

# Impact of the plague in Ancient Greece

M.A. Soupios, EdD, PhD

*Department of Political Science, Long Island University, C.W. Post Campus,  
720 North Boulevard, Brookville, NY 11548, USA*

The Peloponnesian War is not an isolated incident in the social and military history of ancient Greece. It is better understood as the most spectacular example of a bloody internecine instinct that plagued Hellas throughout most of its history. In the absence of the generalized threat posed by the Great King's army, the grand alliance that successfully had repulsed the Persian juggernaut in 480 to 479 BC soon began to unravel. Spurred by Athenian adventurism, the Greeks quickly reverted to their traditional jealousies and hatreds. The expansive lusts of Athens convinced Sparta and her allies that the Athenians were a menace to Hellas' strategic balance of power and that conflict was necessary and inevitable. Formal hostilities commenced in 431 BC and continued intermittently for the next 27 years, during which time much of the luster of the Golden Age of Greece was tarnished irreversibly.

## War and disease

In the 5th century BC, an infantry unit known as the phalanx dominated Greek warfare. This formation was comprised of hoplites, citizen-soldiers who took their name from a large wooden shield (hoplon) that they carried into battle [1]. The killing efficiency of the phalanx had been field-tested thoroughly in the struggles against Persia. In 431 BC, the Greeks redirected their war machine toward fratricidal ends. The Spartans, with their iron discipline and ready willingness to sacrifice all, were the acknowledged masters of this infantry combat.

Athens also possessed a formidable land force, but the bulk of its military assets and the key to its strategy in the Peloponnesian War were centered on the navy. Athens was pursuing a course established 50 years earlier by Themistocles, the hero of Salamis and the architect of the Greek victory over Xerxes. Themistocles opted to defend Hellas with "wooden walls" (ie, triremes) and persuaded the Athenians to dedicate a large, recently

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*E-mail address:* [msoupios@hotmail.com](mailto:msoupios@hotmail.com)

discovered deposit of silver to the construction of 200 warships. Themistocles had the vision and foresight to insist on the fortification of the Piraeus, a move that greatly facilitates the emergence of the Athenian Empire.

The thalassocratic legacy of Themistocles was embraced readily by the next great Athenian statesman, Pericles, a man who would dominate the political scene of Athens for more than 30 years. As the war began, Pericles chose to forego the customary clash of hoplite formations. Instead of fielding his infantry in an all-out pitched battle against the enemy, Pericles elected to rely on an attritional strategy whereby the Athenians would withdraw behind their walls and rely on the fleet to resupply the city and conduct amphibious raids against the enemy. From a tactical viewpoint, the Periclean defensive strategy was an impeccably sound response to the superior Peloponnesian ground forces, but it also constituted a controversial departure from the protocols of Greek warfare. The code of honor that guided so much of Hellenic civilization, a code with roots as far back as Mycenaean times, called for the spirited defense of hearth and home under such circumstances. Instead, Pericles asked the Athenians to exhibit an uncharacteristic restraint, even as fire and ax were brought against their ancestral holdings.

In effect, Pericles hoped to frustrate and exhaust his Peloponnesian opponents by transforming Athens into an impregnable island fortress. Unimpeded naval operations would allow the Athenians to protract the conflict indefinitely, eventually draining the military resolve of the enemy. Significantly, the Periclean strategy did not seek to register a definitive victory—stalemate would be victory enough. Not even Pericles, who Thucydides [2] specifically applauded for his prescience, could foresee the dire consequences of massing the bulk of Athens' population within the city walls. There is little doubt that the throng of refugees crammed into the city contributed to the plague's rapid contagion and to its ruinous mortality rates.

## **Symptoms**

According to Thucydides, there was virtually no incubation period for the plague. The disease struck healthy individuals suddenly, beginning with an intense fever in the head; inflammation of the eyes; redness of tongue and throat; and unnatural, fetid breath. The next stage involved sneezing and hoarseness followed by the disease's descent into the chest, where it produced severe coughing. Subsequently, the stomach was affected, and victims experienced vomiting and violent convulsions. Externally, the body did not feel warm to the touch. The skin was not pale but was flushed and livid. Thucydides mentions an efflorescence of blisters and sores. Internally, patients were consumed by an extreme sense of heat; a tormenting, unquenchable thirst; and a restlessness that made sleep impossible. Most sufferers succumbed on the seventh or ninth day of their ordeal, but Thucydides notes that their bodies still possessed a considerable strength, even at the time of expiration.

People who lived through the plague's normal cycle were subject to violent ulcerations of the bowels, accompanied by acute diarrhea, which also claimed many lives. Thucydides describes gangrene of the extremities, loss of sight, and, in some cases, loss of memory. Significantly, he characterizes this long roster of symptoms as a general description of the ailment, noting there were many other "unusual symptoms" that were specific to any given sufferer.

Scholars have noted the remarkable detail and accuracy with which Thucydides describes the range of symptoms associated with the plague of Athens. His presentation suggests extraordinary powers of observation, some of which stem from personal experience with the disease, plus a sophisticated understanding of contemporary medical doctrine. Two Hippocratic treatises, *Epidemics* and *Prognostic*, seem to have directly influenced the pattern of description and the choice of terminology employed by Thucydides. In one detail, Thucydides fails to provide an adequate portrait of the disease—the exanthems. The text makes only a brief mention of "small blisters and ulcers," without reference to color, location, or stage of occurrence. Beyond these descriptive deficiencies, there is also the critical issue of how to translate the terms used by Thucydides in his report of these cutaneous disorders. Do modern terms such as "pustule," "eruptions," or "lesion" accurately convey what Thucydides is attempting to depict? Imprecision in these matters have allowed historians and medical authorities to formulate radically different conclusions regarding the disease's identity. For one expert, Thucydides' reference to "blisters and ulcers" implies the scabs of smallpox, but for another expert, they indicate the petechiae of typhus fever. A detailed, lucid description of the exanthems might have delimited greatly the bewildering number of identifying theories proffered by authorities.

### **What was the Athenian plague?**

In the annals of medical history, this question has become a kind of riddle for which a great number of interesting and provocative theories have been offered. No single theory however, has proven entirely satisfactory. According to Shrewsbury [3] and Page [4], some of the leading candidates are smallpox, bubonic plague, typhus fever, and measles.

Smallpox produces certain key symptoms that do not appear in the Thucydidean description or that directly contradict his observations, such as physical prostration and delirium; pain in the loins and back; and the pits left by the smallpox rash. It is difficult to imagine that such an acute observer as Thucydides, a survivor of the disease, might have overlooked these notable indications of smallpox.

The identification of the Athenian epidemic as the bubonic plague requires evidence that black rats were present in Athens by 430 BC. There is little ground for such an assumption. It seems that the Greeks of the classical period were unacquainted with this creature and even lacked a specific word for "rat." The characteristic inflammatory swelling of the buboes is absent from

the portrait left by Thucydides. It is impossible to accept that he omitted such a prominent feature of the disease. Any comparison with Procopius' description [5] of the bubonic plague that decimated 6th century AD Byzantium also tells against the plague of Athens being an earlier occurrence of the disease.

Claims that typhus fever caused the Athenian plague are ostensibly strong. The physical setting, comprised of destitute refugees living in unnatural proximity, would have facilitated the spread of head and body lice. Most symptoms presented by Thucydides are associated closely with epidemic typhus, including rapid onset, severe headache, foul breath, cough, mortification of extremities, and loss of memory. Formidable difficulties remain, however. There is the issue of whether the initiating rodent host was present in Athens in 430 BC. Certain well-established symptoms for the disease, such as hallucination in the early stages and the incidence of coma in the final intervals, are absent in Thucydides' report.

A strong case has been made for measles as the true culprit behind the Athenian pandemic. This theory may not seem plausible given the emasculated version of the disease that is seen today. If it is assumed, however, that 5th century Athens constituted a "virgin" population, the virulence described by Thucydides—he speaks of people dying like sheep—easily could be attributed to this disease. Illustration of this point can be seen in the calamitous effects that measles had on the virgin populations of the Fiji Islands in 1875. There are numerous correlations between the symptoms reported by Thucydides and the description of measles offered by contemporary medical texts, including fever, inflammation of the eyes, redness of the tongue and throat, hoarseness, vomiting, skin eruptions, thirst, and restlessness. The attending complications mentioned by Thucydides, including ulceration of the intestines, loss of eyesight, and gangrene, also correlated well with measles. The identification of measles with the plague of Athens is not precise, however. Abnormal foul breath and memory loss typically are not associated with the disease, and Thucydides identifies the extremities (ie, toes, fingers) as the regions chiefly affected by gangrene, whereas measles is not known to impact these areas.

To complicate further the matter of identification, it should be kept in mind that diseases can evolve over time, which means that the measles or typhus epidemic of 2400 years ago may not manifest itself in the same fashion today. Thucydides also may be describing a plurality of simultaneous plagues, which would further compound the task of assigning identity. The only certainty that can be asserted is the continuous incapacity to definitively designate the cause of the Athenian plague.

## **Impact**

There is much less guesswork involved in summarizing the consequences that the plague had on Athens and the Greek world. The first and most

obvious impact of the Athenian plague was a significant depletion of the city's human resources. Thucydides notes that by the winter of 427 BC, the Athenians had lost 4400 hoplites and 300 cavalrymen to the disease. According to Gomme [6], these figures represent more than a 25% reduction of Athens' first-line troops. These numbers are of crucial significance given the labor-intensive nature of ancient warfare. Unlike modern war, in which technologic superiority can negate numerical advantage, in antiquity the gods tended to favor those with the largest battalions. The fact that Athens stubbornly continued its resistance for more than 20 years after the disease had subsided should not be construed as evidence of the plague's inconsequence. It is better explained by the remarkable tenacity and resourcefulness of the Athenian people despite a substantial decrease in armed forces. Although it would be too much to argue that Athens' fate in the Peloponnesian War was predetermined from the outset by the plague, it is reasonable to assume the Athenians were placed demographically at a critical disadvantage against Peloponnesian opponents, who Thucydides describes as remaining virtually untouched by the epidemic.

Perhaps the most significant and telling impact of the plague was its effects on the quality of political leadership at Athens. Within 2.5 years of the war's outbreak, the plague claimed the life of Pericles, the greatest statesman of the era. With few exceptions [7], the ancient sources speak in one voice of his wisdom, courage, and incorruptibility. In describing his many virtues, Plutarch [8] employs a variety of encomiastic phrases such as "loftiness of spirit" and "majestic demeanor." Thucydides, despite belonging to a rival oligarchic family (the Philaidae), is unstinting in his praise of Pericles, referring to him as "protos aner," the first man, suggesting that Athens was a democracy in name only. Among the Athenians, he was referred to as the "Olympian" because of the air of loftiness and high-mindedness he consistently projected. Given the tenor of Athenian politics, particularly the unforgiving and volatile nature of public opinion, it is extraordinary that Pericles dominated the political and military horizons as he did.

In carrying off Pericles, the plague deprived Athens of the one man who had the courage and capacity to remonstrate the citizenry when necessary. Unlike other public figures, particularly those who followed, Pericles did not pander to the "demos"; where the others flattered, he alone dared to speak the truth. Pericles challenged his people with a vision of "great politics," a vision immortalized in the famous Funeral Oration, which continues to provide some of the most compelling evidence of Pericles' status as a true statesman. An unbroken chain of mountebanks and demagogues filled the void created by Pericles' death. In what came to operate as the political equivalent of Gresham's Law, men such as Cleophon, Hyperbolus, and Cleon preceded to debase the precious currency minted by Pericles and in so doing ensured Athens' ruin.

It is impossible to speak with certainty as to what verdicts the tribunal of history might have rendered had Pericles lived. It seems reasonable to

propose at least the following points: The Spartan peace overture made during the winter of 425 to 424 BC would have been accepted. After their fortuitous investment of the Spartan forces on Sphacteria, the Athenians were offered peace terms by the enemy. The popular Assembly at Athens, spurred on by the inflammatory rhetoric of Cleon, proposed terms that were onerous and virtually guaranteed a continuation of hostilities. Pericles, who from the war's outset had advanced a moderate strategy, undoubtedly would have seized this opportunity to end the conflict.

The untimely death of Pericles also had real implication for the greatest military blunder in the Peloponnesian War, namely, the Sicilian expedition. Ignoring the ongoing threat of an unsubdued foe in the main theatre of battle, the Athenians wrecklessly opened a second front in the west. They were seduced by the oratory of Alcibiades, a political knave who was less concerned with the welfare of Athens than with his own self-advancement. The result was predictable. The Sicilian city-state of Syracuse became the Athenian Stalingrad, an unmitigated catastrophe from which Athens never recovered. Everything that is known about Pericles indicates that the Sicilian debacle was the sort of madness that he would have avoided at all costs.

In addition to depriving Athens of its greatest leader, the plague was also responsible for a profound social deterioration that had far-reaching consequences for Athens and for Greece. The great pestilence of 430 BC had a sociopolitical corollary. The first infestation despoiled human flesh. The second infestation devastated the system of norms and values requisite for civilized existence. Thucydides refers to this deterioration prominently in his analysis of the plague's impact. The imminent specter of death projected by the plague unleashed an anarchic spirit that consumed the entire city. People began to live for the moment, disregarding all laws, sacred and profane. Time-honored customs and social restraints were cast aside with the result that the "School of Hellas" rapidly was reduced to a state of nature. The plague fostered an environment that unraveled the spiritual tapestry of Greece's greatest city. The high idealism and lofty aspirations that are articulated eloquently in the Funeral Oration were trampled underfoot by individuals who experienced the plague's bitter effects. In this regard, one could argue that the mindless gore of Scione and Melos had its origins with the plague, which conditioned the Athenians to the horrible cheapness of human life.

It is conceivable that "stasis," the factional strife from which Athens initially seemed immune, was in part attributable to the civic disruptions attributable to the plague. The epidemic may have compromised the delicate and essential balance between private interests and the public good. Before the pestilence, Athens displayed an atmosphere of high social consciousness that was capable of fruitfully subordinating personal or party ambition to larger social necessities. With the cynicism and hopelessness spawned by the plague, the Athenians became markedly less inclined to deny private ambition, and the city increasingly was beset by a spirit of narcissistic self-centeredness. In Thucydides' view, this development was of capital significance to the

extent that it produced the civil discord which he feels ultimately cost Athens the war.

## **Summary**

Disease as a pivotal factor in determining the course of human events may be one of the least considered historical variables. When assessing the critical junctures of history, historians seem more inclined to focus on the impact of conquering armies, economic revolutions, and technologic breakthroughs. This analysis attempts to illustrate the seminal effects of the great plague of Athens. By depleting Athenian military personnel, depriving Athens of its charismatic leadership, and dissolving the system of ideals and principles that distinguished Athens from the rest of antiquity, the plague materially altered the outcome of the Peloponnesian War, which in turn deflected the flow of all subsequent Hellenic history.

Perhaps the best way to fully appreciate the weight of the plague's significance is to consider the following questions: How might the history of Athens and Greece have been different had the deft hand of Pericles remained in place? What would have been the effects on world history had Athens achieved victory in the Peloponnesian War? How might Western civilization have benefited from an extended Golden Age led by an Athens that was unscathed by protracted warfare? Only by considering the plague from these vantage points can one begin to appreciate the disease's full implication for Greece and for the subsequent development of Western culture.

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