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Pandemic Influenza in Late Ottoman and British Occupied Iraq: The 1889–1893 and 1918–1920 Influenza Pandemics

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SUMMARY: During the late nineteenth and early twentieth centuries, Iraq was visited by two influenza pandemics—one in 1889–1893 (the so-called Russian flu), the other in 1918–1920 (the so-called Spanish flu). These pandemics occurred during two completely different political contexts in the history of Iraq—that of the Ottoman Empire, which ruled Iraq since the sixteenth century, and that of the British wartime occupation, which brought an end to Ottoman rule in the region during World War I. The different political contexts in which influenza appeared in Iraq produced significant differences in how Ottoman and British authorities responded to the disease. Specifically, while influenza was widespread across Iraq during both pandemics, the Ottomans largely ignored the disease, whereas the British tracked and studied it. Despite these differences, however, there were certain similarities across both pandemics. For one, there were subsequent outbreaks of influenza following the worst of each pandemic, but these did not meaningfully shape Ottoman or British public health priorities. Second, in both cases, there was uncertainty about the nature of influenza, much as there was elsewhere in the world. As this article demonstrates, the history of influenza in late Ottoman and British occupied Iraq was one marked by continuity and change.

KEYWORDS: influenza, Iraq, Ottoman Empire, Mesopotamian Campaign

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During the late nineteenth and early twentieth centuries, two major influenza pandemics swept the globe: one in 1889–1893 (the so-called Russian flu on account of its hypothesized origins in the Russian Empire), the other in 1918–1920 (the so-called Spanish flu on account of Spanish newspapers being among the first to report about it during World War I).[1] These were not the first influenza pandemics to ever occur.[2] However, their global scope, the speed with which they spread, and their role in expanding scientific research on influenza made these pandemics categorically different from previous ones.[3] Many important studies have focused on one pandemic or the other to examine influenza's effects on individual societies across the world.[4] Nevertheless, only a handful of studies have examined both pandemics alongside each other to bring attention to significant instances of continuity and change across the history of each. In doing so, they have highlighted a range of issues in diverse geographical settings—whether it be changing societal perceptions of influenza in the United States,[5] changing scientific

[1] For a general overview of the history of pandemic influenza, see George Dehner, *Influenza: A Century of Science and Public Health Response* (Pittsburgh: University of Pittsburgh Press, 2012).
[2] On earlier influenza pandemics, see K. David Patterson, *Pandemic Influenza, 1700–1900* (Totowa, N.J.: Rowman & Littlefield, 1986), 11–48.
[3] Dehner, *Influenza* (n. 1), 39–41, 43–44, 47–48.
[4] The literature on the 1889–1893 and 1918–1920 influenza pandemics is too vast to cite here in its entirety. References to specific geographical case studies are made throughout this article whenever relevant. However, the following works provide overviews of the global effects of each pandemic and highlight some of the historiographical issues involved in interpreting them. For the 1889–1893 pandemic, see Patterson, *Pandemic Influenza* (n. 2), 49–82; Dehner, *Influenza* (n. 1), 39–41. For the 1918–1920 pandemic, see Howard Phillips and David Killingray, eds., *The Spanish Influenza Pandemic of 1918–19: New Perspectives* (London: Routledge, 2011); Guy Beiner, ed., *Pandemic Re-awakenings: The Forgotten and Unforgotten "Spanish" Flu of 1918–1919* (Oxford: Oxford University Press, 2022).
[5] Nancy K. Bristow, *American Pandemic: The Lost Worlds of the 1918 Influenza Epidemic* (Oxford: Oxford University Press, 2012).

understandings of influenza in Britain,[6] continuity in the way in which British colonial authorities in India downplayed the threat of influenza,[7] the extraordinary virulence of both pandemics in Qajar Iran,[8] continued outbreaks of influenza between both pandemics in the Ottoman Empire,[9] or the continued global impact of influenza.[10] Such studies, thus, underscore the importance of further exploring the relation between the 1889–1893 and 1918–1920 pandemics.[11] Indeed, as Howard Phillips remarked in a historiographical survey of the 1918–1920 pandemic, diachronic comparisons of influenza pandemics can help clarify what was distinctive about different manifestations of the disease and societal responses to them.[12] This is all the more important for the 1889–1893 and 1918–1920 pandemics, both of which marked critical junctures in the history of influenza.

This article addresses that imperative by examining these influenza pandemics as they unfolded in two completely different political contexts in the history of Iraq—that of the Ottoman Empire, which ruled Iraq during the nineteenth century, and that of the British wartime

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[6] Michael Bresalier, "'A Most Protean Disease': Aligning Medical Knowledge of Modern Influenza, 1890–1914," *Med. Hist.* 56 (2012): 481–510.
[7] David Arnold, "Death and the Modern Empire: The 1918–19 Influenza Epidemic in India," *Trans. Roy. Hist. Soc.* 29 (2019): 187–90.
[8] Amir A. Afkhami, "Influenza," *Encyclopædia Iranica*, updated August 21, 2012, https://www.iranicaonline.org/articles/influenza.
[9] Nuran Yıldırım, "COVID-19 Pandemisinden Tarihe Bakış Dünyada ve Türkiye'de İnfluenza/Grip Epidemileri ve Pandemeleri," in *COVID-19 Pandemisinde Hastalık ve Hastane Yönetimi*, ed. Ramazan Özdemir, Teoman Aydın, and Özlem Su Küçük (Istanbul: Bezmialem Vakıf Üniversitesi Yayınları, 2021), 24–34.
[10] Dehner, *Influenza* (n. 1).
[11] Joseph P. Byrne and Jo N. Hays, *Epidemics and Pandemics: From Ancient Plagues to Modern-Day Threats*, vol. 2 (Santa Barbara, Calif.: ABC-CLIO, 2021), 225–26.
[12] Howard Phillips, "The Recent Wave of 'Spanish' Flu Historiography," *Soc. Hist. Med.* 27 (2014): 804, 805.

occupation during World War I, which brought an end to Ottoman rule in the region.[13] As this article demonstrates, the different political contexts in which influenza appeared in Iraq produced significant differences in how Ottoman and British authorities responded to the disease. Specifically, while influenza was widespread across Iraq during both pandemics, the Ottomans largely ignored the disease, whereas the British tracked and studied it. These different responses reflected the distinct priorities of Ottoman and British authorities at the time of influenza's arrival. In the Ottoman case, official public health priorities in Iraq—like those of Ottoman Iraqis—remained largely focused on diseases other than influenza, especially cholera and plague, both of which had become increasingly politicized through international sanitary conventions that cast the Ottoman Empire as an exporter of disease. As for the British, Britain's wartime needs forced it to track the spread of influenza among its soldiers, as well as the Arab and Indian workers who provided the labor for British developmentalist projects in Iraq, particularly in agriculture and infrastructure. Despite these differences, however, there were certain similarities across both pandemics. For one, there were subsequent outbreaks of influenza following the worst of each pandemic, but these did not meaningfully shape Ottoman or British public health priorities. Second, there was uncertainty about the nature of influenza, much as there was

[13] For general overviews of the history of Ottoman Iraq during the nineteenth century, see Ebubekir Ceylan, *The Ottoman Origins of Modern Iraq: Political Reform, Modernization and Development in the Nineteenth Century* (London: I.B. Tauris, 2011); Gökhan Çetinsaya, *Ottoman Administration of Iraq, 1890–1908* (London: Routledge, 2006); 'Abbas al-'Azzawi, *Tarikh al-'Iraq Bayna Ihtilalayn*, vol. 7 (Baghdad: Sharikat al-Tijarah wa al-Tab'at al-Mahdud, 1955); 'Abbas al-'Azzawi, *Tarikh al-'Iraq Bayna Ihtilalayn*, vol. 8 (Baghdad: Sharikat al-Tijarah wa al-Tab'at al-Mahdud, 1955). For general overviews of the history of Iraq during the period of the British occupation, see Peter Sluglett, *Britain in Iraq: Contriving King and Country* (London: I.B. Tauris, 2007); Toby Dodge, *Inventing Iraq: The Failure of Nation-Building and a History Denied* (New York: Columbia University Press, 2005).

elsewhere in the world, as can be seen in sources documenting the reactions of locals and foreigners to the disease's appearance and effects in Ottoman and British occupied Iraq. In short, the history of influenza in late Ottoman and British occupied Iraq is one marked by continuity and change.

Through a comparison of influenza pandemics in Ottoman and British occupied Iraq, this article builds on the invaluable work of scholars who have thought about continuity and change between the Ottoman and British periods when examining other topics in the history of medicine of Iraq. Sara Farhan, for example, has demonstrated that the end of Ottoman rule in Iraq marked a change in women's role in Iraq's medical institutions: they had previously been integrated into the Ottoman health infrastructure, but were largely marginalized by the British, who placed them in subordinate, gender-specific medical roles—a development that many of these women resisted.[14] Likewise, Omar Dewachi has shown that the career trajectories of doctors who received their medical training in Ottoman institutions changed under British rule, as British policies prevented these individuals from practicing medicine in any official capacity in Iraq, except in generally undesirable roles as doctors in rural districts.[15] 'Abd al-Hamid 'Alwachi has highlighted institutional change by showing that British authorities repurposed certain Ottoman-era hospitals in Iraq.[16] At the broadest of levels, such works remind us that comparisons across time can be just as revealing as comparisons across space when writing comparative histories in

[14] Sara Farhan, "Women Doctors and the Medical Profession in Iraq during the First Half of the Twentieth Century," *J. Middle East Women's Stud.* 18 (2022): 59–80.
[15] Omar Dewachi, *Ungovernable Life: Mandatory Medicine and Statecraft in Iraq* (Stanford, Calif.: Stanford University Press, 2017), 65, 68–69.
[16] 'Abd al-Hamid 'Alwachi, *Tarikh Tibb al-'Iraqi* (Baghdad: Matba'at al-'Asad, 1967), 151–53.

general.[17] In the case of influenza, then, a comparative history of the disease during the Ottoman and British periods necessarily requires us to think about continuity and change in terms of influenza's effects, official responses to each pandemic, and prevailing understandings of the disease.

Writing such a history is no easy task, however. This is particularly the case for the Ottoman period. Ottoman archival sources are useful for studying the history of influenza in Anatolia, but are largely silent on the disease's impact on Iraq, despite being useful for examining Ottoman responses to cholera and plague.[18] Moreover, the contemporaneous and retrospective writings of Ottoman Iraqis—as preserved in scientific journals, newspapers, and memoirs—do not comment on influenza, even though they mention other epidemic diseases, such as cholera, plague, typhoid, and malaria, among others. Further complicating matters is the fact that, with few exceptions, most references to influenza in Iraq are found in the observations of foreigners or colonial authorities rather than local sources. For the Ottoman period, such sources include French consular records, foreign-run periodicals operating in the Ottoman

[17] Raymond Grew, "The Case for Comparing Histories," *Amer. Hist. Rev.* 85 (1980): 767, 768, 771; Philippa Levine, "Is Comparative History Possible?," *Hist. Theory* 53 (2014): 343; Javier Fernández-Sebastián, "Waving the Historian's Magic Wand: Temporal Comparisons and Analogies in the Writing of History," *Time Soc.* 30 (2021): 517–35.

[18] For histories of influenza during the Ottoman period, see Yıldırım, "COVID-19 Pandemisinden Tarihe Bakış" (n. 9); Murat Yolun and Metin Kopar, "The Impact of the Spanish Influenza on the Ottoman Empire," *Belleten* 79 (2015): 1099–1120; M. Kemal Temel, "The 1918 'Spanish Flu' Pandemic in the Ottoman Capital, Istanbul," *Can. Bull. Med. Hist.* 37 (2020): 195–231. For histories of disease in Ottoman Iraq, see Sabri Ateş, "Bones of Contention: Corpse Traffic and Ottoman-Iranian Rivalry in Nineteenth-Century Iraq," *Comp. Stud. South Asia, Africa, and the Middle East* 30 (2010): 512–32; Isacar A. Bolaños, "The Ottomans during the Global Crises of Cholera and Plague: The View from Iraq and the Gulf," *Internat. J. Middle East Stud.* 51 (2019): 603–20; Hande Yalnızoğlu Altınay, "The Making of an Ottoman Quarantine Post: Baghdad's Quarantine Infrastructure, 1848–1856," *J. Turkish Stud.* 55 (2021): 43–46.

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Empire, the correspondences of the Baghdad branch of the French Jewish philanthropic organization Alliance Israélite Universelle (AIU),[19] and the extraordinarily detailed diary of Joseph Mathia Svoboda, who was an Austro-Hungarian subject born in Baghdad, where he worked for the Euphrates and Tigris Steam Navigation Company.[20] Similarly, for the British period, references to influenza are mainly found in British colonial records and medical journals rather than in the Arabic memoirs, periodicals, and literary works that several scholars have used successfully to examine other aspects of Iraq's history during the period of the British occupation, including topics relevant to the history of health, medicine, and disease.[21]

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[19] On the AIU's activities in Ottoman Iraq, see Jonathan Sciarcon, *Educational Oases in the Desert: The Alliance Israélite Universelle's Girls' School in Ottoman Iraq, 1895–1915* (Syracuse, N.Y.: Syracuse University Press, 2017). On the Jewish community in Iraq more broadly, both during the late Ottoman period and beyond, see Orit Bashkin, "'Religious Hatred Shall Disappear from the Land': Iraqi Jews as Ottoman Subjects, 1864–1913," *Internat. J. Contemp. Iraqi Stud.* 4 (2010): 305–23; Orit Bashkin, *New Babylonians: A History of Jews in Modern Iraq* (Stanford, Calif.: Stanford University Press, 2012); Annie Greene, "Burying a Rabbi in Baghdad: The Limits of Ottomanism for Ottoman-Iraqi Jews in the Late Nineteenth Century," *J. Jewish Identities* 12 (2019): 97–123.

[20] The Svoboda Diaries (hereafter SD) have been digitized by the University of Washington and can be accessed at the following link: https://digital.lib.washington.edu/researchworks/communities/fac2ca4b-827c-4a4e-8756-d7f4ea962837. On Svoboda's life and the importance of his diaries for the history of late Ottoman Iraq, see Margaret Makiya, "The Svoboda Diaries," *Baghdad College of Arts J.* 64 (1969): 37–67; Sam Fields, Camille Lyans Colle, Catherine Oei, and Annie T. Chen, "Using Named Entity Recognition and Network Analysis to Distinguish Personal Networks from the Social Milieu in Nineteenth-Century Ottoman-Iraqi Personal Diaries," *Digital Scholarship in the Human.* 38 (2023): 67. To learn more about the Svoboda Diaries, visit the following link: https://www.svobodadiariesproject.org/

[21] For examples of histories of Iraq that do not rely on colonial records to examine the period of the British occupation, see Orit Bashkin, *The Other Iraq: Pluralism and Culture in Hashemite Iraq* (Stanford, Calif.: Stanford University Press, 2009), 19–51; Sara Pursley, *Familiar Futures: Time, Selfhood, and Sovereignty in Iraq* (Stanford, Calif.: Stanford University Press, 2019); Kevin M. Jones, *The Dangers of Poetry: Culture, Politics, and Revolution in Iraq* (Stanford, Calif.: Stanford University Press, 2020), 48–102; Dewachi, *Ungovernable Life* (n. 15), 65–82; Farhan, "Women Doctors" (n. 14).

While this source base is far from ideal, when read critically, it provides a foundation from which to begin sketching the rough outlines of influenza's history in Iraq during the Ottoman and British periods. Importantly, it allows us to do so in ways that engage with conceptual insights that arise from the history of medicine more broadly. For example, even local sources that do *not* mention influenza become relevant for writing such a history when we take seriously the following question that Dwaipayan Banerjee has posed about the writing of pandemic histories in general: "what if we situate [pandemics'] relation to history as not catalyzing narrative action to the point of unprecedent crisis but rather as dispersed within an already unfolding scene, bending but not breaking the narrative arc?"[22] For the Ottoman period in particular, such a framing allows us to perceive more clearly the "already unfolding scene" on which influenza appeared—one in which official public health priorities in Iraq and prevailing societal imaginings of its epidemiological landscape were shaped primarily by concerns with diseases other than influenza. Viewed this way, we can be more attentive to the reasons why societies have historically prioritized certain diseases over others at particular times, as Kavita Sivaramakrishnan has recently encouraged us to do.[23] This is important in light of recurring outbreaks of influenza in Iraq beyond the worst of each pandemic, as Ottoman and British neglect of these later outbreaks further substantiate an emerging consensus among historians of medicine that epidemics can exhibit continuities that are otherwise obscured when they are portrayed as episodic, finite events, by either historical actors or historians of medicine

[22] Dwaipayan Banerjee, "The Mystery of the Missing Pandemic," *Hist. Pres.* 13 (2023): 57–70, quotation on 66.
[23] Kavita Sivaramakrishnan, "Looking Sideways: Locating Epidemics and Erasures in South Asia," *Bull. Hist. Med.* 94 (2020): 641, 642, 643, 655, 657.

themselves.[24] Finally, comparing the Ottoman and British experiences with influenza in Iraq brings into greater focus for influenza what Linda Nash observed about histories of cholera and plague—namely, that "even well-studied diseases . . . are highly versatile in time and space, and subject to competing scientific interpretations."[25] These conceptual insights, along with the historiographical issues outlined above, guide this article's analysis of the history of influenza in Ottoman and British occupied Iraq—a task to which we now turn.

Pandemic Influenza in Ottoman Iraq

During the nineteenth century, Iraq was part of the Ottoman Empire. This century in Ottoman history was characterized by efforts to centralize government authority across the empire through a series of modernization reforms.[26] In the case of Iraq, Ottoman officials identified infrastructure, education, agriculture, and the political integration of tribes and religious minorities as some of the region's most pressing issues.[27] However, officials also began turning their to attention to matters of public health in Iraq, especially in response to repeated epidemics of cholera and plague, to which the Ottoman government responded by enforcing strict quarantine measures—a development that further facilitated the expansion of Ottoman authority

[24] Dóra Vargha, "Reconsidering the Dramaturgy," *Bull. Hist. Med.* 94 (2020): 690–98.
[25] Linda Nash, "Comment: Materia Medica," *Bull. Hist. Med.* 92 (2018): 50–54, quotation on 54.
[26] Carter Findley, "The Tanzimat II," in *The Cambridge History of Turkey*, vol. 4: *Turkey in the Modern World*, ed. Reşat Kasaba (Cambridge: Cambridge University Press, 2008), 9–37; M. Şükrü Hanioğlu, *A Brief History of the Late Ottoman Empire* (Princeton, N.J.: Princeton University Press, 2010), 109–49.
[27] On the history of these reform efforts in Iraq, see Ceylan, *Ottoman Origins of Modern Iraq* (n. 13); Çetinsaya, *Ottoman Administration of Iraq* (n. 13); Karen Kern, *Imperial Citizen: Marriage and Citizenship in the Ottoman Frontier Provinces of Iraq* (Syracuse, N.Y.: Syracuse University Press, 2011); Keiko Kiyotaki, *Ottoman Land Reform in the Province of Baghdad* (Leiden: Brill, 2019).

in this region of the empire.[28] It was in this context that influenza appeared in Iraq as part of a pandemic that swept the globe, including much of the Middle East and North Africa (MENA) region, in 1889–1893. While influenza was widespread across Iraq, the disease did little to change Ottoman public health priorities in the region. Nor was it significant in shaping Ottoman Iraqis' perceptions about the region's epidemiological landscape. The same was true for subsequent outbreaks of influenza in 1895 and 1898. Nevertheless, the observations of the few—albeit mostly foreign—individuals who commented on influenza's sudden appearance in Iraq evince an uncertainty about the nature of influenza that had parallels elsewhere in the world.

To begin, virtually no place in the MENA region was left untouched by the global spread of influenza in 1889–1893. Among the first states in the region to be affected by the pandemic was Qajar Iran, where influenza-related deaths in Tehran alone ranged from fifty to seventy a day, while countrywide approximately six thousand children died over the course of the pandemic.[29] Influenza also proved fatal along the eastern coastline of the Arabian Peninsula when it appeared in Bahrain and Muscat.[30] In Egypt, which was formally Ottoman territory despite being under British occupation since 1882, outbreaks occurred in 1890 and 1892; while their effects were generally mild, the latter of these apparently resulted in the death of Egypt's

[28] Ateş, "Bones of Contention" (n. 18); Altinay, "Making of an Ottoman Quarantine Post" (n. 18); Bolaños, "Ottomans during the Global Crises" (n. 18).
[29] Amir A. Afkhami, *A Modern Contagion: Imperialism and Public Health in Iran's Age of Cholera* (Baltimore: Johns Hopkins University Press, 2019), 55.
[30] *Administration Report on the Persian Gulf Political Residency and Muscat Political Agency for 1890–1891* (Calcutta: Office of the Superintendent of Government Printing, India, 1891), 6; *Administration Report on the Persian Gulf Political Residency and Muscat Political Agency for 1891–1892* (Calcutta: Office of the Superintendent of Government Printing, India, 1892), 7.

ruling dynast, Khedive Tawfiq Pasha.[31] Influenza also spread to Morocco, Algeria, and Tunisia.[32] The Ottoman capital of Istanbul experienced repeated outbreaks between 1890 and 1892, some worse than others: in 1890, for example, military hospitals were overrun with sick soldiers.[33] The pandemic's severity in Ottoman territory more broadly was also a topic of interest for the Istanbul-based Ottoman newspaper *Tercüman-ı Hakikat* ("Interpreter of Truth"), which tracked influenza outbreaks as they occurred across the empire, whether in coastal cities such as Izmir, Samsun, and Trabzon, deep in the empire's interior in Konya, Sivas, and Aleppo, or along the empire's southern periphery in Yemen.[34] In short, influenza spread widely across the MENA region.

Iraq was no exception. One of the more detailed accounts of influenza as it spread across Iraq in 1890 during the months of April and May comes from the diary of Joseph Mathia

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[31] For information about these outbreaks, see "Egypt (From Our Own Correspondent)," *Lancet* 135 (1890): 521 and Local Government Board, *Further Report and Papers on Epidemic Influenza, 1889–1892: With an Introduction by the Medical Officer of the Local Government Board* (London: Eyre and Spottiswoode, 1893), 38. On Tawfiq Pasha's death, see "Latest Intelligence: Egypt," *Times* (London), January 13, 1892, 5.

[32] Patterson, *Pandemic Influenza* (n. 2), 63.

[33] Centre des Archives Diplomatiques des Nantes, Nantes, France (hereafter CADN), Constantinople, Serie E, vol. 468, no. 7, Mahé to French Ambassador, January 12, 1890; CADN, Constantinople, Serie E, vol. 468, no. 57, Mahé to French Ambassador, March 14, 1891; CADN, Constantinople, Serie E, vol. 468, no. 87, Mahé to French Ambassador, December 8, 1891; CADN, Constantinople, Serie E, vol. 468, no. 90, Mahé to French Ambassador, December 29, 1891; "The Influenza: The Influenza Abroad," *Times* (London), January 7, 1892, 7.

[34] For outbreaks in coastal cities such as Izmir, Samsun, and Trabzon, see "Enflüanza," *Tercüman-ı Hakikat*, 16 Recep 1309 / February 15, 1892, 3; "Ahval-ı Sıhhiye," *Tercüman-ı Hakikat*, 4 Ramazan 1309 / April 2, 1892, 4; "Nezle-i Müstevliye," *Tercüman-ı Hakikat*, 27 Cemazeyilahir 1307 / February 18, 1890, 3. For Konya, Sivas, and Aleppo, see "Nezle-i Müstevliye," *Tercüman-ı Hakikat*, 25 Cemazeyilahir 1307 / February 16, 1890, 2; "Enflüença," *Tercüman-ı Hakikat*, 28 Cemazeyilahir 1307 / February 19, 1890, 2; and "Enflüença," *Tercüman-ı Hakkitat*, 23 Cemazeyilahir 1307 / February 14, 1890. For Yemen, see "Enflüença," *Tercüman-ı Hakikat*, 8 Şaban 1309 / March 8, 1892, 4.

Svoboda. As Svoboda explained in a diary entry for Sunday, April 13, he suffered from influenza and experienced symptoms such as a "bad cold on [his] head, nose and chest," as well as joint pain. Svoboda was also aware of the global and regional contexts in which influenza was spreading: he noted that he was experiencing "something like the Influenza which has been going round all over Europe since the beginning of Winter"; he mentioned influenza's presence in Bombay and the Qajar port city of Bushire; and while at Basra, he had learned that the disease was spreading in Baghdad, Mosul, and Diyarbekir.[35] According to Svoboda, influenza was still raging in Basra and Baghdad in early May.[36] The situation had hardly improved by May 23, with Svoboda observing that people were still suffering the effects of influenza in Baghdad.[37]

If Svoboda emphasized the global and regional trajectories of influenza as the disease spread across Iraq, others pointed to local environmental factors when explaining its appearance and effects. For example, Samuel Somekh, an Ottoman Jew from Baghdad who was affiliated with the AIU, suggested that, in the case of Basra, there was a correlation between the city's "swamp climate" and the "great mortality" that influenza left behind.[38] An anonymous correspondent for the Istanbul-based Francophone newspaper *Le Moniteur Oriental* echoed this sentiment with respect to Baghdad. The correspondent attributed influenza's presence to flooding and the year's unusually cold weather, factors that had proven "harmful to agriculture and

[35] SD, Diary 34, April 13, 1890, quotations on 185–86.
[36] SD, Diary 34, May 3, 1890.
[37] SD, Diary 34, May 23, 1890, 221.
[38] Alliance Israéllite Universelle Archives, Harvard University (hereafter AIUA), "Irak: XII E: 112," "Ecoles: Bagdad: Somekh (S.)," Somekh to Paris, May 12, 1890, quotation on first page of letter. For more on Somekh, see Elizabeth Antébi, "Somekh, Samuel," in *Encyclopedia of Jews in the Islamic World*, ed. Norman A. Stillman, http://dx.doi.org/10.1163/1878-9781_ejiw_SIM_0020480, accessed January 31, 2025.

health." As the correspondent noted, "The vast crop fields are submerged by the flooding of the rivers; the city is surrounded by a belt of stagnant water. We have all kinds of fevers and *grippes*, which our doctors continue to call influenza and dengue."[39] This environmental explanation may have resonated with at least some among the Ottoman-reading public in Istanbul, given that *Tercüman-ı Hakikat* translated the correspondent's report to Ottoman Turkish.[40] Importantly, this type of environmental reasoning did not occur in a vacuum: over the course of the nineteenth century, Ottoman and European observers alike perceived environmental conditions in Iraq as being in decline, and for Ottoman officials, such perceptions shaped their efforts to improve water management in the region during the nineteenth century, particularly when it came to flood control and irrigation, as well as public health concerns.[41]

More broadly, though, these varied explanations for influenza's sudden appearance in Iraq—whether emphasizing global factors or local environmental ones—reflected the imperfect state of knowledge about the disease at the time, not just in the Ottoman Empire, but elsewhere in the world too. The germ theory of disease had recently made it possible for scientists to identify specific microbes as causative agents of disease, such as the bacterium responsible for

[39] "Provinces," *Le Moniteur Oriental*, Friday, May 23, 1890, n.p.
[40] "Bağdad," *Tercüman-ı Hakikat*, 6 Şevval 1307 / May 26, 1890, 2.
[41] On Ottoman and European discourses of environmental decline in Iraq and their effects on Ottoman reforms, see Camille Lyans Cole, "Controversial Investments: Trade and Infrastructure in Ottoman-British Relations in Iraq, 1861–1918," *Middle Eastern Stud.* 54 (2018): 750–56; Camile Lyans Cole, "*Nafia* for the Tigris: The Privy Purse and the Infrastructure of Development in Late Ottoman Iraq, 1882–1914," *Hist. Sci.* 62, no. 4 (2021): 488–510, https://doi.org/10.1177/0073275321999265; Camile Lyans Cole, "The Ottoman Model: Basra and the Making of Qajar Reform, 1881–1889," *Comp. Stud. Soc. Hist.* 64 (2022): 1024–54; Isacar Bolaños, "Water, Engineers, and French Environmental Imaginaries of Ottoman Iraq, 1868–1908," *Environ. Hist.* 27 (2022): 772–98; Bolaños, "Ottomans during the Global Crises" (n. 18), 610–12.

cholera.[42] In the case of influenza, however, this scientific breakthrough led scientists to the erroneous conclusion that influenza was caused by a bacterium known as Pfeiffer's bacillus—a mistake that would not become apparent until the 1918–1920 pandemic, when scientists began hypothesizing that the disease was of viral origins.[43] Imperfect knowledge about influenza was evident in other ways as well. In the Russian Empire, for example, at least one medical expert initially posited a causal link between influenza and cholera pandemics.[44] In Britain, medical experts could not agree on influenza's symptoms.[45] In Qajar Iran, doctors regularly mistook influenza for the common cold.[46] In the Ottoman capital of Istanbul, European and Ottoman medical experts debated whether the city had been visited by dengue or influenza in 1889, when the pandemic first reached Ottoman territory.[47] There was a similar uncertainty in Iraq, where Henri Pognon, France's consul at Baghdad, expressed skepticism of claims that influenza was spreading in Baghdad, arguing that the symptoms resembled those of dengue fever instead.[48] In contrast, a certain Mr. Valadji, who was affiliated with the Baghdad branch of the AIU, noted the presence of both dengue and influenza in the city.[49]

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[42] Dehner, *Influenza* (n. 1), 36–37, 39.
[43] Ibid., 48, 59.
[44] E. Thomas Ewing, "'The Two Diseases Are So Utterly Dissimilar': Using Digital Humanities Tools to Advance Scholarship in the Global History of Medicine," *Curr. Res. Digital Res.* 1 (2018), https://doi.org/10.31835/crdh.2018.12.
[45] Bresalier, "'A Most Protean Disease'" (n. 6), 494–500.
[46] Afkhami, *Modern Contagion* (n. 29), 55.
[47] Yıldırım, "COVID-19 Pandemisinden Tarihe Bakış" (n. 9), 61–62.
[48] CADN, Constantinople, Serie D, Baghdad, vol. 17, no. 10, Pognon to Comte de Montebello, May 26, 1890.
[49] AIUA, "Irak: XII E: 117," "Ecoles: Bagdad: Valadji (J.)," Valadji to Paris, May 5, 1890.

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Still, despite influenza's presence in Iraq, Ottoman officials did not respond to it forcefully. Imperfect knowledge about influenza was hardly a reason for this; after all, the Ottoman government took decisive action in response to the disease's appearance in other parts of the empire. For example, in January 1890, when influenza, scarlet fever (*kızıl*), and diphtheria (*kuşpalazı*) were spreading in Istanbul, the Ottoman government appointed doctors to oversee the implementation of disinfection and purification procedures in response to these outbreaks.[50] That same year, Sultan Abdülhamid II even arranged for free medical treatment to be given to theology students who were affected by influenza in Istanbul and its surrounding suburbs, prompting these students to send a letter of gratitude to the sultan.[51] In Kastamonu near the Black Sea coast, Ottoman officials responded by temporarily closing schools.[52] Meanwhile, the governor of Konya informed the Ministry of the Interior that influenza was spreading, even though the disease had not resulted in any deaths.[53] In Iraq, however, even as influenza was spreading during the months of April and May, Ottoman health priorities remained focused on preventing the spread of cholera, as they had been since at least the 1840s.[54] In April, the Ottoman government sent a medical mission to southern Iraq to investigate the causes of a cholera epidemic from the *previous* year in 1889.[55] By the beginning of May 1890, cholera had

[50] Başbakanlık Osmanlı Arşivi, Istanbul, Turkey (hereafter BOA), I.DH 1167/9142, 24 C 1307 / January 16, 1890.
[51] "L'Influenza," *Stamboul*, January 17, 1890, n.p.
[52] Yıldırım, "COVID-19 Pandemisinden Tarihe Bakış" (n. 9), 30.
[53] BOA, Y.A.HUS, 233/17, telegram from governor of Konya to Ministry of the Interior, 15 Kanunusani 1305 / January 27, 1890.
[54] On the importance of cholera to Ottoman public health priorities in Iraq, see Bolaños, "Ottomans during the Global Crises" (n. 18), 607–9.
[55] CADN, Constantinople, Serie E, vol. 468, no. 21, Mahé to French Ambassador, April 21, 1890.

reappeared, but this time in Mosul, leading the Ottoman government to impose a strict sanitary cordon to prevent the disease from spreading across the rest of Anatolia and to Istanbul.[56] Toward the end of the month, rumors that cholera was spreading in the town of Beled, just outside of Baghdad to the north, convinced the Ottoman government to send military doctors there as well.[57] The sultan also authorized the governor of Baghdad to implement all necessary public health measures to prevent cholera from spreading further.[58] At least in Iraq, then, cholera mattered to Ottoman officials in a way that influenza simply did not, even as the disease was spreading across the region in April and May. In fact, influenza was still observed to be spreading in Baghdad and Basra well into June 1890.[59]

For Ottoman officials, though, influenza was not politicized in the same way that cholera had become during the nineteenth century. Specifically, Western governments repeatedly blamed the Ottoman Empire and its administration of the Hajj pilgrimage for the global spread of the disease.[60] Britain, in particular, frequently denied British India's role as the epicenter of many of the century's cholera pandemics, especially when criticizing the Ottomans.[61] International sanitary measures designed in Europe also undermined Ottoman sovereignty, and over the course of the nineteenth century, certain aspects of the Ottomans' public health infrastructure came

[56] BOA, I.DH 117/92008, 14 N 1307 / May 4, 1890.
[57] CADN, Constantinople, Serie E, vol. 468, no. 22, Mahé to French Ambassador, May 30, 1890.
[58] BOA, I.DH 1180/92257, 2 L 1307 / May 22, 1890.
[59] Archives Diplomatiques, La Courneuve, France (hereafter AD), Correspondence Commerciale, Bagdad, v. 4, telegram, Pognon to Ministry of Foreign Affairs, June 14, 1890.
[60] Valeska Huber, "The Unification of the Globe by Disease? The International Sanitary Conferences on Cholera, 1851–1894," *Hist. J.* 49 (2006): 453–76.
[61] Michael Christopher Low, *Imperial Mecca: Ottoman Arabia and the Indian Ocean Hajj* (New York: Columbia University Press, 2020), 169; David Arnold, *Colonizing the Body: State Medicine and Epidemic Disease in Nineteenth-Century India* (Berkeley: University of California Press, 1993), 194–95.

under European control, most notably the Constantinople Board of Health, which oversaw the empire's quarantine operations.[62] In the case of Iraq, the Ottomans managed to push back against some of this oversight by advocating for their interests at international sanitary conferences and enforcing strict quarantine measures during epidemics of cholera originating in Qajar Iran and British India, much to the frustration of European merchants who worried about the effects of quarantines on trade.[63] Nevertheless, the perception that the Ottoman Empire—and Iraq in particular—was an exporter of diseases was deeply ingrained. In fact, in 1890, the Istanbul-based Persian language newspaper *Akhtar* ("Star") attempted to ward off rumors in the Russian press that Qajar Iran had spread influenza to the Russian Empire by arguing that Iraq had a long history of exporting diseases to Qajar territory.[64]

In the end, the first wave of the pandemic in 1890 had come and gone, but Iraq would still be visited by subsequent outbreaks of the disease during the remaining years of the 1889–1893 pandemic. These outbreaks occurred in 1891, 1892, and 1893.[65] As in 1890, Ottoman authorities paid little attention to influenza's appearance in Iraq. To be sure, in 1892, Baghdad's quarantine inspector informed Ottoman officials in Istanbul that influenza, which was spreading in neighboring Qajar Iran, had spread to Sulaymaniyah in the nearby province of Mosul, though

[62] Low, *Imperial Mecca* (n. 61), 131; Birsen Bulmuş, *Plague, Quarantines and Geopolitics in the Ottoman Empire* (Edinburgh: Edinburgh University Press, 2005), 141–45; Huber, "Unification of the Globe" (n. 60), 453–76. For a similar process that occurred in Ottoman Egypt, see LaVerne Kuhnke, *Lives at Risk: Public Health in Nineteenth-Century Egypt* (Berkeley, California: University of California Press, 1990), 92–110.
[63] Bolaños, "Ottomans during the Global Crises" (n. 18), 607–9.
[64] "Enfluanza Dar Iran," *Akhtar*, March 24, 1890, 244.
[65] SD, Diary 36, December 2, 1891, 31; "Provincial," *Levant Herald and Eastern Express*, December 18, 1893, 637.

in a mild form.[66] Beyond this, however, Ottoman officials responded more forcefully to epidemics of others diseases. For example, in June 1892, when plague was spreading in the lower Euphrates region, the Ottomans dispatched doctors and soldiers to enforce a strict sanitary cordon to prevent the disease from spreading.[67] When cholera appeared in Basra during the following year in 1893, Ottoman authorities introduced quarantine measures to protect Baghdad from the disease, which still managed to spread to the city, despite these efforts.[68] Tellingly, the Ottoman public health reformer Mehmed Şakir, who was commissioned by the Ottoman government to propose sanitary reforms for Iraq, included the history of both of these epidemics in his 1895 report, "Hindistan Kolerası ve Irak'ın Islahat-ı Sıhhiyesi" ("The Cholera of India and the Sanitary Reform of Iraq"), which, despite its title's apparent focus on cholera, mentioned other diseases, including plague, typhus, sheeppox, and scabies, but not influenza.[69] And yet, influenza continued to affect people in Iraq beyond 1893, the date typically held to be the end of the "Russian" flu. This much is clear from Joseph Mathia Svoboda's diary entry for July 16, 1895, in which he described a visit to a local pharmacy in Baghdad that was attending about three hundred patients. According to Svoboda, "it appears that more than half of the population

[66] "Mevad-ı Sıhhiye," *Tercüman-ı Hakikat*, 3 Şaban 1309 / March 3, 1892, 2; "Maladie a Sihna," *Le Moniteur Oriental*, Wednesday, March 2, 1890, n.p.
[67] BOA, BEO 28/2074, copy of deciphered telegram from the Commander of Sixth Ottoman Army in Baghdad, 16 Haziran 1308 / June 28, 1892; BOA, I.DH, Minister of Health to Grand Vizier, 18 Za 1309 / June 14, 1892.
[68] CADN, Constantinople, Serie D, v. 18, no. 2, Pognon to Cambon, June 30, 1893; CADN, Constantinople, Serie D, v. 18, no. 9, Pognon to Cambon, August 29, 1893.
[69] Mehmed Şakir, "Hindistan Kolerası ve Irak'ın Islahat-ı Sıhhiyesi," İstanbul Üniversitesi Nadir Eserler Kütüphanesi (hereafter İÜNEK), Ms. no. TY5071, 246–51, 265, 383–95, 395, 397. For more on Mehmed Şakir's life and career as a public health reformer, see Mehmed Şakir, *Halife II. Abdülhamid'in Hac Siyaseti*, ed. Gülden Sarıyıldız (Istanbul: Timas, 2009), 9–17.

of the town are sick with fever, Influenza, chest and throat, and all sorts of malady such as it has not occurred before in Baghdad."[70]

Nevertheless, for Ottoman Iraqis who commented on matters related to public health, influenza's appearance did little to shape their perceptions of Iraq's epidemiological landscape. This can be gleaned from their writings in the years immediately following the influenza pandemic. Here, a two-part essay on the topic of "Public Health in Baghdad" by the renowned Iraqi poet and political activist Jamil Sidqi al-Zahawi (1863–1936) is particularly revealing.[71] The essay was published in 1896 and appeared in two installments in the Beirut-based medical journal *al-Tabib* ("The Physician"), which helped popularize medical knowledge in Arabic during the late nineteenth century.[72] After giving a brief overview of Baghdad's geography and urban layout, al-Zahawi argued that the flooding of the Tigris, which was made worse by the poor state of Iraq's hydraulic infrastructure, caused malaria, diarrhea, and typhoid fever. He attributed cholera epidemics in Baghdad to filth that entered sources of water.[73] Al-Zahawi also noted that Baghdad suffered from syphilis, pulmonary tuberculosis, measles, and smallpox. He hoped that by exposing these issues the Ottoman government would make improvements in

[70] SD, Diary 41, July 16, 1895, 10.
[71] On Jamil Sidqi al-Zahawi's life and career, see Dina Rizk Khoury, "Looking for the Modern: A Biography of an Iraqi Modernist," in *Auto/Biography and the Construction of Identity and Community in the Middle East*, ed. Mary Ann Fay (New York: Palgrave, 2002), 109–24.
[72] On the history of *al-Tabib*, see Marwa Elshakry, *Reading Darwin in Arabic, 1860–1950* (Chicago: University of Chicago Press, 2013), 58; Joelle M. Abi-Rached, *ʿAṣfūriyyeh: A History of Madness, Modernity, and War in the Middle East* (Cambridge, Mass.: MIT Press, 2020), 44; Hala Auji, "Picturing Knowledge: Visual Literary in Nineteenth-Century Arabic Periodicals," in *Making Modernity in the Islamic Mediterranean*, ed. Margaret S. Graves and Alex Dika Seggerman (Bloomington: Indiana University Press, 2022), 74.
[73] Jamil Sidqi al-Zahawi, "al-Sihhat al-'Umumiyya fi Baghdad [part 1]," *al-Tabib*, June 1, 1896, 21–24.

public health.[74] Importantly, al-Zahawi was not alone in depicting the state of public health in Baghdad in this way. In 1896, an Iraqi literary figure and pharmacist named Dawud Fatu also published an essay in *al-Tabib* titled "Baghdad and Health," in which he noted that measles, smallpox, and flooding were among the biggest threats to public health in the city.[75]

Still, even though Ottoman Iraqis were not actively writing about influenza, they certainly had access to information about the disease, given that influential periodicals in Cairo and Beirut were publishing articles about it. A case in point is the Cairo-based journal *al-Muqtataf* ("The Digest"), which Iraqi literary elites regularly read and to which they frequently contributed works of poetry.[76] Over the course of the pandemic and the years immediately following it, *al-Muqtataf* published various articles on the subject of influenza, covering a range of topics, such as the history of influenza,[77] the discovery of Pfeiffer's bacillus,[78] the etymology of the term "influenza,"[79] and basic information about the disease and how to treat it.[80] For its part, *al-Tabib* also published an article on influenza in October 1896, just a few months after it published essays on public health in Baghdad by Jamil Sidqi al-Zahawi and Dawud Fatu. The

[74] Jamil Sidqi al-Zahawi, "al-Sihhat al-'Umumiyya fi Baghdad [part 2]," *al-Tabib*, July 1, 1896, 49–52.
[75] Dawud Fatu, "Baghdad wa al-Sihhat," *al-Tabib*, July 1, 1896, 52–54. Not much information is available on Dawud Fatu, but references in other periodicals make it clear that he was a pharmacist from Baghdad. See Dawud Fatu, "Fawa'id Sihhiyyat Mustakhraja min Ba'ad Kutub al-Ankliyziyya," *al-Hilal*, September 1, 1894, 26–27; Dawud Fatu, "al-Taqs al-'Ibrani," *al-Hilal*, December 15, 1897, 299; Dawud Fatu, "Kitab li-Ta'lim al-Musiqi," *al-Muqtataf*, April 1, 1899, 306.
[76] On Iraqi contributions to *al-Muqtataf*, see Jones, *Dangers of Poetry* (n. 21), 21, 22, 26, 31, 32, 34, 39, 40, 41,
[77] "al-Nazlat al-Wafida (Anfluwanza)," *al-Muqtataf*, January 2, 1890, 280–81; "al-Anfluwanza," *al-Muqtataf*, March 1, 1895, 221.
[78] "Mikrob al-Anfluwanza," *al-Muqtataf*, February 1, 1892, 296.
[79] "'Ism al-Nazlat al-Wafida," *al-Muqtataf*, June 1, 1892, 646–47.
[80] "Marad al-Anfluwanza," *al-Muqtataf*, April 1, 1890, 358–60.

article, which *al-Tabib* published after receiving requests from its readership to do so, gave a history of influenza and provided information regarding the disease's etiology and symptoms, as well as advice regarding treatment.[81] For Ottoman Iraqis who read these periodicals, such information could have been of interest, given that influenza reappeared in Iraq in May 1898.[82]

How Iraqis responded to this later outbreak is difficult to say. What is clear, though, is that, on the heels of World War I, as Ottoman rule in Iraq entered its final years, matters related to public health remained important to Iraqis, even if influenza was not a priority. In fact, Baghdad-based periodicals often published information regarding matters of public health. For example, *Sada Babil* ("Echo of Babylon"), which operated from 1909 to 1914, informed readers about local government efforts to contain a cholera epidemic in 1910 and a successful smallpox inoculation campaign in the lower Euphrates district of Diwaniyya in 1912.[83] Between the years 1911 and 1914, *Lughat al-'Arab* ("The Arab Language") also informed readers about threats to public health in Baghdad, nearby cities, and the Persian Gulf region. These threats included "fevers" following flooding in Baghdad and rumors of plague in Basra in 1911;[84] typhoid and measles epidemics in 1912;[85] the spread of plague in neighboring Qajar Iran in 1912;[86] and a smallpox epidemic in 1914.[87] Even in their memoirs published many decades after the collapse

[81] "al-Nazlat al-Wafida al-Anfluanza," *al-Tabib*, October 1, 1896, 135–41.
[82] SD, Diary 47, May 27, 1898, 279.
[83] "Lajnat al-Sihhiyya fi Baghdad," *Sada Babil*, October 14, 1890, 4; "Talqih al-Jadari," *Sada Babil*, April 21, 1912, 3.
[84] "al-Sihhat fi Baghdad fi Hadha al-Ayyam," *Lughat al-'Arab*, July 1, 1911, 36–37.
[85] "al-Amrad fi al-Balda," *Lughat al-'Arab*, March 1, 1912, 328; "al-Hasba," *Lughat al-'Arab*, October 1, 1912, 167.
[86] "al-Ta'un fi Abi Shahir," *Lughat al-'Arab*, May 1, 1912, 492.
[87] "al-Jadari," *Lughat al-'Arab*, January 1, 1914, 391.

of the Ottoman Empire, Iraqis who lived through the final decades of Ottoman rule commented on issues related to public health that had nothing to do with influenza. For example, the lawyer, intellectual, and political reformer Sulayman al-Faydhi, who was born in Mosul in 1885 and spent much of the late Ottoman period in Basra, recalled that doctors were primarily located in Iraq's major cities, that thousands of people died during cholera and plague epidemics, and that there were few hospitals.[88] For his part, Naji Shawkat, who would go on to serve as Prime Minister of Iraq in 1932, also remembered there being few doctors, hospitals, and pharmacies in Baghdad during the late Ottoman period.[89]

In the end, there can be little doubt that, during the Ottoman period, the 1889–1893 influenza pandemic reached Iraq and that there were subsequent outbreaks of the disease in 1895 and 1898. For Ottoman officials, however, influenza did little to change their public health priorities in Iraq, which remained fixated on preventing the spread of cholera and plague. Similarly, influenza was largely insignificant in shaping Ottoman Iraqis' perceptions of the region's epidemiological landscape, specifically as it pertained to flooding, cholera, and malaria, among other diseases. Nevertheless, the observations of the few—albeit mostly foreign—individuals who commented on influenza's appearance in Iraq demonstrate the extent to which knowledge about the nature of the disease remained in flux, as it was elsewhere in the world. As we shall now see, this situation was similar to and different from that which unfolded when

[88] Sulayman al-Faydhi, *Fi Ghamrat al-Nidal: Mudhakkirat Sulayman Faydi* (Baghdad: Sharikat al-Tijarah wa al-Tiba'ah, 1952), 53.
[89] Naji Shawkat, *Sira wa Dhikrayat Thamanin 'Aman, 1894–1974*, vol. 1 (Baghdad: Manshurat Maktabat al-Yaqza al-'Arabiyya, 1990), 23.

influenza reappeared in 1918, by which point Iraq was no longer under Ottoman rule, but rather under British occupation.

Pandemic Influenza in British Occupied Iraq

During World War I, Britain occupied Iraq, bringing nearly three and a half centuries of Ottoman rule in the region to an end. When Britain captured Basra in 1914, it had the limited strategic goal of preventing a potential Ottoman attack through the Persian Gulf.[90] However, as the war progressed, Britain set its sights on conquering Iraq in its entirety and proceeded to capture Baghdad in 1917 and Mosul in 1918.[91] An important factor motivating much of this conquest was a developmentalist agenda informed by the belief that British technocratic expertise could restore Iraq to the prosperous economic conditions that were imagined to have prevailed in ancient Mesopotamia.[92] This was most apparent in works of hydraulic engineering meant to expand irrigation and improve river navigation.[93] However, it also manifested in British efforts to expand medical services in Iraq. In that regard, the maintenance of troop health was a priority for the British.[94] So too though was overhauling the existing Ottoman public health infrastructure in Iraq, since the British viewed it as backward and inadequate for civilian needs, much as they

[90] Sluglett, *Britain in Iraq* (n. 13), 8.
[91] Ibid., 9–12.
[92] Priya Satia, "Developing Iraq: Britain, India and the Redemption of Empire and Technology in the First World War," *Past & Present* 197 (2008): 211–255.
[93] Cole, "Controversial Investments" (n. 41), 758–59.
[94] Dewachi, *Ungovernable Life* (n. 15), 38; Mark Harrison, *The Medical War: British Military Medicine in the First World War* (Oxford: Oxford University Press, 2010), chaps. 5 and 7.

would during the period of mandate rule following the war.[95] As the British administration noted in 1918 when reviewing the civil services that it had introduced in Iraq since the start of the war, "The most generous critic could not maintain that the Turkish Administration fulfilled the obligation to fight epidemic and infectious diseases and improve general sanitation of the country. The first and most pressing task of the Army of Occupation, as it occupied each particular town, was that of reducing it to some semblance of cleanliness and sanitary well-being."[96]

Thus, when influenza reappeared in Iraq in 1918, it did so at a time when developmentalist schemes in agriculture and public health were important to Britain's immediate wartime goals. This wartime context led the British to respond to influenza in ways that differed significantly from the Ottoman government's response when the disease was similarly widespread in Iraq just three decades earlier. British military authorities not only tracked the spread of the disease among British soldiers and Arab and Indian workers but also studied the disease and produced knowledge about it, even though they struggled to fully understand the nature of influenza, just as civilians and British soldiers did. However, following the worst of the pandemic, influenza was no longer perceived as a major threat, and British public health priorities focused on other diseases, even though influenza would reappear in subsequent years.

[95] On British critiques of Ottoman public health institutions during the occupation and mandate periods, see Farhan, "Women Doctors" (n. 14), 63; Dewachi, *Ungovernable Life* (n. 15), 48.
[96] "Review of the Civil Administration of the Occupied Territories of Al 'Iraq, 1914–1918," in *Iraq Administration Reports, 1914–1932*, vol. 1: *1914–1918*, ed. Robert L. Jarman (Oxford: Archive Editions, 1992), 75.

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To begin, it is important to note that, before the reappearance of influenza in 1918, British public health priorities in Iraq focused on combatting other diseases. Just as the Ottoman government worked to vaccinate its population against diseases during World War I, so too did the British in Iraq.[97] In that regard, cholera was of particular concern. Cholera vaccines were mandatory for British soldiers.[98] Inoculation campaigns were also carried out among civilians, and in Basra alone, the Civil Surgeon noted that a total of 2,402 people were vaccinated for cholera during 1916–1917 administrative year.[99] More targeted measures were also adopted in response to specific cholera outbreaks: in 1917, for example, police in Karbala were tasked with preventing people from using a contaminated source of water.[100] Malaria also raised alarms. In Basra, the disease was such an issue that the British set out to destroy mosquito larvae in homes, wells, and other water sources throughout the city.[101] In support of these efforts, river embankments were also fortified to prevent the accumulation of stagnant water after periods of flooding.[102] In Baqubah, a British political officer noted that locals remained vulnerable to malaria because there was plenty of shelter and water for mosquitos.[103] The British also closely monitored cases of sandfly fever, smallpox, typhus, and relapsing fever.[104] For some British

[97] On Ottoman inoculation campaigns during World War I, see Emine Ö. Evered and Kyle T. Evered, "Mandating Immunity in the Ottoman Empire: A History of Public Health Education and Compulsory Vaccination," *Heliyon* 6 (2020): 4.
[98] William H. Willcox, *Mesopotamia (1916–1919)* (London: Marton and Burt, 1919), 11–12.
[99] "Civil Surgeon, Basrah," in *Iraq Administration Reports, 1914–1932*, vol. 1: *1914–1918* (n. 96), 200.
[100] "Administration Report," in *Iraq Administration Reports,* vol. 1: *1914–1918* (n. 96), 474.
[101] "Health Officer, Basrah," in *Iraq Administration Reports,* vol. 1: *1914–1918* (n. 96), 211, 212.
[102] S. R. Christophers and H. E. Short, "Anti-Malaria Operations at Busra, 1916–1919," *Indian J. Med. Res.* 3 (1921): 573, 576.
[103] "Administration Report," in *Iraq Administration Reports*, vol. 1: *1914–1918* (n. 96), 510.
[104] Willcox, *Mesopotamia* (n. 98), 18–19.

health authorities, the various diseases that they encountered even convinced them that Iraq's ecology was inherently insalubrious.[105]

In this context, influenza represented a new challenge as it swept through the MENA region and the world at large in 1918–1920. The virus responsible for the pandemic likely originated in the United States before circling the globe in three waves, the deadliest being the second, which began in August 1918.[106] Once in the MENA region, influenza caused much distress. In Iran, influenza arrived at a time of widespread war-related famine, which contributed to the disease's high mortality rate, particularly among rural populations and individuals with chronic malaria.[107] In Egypt, which was under British occupation, the government's slow response in closing schools and prohibiting large public gatherings drew sharp criticism, and in rural areas, influenza had an outsized impact, possibly exacerbating existing social disparities that fueled the growing anti-British sentiment behind the country's political revolution in 1919.[108] Influenza was widespread across Ottoman Anatolia, and in the Ottoman capital of Istanbul, influenza not only prompted government authorities to issue strict sanitary measures, such as prohibiting public gatherings, but also sparked debate in the local press about the nature of the disease.[109] The Arabian Peninsula was also affected, so much so that an American doctor from a Persian Gulf outpost of the Reformed Church of America was invited to Riyadh to treat

[105] Dewachi, *Ungovernable Life* (n. 15), 38–43.
[106] Byrne and Hays, *Epidemics and Pandemics* (n. 11), 285.
[107] Amir Afkhami, "Compromised Constitutions: The Iranian Experience with the 1918 Influenza Pandemic," *Bull. Hist. Med.* 77 (2003): 372–73, 381–83.
[108] Christopher S. Rose, "Implications of the Spanish Influenza Pandemic (1918–1920) for the History of Early Twentieth-Century Egypt," *J. World Hist.* 32 (2021): 674–83.
[109] Yolun and Kopar, "Impact of the Spanish Influenza" (n. 18), 1103–4; Temel, "1918 'Spanish Flu' Pandemic" (n. 18), 206–22.

the son of Ibn Saud, the eponymous founder of Saudi Arabia.[110] Iraq did not escape this regional spread of influenza.[111]

For the British military in Iraq, the pandemic was nothing short of a crisis.[112] Military hospitals across Iraq recorded sharp increases in influenza-related admissions in September and October 1918; makeshift tents were set up outside military hospitals in Baghdad and Nahr Umar, near Basra, to separate and accommodate influenza patients; and extra hospital beds were needed at Amara on the lower Tigris.[113] As one observer put it in 1919, when looking back on the pandemic, "Many units, not excluding hospitals with officers, nurses, and orderlies, were crippled for a time and some useful lives were lost."[114] The extent to which the pandemic strained Britain's medical resources in Iraq was also captured by the Consultant Physician for the Mesopotamian Expeditionary Force, William H. Willcox, whose official war diary recorded his frustration at learning that medical reinforcements originally meant for Iraq were being redirected to Britain and France to deal with the spread of influenza there. For Willcox, this

[110] James Batal, *Assignment: Near East* (New York: Friendship Press, 1950), 70. On influenza's effects on the Arabian Peninsula more broadly, see Guido Steinberg, "The Commemoration of the 'Spanish Flu' of 1918–1919 in the Arab East," in *The First World War as Remembered in the Countries of the Eastern Mediterranean*, ed. Olaf Farschid, Manfred Kropp, and Stephan Dähne (Würzburg: Ergon-Verlag, 2006), 154–56.
[111] Ministry of Health, *Report on the Pandemic of Influenza, 1918–1919* (London: His Majesty's Stationery Office, 1920), 379.
[112] For a brief overview of influenza's effects on the British military in Iraq, see Harrison, *Medical War* (n. 94), 284.
[113] The National Archives, Kew Gardens, United Kingdom (hereafter TNA), WO 95/5259/7, September 22, 1918; TNA, WO 95/5257/2, September 16, 1918; TNA, WO 95/5017/6, October 7, 1918. On tents and beds, see TNA, WO 95/5721/1, "Summary" for September 1918; TNA, WO 95/5267/3, October 9, 1918; TNA, WO 95/5271/8, October 13, 1918, October 14, 1918.
[114] F. E. Freemantle, "Health-Work in Mesopotamia," *Contemporary Review*, July 1, 1919, 650–59, quotation on 655.

arrangement could not have come at a worst time, since Baghdad was dealing with not only a refugee crisis of thousands of Armenians and Assyrians, but also other pressing medical needs. As he noted, "I doubt if it is appreciated at Home how large are the responsibilities in this country, apart from the work usually undertaken by Army Medical Services. It does not seem to be appreciated that there is a widespread epidemic of influenza in Mesopotamia, that we are dealing with 50,000 refugees and that constant precautions are necessary to deal with outbreaks of infectious disease amongst the civil population in order to prevent the troops and Labour Corps from becoming infected."[115] For his part, Dr. Melville Douglas Mackenzie, who held the post of Specialist Sanitary Officer at Basra, also emphasized the seriousness of influenza, even as he anticipated the appearance of other more familiar diseases: "We are just starting the plague, cholera, and typhus seasons, so shall be very busy for six months, and we are getting our old friend influenza out here, but rather a bad type, and it is a serious illness always."[116]

While Mackenzie noted that he had "escaped" influenza,[117] others were not so lucky. For a British soldier named Edward Roe, influenza revealed his contempt for the Ottomans; as he wrote in his personal diary, it was his hope that "the Turks have got their share [of influenza] as well," after noting that the month of September had "brought a new disease to the Land of the Two Rivers" and that that disease was "called the Flu."[118] In fact, during World War I, Ottoman

[115] TNA, WO 95/4977/2, quotation on entry for November 11, 1918, n.p.
[116] Imperial War Museums, London, United Kingdom (hereafter IWM), Documents.7177, file 77/128/1: "V. 29th Sanitary Section," letter dated October 1, 1918, 33.
[117] Ibid., 33.
[118] Edward Roe, *Diary of an Old Contemptible: From Mons to Baghdad, 1914–1919*, ed. Peter Downham (South Yorkshire, UK: Pen & Sword Military, 2004), 297.

soldiers under British captivity as prisoners of war were often exposed to diseases,[119] and in southern Iraq, this was no different, as Ottoman prisoners of war suffered from influenza.[120] So did Indian soldiers, who generally experienced higher mortality rates than British soldiers.[121] Even then, hardly anyone escaped influenza, including civilians. As the British consultant physician for the town of Amara noted in his official war diary, "The 'prevalent' influenza has already had another epidemic at Amara, similar to the first one recorded in June-July. The chief distinction is that while in June-July Europeans were slightly, if at all, affected, that [*sic*] now they appear to be as much affected or more so than the Indians and Arabs."[122]

Widespread though influenza was across Iraq, the disease's impact was not the same everywhere. Among urban areas, Basra was hit quite hard, and according to one British official, not even the arrival of cholera earlier in the year in May had produced as many deaths as influenza, which were estimated to be around seven hundred people.[123] In Qurnah, influenza led to school closures and prompted large numbers of people to seek medicine at the local hospital.[124] In Sulaymaniyah, the effects of influenza were made worse by a concurrent malaria epidemic.[125] However, it was Iraq's rural communities that suffered the most, particularly those

[119] For a general overview of epidemics in prisoner of war camps where Ottoman soldiers were held captive during World War I, see Yücel Yanıkdağ, *Healing the Nation: Prisoners of War, Medicine and Nationalism in Turkey, 1914–1939* (Edinburgh: Edinburgh University Press, 2013), 119–63.
[120] TNA, WO 95/5280/6, October 6, 1918; TNA, WO 95/5023/7, October 9, 1918; TNA, WO 95/5271/8, October 22, 1918.
[121] Harrison, *Medical War* (n. 94), 284.
[122] TNA, WO 95/5238/1, quotation on entry for October 6, 1918, n.p.
[123] "Reports of Administration," in *Iraq Administration Reports*, vol. 2: *1918*, ed. Robert L. Jarman (Oxford: Archive Editions, 1992), 257–58, 260.
[124] India Office Records, British Library, London, United Kingdom (hereafter IOR)/L/PS/10/1620, "Monthly Reports of Political Officers, October 1918," 38–39.
[125] IOR/L/PS/10/620, "Progress Report, Medical and Sanitary, December 1918," 57, 514.

located along the middle and lower Euphrates and in villages north of Baghdad—a pattern of rural mortality repeated across the world.[126] In Fallujah, the British officer in charge of the district reported "a high rate of mortality prevailing among the Arabs" residing outside of the town.[127] Similarly, British officials reported anywhere between two thousand and twenty-five hundred deaths among the tribes of Suq al-Shuyukh—a death toll that included important tribal leaders and their sons.[128] In Qala't Sikar, the British administrator was even more specific, noting that "the tribes suffered heavily from the epidemic of Spanish influenza. A conservative estimate gives the deaths at 40 men and 300 women and children."[129] In Shatrah, there were as many as twenty to thirty deaths a day among the Khafajah and Abu Sa'ad tribes owing to influenza.[130] In rural Kurdish communities near Erbil, which was not yet under British occupation in 1918, the British officer W. R. Hay learned that, just before his arrival to the town in 1919, "Spanish influenza, locally known as 'Ispaniol,' had carried off large numbers of the population, being worst, curiously enough, in some of the remote Kurdish villages, especially Shaqlawah, where in one of the leading men's houses every man, woman, and child died."[131]

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[126] On the effects of influenza on rural communities, see Hiroshi Nishiura and Gerardo Chowell, "Rurality and Pandemic Influenza: Geographic Heterogeneity in the Risks of Infection and Death in Kanagawa, Japan (1918–1919)," *New Zealand Med. J.* 110 (2008): 18–27; Afkhami, "Compromised Constitutions" (n. 107), 381–82; Rose, "Implications of the Spanish Influenza Pandemic" (n. 108), 676–77, 681–82; Phillips, "Recent Wave" (n. 12), 800.

[127] "Reports of Administration," in *Iraq Administration Reports*, vol. 2: *1918* (n. 123), 228.

[128] Ibid., 373.

[129] Ibid., 398.

[130] Ibid., 388.

[131] W. R. Hay, *Two Years in Kurdistan: Experiences of a Political Officer, 1918–1920* (London: Sidgwick & Jackson, 1921), 27.

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For British officials, influenza cases and deaths raised concerns about the availability of labor for agriculture and infrastructure projects, among other tasks deemed important for the British occupation. In Fallujah, the appearance of influenza disrupted work on an irrigation canal for at least a "fortnight."[132] In the Muntafiq districts, work on the Sayih canal, which was meant to bring water to a nearby railway and expand irrigation, stopped as Arab laborers began dying or fleeing the area on account of the spread of influenza, raising the possibility that they would need to be replaced by Indian laborers.[133] In Shatrah, irrigation projects were delayed because influenza made it difficult for British officials to find labor.[134] In Qurnah, influenza's appearance, along with heavy rains, delayed the harvesting of summer crops.[135] In parts of the Suq al-Shuyukh district, there were not enough workers to collect the rice harvest.[136] At Basra, the amount of people available for labor was already reduced on account of British military needs, so influenza-related deaths only further contributed to labor shortages.[137] According to the British officer in charge of overseeing the brickfields at Gurmat Ali, just north of Basra, "the strength of the Corps [of coolies] has shown a marked decrease, owing to the epidemic of influenza in the village."[138] Labor shortages also affected a military isolation hospital in Basra, where a British official observed the "crippling" effect of influenza among the "Indian Staff" whose "numbers

[132] "Reports of Administration," in *Iraq Administration Reports*, vol. 2: *1918* (n. 123), 226.
[133] Ibid., 388, 403; TNA, WO 95/5031/5, October 27, 1918 and October 28, 1918; IOR/L/PS/10/620, "Monthly Reports of Political Officers, October 1918," 43.
[134] IOR/L/PS/10/620, "Monthly Reports of Political Officers, October 1918," 50.
[135] "Reports of Administration," in *Iraq Administration Reports*, vol. 2: *1918* (n. 123), 305.
[136] IOR/L/PS/10/620, "Monthly Reports of Political Officers, October 1918," 45.
[137] "Reports of Administration," in *Iraq Administration Reports*, vol. 2: *1918* (n. 123), 246.
[138] TNA, WO 95/5278/8, quotation on summary entry for October 1918.

were reduced to a minimum" and who were employed as sweepers, among other low-ranking positions.[139]

As influenza spread across Iraq, people offered various explanations for its appearance, reflecting a general uncertainty about the nature of the disease—an important continuity that carried over from the Ottoman period. The inhabitants of the town of Kifri, Diyala, apparently blamed influenza's appearance on their decision to allow British officials to chlorinate their water supply during a cholera epidemic earlier in the year.[140] For his part, Albert Zilberstein, who was affiliated with the AIU and arrived in Basra from Haifa in 1913, listed influenza as just the latest in a recent succession of epidemics of plague and cholera to affect the city in 1918.[141] Interestingly, the British did not always view influenza as a problem inherent to Iraq's ecology and climate, as was the case with other diseases they experienced; rather, they occasionally pointed to the disease's regional and global trajectories. For example, a British political officer in Samarra referred to influenza in Iraq as "Bombay influenza."[142] Moreover, in a letter to his mother, a soldier named Frederick Witts referred to the potential threat that the "extraordinary influenza epidemic which has been going around the world" posed to troops in Iraq, even though the disease "seems to be passing off again without any particular ravages," as it was "a thing to

[139] TNA, WO 95/5273/5, quotation on diary entry for September 29, 1918.
[140] "Reports of Administration," in *Iraq Administration Reports*, vol. 2: *1918* (n. 123), 427.
[141] AIUA, "Irak: XIV E 132," "Ecoles: Bassorah: Zilberstein (Albert)," Zilberstein to Paris, October 8, 1918.
[142] IOR/L/PS/10/620, "Progress Report no. 17, for the Month of October, 1918," 8.

get and to get over it."[143] In sum, the general uncertainty about the nature of influenza that prevailed elsewhere in the world was also evident in Iraq.[144]

Like civilians and British soldiers, British medical authorities in Iraq also sought to explain the nature of influenza, even though they struggled to do so. In that regard, an important stimulus was the difficulty of identifying influenza cases. Cases of "fever" were particularly problematic, as blood examinations had to be carried out to perform differential diagnoses to determine whether the fever was being caused by malaria, typhus, smallpox, relapsing fever, or influenza.[145] In fact, as Colonel E. W. W. Cochrane of the Royal Army Medical Corps noted, during the first wave of the pandemic, he and other medical officers were initially reluctant to attribute a sharp increase in hospital admissions among soldiers to anything other than sandfly fever, though eventually "even the most dogmatic" doctors were "convinced that the majority of fevers then seen were Influenza in epidemic form."[146] Further complicating matters was the question of whether Pfeiffer's bacillus was the cause of influenza, as many medical authorities had mistakenly believed since the 1889–1893 pandemic.[147] As Britain's Consultant Physician at Amara noted in his official war diary after visiting a British medical laboratory in Iraq, such a causative relationship was questionable: "The Central Laboratory has been unable to find Pfeiffer's bacillus in the sputum or in throat swabbings: the organism is not determined."[148]

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[143] Frederick Witts, *The Mespot Letters of a Cotswold Soldier*, ed. Jasper Hadman (Gloucestershire: Amberley, 2009), 248.
[144] On this general uncertainty about the nature of influenza, see Dehner, *Influenza* (n. 1), 47–48.
[145] Willcox, *Mesopotamia* (n. 98), 18.
[146] Wellcome Collection, London, United Kingdom (hereafter WC), RAMC/1186/2/2: "General Reports on Medical History of 15th Division, from 2nd May 1918 to 31st December 1918," 8.
[147] Dehner, *Influenza* (n. 1), 47–48.
[148] TNA, WO 95/5238/1, quotation on diary entry for October 6, 1918.

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Another difficulty was the task of differentiating between influenza as a disease and pneumonia as a possible complication arising from it. As a doctor at a military hospital at Basra argued, the practice of recording influenza and pneumonia as two different diseases when observational evidence indicated that "true pneumonia" was not present made "the compilation of true statistics difficult if not impossible." For him, it was difficult to imagine a similar "alteration" being made in medical statistics for cases of plague in which people began to develop a "secondary pneumonia." He reasoned that influenza cases were likely much higher than official records indicated and complained about doctors' tendency "to look at Influenza as a more or less trivial complaint and Pneumonia as a serious one."[149]

However, for some British medical authorities in Iraq, influenza was a serious disease requiring further study. For example, in 1919, when the third wave of the influenza pandemic reached Iraq and affected Indian soldiers in Basra in large numbers, British medical officials tested an experimental treatment that involved injecting influenza patients with hydrogen peroxide. In 1920, Drs. T. H. Oliver and D. V. Murphy, who carried out this experiment at Basra, published their findings in the *Lancet*, claiming that the treatment reduced the chances of mortality, particularly among the worst cases.[150] Even research not specifically focused on influenza yielded new insights. Research into cases of paratyphoid in Iraq revealed the extent to which the disease's symptoms resembled those of influenza.[151] Moreover, in a series of lectures

[149] TNA, WO 95/5264/3, quotations on diary entry for November 30, 1918.
[150] T. H. Oliver and D. V. Murphy, "Influenzal Pneumonia: The Intravenous Injection of Hydrogen Peroxide," *Lancet* 195 (1920): 432–33.
[151] William MacAdam, "An Account of an Infection in Mesopotamia Due to A Bacillus of the Gaertner-Paratyphoid Group," *Lancet* 194 (1919): 190; F. P. Mackie and G. J. Bowen, "Note on the Characters of an Anomalous Member of the Paratyphoid Group Met with in Mesopotamia," *J. Roy. Army Med. Corps*

on jaundice published in the *British Medical Journal* in 1919, William H. Willcox argued that mortality rates for influenza were higher among British soldiers who were also suffering from malaria. His argument was based on his observations that influenza-related deaths in Iraq were low because of the "open-air life" that prevailed in the region. In contrast, in neighboring Iran, blood examinations had shown that the mortality rate among British troops was higher because these soldiers had also been infected with malaria in addition to influenza.[152]

As the worst of the influenza pandemic came to an end, the disease was no longer a priority for British medical authorities, even though it reappeared in subsequent years during the 1920s, by which time Iraq had officially become a League of Nations mandate under British rule. To be sure, the British maintained official statistics to record influenza cases into 1919,[153] and that year, they also announced general precautions to stop the spread of influenza, such as recommending that people expose soiled linens to the sun all day.[154] Moreover, as the disease continued to spread throughout the world in 1920, a vaccine was even made available for British and Indian troops.[155] However, even in 1920, influenza was not made a notifiable disease in Baghdad, though smallpox, cholera, plague, typhoid, and several other infectious diseases

33 (1919): 158; F. P. Mackie and George Trasler, "Laboratory Records from Mesopotamia," *Indian Med. Gazette* (1921): 416.

[152] William Henry Willcox, "Jaundice: With Special Reference to Types Occurring during the War," *Brit. Med. J.* (1919): 640–41.

[153] "Annual Report of Health Department Baghdad," in *Iraq Administration Reports, 1914–1932*, vol. 3: *1919*, ed. Robert L. Jarman (Oxford: Archive Editions, 1992), 352; "Mosul Division. Annual Report," in *Iraq Administration Reports, 1914–1932*, vol. 4: *1919*, ed. Robert L. Jarman (Oxford: Archive Editions, 1992), 497; "Administration Report of the Nasiriyah District for the Year 1919," in *Iraq Administration Reports, 1914–1932*, vol. 4: *1919* (n. 153), 568.

[154] IOR/L/PS/10/620, "Civil Administration of 'Iraq, General Circulars, Baghdad, 1st October, 1919," 4.

[155] IOR/L/PS/10/889, "Annexture to General Circular no. 191, dated 18th February, 1920," 2.

were.[156] Still, perhaps because of the experience of the 1918–1920 influenza pandemic, the British mandatory government continued to maintain statistics of influenza cases in Iraq for the years between 1921 and 1926. According to those statistics, there were ten cases in 1921, ten cases in 1922, thirteen cases in 1923, eight cases in 1924, forty-one cases in 1925, and one hundred twenty-five cases in 1926.[157] Nevertheless, the "Infectious Disease Law" of 1926 essentially confirmed that influenza was not a priority for the British mandatory government in the same way that other diseases were. Specifically, the law listed influenza in "Part II" of the schedule of infectious diseases, meaning that it was not subject to the same reporting and isolation requirements as diseases listed under "Part I"—cholera, plague, smallpox, and typhoid, among others.[158] Tellingly, in subsequent yearly reports to the League of Nations, Britain stopped recording influenza cases altogether.[159]

In sum, influenza was just as widespread in Iraq in 1918 as it was during the Ottoman period. However, the wartime context in which influenza spread in Iraq produced an entirely different response from the British when compared to that of the Ottomans just three decades

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[156] "Annual Report of the Health Department for the Year 1920," in *Iraq Administration Reports, 1914–1932*, vol. 6: *1920*, ed. Robert L. Jarman (Oxford: Archive Editions, 1992), 381.

[157] United Nations Archives at Geneva (hereafter UNAG), R59/1/56968/17502, "Report by His Britannic Majesty's Government to the Council of the League of Nations on the Administration of 'Iraq for the Year 1926," 55.

[158] Ibid., 142. To be sure, Article 3 of the law allowed for any disease listed in Part II to be included in Part I at the discretion of the Minster of the Interior.

[159] UNAG, R2314/6A/6774/655, "Report by His Britannic Majesty's Government to the Council of the League of Nations on the Administration of 'Iraq for the Year 1927," 84; UNAG, R2315/6A/14172/655, "Report by His Majesty's Government in the United Kingdom of Great Britain and Northern Ireland to the Council of the League of Nations on the Administration of 'Iraq for the Year 1928," 58; UNAG, R2315/6A/22103/655, "Report by His Majesty's Government in the United Kingdom of Great Britain and Northern Ireland to the Council of the League of Nations on the Administration of 'Iraq for the Year 1929," 60.

earlier. Specifically, Britain mobilized resources to track the spread of the disease among groups that were critical to Britain's immediate wartime goals: British soldiers and Arab and Indian workers who provided the labor for Britain's developmentalist projects in Iraq. British medical authorities also studied influenza and produced knowledge about it, even though they struggled to completely understand the disease, as did civilians and British soldiers. This general uncertainty about the nature of influenza represented an important continuity from the Ottoman period. As pronounced as the effects of influenza on Iraq were, however, the disease did not become a priority in British public health policy in the same way that other diseases did, despite subsequent outbreaks of the disease following the worst of the 1918–1920 influenza pandemic.

Conclusion

This article has shown that the history of pandemic influenza in Ottoman and British occupied Iraq was marked by continuity and change. Influenza was widespread in Iraq during both the 1889–1893 and 1918–1920 influenza pandemics. However, Ottoman officials largely ignored the disease, while British military authorities responded forcefully to it. This difference can be explained by the fact that Ottoman health priorities, like those of Ottoman Iraqis, were primarily focused on diseases other than influenza, whereas Britain's wartime needs required it to track and study the disease, as it spread among soldiers and Arab and Indian workers who provided labor for Britain's developmentalist projects in Iraq. Despite these differences, however, there were certain elements of continuity, such as repeated outbreaks of influenza after the worst of each pandemic, and a general uncertainty about the nature of influenza, which had parallels elsewhere in the world. Ultimately, this study provides further evidence of the impact of

pandemic influenza on the MENA region and further positions us to more fully incorporate the region's experiences into global histories of the disease—an imperative that scholars have articulated most clearly for the 1918–1920 pandemic.[160] Moreover, this study shows the continued value of examining the history of Iraq through specific diseases—whether it be cholera and plague during the Ottoman period, bejel during the period of the Hashemite monarchy, or smallpox during the early decades of Iraq's engagement with the broader geopolitics of the Cold War as it unfolded across Asia.[161] Here, the history of pandemic influenza helps us think about continuity and change between the Ottoman and British periods in ways that build on what scholars have shown for other topics in the history of medicine of Iraq.

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[160] Christopher S. Rose, "The History of Public Health in the Modern Middle East: The Environmental-Medical Turn," *Hist. Compass* 19 (2021): 8; Phillips, "Recent Wave" (n. 12), 801.
[161] Ateş, "Bones of Contention" (n. 18); Bolaños, "Ottomans during the Global Crises" (n. 18); Altınay, "Making of an Ottoman Quarantine Post" (n. 18); Liat Kozma, "Between Colonial, National, and International Medicine: The Case of Bejel," *Bull. Hist. Med.* 91 (2017): 744–71; Sara Farhan, "Pox and Proximities: Iraq's Cold War Medical Diplomacy," *Comp. Stud. South Asia, Africa, and the Middle East* 43 (2023): 370–85.