Athletic Medicine, Training, and Politics in Ancient Greece: Galen vs. Gymnasticus

A culture whose political and military dominance spread over a millennium, the Ancient Greeks laid the groundwork both for modern medicine and athletics in the forms of Hippocratic medicine and the Olympic Games from the 8th to 5th Centuries B.C. Paradigms in their time, Hippocratic medicine and the Olympics have had lasting impacts on how society has come to practice medicine and sport. Over time, the desire to prove victorious in these games turned sinister, and by the 4th Century A.D. the Olympics had been abolished; laziness, bribery, and doping had corrupted the games’ sanctity. As contemporaries in the 2nd Century A.D., the Greek philosophers Galen and Philostratus shared many of the same concerns about the state of athletic training and medicine. Although Galen condemned the practice of employing gymnastês and paidotribês (athletic dieticians and trainers, respectively), Philostratus, in his work Gymnasticus, argued for their essential importance. The decline of Greek physical prowess, he agreed, mirrored Greece’s loss of political and military power due to Roman occupation; yet, he remained hopeful for a prosperous Greek future, which would include the restoration of the sanctity of sport, athletic medicine, and the athlete’s body.

Keywords: Ancient Greece, sports medicine, athletic training, Hippocratic medicine, Olympics

Figure 1. Referee watches Greek wrestlers in ancient Olympic games¹

Introduction

Often thought to be one of the most recent developments in the medical world, the field of athletic medicine has in fact existed since the earliest instances of organized sport. No one took this practice as seriously as the Ancient Greeks, whom many consider the pioneers of both disciplines, medicine and sport. As Dr. Spyros Retsas stated in a speech to the Directors of the National Olympic Academies, “The unique ethical, philosophical and clinical profile of ancient Hellenic Medicine is not a random event in the history of civilisation but the direct consequence of a culture that indulges in nature, excels in competitive sport, cultivates reason and respects the individual.” As a culture whose political and military dominance spread over a millennium, the Greeks laid the groundwork for these ideals of medicine and athletics in the forms of Hippocratic medicine and the Olympic Games, respectively. Both were preeminent entities in their domains at the time, and to this day have had lasting impacts on how modern society practices medicine and sport. Inherently intertwined in the rise of Hellenic culture, it stands to reason that these two disciplines have a much stronger relationship with Ancient Greek politics and society than is readily apparent.

In approaching this subject, one must first seek to illuminate how the growth of Hippocratic medicine impacted athletic training and dieting in Ancient Greece. In answer to this question, Philostratus’s treatise Gymnasticus serves as the primary source. Various secondary sources include medical journals, historical articles, and published works that provide context. One must also examine the impact that the Hippocratic Corpus itself had on ancient athletic training, a majority of which was centered around competition in the earliest Olympic Games. With their peak occurring in the 5th Century B.C., the games coincided with the emergence of the Hippocratic period. Before this time, there were very few organized sporting events in Ancient Greece, but with

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the growth in popularity of Hippocrates’s holistic view of medicine, which strongly promoted exercise and dieting, an emphasis on training in sport emerged. Unfortunately, however, the desire to prove victorious in these games turned sinister, and by the 4th Century A.D. the games had been abolished. The corruption of the games’ sanctity came in the form of laziness, bribery, and doping.

Figure 2. Philostratus (left); Heroicus, Gymnastiuces, Discourses 1 and 2 (right)

During the interceding period between the rise and fall of the Ancient Olympiad, there was an ever-increasing effort to maximize each athlete’s potential; this included refining the combination of foods they ate, methods with which they trained, and careful management of their Hippocratic “humors” (blood, phlegm, black bile, and yellow bile). Likewise, Philostratus described a distinction between an athletic trainer and a physician, illustrating a more complex dynamic in the ways the Ancient Greeks sought to remedy injuries sustained in sport. Yet, his argument in Gymnasticus had much larger implications than simply explaining the difference between the two specialties. Philostratus contested that sport and medicine were integral parts of

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society, and the fact that athletic medicine combined these two fields made its importance even more pronounced. Despite its flaws, he believed he should not doom athletic medicine to incompetency, as Galen of Pergamum had, but rather that he should address these issues in an open forum, with the future prosperity of Greece in mind.

Figure 3. Galen lecturing on anatomy in Rome⁶

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Literature Review

It is appropriate to expand on the idea Jeffrey Rusten and Jason König discussed in the introduction of their translation of Gymnasticus. Here, they state that the work is “an important landmark in Philostratus’ lifelong project of defending and exploring Greek tradition... a fascinating example of the richness and flexibility of the traditions of ancient technical and scientific writing as they were treated within Greek imperial prose.”⁷ When one approaches Philostratus’s text from this perspective, it is clear that it is far more profound than it may appear on the surface. The writing is more than a mere catalog of technical medical and athletic jargon. Instead, it speaks to a larger

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⁷Philostratus, Gymnasticus, 333-334.
phenomenon that Philostratus witnessed in Greece over the course of his life, a trend that ultimately included athletes gorging themselves at their trainers’ behest while neglecting true athletic improvement.

This decline of physical prowess, as Philostratus subtly suggested throughout the pages of Gymnasticus, mirrored Greece’s loss of political and military power as a result of Roman occupation, as Olympic competition “captures also the political dimension of the Olympiad as a Pan-Hellenic institution.”

Gone were the days in which sport reflected valor on the battlefield; sadly, it had become an excuse for luxurious overeating and an arena for bribery. Unlike his contemporary counterparts, however, Philostratus remained hopeful that the era of athletic glory had not permanently vanished from the Hellenic state. This is a major factor in why he was so unwaveringly optimistic in his discussion of athletic medicine. Hippocratic medicine and its interactions with sport created a divide in ideologies among some of the foremost minds on the subject, best explored through a close examination of Philostratus’ Gymnasticus. The personal biases of figures such as Galen against the practice of athletic medicine are evident in their writing. Likewise, there remains a bias in Philostratus’s work, but it is a positive one, hopeful for a prosperous Greek future, which would include the restoration of the sanctity of sport, medicine, and the athlete’s body.

Gymnasticus, interestingly, is the least famous of all of his works, others of which include his Heroicus, and his Discourses 1 and 2. The reason for this, as Rusten and König note, is likely due to the fact that the translation proved challenging to decipher because of its specialized medical and sports verbiage. This, it seems, has proved daunting for many scholars, as few invoke the treatise when discussing Greek athletics other than to provide specific anecdotes. They opt instead to use Galen’s widely known and prolific library of works to describe the ancient practice of sports medicine. Herein lies the reason why this controversy offers a skewed vision of athletic medicine in Ancient Greece. As contemporaries, Galen and Philostratus shared many of the same concerns about the state of athletic training and medicine, but they treated the practice itself with very different levels of respect.

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8Retsas, “Medicine and the Olympic Games of Antiquity.”
9Philostratus, Gymnasticus, 354.
10Philostratus, Gymnasticus, 333.
11Philostratus, Gymnasticus, 333.
Contrasting Galen, who considered athletic medicine inferior to traditional curative medicine practiced by physicians, Philostratus opens his Gymnasticus by maintaining that “athletic training [gymnastikê]... is a form of wisdom [sophia], and one which is inferior to none of the other skills [technai],” meaning that it could be “summed up by a treatise” just as the tenets of Hippocratic medicine had been. In using the term sophia to describe athletic medicine, Philostratus draws a distinct line in the sand in his refutation of Galen, refusing to gloss over the importance of gymnastês, who were mostly concerned with the healthy diets of the athletes, and paidotribês, who conducted the actual athletic training. The comparison of his doctrine to Hippocrates’s writings was meaningful, as the Hippocratic treatises had changed the way society viewed injuries and therapeutic medicine. After Hippocrates, “Injury was no longer considered a punishment by the gods. At the same time, temple offerings tendered in the hope of victory gave way to the athlete’s personal preparation based on a specifically modified lifestyle, diet, and training.” Medical care moved from mystical, in the hands of the Greek god of medicine, Aesculapius, to practical, in the grasp of Hippocrates.

Scholars have also made a direct connection between Hippocrates and sports medicine in the Greek physician Herodocus; it has been suggested that he was not only one of the first athletic trainers, but also the physician who taught Hippocrates himself the art of medicine. Depictions of this relationship were noted by Plato in his Republic, where he described Herodocus, in a rather surly manner, as “an athletic trainer whose health failed and who proceeded to make first and foremost himself, and then many others after him, miserable by a combination of medicine and physical training.” An article published in the Journal of the American Medical Association entitled “A Medical History of the Olympic Games” supported these characterizations, designating Herodocus as the first of the gymnastês. Likewise, scholars

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1Philostratus, Gymnasticus, 399.
2Philostratus, Gymnasticus, 399-400.
have called him “the first of the Greek physicians whose writings indicate a strong interest in physical rehabilitation... [whose concern] about the diet of his patients can probably be attributed to the intense interest in the proper diet for athletes.” Philostratus, then, may have seen himself as an heir to this tradition, revitalizing the ideals first offered by Herodocus and Hippocrates.

**Figure 4. Statue of the Ancient Greek philosopher Plato**

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In Rusten and König’s introduction to the translation of *Gymnasticus*, they note that trainers had a large role throughout all Ancient Greek sporting practices. Although a trainer’s actual day to day duties varied, he was almost always “well respected” and “viewed as an important part of the entourage of any star athlete in the Hellenistic and Roman periods... frequently mentioned in passing in victory inscriptions.” The editors even describe instances of some trainers returning to their home towns to seek political office, hoping to present themselves using their newfound fame and renown; one could perceive this development as some of the early signs of ulterior motives encroaching into athletic training and competition. Although Rusten

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21 Philostratus, *Gymnasticus*, 327.
and König do not make this specific connection, it is important to keep in mind the evolution of the culture surrounding athletic training that preceded Philostratus’s work. If examined closely, ancient athletic training is apparent even in how one views the ancient Greeks through artifacts today, as “sport influenced Greek civilization through the sculptor’s chisel, which so skillfully rendered that harmonious beauty of bodies observed in scenes from the competitions.”

The introduction also discusses the opinions of prominent Greek figures other than Galen and Philostratus, most notably Hippocrates. In the treatise On Regimen, with the practice of regimen being the main method of training and dieting for which gymnastai advocated, Hippocrates showed some support for the custom as well. A notable distinction, though, was that the authors of this era writing about the importance of regimen “would have identified themselves not as gymnastai but as philosophers or doctors.” Hippocrates was careful in stating his stance on the practice, “embracing the power of exercise to improve the human constitution but also keeping training for competition rather at arm’s length, stressing that the goal of exercise should always be the preservation of the correct constitutional balance within the human body.” Plato, meanwhile, expressed doubts about the benefits of organized athletic training. In his works, he brought into question the effectiveness and safety of the specific training methods that the gymnastai endorsed, with the editors noting “anxiety about the dangerous, unhealthy character of the athletic condition” in his works such as Republic. Centuries later, Galen echoed these concerns, condemning the practice of athletic medicine and training and delivering the harshest criticisms that the discipline had ever faced.

In the context of these notable previous works regarding sport medicine, Galen’s disparagement of the field seems to be exceedingly scathing, which indicates that his distaste was likely personally motivated, as well as a product of the era in which he lived. Born in 129 AD at Pergamum, and living until 200 AD, Galen, like Philostratus, matured well after Greece reached its political, military, and athletic peaks. The physician philosopher, jaded by his current state, devoted

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25Philostratus, Gymnasticus, 341.
26Philostratus, Gymnasticus, 341.
27Philostratus, Gymnasticus, 343.
28Philostratus, Gymnasticus, 342.
multiple works to decrying athletics and sports medicine, one of which was his *Protrepticus*. In an examination of what he deemed the important liberal arts of Ancient Greece (including medicine), Galen used what he deemed as “false arts” as comparisons, the “most false” of which he determined to be athletics. His views signify how much more pressing the issue of athletic training had become in the years since the earliest Olympic Games and Hippocrates’s writings. He felt the need to denounce sports as a tradition that “leads to a dangerous obsession with glory and also damages the health of the human body.” In another of his works, *Thrasybulus: Is Health a Part of Medicine or Gymnastics?*, Galen clarified that he had no problem with exercise or with those who exercised, but that his hostility was instead directed at *gymnastai*, who he believed falsely portrayed themselves as medical professionals.

This was the atmosphere surrounding athletic training and medicine when Philostratus published *Gymnasticus* in the 220s or 230s AD. The criticism of the practice had become so overwhelming that at the time that he wrote, “the kind of training that prevails today has so far changed the nature of athlete’s that the majority of people are irritated even by lovers of the gymnasium.” Philostratus, then, faced the daunting challenge of changing the narrative surrounding this field, while also acknowledging many of its shortcomings that had been vilified in previous decades. To do so, he had no other choice but to begin confidently with the statement that athletic training was *sophia*, a form of wisdom.

This view is in direct conflict with Galen’s. In coming out so strongly in support of sports medicine as *sophia*, Philostratus knew that he would be sparking controversy. He held firm, however, also pushing back on the notion of athletics as a “false art,” writing “What, then, should one think about the art of athletic training? What else except to believe that it is a type of wisdom combining both the art of medicine and the art of the *paidotribês*? Just as a physician helped improve an athletes physical condition by therapeutic means, so too did the trainer

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30Philostratus, *Gymnasticus*, 343.
33Philostratus, *Gymnasticus*, 401.
34Philostratus, *Gymnasticus*, 425.
through massage, diet, and other preventative measures.\textsuperscript{35} Philostratus, however, was not lured into a lengthy discourse on Galen’s dogmatism. Instead, after his effective introduction, he moved swiftly into a discussion of the history of athletics in Greece, harkening back to the glory days of Hellenic culture and sport.

For much of the first half of his work, Philostratus spends valuable paragraphs and pages orienting the reader to the rich history of athletes, athletic medicine, and their place in the legendary Olympic Games. That he devoted so much of his opening to the history of the practice indicates his fascination with the previous dominance of the Greeks in all walks of life, not just an isolated field. Without saying so explicitly, \textit{Gymnasticus} is a statement about the decline of an empire, as well as his blueprint for how to return to its dominant ways. Athletic trainers of his day did not need rhetorical expertise or a seat in political office, Philostratus explained; instead, they had to speak with purpose, motivation, and emotion to inspire athletes, practicing their art as it was intended to be done.\textsuperscript{36}

\textit{Figure 5. Embossment of Ancient Greek wrestlers}\textsuperscript{37}

By the time Philostratus was writing \textit{Gymnasticus}, “Roman conquest reduced the contests to the level of entertainment. Certain tests of nobility disappeared, and there was an increase in those contests where violence reigned supreme.”\textsuperscript{38} This was what he was rallying against. Athletics and medicine, he implied, should be more

\textsuperscript{35}Philostratus, \textit{Gymnasticus}, 353.
\textsuperscript{36}Philostratus, \textit{Gymnasticus}, 361.
\textsuperscript{38}Appelboom, et al., “Sport and Medicine in Ancient Greece,” 595.
than what they were reduced to under Roman occupation: they should harken back to Greece’s Golden Age. Yet, the author was able to find hope in the notion that no changes in the types of people who strove for athletic prowess had occurred. He stated quite the contrary, in fact, as “Nature produces all things the same as before, as she originally decreed... [and it is] not nature that has abandoned [athletes]... it is the lack of healthy training and vigorous exercise that have deprived nature of her strength.”39

With this, Philostratus did not shy away from placing the blame squarely on the trainers’ shoulders. Yet, he also indicated that the prevailing culture of his current Greek society was also to blame. One can see this through his frequent discussion of Spartan practices, which he considers with admiration; his first mention of them described their invention and popularization of the sport of boxing.40 Although he attempted to remain objective, through the context of his beliefs on honor and competition, the way in which Spartans used the sport of boxing to train for battle likely appealed to him. He saw athletic competition as a form of peacetime war, and believed that “the spirit of rivalry and confrontation inherent in man and previously unleashed in war, in ancient Greece came to be channeled into the practice of competitive sports.”41

In addition to describing the broader cultures which he admired, Philostratus was also sure to mention some of the most notable victorious Olympians in his discussion of sports history. It is in this area that he seems to differ in philosophy from scholars such as Plato and Galen. Although they were apprehensive of imbuing glory on the competitors and champions of the Olympic Games, it is clear that Philostratus had a great respect for these men. He did not stop there, however, stating that “these victories obtained by the athletes also belong—no less to the athletes themselves—to the trainers.”42 Furthermore, by invoking names of gods such as Prometheus and Hermes as the inventors of athletic training, he attempted to place trainers into rarified air; it was a divine practice, he suggested, that should not be abandoned simply because of human imperfections.43

39Philostratus, Gymnasticus, 403.
40Philostratus, Gymnasticus, 411.
42Philostratus, Gymnasticus, 425.
43Philostratus, Gymnasticus, 429.
In concluding his discussion of the rich history of Greek athletics, Philostratus transitioned to his ideas for a way to recapture competitive dominance for the future of Greece. In Chapter 25 he reverts the focus of the book back to the trainer himself; in doing so, the author gives his readers a prescription for how to restore what had become of the profession of athletic training. Philostratus preached that the ideal trainer be “neither garrulous nor untrained in speech, so that the effectiveness of his craft may not be reduced because of his talkativeness, nor appear too unsophisticated through being performed without proper speech.” By illustrating this, he made the point that the essential work of the trainer was not to be concerned about his potential future endeavors. On the contrary, it was to be focused solely on his trainee, using just the right amount of speech to maximize his or her potential; this, then, would ensure that the future of Greece would be kept in well trained hands for generations to come.

In advocating the training of children from such a young age, Philostratus indicated that his true desire actually might not have been purely a return of Greek athletic dominance. Although he would welcome it as a positive byproduct, in describing his perfect trainee he showed that he viewed the process of training a child as more than just a physical endeavor; his ideal outcome was that the child would become a confident and valiant leader. Again, one may note his reverence for Spartan ways; in striving to populate Sparta with as many warriors as possible, he wrote how one of Sparta’s leaders stated, “Let the girls exercise, and let them be allowed to run in public.” Although it was surely a fundamental right that women of the era ought to have enjoyed, Philostratus showed progressive thinking in his time by supporting the Spartan Lycurgus’s relatively unpopular views. As no women competed in events such as the Olympics, it is clear that he believed that exercise did not simply benefit athletic competition, but overall public health as well. This, it would then seem, was what Philostratus truly wished to develop from athletic training: a stronger foundation for a brighter Greek future.

Similar to much of scientific medicine conducted during this period, Philostratus relied heavily on the Hippocratic notions of a homeostatic balance of the humors, relating them to athletic training in the final third of his book. Furthermore, he discussed the topics as a

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44 Philostratus, Gymnasticus, 439.
45 Philostratus, Gymnasticus, 443.
concrete science with no room for dispute, writing “as far as the mixture of the humors is concerned it has never been disputed, nor would it ever be disputed, that the best type of mixture of all those that exist is the warm and moist one.” Yet, even when he discussed the foremost scientific understanding of athletic training at the time, he could not refrain from referencing in awe the “old gymnastikê” and the athletes who came before his era. They did not fret about the details of a diet, he explained, instead focusing on pure strength for competition, “some by competing for speed with horses and hares... others wrestled bulls and even lions by the throat.” With these larger-than-life, almost mythical tales, Philostratus painted a picture of a society ruled by muscle and vigor. Instances of athletes who gorged themselves increased as well, most notably Milo of Croton, who reportedly ate 20 pounds of meat, 20 pounds of bread, and drank 18 pints of wine per day. These were more in line with the athletes of his time, who had become “inexperienced in warfare” and “sluggish” since the introduction of the “art of flattery” in athletic training.

Figure 6. Milo of Croton depicted fighting a lion

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46 Philostratus, Gymnasticus, 469.  
47 Philostratus, Gymnasticus, 471.  
48 Philostratus, Gymnasticus, 471.  
50 Philostratus, Gymnasticus, 473.  
Just as trainers had a share in the victories of their trainees, Philostratus argued that the trainers held much of the blame for this degradation of Greek sport. By providing the luxury of a gluttonous diet, he contended that the trainers instigated and enabled the athletes’ greed, which “started the habit of rule breaking among athletes for the sake of money and the buying and selling of victories.” The trainers paid no mind to this corruption, however, as they too had become profiteers from sport: “they trafficked, as it were, the virtue of the athletes while profiting in their own affairs.” Debatably the largest error in Philostratus’s view, though, was their treatment of the boy athlete “as if he were a man.” Therefore, in his view the trainers of his day were actively contributing to the downfall of a prosperous Greek society; by overfeeding boys from a young age, they instilled values of overindulgence and laziness, which he attributed to bad performance both on the athletic field, in politics, and as a culture.

Physical evidence of this ancient attempt at “doping,” as it has come to be known, exists in the form of an archeological case study, published by Il Giornale di Chirurgia - Journal of Surgery. The article describes a skeleton of a man from the 5th Century B.C. that the authors of the article believe to have been doping as a means to better himself in athletic training. This is helpful in orienting the reader to the type of competitive advantages athletes of this era sought; though not technically illegal, it is the exactly the type of hedonistic act that Philostratus rallied against. This source provides concrete and tangible evidence to support the claims of other authors, both ancient and modern, who have asserted that ancient athletes used foreign substances to enhance athletic prowess in the same way that some athletes today use them. A series of chemical analyses, X-rays, and CAT scans were performed on the skeleton to provide the basis for the author’s claim. The study shows traces of arsenic in the body as well as increased bone mass and an early age of death (27-35 years), all of which point to use of doping for increased athletic performance.

52Philostratus, Gymnasticus, 475.
53Philostratus, Gymnasticus, 479.
54Philostratus, Gymnasticus, 479.
Beyond the practice of overeating as a form of “doping,” Philostratus continued by denouncing the use of “tetrad” training methods, which operated on a four day cycle, for their highly inflexible nature, again stressing the individuality of medicine, training, and learning.57 The fact that he campaigned for mental health treatment for athletes was surprising, given the perception of sports psychology as a relatively new and innovative field today.58 Finally, he concluded his book with one last homage to the culture of Sparta, praising, of all things, their sunbathing techniques; from the major to the minute, Philostratus withheld no examples of what he believed was the proper way to train.

Conclusions

Philostratus illustrated philosophies that were in some ways ahead of his time. For example, he stressed the individual nature of athletic training, and in turn medicine as a whole, meaning that what worked for some people might not work for others. Athletic training could not be “applied in a mechanical fashion,” as humans are living, breathing beings, not machines; he even acknowledged the mental health of athletes as a factor in training, a very forward-thinking notion for his time.59 This was in contrast to Galen’s De sanitate tua, which was as technical a work on medicine as could be found during this era.60 Gymnasticus, on the other hand, was more ideological; Philostatus refrained from discerning the specific technique of the massages for which he advocates, some critics believe, because he did not in fact know or understand these specifics.61 In reality, there were flaws to both men’s perspectives on sports medicine; as author David Potter notes, “it is no more in the interests of Philostratus, and the many who wrote about training before him, to admit that natural talent might trump the skill of the coach in determining a championship than it is in

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57 Philostratus, Gymnasticus, 481.
58 Philostratus, Gymnasticus, 487.
59 Philostratus, Gymnasticus, 367.
60 Philostratus, Gymnasticus, 367.
61 Philostratus, Gymnasticus, 367.
the interests of Galen to admit that a physical trainer might know more about good health than he does.”

This alone does not weaken Philostratus’s argument, however. He was advocating for a regimen, a set of values that he felt was lacking in his society. It was not a certain diet or a special muscle to massage, but simply a commitment from these athletes and trainers for which he was searching. Although he may have fallen victim to a misplaced sense of a nostalgia for an idealized era, with Gymnasticus Philostratus nevertheless launched a valiant rebuttal to the overwhelmingly negative contemporary interpretations of sport and athletic medicine. In the hopes of reaching a wider audience, he attempted to appeal to his fellow Greeks’ strong sense of cultural tradition, while simplifying a complex subject matter as to keep his writing accessible. Whether he succeeded in doing so cannot be stated with certainty, but his broader appeal to Greek scientific, political, and social sensibilities is apparent.

References


