences and practical philosophy.

Cevdet's position shows that European interest in the natural sciences was well received by nineteenth-century Muslim scholars because it overlapped with a history of Islamic critiques of philosophical metaphysics, as provided by Ibn Khaldun and others. It is also with regard to such developments in Europe that we find Cevdet's rejection of Ibn Khaldun's criticism of natural philosophy and alchemy as transformed into the discipline of chemistry; here the translator points out that developments in Europe had proven the soundness of these branches of learning, as is evident in their reliance on observation and experiments and in their effect on industry and progress, as opposed to the period in which Ibn Khaldun was living.[47]

Ottomanizing and updating Ibn Khaldun's history of sciences

Cevdet's translation of the sixth chapter is also notable for other edits in which he both updated and Ottomanized the original work. While the simple fact that he translated the text from Arabic into Ottoman Turkish might make a sufficient case for the Ottomanization of Ibn Khaldun's *Muqaddimah*, Cevdet also inserted information about Ottoman history and expanded accounts of topics that he found underdeveloped by Ibn Khaldun. For example, in his account of the rational sciences, Ibn Khaldun provided an overarching description of each, together with a brief history. The distinguishing feature of these sciences was that they did not belong to any specific nation or religion; as such his account included developments under Greek and Persian political powers as well as under the Muslim dynasties. In his interspersed comments, Cevdet supplemented Ibn Khaldun's account with biographical notes on figures mentioned in the text or expanded the account by informing the reader on matters unknown to the fourteenth-century author.

In his history of sciences during the Islamic period, for instance, Ibn Khaldun briefly described the emergence of interest in the philosophical disciplines during the reign of the Abbasid caliphs Abu Ja'far al-Mansūr (r. 754–75) and al-Ma'mūn (r. 813–33), pointing out that Muslim philosophers at the time had surpassed their predecessors, including Aristotle. The four most prominent of these philosophers were al-Fārābī (d. 950) and Ibn Sina (Avicenna, d. 1037) in the eastern Islamic domains, and Ibn Rushd (Averroes, d. 1198) and Abu Bakr ibn Sā'igh (Ibn Bāja or Avempace, d. 1138) in the western Islamic

46 Cevdet, op. cit. (10), pp. 23–37.

47 Cevdet, op. cit. (10), p. 205. For Cevdet's succinct account of the connection and difference between alchemy and chemistry see Cevdet, op. cit. (10), p. 221.

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

domains. Elaborating on Ibn Khaldun's brief history, Cevdet further discussed the emergence of the philosophical sciences during the second century of Islam (from 718 to 815).[48] Moreover, Cevdet added more information about philosophy in the subsequent century and provided brief biographical accounts of al-Kindī (d. *c.*870), Qustā ibn Luqā (d. 912), Hunayn ibn Ishāq (d. 873), Thābit ibn Qurrā (d. 901) and other prominent philosophers who were translators as well.

Remarkably, Cevdet not only amended Ibn Khaldun's account but also added a brief history of the rational sciences after Ibn Khaldun's time, noting that the sciences and knowledge (*ulûm and maârif*) continued to shine for a while after the author's day.[49] However, the effects and products of civilization decreased in Persia and Transoxiana due to political corruption and disturbances.[50] Nevertheless, he proclaimed that Ibn Khaldun was writing at a time when the Ottoman star was rising. He suggested that, by conquering the Balkans, the Ottomans made up for losses in Andalus that the fourteenth-century author had mentioned. This appended history may be viewed as an Ottomanization of the text, an updating that connected its Ottoman audience to previous Islamic and world history, quenching the curiosity of modern Ottoman readers about later developments.

Cevdet's foray into the post-Ibn Khaldun history of the rational sciences included a brief recognition of developments in Europe as well. These notes are particularly striking as they reveal that Cevdet's Ottomanization of the text was not a random occurrence; rather he was consciously working to advance the Turkish language (note his pioneering work on Ottoman Turkish grammar) and the empire by considering the process of modernization in Europe. Cevdet stated that Europe progressed in the philosophical sciences to an extent that had not previously been imaginable, an achievement made possible by first translating Greek and Arabic books into Latin, and then into vernacular languages.[51] Cevdet then noted the surprising accomplishments in the mathematical and natural sciences in Europe, and consequent industrial innovations. All these developments were viewed as a product of vernacularization, which was also a priority for Ottoman reformers.

The belief that the vernacularization of the sciences was for the betterment of society seems to have run deep in Cevdet, as he brought up this issue again in a later comment on Ibn Khaldun's assertion that non-Arabic speakers were disadvantaged compared to native Arabic speakers in learning about science. Of course, that was because Arabic was the lingua franca of educated Muslims in the premodern period. Cevdet concurred with this assertion of Ibn Khaldun's as he reminded the reader of the previously mentioned vernacularization of science in Europe, which he believed European rulers had encouraged in order to promote the acquisition of knowledge within their borders, and to make their languages more powerful and prestigious. Cevdet mentioned French as an example. This comment on the role of vernacular translations shows that Cevdet viewed his own engagement in translation as a means of increasing the power and prestige of the Ottoman Turkish language and empire. This proto-nationalist perspective on scientific language is itself a modern development and shows that leading Ottoman reformers such as Cevdet saw a connection between scientific language and political power, hence the official attempt by the state to commission translations of scientific texts and to stimulate the production of new texts through institutions such as the Academy of

48 For two wonderful texts on the early history of rational–philosophical sciences in Islamic history see Saliba, op. cit. (2); Dimitri Gutas, *Greek Thought, Arabic Culture*, New York: Routledge, 1998.

49 Cevdet differentiates between *ulûm* and *maârif*. He uses the former to refer to theoretical knowledge and higher knowledge, and the latter to refer to general information. For a discussion of these concepts cf. Yalçınkaya, op. cit. (3).

50 Cevdet, op. cit. (10), p. 114.

51 Cevdet, op. cit. (10), p. 114.

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

Sciences (Encümen-i Dâniş) and later the Ottoman Scientific Society (Cemiyet-i İlmiye-i Osmaniye).[52] Cevdet was at the forefront of these developments and contributed to the production of knowledge that would enhance the power of the state by authoring several textbooks, such as *Kavaid-i Türkiyye* (a simplified version of *Kavâid-i Osmâniyye*) on Turkish grammar, *Belâgât-ı Osmâniyye* on rhetoric, *Mi'yâr-ı Sedâd* on logic and *Âdâb-ı Sedâd* on dialectic, all of which were to be used in the new schools. He also wrote a work on calendars (*Takvimü'l-Edvâr*) which he believed demonstrated that Turkish could be a language of sciences.[53]

Cevdet's interventions in Ibn Khaldun's account of the religious sciences further manifest his Ottomanization of the text, particularly in light of the religio-cultural differences between the author of the *Muqaddimah*, a North African who followed the Maliki school of law and Ash'ari theology, and its translator, an Ottoman who followed the Hanafi school of law and Maturidi theology. As an example, in discussing Islamic legal theory, Ibn Khaldun mentioned significant works on this subject, just as he did with other disciplines. Cevdet supplemented Ibn Khaldun's brief bibliography by noting the contributions of Taftazani (d. 1390), Molla Hüsrev (d. 1480) and Molla Fenari (d. 1431) to the field, adding that they were prominent scholars in the Ottoman Empire.[54] The latter two scholars were, in fact, Ottomans whose works in legal theory were studied by later generations.

One of the translator's longest glosses comes in the section dealing with speculative theology, which again provides an alternative and more familiar account than that found in the main text. In his overview of various theological schools, Cevdet particularly emphasized Ash'aris and Maturidis as the most righteous, adding that Ibn Khaldun lacked information about Maturidis, and thus neglected them in his account. He noted that this did not, however, mean that they were not Sunnis.[55] This intervention in Ibn Khaldun's narrative clearly shows Cevdet's tendency to rewrite the history of the religious sciences in a way that gave due weight to his own community. Overall, Cevdet's interventions in the history of the religious sciences reflect the sensitivities of an Ottoman scholar amending a text according to the demands of his own context. In addition to the linguistic idiom of Ottoman Turkish, it was such religio-cultural proclivities that inspired Cevdet and show his resulting translation and interventions to be an Ottomanization of the *Muqaddimah*.

As we have seen so far, in general, Cevdet intervened in Ibn Khaldun's narrative to update the text, to fill in the gaps, to object to some assertions, or to foreground the history of his own community. However, in at least one case, I would suggest that Cevdet's intervention was self-serving, designed to advance his own career and standing among the ruling bureaucratic elite. At issue was Ibn Khaldun's conception of expertise, based on his above-mentioned three levels of thinking that employed differentiating, theoretical and practical reason. In line with his view that mastery of one kind of craft or knowledge created a disadvantage in mastering another, Ibn Khaldun believed that immersion in one level of thinking would be disadvantageous to others. In his discussion of practical reason, he stated that theoreticians do not have a deep knowledge of practical matters, a point that is rephrased in another section of the sixth chapter where it is asserted that 'of

52 Cevdet, op. cit. (14), pp. 46–56, presents a report, a public statement and an official speech from the opening ceremony of the Academy of Sciences, all of which he states he had penned down. For more information on the Academy see Kenan Akyüz, *Encümen-i Dâniş*, Ankara: Ankara Üniversitesi Eğitim Fakültesi Yayınları, 1975. For some primary documents on *Encümen-i Dâniş* see BOA, İ. MVL. 208/6740. For further research on the Ottoman Scientific Society and other intellectual movements see Ekmeleddin İhsanoğlu, *Osmanlı İlmî ve Meslekî Cemiyetleri: 1*, Istanbul: Edebiyat Fakültesi Basimevi, 1987; Şerif Mardin, *Genesis of Young Ottoman Thought*, Syracuse, NY: Syracuse University Press, 2000.

53 Cevdet, op. cit. (14), vol. 4, p. 110.

54 Cevdet, op. cit. (10), p. 56.

55 Cevdet, op. cit. (10), pp. 68–70.

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

all human beings, scholars are the furthest from politics'. Ibn Khaldun argued that scholars could not grasp politics because they were busy generalizing and analogizing. Their universalist thinking was seen as not particularly apt in the practical realm of politics which concerned particular issues. Accordingly, average humans were more reliable in matters political, since their thinking was not tainted by the abstractions that preoccupied smart people and scholars.[56]

In his comment on this section, Cevdet concurred that scholars were not reliable in politics, in general. However, he added that it was possible for one to become an expert in both theoretical and practical philosophy, pointing out the examples of Ibn Sina, Ibn Rushd and Ibn Khaldun himself among the pre-Ottoman Islamic scholars, and Kemalpaşazâde (d. 1534), İdris Bitlisi (d. 1520) and Ebüssuud Efendi (d. 1574) among the Ottoman scholars who aided rulers.[57] Nevertheless, Cevdet acknowledged that these were rather exceptional figures, and confirmed the accuracy of Ibn Khaldun's assertion in general. Cevdet probably would have wished to discourage political elites from taking this point of Ibn Khaldun's as a universal truth and applying it to prevent someone like himself from being consulted on political matters or promoted to higher political offices. Therefore, even though Cevdet shared Ibn Khaldun's tripartite view of human thinking and professionalization, he intervened in the text to elide any implications that might be hazardous to his own career.

Conclusion

Embedded in Ahmed Cevdet's Ottoman Turkish rendering of the sixth chapter of the *Muqaddimah* are certain assumptions that would prove crucial for the globalization of science in the nineteenth century, in that they provided a basis for the cross-cultural exchange of ideas and made scientific knowledge more agreeable and transferable to the Muslim world. These assumptions are (1) an ontology of human beings which holds rational thought, as the locus of all scientific knowledge, to be their defining feature, and (2) a conception of science as disciplinary knowledge accumulated and progressing over time and across nations. Cevdet adopted as his own these notions of humankind and science from Islamic philosophy as encapsulated in the *Muqaddimah*. As a result, his translations and annotations on the original text could both engage with and appropriate modern nineteenth-century European science, embedding it ever more firmly within Ottoman culture.

This article has also drawn attention to the significance of the ostensive silence of modern science on metaphysical issues, a feature which allowed it to remain apparently neutral as regards the rival metaphysical discourses put forward by theological and philosophical schools in the Islamic world. Since modern science purported to be an overwhelmingly factual and empirical endeavour up until the mid-twentieth century, theologians and religious scholars such as Cevdet could support its advance into Ottoman lands in good conscience and without controversy.

Ahmed Cevdet's translated and glossed sixth chapter of the *Muqaddimah* is important not for any particular contributions it made to the body of scientific knowledge, but rather because it stands as a pioneering history of science in the late Ottoman Empire, one that reveals the reformist motivations and religious justifications for appropriating and advancing modern science during the Tanzimat. The foregoing analysis of Cevdet's undertaking demonstrates that the agency of non-Europeans in the globalization of

56 Ibn Khaldun, op. cit. (4), vol. 3, pp. 227–8.

57 Cevdet, op. cit. (10), p. 236. Apparently, there was anxiety about statesmen teaching the sciences as well. See Yalçınkaya, op. cit. (3), pp. 74–6.

https://doi.org/10.1017/S0007087422000346 Published online by Cambridge University Press

science should not only be sought in the number of discoveries made or prizes won, but also within the more general texts on science put forth by a culture. Such works might indicate how certain intellectual traditions inform a culture's understanding of the world and encourage local participation in modern science. Hence, to provide a more accurate and inclusive account of the globalization of science, historians should take into consideration such foundational texts on the nature of science written in non-European languages.

Acknowledgments. This article is a revised version of a chapter of my PhD dissertation. I am grateful to my supervisor George Saliba and the committee members, as well as my cohorts in the Department of Middle Eastern, South Asian and African Studies at Columbia University, for their initial feedback. In 2017, I presented parts of the chapter at The Globalization of Science in Middle East and North Africa, 18th–20th Centuries, a conference organized by Sahar Bazzaz and Jane Murphy. I would like to thank them not only for the opportunity to present and discuss this topic at the conference, but also for their constant support and suggestions since then to revise and transform the chapter into an article. I also benefited from discussions of the topic with Chris Gratien, Ayşe Betül Tekin and Alper Yalçınkaya. I would like to thank them all. Last, but not least, I am grateful to the two anonymous *BJHS* reviewers and editors for their very helpful comments and advice.

Cite this article: Tekin K (2022). Islamic philosophy and the globalization of science: Ahmed Cevdet's translation of the sixth chapter of Ibn Khaldun's *Muqaddimah*. *The British Journal for the History of Science* **55**, 459–475. https://doi.org/10.1017/S0007087422000346