## Introduction

IN A MUSEUM OF MEDICAL HISTORY in Cairo hangs a curious unsigned painting (see figure 1). A faded old card explains that it depicts the first anatomy lesson performed in Egypt. The momentous event took place in 1829 at a medical school that had recently been founded in Abū Zaʿbal, to the northeast of Cairo. The painting shows a black male cadaver laid out on a dissection table in the middle of a large amphitheater, the walls of which are adorned with the Arabic names of Greek and Muslim physicians: Galen, Jābir Ibn Hayyān, Hippocrates, and Ibn al-Baytār, among others. Next to the dissection table stands a turbaned physician clad in oriental costume, pointing with one hand to the cadaver and with the other to a skeleton hanging next to him, as if illustrating the inner structure of the human body. In the background sit some hundred students, also turbaned, listening attentively to the anatomy lesson. Surrounding the dissection table is a group of animated religious scholars, one of them leaning over the cadaver. A military officer is standing at the foot of the body, and an armed sentry guards the entrance to the room.<sup>1</sup>

Like the event it commemorates, this painting is one of a kind, and it is difficult to situate it in an art historical context that can help explain the artist's meaning. Even though classical Arabic medical literature is replete with manuscripts containing anatomical illustrations, these illustrations do not depict anatomy lessons; rather, they represent a "highly schematic approach to human anatomy, [and] . . . could serve as a reasonable *aide memoire* for the user, even though they might give an inadequate representation of the structures themselves."<sup>2</sup> However, by comparing our painting to early European Renaissance woodcuts that illustrate anatomy lessons, especially those lessons that were performed in Italian medical colleges, a central



FIGURE 1: Strekalovsky, *The First Dissection Lesson in Egypt, 1829*. Museum of the History of Medicine, Qaşr al-'Ainī Medical School, Cairo. Photo by Mazen Attalla.

feature presents itself as a possible clue. Down the centuries, these European images point to an ongoing dialogue, if not a tension, between the dissected body and the medical text being recited aloud by a lector sitting behind an elevated lectern, the text authored by medical authorities that can be traced all the way back to Galen, the second-century-CE Greek physician.<sup>3</sup> Some of the earliest European anatomical illustrations expressed this tension quite vividly, for they "do not show so much what . . . had [been] seen as what [was known] to exist.<sup>34</sup> Simply put, this tension was about what has precedence over the other: the text or the cadaver? Are the senses (especially those of touch and sight) to be trusted enough to replace the word? Is the corpus of classical medical literature to be discarded in favor of direct observation of a dissected cadaver, or does a corpse only corroborate the teachings of the ancients?

By contrast, our Egyptian painting lacks explicit references to any text except the names of classical medical authors running along the amphitheater walls. However, there is another poignant, if subtle, reference to the tension between cadaver and text at the very center of the painting. Surrounding the cadaver is a group of *'ulamā'*, or custodians of the Text (i.e., the Quran), one of them gesticulating excitingly at what is taking place in front of him. Compared to the figures in the much more famous dissection scene depicted on the frontispiece of Vesalius's *De humani corporis fabrica* (1543), neither the

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anatomist nor the dissected cadaver in the Egyptian painting demand our attention.<sup>5</sup> Rather, the group of religious scholars occupies center stage, and the painter arranges them in such a way as to obstruct both our view and that of the students, preventing direct access to the cadaver, ostensibly the source of knowledge about the internal structure of the human body. Autopsy, which literally means "to see with one's own eyes," is thus thwarted by religion.

This reading of the painting, wherein religion stands in the way of science, gains further credence when we identify the artist and date of the painting. Anne Marie Moulin, who studied the history of nineteenth-century Egyptian medicine, has identified the artist as a certain Strekalovsky, a Russian painter who worked in Egypt in the 1930s and 1940s.<sup>6</sup> With more than a century separating him from the event he was commemorating, there is little doubt that Strekalovsky derived his understanding of the circumstances surrounding the opening of the medical school, where instruction was based on dissection, from the copious writings of Dr. Antoine-Barthélémy Clot, the French founding director of the school. The turbaned teacher depicted in the painting is almost certainly Dr. Clot himself, or Clot Bey, as he famously came to be known.<sup>7</sup>

In his memoirs, Clot Bey wrote that soon after he had been entrusted by Egypt's ruler, Mehmed Ali Pasha (r. 1805–48), to found a medical school, he explained to the Pasha that the medical education he had in mind had to be firmly based on human dissection. To his dismay, he received a firm directive that cadavers were not to be touched. Undeterred, the French doctor used all of his rhetorical and political skills to overcome this formidable barrier. He recounted this campaign in his memoirs:

I harbored the hope that one day I would vanquish this prejudice, even though I clearly noted the profound disgust of the students and the fanatical opposition of the *ulémas*, with whom I had had communication on the subject. I applied myself to winning the confidence of Cheikh El Islam al-Arusi, an important person who enjoyed a high reputation for holiness in the country.... When I approached the question of anatomy, he would not give a single concession. His principal argument was that, according to religion, cadavers could feel pain, to which I concurred, but added that bodies would decompose and become the prey of worms soon after death.... [The Shaykh then argued that medical treatises] published on such subjects should suffice for the instruction of the students.... [I responded] that the theory provides no more than incomplete notions: a watchmaker, I told him, who has to repair watches, does he not need to understand their whole mechanism?

Moreover, does he not have to put together and take apart the various pieces before he can understand how they operate? This image struck him, . . . [and] I managed to obtain a tacit agreement to study anatomy but to act with the greatest discretion and to do so in secret.<sup>8</sup>

After he had managed to placate the 'ulamā', Clot Bey had to face the hostility of his own students. One day, he wrote, a student approached him with a letter. No sooner had he started reading the letter than the student attacked him with a knife. Instinctively, Clot Bey raised his right arm, which received a deep wound. The attacker was immediately grabbed and disarmed, and Clot Bey ordered him to be detained. During the ensuing interrogation, the same students who had earlier disarmed the attacker backed their colleague's version of events "after being made to understand that a believer should not be given up for a Christian dog." After only eight hours in detention, the attacker was released and allowed to walk scot-free. This left Clot Bey completely demoralized: "I admit that from the time I was hit by the fanatic young man a deep despondency seized me.... Sacrificing one's life, giving up one's peace in order to conquer the prejudices of a people, to develop their intelligence, to extend to them the benefits of civilization only to be rewarded by indifference, if not hatred, this thought overwhelmed my soul."

Nevertheless, and after being consoled by Jean-François Mimaut, the French consul in Egypt, Clot Bey decided not to resign. Instead, he became even more committed to continuing the mission that he had come to Egypt to complete. Through perseverance and hard work, he finally succeeded in overcoming not only the students' "huge veneration of Aristotle" but also their "fanaticism" and dogmatic resistance to dissection; eventually, they "no longer considered anatomical dissection to be a profanation."<sup>10</sup>

A century later, Dr. Naguib Bey Mahfouz, the assistant dean of the school's Faculty of Medicine, gave a slightly different version of this dramatic event, and his text did much to bolster Clot Bey's image as a beacon of enlightened thought in a sea of darkness. In his English-language *History of Medical Education in Egypt*, he wrote that

the practice of dissection provoked much antagonism, not only from the Ulemas [*sic*] but also from the students themselves. By steady perseverance the Ulemas were induced to give their consent.... The dissecting rooms were surrounded by guards, who were kept ignorant of what was going inside. On one occasion one of the medical students, infuriated at seeing the bodies dissected, attempted to kill Clot Bey, stabbing him on the forehead and chest.

By a fortunate movement of the arm Clot Bey evaded the attack. The other students soon intervened and the student was taken into custody. Clot Bey calmly completed his lecture, to the great admiration of the class.<sup>11</sup>

Gripping as it may be, this account of a European man of science determined to win over Muslim 'ulamā' and overcome their opposition to dissection raises many questions. Who was this Dr. Clot, and why did he end up in Egypt? Why did Mehmed Ali entrust him with founding a medical school? If the purpose was to found a medical corps for the Pasha's new army, would it not have been cheaper and more expedient for Clot Bey to invite more of his countrymen to join him in Egypt? Was Clot Bey correct in sensing that his Muslim interlocutors' opposition to dissection was doctrinally based? Did the 'ulamā' he reached out to really believe that cadavers could feel pain, or were there other reasons for their opposition to dissection? And given that this was not a freak show but a lesson in a medical school that surely had professors teaching other branches of medicine, who were the other professors? Did they share Clot Bey's belief in his mission civilisatrice? And returning to our painting, who were the animated students following this historic lesson, and how did they end up in the school? What careers did they pursue after graduation, and what social status did they enjoy as bearers of medical diplomas? More importantly, did they share their professor's belief that science and religion represented two distinct fields of thought, or did they agree with classical Muslim physicians-whose names adorned the walls of their classrooms—in rejecting such a binary distinction?

In light of the ostensible opposition of the *'ulamā'* to dissection as well as Mehmed Ali's directive to Clot Bey not to use dissection, the presence of the guards points to the purported hostility of the wider society to what was going on inside the hallowed halls. Did dissection elicit negative reactions from non-elite Egyptians? And if so, what was their understanding of modern medicine and of the Abū Za'bal Medical School, which was rebranded as the Qaşr al-'Ainī Medical School and Hospital after 1838, when it was relocated to a district by that name closer to Cairo? Furthermore, since cadavers were routinely dissected not only for the purposes of medical pedagogy but also for legal purposes, to ascertain cause of death, how did non-elite Egyptians react to this encroachment on what was, literally, a matter of life and death? Moreover, dissections and postmortem examinations were part of a much larger set of practices that were being used by the newly evolving modern state in the 1830s to control Egypt's population. These practices included registration at birth; vaccination against smallpox; branding of criminals; routine medical examination of students, workers, sailors, and soldiers; conscription; and carrying stamped passports (*tadhākir*) when moving from village to village. How did non-elite Egyptians understand and react to these diverse examples of corporeal surveillance?

The newly constituted police, moreover, routinely practiced autopsies to aid in criminal investigations. The detailed forensic medical reports that police doctors prepared were then presented to courts of law, which based their final rulings squarely on them. But these courts were not the familiar shari'a courts that had existed for centuries in Egypt, just as they had in many other parts of the Ottoman Empire. These were new "legal councils" that were central components of a rapidly evolving legal field. What were these councils, and what was the legal logic that allowed them to accept forensic medicine as prime means of establishing probative proof? How did the public approach these councils and react to the entire legal system, of which they were part? Finally, what was this state that was implementing all these innovations in the medical and legal fields? Who was behind it, and how was it formed? What animated it, and how did it evolve? Did its unprecedented techniques of corporeal surveillance constitute it, or did these techniques simply aid it in placing Egyptian society firmly under its surveillance?

This book attempts to answer these questions by putting the human body at its focal point, and it asks how one can study the twin practices of dissection and autopsy as a way of rethinking the universalistic category of modernity in a non-Western context. As seen from the short excerpt of Clot Bey's writings quoted above, by the beginning of the nineteenth century opening up human cadavers was universally deemed an essential aspect of medical pedagogy. A few years later, prying open the human body to determine cause of death became a standard procedure in criminal investigations within the rapidly evolving legal field. Dissections and autopsies thus came to play pivotal roles in an Egyptian modernity that can be seen to have two central pillars, namely medical and legal reform. This book therefore adopts a corporeal history of the nineteenth-century project of modernization known as *al-Nahda* and follows dissections and autopsies—as well as postmortems, burials, quarantines, and legal torture—as a way of understanding how nonelite Egyptians thought of and reacted to modernity.

To explicate further the questions that this book raises and spell out its methodology and approach, it may be useful to refer to four bodies of scholarly literature with which it engages.

## EGYPTIAN HISTORIOGRAPHY OF MODERN EGYPTIAN MEDICINE

In his study of the conditions surrounding the establishment in Egypt of history as an academic field, Yoav Di-Capua follows the endeavors of Shafiq Ghurbāl, the founder of twentieth-century Egyptian historiography, as he struggled to distinguish his profession from both the historical school coalescing around the 'Ābidīn royal palace and the nationalist, nonprofessional historians who were animating the field in the 1920s and 1930s.<sup>12</sup> Di-Capua explains that Ghurbāl went against the latter group by insisting that his students accept objectivity as a cardinal principle and underscoring for them the importance of using archival sources. At the same time, he and his students distanced themselves from the "royal historians," those European historians that King Fu'ād (r. 1923–36) had commissioned to "lend support to the saga of state formation under [Mehmed Ali] and his successors."<sup>13</sup> Accordingly, in contradistinction to royal historians, who concentrated on power politics and stressed the royal dynasty's accomplishments in warfare and diplomacy, Ghurbal directed his students to study the social and institutional reforms that were believed to have helped Egypt on its path toward modernity. Thus, 'Alī al-Giritlī studied industrialization; Ahmad al-Hittā learned about agricultural reforms; Ahmad 'Izzat 'Abd al-Karīm wrote about education; Jamāl al-Dīn al-Shayyāl examined translation; Abul-Futūh Radwan worked on the advent of the printing press; and Ibrahim 'Abduh researched the advent of the journalistic press.<sup>14</sup> Notably, medical reforms were not the subject of any of the independent studies conducted by the first generation of Egyptian academic historians. It is as if Qaşr al-'Ainī and the many modern medical practices associated with it were of only secondary importance compared to industrial, economic, or educational reforms.

Nevertheless, both 'Abd al-Karīm's study of education and al-Shayyāl's treatise on translation have lengthy sections on the Qaṣr al-'Ainī Medical School and Hospital.<sup>15</sup> These sections exhibit certain assumptions about modernity and Egypt's relations with Europe that, as Di-Capua deftly shows, were characteristic features of the first generation of Egyptian academic historians and that could also be traced back to the intellectual production of subsequent generations of academic historians. Ghurbāl's students accepted the chronology of the royal historians, in which Mehmed Ali appeared as a great founder of modernity, with the result that a before-and-after approach was strictly followed. Before Mehmed Ali, Egypt had gone through a long

period of Ottoman rule that, according to this view, was best left unstudied and ignored. After Mehmed Ali, Egypt evolved along a modern European nation-state model.<sup>16</sup> The only slight variation that the academic historians made to the "founder paradigm" when they addressed medical reforms was to add Clot Bey alongside Mehmed Ali, describing the former as a great reformer who used enlightened, modern medicine to put an end to the quackery and superstition of Ottoman times.

For example, in his 1938 study of education during Mehmed Ali's reign, 'Abd al-Karīm describes Clot Bey's efforts as being instrumental in "spreading modern medicine in the deep Egyptian countryside ... and lifting the clouds of ignorance that had been hovering over the country for long centuries."<sup>17</sup> For his part, al-Shayyāl was deeply impressed by the manner in which Clot Bey dealt with the formidable challenges he encountered in his "enlightening mission." Al-Shayyāl goes to enormous lengths to explain how Clot Bey made "every effort to overcome [these challenges] until he finally succeeded."<sup>18</sup> Behind the French doctor's ceaseless efforts, al-Shayyāl argues, was the unflinching support of Mehmed Ali, who realized "from the instant he ascended to the Egyptian throne<sup>19</sup> that he had to implement a new plan of reform to lift Egypt from the destruction and corruption of the Ottoman era and ... do so by borrowing from the West and its sciences."<sup>20</sup> Of equal significance is al-Shayyāl's description of the overall context in which this process of medical reform was taking place:

For nearly three centuries, that is, during the Ottoman period, Egypt had been looking inward, sitting behind closed doors and windows, after its contact with the outside world, especially Europe, had been severed.... Toward the end of the eighteenth century, however, the West had become impatient with this isolation ..., and rather than invite Egypt to open its windows and doors to allow in European light and civilization, this European West took it upon itself to do so with brute force.... And hence Egypt awoke from its long, deep slumber. But its awakening was not a spontaneous or gentle one; rather, it was an abrupt, forceful awakening. As for the lights that the French brought with them, the lights of arms, civilization, and science, these were so bright that they blinded the eyes of the Egyptians and baffled their most learned man, the famous chronicler 'Abd al-Raḥmān al-Jabartī, when he visited the French library and institute and said, "And they have strange and marvelous matters and equipment, which our limited minds cannot comprehend."<sup>21</sup>

The first generation of Egyptian academic historians, therefore, typically stressed the staunch determination of Clot Bey, his patron Mehmed Ali, and

a few of their "enlightened" assistants to overcome superstitious belief and popular, "unscientific" remedies. As I illustrate in chapter 1, these accounts followed Western Whiggish narratives about the progress of medical science through the ages and its triumph over popular superstition and religious dogma by resorting to metaphors of light and darkness when describing the efforts to institute dissection as standard practice in medical pedagogy. However, within Egyptian historiography, this Manichean struggle between light and darkness was not limited to the field of medical history; rather, it suffused the much larger historiographical field of Egypt's relationship with Europe. As Di-Capua has illustrated, the first generation of Egyptian academic and nonacademic historians saw Bonaparte's invasion of Egypt in 1798 as a momentous event that ushered in European modernity to an Egypt that had been shrouded in centuries of Ottoman darkness.<sup>22</sup> Before we follow the story through the second half of the twentieth century to see how Egypt's encounter with European science and modernity was approached, it is important to stop at an influential study published in the late 1960s that dealt with the French Expedition. Although not written by a professional historian, this study had a profound influence on subsequent generations of Egyptian academic historians.

Two years after the June War (1967), Luwis 'Awad (1915–90), an essayist, literary critic, cultural historian, and professor of English literature at Cairo University, published a two-volume study titled the *Tārīkh al-Fikr al-Miṣrī al-Ḥadīth* (History of modern Egyptian thought), in which he sought to understand the reasons for Egypt's crushing defeat:

The reason for our weakness was that we had not completed our tools of modern life. As is well known, Egypt did not exit the darkness of medieval times that had been spread by the Ottoman Empire to all its dominions until 170 years ago [i.e., in 1789], when Egypt had its first direct encounter with Europe. This is a very short period in the life of peoples and civilizations. Why, Europe herself began her renaissance around 1500 [CE], that is, five centuries ago; and if she has surpassed us in maturity, this is only because she started the process of modern state-building five hundred years before us.<sup>23</sup>

In the second volume of his study, 'Awad closely examines the works of various nineteenth-century literati and follows the way they understood and reacted to notions such as the rule of law, women's liberation, self-rule, liberalism, and democracy, among others. But the contours of 'Awad's argument become manifest in the first volume, where, rather than following the trajectory of certain ideas, he investigates the conditions that allowed Egyptians to think of themselves as Egyptians—that is, as a group that is distinct from the wider Ottoman, Muslim, and/or Arab world. For him, "Bonaparte's expedition to Egypt was a watershed separating two diametrically distinct worlds. [On one side of the divide,] there was a medieval world that extended throughout the Turkish-Mamluk period and ended in 1798. During this period, [Egypt] witnessed a number of purely economic uprisings which, however, did not produce any political, social or cultural thought. [On the other side,] there was a world in which no social or political action occurred except if it was associated with a clear political persuasion, distinct social ideology, and/or definite cultural trend.<sup>"24</sup>

To illustrate the gulf that separated the "medieval" world of Turkish-Mamluk Egypt from the modernity that the French Expedition ushered in, 'Awad zooms in on the Institut d'Egypte, the scientific institute that Bonaparte founded in Cairo in the house of Hasan Kāshif, one of the vanquished Mamluk emirs. 'Awad's aim is not simply to document the French efforts to display their mission civilisatrice but also to trace the contrasting reactions of conservative and "enlightened" Egyptian intellectuals to modern science. He quotes an account from a French source of an experiment performed at the institute by the chemist Claude Louis Berthollet, of modern chemical nomenclature fame, and notes that this experiment was witnessed by some 'ulamā'. This account describes Berthollet showing how acids interact with each other and how electricity is generated, only to be asked by an incredulous shaykh: "Can you be present in Marrakesh and Cairo simultaneously?" 'Awad comments that Berthollet must have been stunned by this nonsensical question and unaware that the shaykh meant to ridicule the science displayed by the French savants. It is, 'Awad argues, as if the shaykh was saying, "Do not be haughty with your intelligence. You might have arrived with your wondrous material sciences, but you forget that they are but childish tricks compared to our spiritual exercises that enable . . . our holy men to exist in more than one place at the same time." 'Awad concludes by commenting, "In this episode, we see an entire civilization confronting another."<sup>25</sup>

To provide a contrast "to this conservative faction," 'Awad devotes an entire chapter to the famous chronicler 'Abd al-Raḥmān al-Jabartī (1753–1825), depicting him as

one of the pioneer Egyptian intellectuals of this strange and wondrous time in which the culture of the Middle Ages was crumbling the way an egg

hatches and out of which emerges a phoenix's cocoon. Not only did Jabartī see contemporary sciences, whether they were theoretical, experimental, or exact, as essential for nation-building; he also exceeded that position to stand in awe in front of the arts that had been rejected by his conservative milieu ... such as painting and sculpture. .... As to embracing the foundations of modern material life, including exact, experimental, or technological sciences-this is an easy matter even for reactionaries, *salafis*, and conservatives. For the history of civilizations has taught us that people espouse their material, this-worldly interests faster and more easily than they appropriate what can lead to their intellectual, moral, or spiritual wellbeing. This cultural schism that manifests itself in accepting material rejuvenation but rejecting its spiritual counterpart is a sign of civilizational rupture that often afflicts societies and individuals in moments of transition. So when we see someone like 'Abd al-Raḥmān al-Jabartī who accepted the possibility of social reform, both materially and intellectually, then it is incumbent upon us to stand in front of him with great respect.<sup>26</sup>

'Awad's *Tārīkh al-Fikr al-Miṣrī al-Ḥadīth* was a bombshell, and for decades it shaped the contours of Egyptian discussion not only about the French Expedition but also about modern Egyptian cultural and intellectual history. As we will see shortly, the book's polemical style, its preference for discursive analysis over institutional or sociohistorical investigation, and its insistence on viewing three centuries of Ottoman rule as Egypt's "dark ages" were all features that greatly influenced the field of academic inquiry into Egypt's supposed "first modern encounter with Europe."<sup>27</sup>

Chief among the Egyptian historians who were influenced by 'Awaḍ was Ra'ūf 'Abbās (1939–2008), a prolific historian of modern Egypt who started his academic career pioneering a new mode of nineteenth-century agrarian social history based on meticulous archival research,<sup>28</sup> and who, years later, was drawn to writing an intellectual history comparing Mehmed Ali's Egypt to Japan during the Meiji period. In the latter, 'Abbās compares the career of one of Egypt's leading intellectuals, Rifā'a al-Ṭahṭāwī (1801–73), with Japan's Fukuzawa Yukichi (1835–1901).<sup>29</sup> As interesting as that study is, it is an earlier study Abbās published in 1987 that has a direct bearing on our analysis.

Titled "Qudūm al-Gharb: Bidāya lil-Nahda am Ijhād Lahā?" (The advent of the West: A beginning or an abortion of renaissance?), this article is a synthesis of many of 'Abbās's ideas to date that dealt not only with Egypt's encounter with Europe during the French Expedition but also with the entire trajectory of nineteenth-century Egyptian history.<sup>30</sup> 'Abbās repeats the now familiar trope of the Ottoman dark ages by arguing that when the Ottomans occupied the Arab provinces in the sixteenth century, "they caused a cultural decline by imposing a complete isolation . . . that prevented Arabs from resuming their dialectical relationship with the West. . . . In addition, the Ottomans were originally Bedouins with no tradition of found-ing a civilization."<sup>31</sup> This isolation was finally broken by Bonaparte's expedition, and 'Abbās argues that one needs to distinguish between two waves of Western encroachment on Arab lands: the first toward the end of the eight-eenth and the beginning of the nineteenth century, and the second starting in the second half of the nineteenth century.

It is in his analysis of the first wave that 'Abbās's debt to 'Awad is most apparent, for he says that the French Expedition had a positive impact on "awakening Arabs to the reality of their decline, ... [for] by participating in the councils that Bonaparte had established, . . . the perception of the elite to [political] power changed, so did their understanding of the rights of the subjects vis-à-vis their rulers, and the responsibilities of the rulers towards their subjects."32 Building on 'Awad's argument that participating in Bonaparte's councils had far-reaching consequences,<sup>33</sup> 'Abbās contends that it was the resulting heightened self-confidence that allowed the "popular leadership" in 1805 to defy the Ottoman sultan and insist on instating a man of its choice, Mehmed Ali Pasha, as governor of Egypt. Mehmed Ali, 'Abbās argues, adopted "a political project of founding a strong Arab Islamic state that would encompass the Arab east under his command and would be a bastion frustrating the West's designs."34 This project entailed a wellthought-out process of completely overhauling the economy, one that led to the formation of state capitalism wherein the state controlled the agricultural sector, introduced modern industry, and sent student missions to Paris and other European capitals, thus resuming cultural links between Egypt and the West. However, 'Abbās maintains, due to the fact that this political project was elitist and state-led, its "social aspect was absent and people's daily lives were not altered."35 Accordingly, in 1841, when the European powers put pressure on Mehmed Ali to abolish the monopolies that underpinned his control of the economy, the first attempts "at renaissance crumbled at the blows it received from Western imperialism. Thus, the second advent of the West was an abortion of the renaissance project, as it entailed a ferocious imperialist attack aimed at maintaining the status of cultural decline and allowing but minor adjustments to the infrastructure of Arab society, adjustments that were designed to deepen the economic, political, and cultural dependency ties [that linked Egypt to the Western metropole]."36

Despite the fact that 'Abbas later revised his negative assessment of the Ottoman period and even became the convener of a weekly seminar held at the Egyptian Historical Society that was devoted to social history during that period, the Whiggish approach to Egyptian history that informed his work had a deep impact on the field of Egyptian history.<sup>37</sup> Furthermore, the lack of scholarly attention to medical reforms continued to be a noticeable feature of the Egyptian historiographical scene. A significant exception is Amira El Azhary Sonbol's study The Creation of a Medical Profession in Egypt, 1800-1922, which, as its title indicates, deals specifically with medical reform. Sonbol believes that there was once "a golden age of Arab medicine" in Egypt. However, sharing with 'Abbas a negative assessment of the Ottomans, she argues that this age was followed by an Ottoman dark age, a period of "stagnation and deterioration" that, by the end of the seventeenth century, left no "medical training worth the name."<sup>38</sup> Like 'Abbās, she argues that this moribund state of affairs was shattered by the enlightened policies of the Pasha and the energetic efforts of his chief medical adviser, Clot Bey. Relying primarily on the latter's writings, she traces the early efforts taken to found the Abū Za'bal Medical School and argues that the school quickly became "a center of civilization that was to have an enlightening effect on the country as a whole."39 But, again like 'Abbās, she says that due to the elitist, state-led nature of these medical reforms, "the country was still steeped in ignorance in the mid-nineteenth century."40 So when the British took control of the school and the adjoining hospital in the 1890s, restricting the number of students, changing the language of instruction from Arabic to English, and establishing a yearly fee after decades of free education, the fortunes of the school declined rapidly as there was no one to defend it. The regulations the British set up, she argues, "could only have one result, that is, the reduction of the number of Egyptian doctors and confinement of membership in the profession to one elite group, which would moreover be English speaking. It was upon just such groups that the British colonial system depended to maintain British control over occupied nations, Europeanized colonial elite groups of this sort were expected to identify more with Europeans than with their countrymen."41

As important as this last insight is, Sonbol does not treat us to any detailed analysis of how the Egyptian graduates of the medical school might have identified with their patients *before* the British takeover. Her study, moreover, lacks a comprehensive account of the social reaction to the introduction of modern medicine to Egypt. Despite her argument that "medicine is perhaps the most appropriate [profession to study the understanding of the dynamic of modernization] because of the importance of health and medicine in the religious, social and economic affairs of Islamic society,<sup>342</sup> there is no exploration of how this "Islamic" society was affected by modern medicine.

The Egyptian school of historiography therefore exhibits a number of Whiggish features when dealing with the story of how modern medicine was introduced in the first half of the nineteenth century, features that, as the above analysis demonstrates, also apply to the way that this school tackled the much larger issue of Egypt's relationship with Europe during and immediately following Bonaparte's expedition. This school believes that before this proverbial confrontation with the West, and due to the "uncivilized" policies of the Ottomans, Egypt was cut off from any direct contact with Europe, which, significantly, it considers to be the true provenance of science and knowledge. But Europe became impatient with this isolation, and Bonaparte's invasion is seen as an expression of this frustration and its determination to put an end to it. Bonaparte's civilizing mission, however, was short-lived, and what he left unfinished was eventually restarted by Mehmed Ali, who restored Egypt's contacts with Europe and implemented an ambitious, wellthought-out plan for national rejuvenation. This plan, however, was thwarted not only by Western imperial designs but also by one fatal flaw: its top-down approach effectively excluded the natives from government and restricted educational and other reforms to the production of only those bureaucrats and technocrats that the government needed. Unlike Bonaparte's expedition at the end of the eighteenth century, therefore, this second instance of the West knocking on Egypt's doors did not trigger a national awakening, for there was no social base that had an interest in defending the reforms that had been initiated by Mehmed Ali. Despite highlighting the radical nature of the many reforms brought about by the Pasha and his successors, Egyptian studies on the history of modern medicine do not offer a detailed understanding of the impact the introduction of modern medicine had on non-elite Egyptians.

In contrast to this historiography, this book, although it is interested in discovering the Pasha's intentions behind founding a medical school in Egypt and looks closely at the medical publications of Clot Bey and his many Egyptian students, is primarily concerned with charting the reactions Egyptians from all walks of life had to the many innovations their society witnessed during the middle decades of the nineteenth century. By zooming in on medical, legal, and public hygienic reforms, this book asks how our understanding of Egyptian modernity would differ if we examined it not by studying schools, newspapers, and printing presses, but by taking a close look at cemeteries, slaughterhouses, and cesspools. Methodologically, it follows intellectual and conceptual transformations by placing them within their institutional settings. *In Quest of Justice* also takes as axiomatic the assumption that one cannot understand nineteenth-century Egyptian developments except by viewing them within their wider Ottoman context. Building on the work of Jane Hathaway, Ehud Toledano, Alan Mikhail, Adam Mestyan, and James Baldwin, this book sees Egypt in the khedival period (1805–79) as still very much part of the Ottoman Empire—its politics, economy, and culture being shaped by developments within that empire—and argues that Cairo's growing connections with Paris and London should be seen in light of its historic relationship with Istanbul.<sup>43</sup>

## COLONIAL MEDICINE AND COLONIAL SUBJECTIVITY

The triumphalist visions and hagiographic narratives that depict Clot Bey and his patron, Mehmed Ali Pasha, as motivated by a high-minded humanitarian zeal to put an end to the ignorance, superstition, and inertia of Egyptians raise the question of whether it is accurate to characterize Qaṣr al-ʿAinī as a "colonial medical institution," to think of Clot Bey as a "colonial official," or to label the medicine that he introduced as "colonial medicine." What makes medicine colonial, and what is colonial about colonial medicine? This is a question that many scholars working on British India and colonial Africa, among other places, have struggled with.<sup>44</sup> On the most basic level, and especially in the tropics, medicine was instrumental in enabling the European conquest of many parts of Africa, Asia, and the New World. The use of quinine prophylaxis as a malaria preventative, for example, is often cited as one of the prime "tools of empire." Without quinine, "European colonialism would have been almost impossible in Africa, and much costlier elsewhere in the tropics."<sup>45</sup>

But what makes medicine colonial is also the different ways in which Western medicine was closely tied to a wide range of military, administrative, and economic activities of the colonial state. The management of colonial labor, especially in mines and armies, and the struggle to protect the lives of native workers, sailors, and soldiers meant that medicine was very often associated with the work of the policeman, the recruiting sergeant, the tax collector, and the many other officials of the colonial state. Moreover, the diffusion of Western medical theories and practices were intricately bound up with the increasingly interventionist colonial state, and as David Arnold has argued, colonial India demonstrated "in a manner unparalleled in Western societies, the exceptional importance of medicine in the cultural and political constitution of its subjects."<sup>46</sup> This close association between medical knowledge and colonial power is what prompted Indians to resist British approaches to healing, disease prevention, and public health, and it was what led Frantz Fanon to comment that "Western medical science, being part of the oppressive [colonial] system, has always provoked in the native an ambivalent attitude.... With medicine we come to one of the most tragic features of the colonial situation."<sup>47</sup>

The racial exclusiveness of medical service in European colonies is yet another feature of colonial medicine. In British India, for example, Europeans, Eurasians, and native Christians were overrepresented in the medical colleges. By offering instruction only in English and requiring students to take their exams in London, medical colleges in British India admitted very few Indians, and it took a century after the founding of Calcutta's medical college in 1835 to overturn the racial exclusiveness of the Indian Medical Service.<sup>48</sup>

Furthermore, medicine, along with education, was often used by colonial officials to justify colonialism. Western medicine in particular was depicted as the quintessential evidence of the West's superiority as it was made to stand for rationality and progress "while indigenous society foolishly cherished superstition and witchcraft, was ruled by ignorance and cruelty, and held beliefs and practices Europe had left behind with the Dark Ages."<sup>49</sup> In Tunisia, for example, Western medicine became an integral part of the French *mission civilisatrice*, and a 1905 article in the *Revue Tunisienne* observed that "the doctor is the true conqueror, the peaceful conqueror.... It follows that if we wish to penetrate their hearts, to win the confidence of the Muslims, it is in multiplying the services of medical assistance that we will arrive at it most surely."<sup>50</sup>

Finally, some scholars have contended that the single most important aim of colonial medical policy was protecting the white colonial enclave. Most notably, Radhika Ramasubban has argued that in British India, the protection of the army and the European civilian population was "at all times the highest priority" of colonial health policy.<sup>51</sup> With the shift from miasmatic theories about disease etiology to germ theory, "disease came to be identified, not as in the past, with pathogenic landscapes, but with living 'native reservoirs' of diseases."<sup>52</sup> This eventually gave rise to a policy of segregation and isolation using criteria of soil, water, air, and elevation. To protect the white, colonial community, residential areas were established away from the "native" quarters, and, occasionally, sanitary cordons were set up to enforce segregation of the colonial enclave from the natives. In 1859, a Royal Sanitary Commission was set up to "lay down elaborate norms for the creation of distinct areas of European residence, and the 'cantonment', ... regulated by legislation, developed into a colonial mode of health and sanitation based on the principle of social and physical segregation."<sup>53</sup>

With these characteristics of colonial medicine in mind, we can now revisit the questions of whether Qaşr al-'Ainī can be seen as a colonial medical institution and whether Clot Bey can be viewed as a colonial medical official. At first glance, it would appear that Clot Bey could certainly be considered such given the clear manner with which he viewed his effort in Egypt as a belonging to civilizing mission and the frequency with which he congratulated himself for conquering the religious superstitions of a backward people and for enlightening them about the glorious benefits of Western science.<sup>54</sup> However, there is more to that characterization than meets the eye. For one thing, although he was French, Clot Bey had not been dispatched to Egypt by the French government and was not an official of the French state. Despite the fact that he had been introduced to Mehmed Ali by the French consul, he was eventually employed by the Pasha, and throughout his long career in Egypt, which spanned some two decades, he remained an official of the Egyptian state, received his salary from Cairo, and never answered to the Quai d'Orsay or to any other agency of the French state.

For another, unlike Fort William, in the shadow of which the Calcutta Medical College was built in 1835, the Jihād-Abād military camp, which was close to the initial site of the medical school (before it was moved to Qaṣr al-'Ainī in 1838), was not a military outpost of a European colonial power occupying Egypt. Rather, it was a large camp that Mehmed Ali had built to prepare his army for his own dynastic military adventures. Despite the fact that the Pasha later sought the assistance of the French state in building this army and ended up employing many French officers, his army was not deployed in a European colonial enterprise. After turning down a request to help the French navy occupy the Barbary States of Tripoli, Tunis, and Algiers, Mehmed Ali directed the full wrath of his military machine to the north.<sup>55</sup> In 1831, he launched a spectacularly successful attack on the Ottoman Empire's troops in Syria, thus inaugurating an occupation of the Syrian provinces that would last for some ten years and that would pose a serious threat to the very existence of the Ottoman Empire.<sup>56</sup> And as is discussed in more

detail in chapter 1, the Qaşr al-'Ainī Medical School was primarily founded to serve the Pasha's army. In fact, one of the main arguments that this book makes is that Qaşr al-'Ainī should be viewed within an Ottoman context rather than a European one.

Moreover, the medicine that Clot Bey introduced did not have as its main aim the protection of a European army of occupation. As such, what can be called "khedival medicine," that is, the medicine that was introduced and supported by Egypt's khedives, was not enclavist but universal. Indeed, and as illustrated in chapter 4, Clot Bey struggled hard against calls from members of the European diplomatic corps residing in Egypt to restrict health reform policies to the European community. Instead, he pushed for the establishment of a public health policy that had as its main target all the inhabitants of Egypt, not only those living in the European enclaves in Cairo, Alexandria, and other main cities, the populations of which were expanding thanks to rising trade with Europe.

Furthermore, on accepting Mehmed Ali's commission to found a medical military corps (discussed in more detail in chapter 1), Clot Bey told the Pasha that securing the medical services of Frenchmen would cost him dearly; it would be wiser and cheaper, he advised, to establish a medical college to train hundreds of native doctors and pharmacists. Crucially, he argued, these native doctors should receive their education in Arabic so that they would be able to communicate with their patients. It is important to ponder the significance of this momentous decision: Clot Bey, a Marseilles-trained, French-speaking doctor, advising Mehmed Ali, a Kavalla-born, Turkish-speaking Ottoman governor, to establish a medical school in Egypt where the Arabic-speaking natives would receive state-of-the-art medical education in their mother tongue. This does not square easily with a typical colonial venture.

In thinking about the supposed colonial nature of Qaṣr al-ʿAinī, one also needs to distinguish between, on the one hand, Clot Bey and his European colleagues, who, for the first few years of the institution's history, constituted the institution's teaching staff, and, on the other hand, the Egyptian students, some of whom would go on to assume teaching positions at their alma mater and even become directors of the school. It is clear from even the short excerpts of Clot Bey's writings quoted above that he shared with many of his nineteenth-century European contemporaries the belief that science had had a teleological progression since its inception in antiquity. According to this traditional view, science was believed to have had its origins in ancient Greece, when philosophers broke away from the myths of their forebears. A long period of stagnation ensued with the rise of Christianity, when science suffered a setback as a result of the church having a strong hold on intellectual and cultural life, reaching a nadir in the Middle Ages. But then science witnessed a triumphant comeback with the scientific revolution of the seventeenth century.<sup>57</sup> Throughout the centuries, a deep anticlerical hostility pervaded this viewpoint, and Clot Bey's occasional resentment of the 'ulamā' might be seen as part of this overarching animosity to religion in general, which he saw as distinct from, and antithetical to, science.<sup>58</sup> But the question remains as to whether Clot Bey's Egyptian students shared with him the belief that science and religion represented two distinct fields of thought or whether they agreed with classical Muslim physicians in rejecting such binary distinction.<sup>59</sup> Furthermore, while Clot Bey depicted himself in many of his publications aimed at a Western audience as transferring Western knowledge to Egypt, it is not clear if his Egyptian students and colleagues believed that they were "diffusing" European science into their country,<sup>60</sup> or if they thought that Qasr al-'Ainī was a "contact zone" where European scientific ideas were exchanged and got circulated.<sup>61</sup> As suggested in chapter 1, Clot Bey's Egyptian students repeatedly argued in their Arabic translations of European textbooks that by opening a modern medical school, Mehmed Ali was neither bridging the gap with the West nor trying to catch up with Europe but rather reviving an art that had once flourished in Egypt and renewing a form of science that had once thrived there.<sup>62</sup>

But even if we set aside for the moment the question of the purported colonial subjectivity of Clot Bey's Egyptian students and how they thought of their racial, religious, and gendered positioning within Qaşr al-Ainī, Clot Bey's own views and those of his European colleagues about the supposed colonial project in which they were involved merit some closer investigation. Again, the comparison with India may be instructive. In his study of how both the British and Indian nationalist discourses viewed the Indian body, Gyan Prakash asks a crucial question: "What was colonial about the colonization of the body?"<sup>63</sup> By this he means to investigate not only the nature of colonial medicine but also the nature of the colonial state. Building on Foucault's elegant triad of sovereignty, discipline, and governmentality, Prakash argues that what made nineteenth-century Indian medicine colonial was the British denial of the possibility of governmentality in the colony. If sovereignty is concerned with territory, legitimacy, and the law, and if discipline is associated with such institutions as the factory, the prison, the school, and the hospital, then governmentality is defined as "pastoral power" that

functions by setting up "economy at the level of the entire state, which means exercising towards its inhabitants, and the wealth and behavior of each and all, a form of surveillance and control as attentive as that of a head of a family over his household and his goods."<sup>64</sup> Prakash then says that what was specific about colonialism was the denial of sovereignty: "British India was marked by the absence of the elegant sovereignty-discipline-government triangle that Foucault identifies in Europe. Fundamentally irreconcilable with the development of a civil society, the colonial state was structurally denied the opportunity to mobilize the capillary forms of power. Thus, colonial governmentality developed in violation of the liberal conception that the government was part of a complex domain of dense, opaque, and autonomous interests that it only harmonized and secured with law and liberty."<sup>65</sup>

In other words, since the presence of these autonomous interests was denied in the colony, and since colonialism, to start with, was predicated on, and justified by, denying the colonized the possibility of self-rule and self-knowledge, it follows that the medical policies adopted by the colonial state reflected this denial of the possibility of governmentality. Accordingly, what distinguished colonial medicine from medicine applied in Europe was not merely the colonial state's deployment of medicine in such a way as to make the Indian body a site of power that witnessed a range of Indian responses (resistance, accommodation, participation, and appropriation), for these responses were not restricted to the colony.<sup>66</sup> Rather, what made medicine colonial, Prakash argues, was the colonial governmentality that was informed by stereotypical images of "Indians as diseased, unhealthy, unhygienic, superstitious, and unscientific."<sup>67</sup>

This view of the colonized as essentially lacking in the liberal faculties of self-knowledge and self-rule is what Partha Chatterjee famously labeled "the rule of colonial difference."<sup>68</sup> Although I find this idea about the very nature of the colonial project illuminating, and while I judge Prakash's critique of the nature of colonial governmentality to be equally insightful, I mention them here not to indicate their applicability to the Egyptian case but, on the contrary, to point to their possible limitations. For ever since the rise of the cultural turn within the field of modern Middle Eastern history, there have been a plethora of studies that approach nationalism in terms of cultural construction, and the work of the Indian Subaltern Studies Collective has been rightly very influential in raising new questions with which to approach the rise of nationalism as a new form of collective subjectivity. The expanding cottage industry of subjectivity studies, however, has all too often made implicit (sometimes explicit)

equations between Egypt and India, paying little attention to the differences that set the Egyptian colonial experience apart from the Indian one.

By contrast, this book starts from what should be a commonsensical assumption, namely that Egypt was never an Indian province, let alone a Bengali one. Despite the fact that many post-1882 British offi cials saw Egypt through an Indian lens, the nature of khedival Egypt should have made these offi cials realize the fallacy of their comparisons.<sup>69</sup> Furthermore, pace Timothy Mitchell's Colonising Egypt, a book that rightly continues to illuminate and rejuvenate the fi eld of modern Middle Eastern studies, I question if it is reasonable to refer to pre-1882 Egyptian society as colonial.<sup>70</sup> Given this chapter's discussion of the nature of Mehmed Ali's dynastic project, Clot Bey's medical venture, and the evolution of Qasr al-'Ainī as the center of a wide-ranging public hygiene establishment, I question the degree to which "colonial medicine," a phrase that describes the experience of India in the nineteenth century, captures the reality of khedival medicine. For as shown in this book, neither Clot Bey nor his students argued that the Egyptian body was essentially diseased, unhealthy, or unhygienic; indeed, a deep belief in the pedagogical impact of Qasr al-'Ainī informed the eff orts of hundreds of Egyptian doctors and hygienists during the middle decades of the nineteenth century.