The last embers of a dying volcano went cold on December 17, 1830. General Simón José Antonio de la Santísima Trinidad Bolívar y Palacios, the Liberator, “victor in 100 battles and founder of three republics in the continent of America” was dead at the age of forty-seven. For over a year, he had been ravaged by fever, cough productive of copious green sputum, progressive weight loss, dyspnea, and indigestion. When finally he slipped into a coma and died, his profoundly emaciated remains were autopsied by Dr. Alexandre Prospère Révérend, the French physician who attended him during his final fortnight. On opening Bolívar’s chest, Révérend discovered “hardening of the superior two thirds of” lungs that were “studded with tubercles of different sizes.” He concluded that his patient had died of “tuberculous consumption.” Although this diagnosis is the one accepted by most historians, the current president of the Bolivarian Republic of Venezuela, Hugo Chávez, recently challenged Révérend’s conclusion by announcing that the General was a victim of poisoning, not tuberculosis.

The controversy over the cause of Simón Bolívar’s death, despite the ultimate diagnostic examination, typifies the difficulties encountered when attempting to diagnose the disorders of historical figures. Such diagnoses are necessarily tentative, because they are rarely supported by definitive test results, such as a critical blood value, key culture, or salient radiologic, histological, or autopsy finding. In Bolívar’s case, Révérend’s autopsy findings were striking and have long been viewed as conclusive. However, they suffer from the absence of the results of either histological examinations or microbial cultures. Consequently, they tell us more about the anatomy of the General’s fatal disorder than its cause.

Diagnosing the diseases of famous patients of bygone eras is hampered most by limitations of the historical records from which clinical summaries are derived. More often than not, such records are the work of nonphysicians, whose appreciation for and description of important clinical details were limited. In addition, because language evolves, the meanings of terms used to describe illnesses change over time such that their proper interpretation becomes problematic. In a letter written in 1829, for example, Bolívar reported that he had recently recovered from un fuerte ataque de bilis negra (“a severe attack of black bile”), whereas in 1828, he wrote of un fuerte ataque bilioso (“a severe attack of bile”). Was he referring to two attacks of the same illness? Was he jaundiced? Were the attacks of “black” bile indicative of hemorrhagic
The Pharos

Alexander the Great

skin lesions or perhaps even the “black water” of falciparum malaria? Questions of this sort are encountered in the extreme when attempting to interpret Thucydides’ description of the rash exhibited by victims of the plague that devastated Athens in the fifth century BC. Perhaps more than any feature of that illness, the rash is the key to the syndrome’s diagnosis. Because of uncertainty as to the proper translation of phlyktainai, the term used by Thucydides to characterize the rash, his description of the disorder is ambiguous—so much so that clinicians have argued for more than two millennia over both the nature of the rash and the diagnosis it signifies.5

In some cases, medical histories have been distorted for personal gain or in deference to political agendas. Révérend was not likely influenced by either motive, in that when in 1849, a French medical congress wished to recognize his service to the Liberator, he demurred, stating: “I want no other honor than that of having been the last doctor of Simón Bolívar, the genius of America.”2p18 Dr. J. J. Moran, who cared for Edgar Allan Poe during his fatal delirium, was another matter. In a patently embellished account of Poe’s final illness written many years after the fact, he promoted his own celebrity and denied posterity an accurate clinical description of the poet’s final illness.6 Josephus, from whom we learn of Herod’s terminal illness, was likely guilty of the latter indiscretion. At least some historians suspect that he was pressured by Titus’ mistress, Berenice (whose grandfather had been executed by Herod), to add infestation of the king’s “privy parts by worms” to his account, not in the interest of historical accuracy, but as postmortem punishment for crimes committed during a despotic reign.7

Many accounts suffer from having been written years, sometimes even centuries, after the fact, and fading memories and/or the limitations of available primary sources have taken a toll on their accuracy. Révérend’s notes were written contemporaneously, as was his autopsy report. However, he was witness to only a brief period of the General’s terminal illness. In the case of Alexander the Great, contemporary accounts of his fatal illness are long lost, and those secondary accounts (by Plutarch, Arian, and others), upon which current diagnoses are based, were written centuries after the king’s demise.8

Similarly, the only description we have of Mozart’s mysterious terminal illness is one written by his sister-in-law nearly three decades after the composer’s death.9 In exercises of this sort, there is also a nagging suspicion that clinical manifestations of diseases might change with the passage of time. Syphilis is one possible example of such, having a less acute and aggressive character than in 1493 when it first arrived in Europe aboard the Niña and the Pinta. It has been suggested that an even more radical transformation might have taken place in the clinical manifestations of the infection that helped bring an end to the Age of Pericles. In 2006, Greek investigators using “suicide” DNA amplification reportedly identified a genetic fingerprint of S. typhi in the dental pulp of three victims of the fifth-century BCE Hellenic holocaust (but no such evidence of M. tuberculosis, Y. pestis, R. prowazekii, B. anthracis, B. henselae, or cowpox virus), and believed they had at last solved the riddle of the etiology of Thucydides’ plague.10 If their findings are valid—and it should be noted that they have been challenged by experts at the University of Oxford’s Henry Wellcome Ancient Biomolecules Centre11—given the blistering eruption that characterized the Athenian disorder, typhoid fever would have had to undergo a stunning metamorphosis in the two and a half millennia since the Peloponnesian War if it was, in fact, the infection responsible for the epidemic.

Finally, there is the problem of a reluctance of those who look for answers in the medical records of history’s illuminati to accept ordinary diseases as causes of the deaths of extraordinary persons, as well as a penchant for diagnosing disorders that are the particular interests of those proffering diagnoses. What motivated Hugo Chávez to diagnose poisoning as the cause of his “spiritual father’s” death is known only to him. Possibly he considers tuberculosis too banal, too unbecoming a disorder to have extinguished the flame of such a remarkable predecessor, or maybe he hoped to enhance the theology of his country’s patriarch by having him martyred. For Bolivar...
was truly one of the giants of his age—perhaps of all ages. Nevertheless, whereas he was a mighty general, he was also a man. It made no difference to the disease that took him that he had wrested from Spanish domination an empire five times vaster than all of Europe. Nor did his terminal illness pause to consider the twenty years of wars he fought to keep it free and united. In the end, he had to pay the debt to divine jealousy all must pay, regardless of worldly accomplishments, by succumbing to a disorder not of his choosing.

Whereas the challenge of diagnosing the disorders of historical figures is one of interpretation of the facts, like the diagnoses derived from them, the facts themselves are often in dispute. How well do the facts of Bolívar’s medical history support a diagnosis of fatal tuberculosis? On the positive side, there is a chronic illness with many of the cardinal features of consumption (fever, productive cough, and cachexia). Even more convincing are the autopsy findings of lungs riddled with tubercles and cavities. Nevertheless, if Bolívar did have far-advanced cavitary tuberculosis, possibly complicated by laryngeal involvement (as indicated by terminal hoarseness), he would have been extraordinarily contagious. If so, how did Révérend, who lived to the ripe old age of eighty-five, escape infection, or Manuela Sáenz, the General’s long-time mistress, who died not of tuberculosis but of diphtheria at age sixty, or his nephew, Fernando, who was his uncle’s private secretary and confidant throughout his terminal illness and lived to age eighty-eight? Why were episodes of hemoptysis not prominent? If Bolívar had been infected by his parents as a child, as many believe, how did his two sisters and brother escape a similar fate? Perhaps most importantly, the chronic cavitary form of pulmonary tuberculosis and the disseminated form rarely coexist. If this is true, as reflected in numerous case series of the latter, how does one explain the presence of pulmonary cavities and simultaneous invasion of the brain, liver, and mesenteric glands identified by Révérend at postmortem?

For all these reasons, closing the book on questions concerning the illnesses of historical figures is an arduous, if not impossible, task. Although examinations of the remains of such patients using modern molecular techniques can open the book to new pages, as in the recent efforts to identify the agent responsible for the plague of Athens, they are rarely diagnostic. Disputes invariably arise as to the meaning and the validity of their results. Consequently, those who would diagnose the disorders of giants of the past must rely primarily upon the limited clinical information provided by biographers more interested in their subjects’ worldly accomplishments than the diseases that liberated them from their earthly suffering.

References
2. Révérend A.P. La Ultima Enfermidad, Los Ultimos Momentos
y Funerales de Simon Bolivar. Dove J, translator. Paris: Hispano- 
American de Cosson: 1866.
3. Carroll R. It was murder: the Chávez version of liberator’s 
4. Guevara A. Historia Clínica del Libertador: Estudio no-
so-lógico y psicobiográfico de Bolívar. Caracas: Lit y Tip del Com-
ercia: 1948.
Mortem: Solving History’s Great Medical Mysteries. Philadelphia: 
7. Mackowiak PA. Chapter 4, Worm’s Meat. In: Post Mortem: 
8. Mackowiak PA. Chapter 3, Death of a Deity. In: Post Mor-
2007: 59–82.
9. Robbins Landon HC. Mozart’s Last Year. New York: Thames 
10. Papagrigorakis MJ, Yapijakis C, Synodinos PN, Bazioto-
poulou-Valavani E. DNA examination of dental pulp incriminates 
typhoid fever as a probable cause of the Plague of Athens. Int J Infect 
11. Shapiro B, Rambaut A, Gilbert MTP. No proof that typhoid 
caused the Plague of Athens (a reply to Papagrigorakis et al). Int J 
Dis 2011; 52: 78–85.
495–505.
14. Alvarez S, McCabe WR. Extrapulmonary tuberculosis re-
visited: A review of experience at Boston City and other hospitals. 
15. Kim JH, Langston AA, Gallis HA. Miliary tuberculosis: 
Epidemiology, clinical manifestations, diagnosis, and outcome. Rev 

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The hospital chapel is nearly full today. I wonder why; maybe the staff layoffs. Prayer requests tell the stories. Layoffs, test results, mother upstairs, Daughter’s surgery in Detroit, Grandson in Afghanistan, Granddaughter on drugs. Wednesday noon and fears will not Wait another four days. The chaplain raises her voice In prayer; we respond in song. At one pm she sends us out To find our way.

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Illustration by Jim M’Guinness