

ANCIENT GREEK HELMETS

COMPLETE GUIDE AND CATALOG



BY
RANDALL HIXENBAUGH
&
ALEXANDER VALDMAN

Ancient Greek Helmets: Complete Guide and Catalog is a forthcoming book by Randall Hixenbaugh and Alexander Valdman. The aim of the authors is to produce the first ever comprehensive study of ancient Greek helmets. Rather than focusing on the helmets from one particular region, archaeological site, museum, or private collection, this work will compile all of the existing examples in one exhaustive analysis. The book illustrates and describes two thousand ancient Greek helmets from the Bronze Age through the end of the Hellenistic Age. The vast majority of these helmets have never been published before. Through comparative analysis of technological aspects, design, style, form, and function, in addition to archaeological context, inscriptions, and references in contemporary ancient literature and artwork, the authors have been able to identify the work of previously unrecognized ancient Greek workshops and armor smiths. The projected publication date is 2014.



Boar Tusk Helmets

Introduction

Warfare is as old as humanity. Weapons were among the first tools created by modern humans, and their material remains are found among the earliest finds in the archaeological record of mankind. Throughout all of human history conflict gave rise to invention. The first helmet was surely conceived soon after the first human was struck in the head by an adversary. More so than any other piece of armor, the helmet increased both the combat effectiveness of the soldier and his likelihood of survival in battle. The helmet allowed the combatant to sustain a blow and remain conscious, enabling him to fight back or run and fight another day. The helmet remained essential military gear from the Bronze Age through the advent of iron, and continues to remain in use long after the introduction of fire arms. Of all of the great variety of weapons and armor that have been introduced over the millennia, the helmet is virtually the only one that remains as ubiquitous on the modern battlefield as it was in antiquity.

Close combat is horrific, regardless of whether it occurred in the 5th century BC or the 21st century AD. The descriptions of battlefield conditions that have come down to us from the ancient literary sources and the images portrayed in ancient art are poignant in their timelessness. In many ways, the chaotic experience of men in the midst of battle has changed little despite the passing of several millennia. Certainly modern technology has introduced a multitude of novel means of cutting down one's foe, but in the end, the confusion, fear, and brutality of battle has

remained constant. A thicket of spear points, a hail of projectiles, a cloud of blinding dust, and a deafening din were what faced the men who took the field of battle in antiquity. What remains of these ancient souls, of both their triumphs and defeats, is often little more than a few lines in an ancient text or inscribed on weathered marble. It is the armor of the ancient Greeks and their helmets in particular, that offer us the most direct physical contact point to these men. Surely among the plethora of ancient Greek helmets that have survived are helmets that were used in the greatest battles of antiquity. One can imagine them shining brightly in the Sun on the battlefields at Thermopylae, Marathon, or Plataea when the fate of the Western World was to be decided in an afternoon. Among them are the helmets that were worn by the Spartans and the Athenians during the protracted and devastating Peloponnesian War, when a helmet proudly worn by a father at the beginning of the hostilities sometimes found its way to the head of a vengeful orphaned son fighting in the same conflict two decades later. We also have examples of the sophisticated novel headgear worn by the army of Alexander the Great as they crossed into Asia on their way to transforming the ancient Near East and consequently the history of mankind. In most cases the only actual tangible, albeit mute, witnesses to these epic events that have come down to us from antiquity to the present day are these durable metal helmets. The names of the individual combatants are almost entirely lost, the names and locations of the battles and even the wars are often forgotten as well. But some of the armor has endured, and it offers us a small but distinct glimpse of those who long preceded us.



Kegel Helmets

Surprisingly, the complete body of surviving ancient Greek armor has never been examined in a single comprehensive and comparative study. To that end, this work will attempt to thoroughly examine the development, both functionally and artistically, of the ancient Greek helmet from the Bronze Age through the Hellenistic Period (ca. 2000 BC - 30 BC). From this we hope to identify hitherto unrecognized workshops, regional styles, and ultimately the work of individual armor smiths. The Greeks did not invent metal armor or helmets, but they did perfect them in terms of form and function. Greek military industry was unmatched for several centuries in the first millennium BC. It was the unique and extraordinary social and political circumstances of the ancient Greek society that gave rise to an unprecedented middle class of landowning militiamen, hoplites, whose individualistic nature and loyalty to their homeland was effectively symbolized by the gleaming bronze helmets with high brightly colored horse-hair crests that they wore into battle. Whereas the few metal helmets that predate Greek civilization were among the luxury goods of a small aristocratic elite stratum at the pinnacle of their society,

the helmets of the Greeks belonged to a large, educated, land owning, politically important middle class.

Metal helmets first came into being in the early Bronze Age at the turn of the 4th millennium BC. Beginning in the fertile crescent of Mesopotamia and the Nile Valley, late Stone Age societies discovered that copper could be smelted from naturally occurring ore (azurite, cuprite, or malachite) to form a uniform malleable metal. But copper, a relatively soft metal, had its limitations with regard to the manufacture of tools and weapons. Within a few hundred years ancient smiths had discovered that by adding other metals, primarily tin, to copper in just the right proportion they were able to create an alloy that better suited their needs. Bronze proved to be a much more durable and workable metal and became the alloy of choice for all manner of goods for hundreds of years all over the ancient Near East, Mediterranean, and Europe. Eventually iron metallurgy was discovered in Anatolia midway through the second millennium BC. The smelting and working of this superior metal remained a closely guarded secret at first, but iron technology slowly spread, eventually reaching as far as Northern Europe by the beginning of the first millennium BC. Nevertheless, bronze remained in wide use as it was, among other things, lighter, less resource intensive to produce, less prone to corrosion, better suited for casting, more malleable, and generally easier to extract from the environment than iron. Within the context of offensive weapons, however, iron quickly supplanted bronze. The bronze spears of the Mycenaeans who fought at Troy, for instance, were prone to bending and lacked the density necessary to penetrate bronze armor and wooden shields. Bronze weapons were largely replaced by iron ones in the armies of the Greeks and their immediate neighbors by the 8th century BC. However bronze, being both lighter and less brittle, as well as less laborious and expensive to manufacture, remained the preferred metal for constructing armor in the form of helmets, cuirasses (breast plates), belts, shields, and greaves (shin guards). The Greek city-states of the Archaic and Classical periods were in a state of continual competition with one another over resources, trade routes, and land. The Greeks were also under constant external pressure from the Persians, Etruscans, Carthaginians, Illyrians, and Scythians on all sides of them. This near continuous state of war, by necessity, spurred invention. The Greeks came to excel at military technology just as they had in so many other areas. For several centuries, the city-states of Greece were unmatched by the contemporary civilizations of the ancient world in the development of offensive weapons, armor, siege craft, and naval technology. It followed that their military strategy and tactics also became far more advanced than that of their enemies.



Corinthian Helmets

Ancient Greek helmets are of great interest for a myriad of reasons. A large but finite amount of them have survived to the present day, perhaps as many as two thousand examples in all, more than enough to allow us to discern the broader picture of their historical development. Many have been unearthed through careful archaeological excavations enabling us to compare them with contemporary finds and date them with some certainty. Many of them convey to us in some way the taste of their ancient owners, members of the Greek citizen militia class known in antiquity as hoplites (οπλιται). The ancient Greek term *hoplon* (οπλον) from which the term hoplite derives was initially a somewhat vague term for gear or equipment. Initially the term had an agrarian connotation, but later it was used exclusively to refer to gear within a military context. Eventually the word *hoplon* came to refer specifically to the large round shield that every hoplite carried in combat. The shield itself, however, was also known to the Greeks as an *aspis* (ασπις). By the end of the 8th century BC, the Greek hoplite and their distinctive close-order formation, the phalanx, and the tactics predicated by this troop type were firmly established in Greece. The hoplite phalanx, virtually impervious to the infantry formations fielded by rival nations, was to remain the preeminent fighting force in the Mediterranean for nearly four hundred years. It was for the hoplite that Greek helmets were meticulously designed and manufactured. They were made to order, one at a time, with great attention paid to detail with regard to both function and aesthetics. Greek armor smiths were sometimes portrayed on ancient vases, but otherwise we know nothing today of specific ancient Greek armor smiths or their workshops. The body of surviving helmets displays both great diversity of design as well as exact duplication of more prevalent types suggesting that there were only a few major workshops and many peripheral ones. A number of helmets bear ancient inscriptions, often a dedication to a patron god or goddess in the name of a victorious army, or naming the defeated army from whom they were taken as spoils of war. Some are simply inscribed with a soldier's name. Many of them show battle damage and sometimes ancient repairs or modifications. Others are twisted, crushed, or scarred by jarring holes where they were once nailed to temple or sanctuary walls by victorious troops upon returning home. As state of the art examples of Greek military technology that conveyed, both power and rank in antiquity, their value was intrinsic. A panoply of armor was an indication of a man's significance within the ancient Greek state. These helmets were not handed out to the conscripted landless urban poor, nor were they made exclusively for the members of a small aristocracy. Rather they were the very emblems of the independent, land-owning agrarian middle class men that made up the political majority of the ancient Greek city-state. These were men who of their own volition took up their own arms to defend their own land. The ideals of rational self-determination that these ancient Greeks initiated remain at the very core of Western values. The helmets these citizen-soldiers owned were not just pieces of utilitarian armor. They were emblems of their service to the state and of the state's dependence upon them. Having survived not only the rigors of war but also the ravages of time, these objects offer silent but vivid testimony in bronze and iron of the crucible from which Western Civilization sprang.

It is the primary goal of this study to thoroughly catalog all of the ancient Greek helmets that have come down to us, illustrating as many of the numerous variations as possible, allowing a comprehensive comparison of the subject which will hopefully spur further more in-depth study of this fascinating subject. Surely some examples have been overlooked, but nearly 2000 helmets are identified here. Our appreciation of the helmets themselves comes in many forms. One can imagine the helmet as it appeared when it was first made and initially handed from the armor smith to its first owner. One can often detect the wear and occasional modification the

helmet received on campaign. One sometimes finds evidence of a mortal blow or minor damage that has been repaired. More often we see what appears to be deliberate damage, caused when the armor was stripped from the corpse of a fallen adversary or intentionally disfigured before the helmet was put on display as a trophy. An inscription might tell us a great deal about where a helmet has been, even if its provenance is not known. Likewise, the patina and condition of a helmet often convey to us the circumstances of it surviving the centuries, whether it was found in a river, the sea, or buried in the ground. In the best case, we may know the exact find spot of the helmet, whether it be from a temple dedication, or tomb.



Illyrian Helmets

The present work focuses specifically on Greek helmets. That is to say helmets produced in the ancient Greek world, including its city-states, colonies, and peripheral neighbors, throughout the Mediterranean and Southern Europe from the Bronze Age through the end of the Hellenistic Period (Ca. 2000-30 BC). This includes, as they are commonly known, the Kegel, Illyrian, Corinthian, Chalcidian, Attic, Phrygian, Boeotian, and Pilos type helmets as well as their numerous variants. Contemporary helmets of the independent Etruscan, Celtic, Persian, Assyrian, and Scythian cultures will be considered, but they are not included in the catalog. The so-called Italo-Corinthian type for instance, though clearly derived from the classical Greek Corinthian type, was manufactured almost exclusively by the Samnites and belongs to the Italian tradition and will therefore be excluded from the present analysis. Similarly early Roman Republican helmets are beyond the scope of this study. This work will focus primarily on the hard evidence of the actual helmets that have come down to us. Considerably less emphasis will be given to the helmets as they are portrayed on numerous ancient Greek vases, sculptures, coins, and gems. The surviving ancient literary accounts will be given close consideration. Depictions of hoplites on ancient Greek vases exist in the thousands and have received much attention from scholars, so much so in fact that vase depictions are often used to illustrate ancient weapons and armor more often than the actual surviving objects themselves. Contemporary depictions such as these are often astonishingly accurate and therefore useful in recreating the crests, attachments, and straps that because of their organic composition are rarely preserved. But in all media, the ancient Greek artist was occasionally prone to producing unrealistic or anachronistic representations of ancient Greek helmets as well. As such, contemporary images of ancient Greek warfare must be treated with some caution especially in establishing dating. Furthermore, this study will focus particularly on the helmets as opposed to the other elements of Greek armor. The reason for this is that compared to the helmets, very little else of the hoplites' panoply have come down to us. The large *hoplon* shield for instance, which was of very standard form, is rarely preserved, perhaps less than a few dozen examples are known. Bronze cuirasses or breast

plates were worn in the Archaic Period but by the end of the 6th century BC, with tendency toward a lighter less restrictive panoply, they fell out of use. The Classical Greek soldiers' typical defensive body armor, the linen corselet, rarely survives even in fragments. Metal studs or epaulettes are sometimes preserved, but the hoplite corselet, being made primarily of organic material, is largely lacking from the archaeological record. The metal cuirass reappeared on the ancient battlefield during the 4th century BC, when cavalry became a more important component in the armies of Hellenized Southern Italy and among Alexander the Great and his successors. Other pieces of metal body armor were worn, but by the time of the Persian wars (490-480 BC), these had mostly fallen out of favor. The bronze shin guards or greaves, however, did remain in wide use though the Archaic, Classical, and Hellenistic Periods. Some greaves are rather elaborate, but on the whole they are of standardized form and change little over time. All of this ancient Greek armor is beyond the rather narrow scope of this study, the focus of which is the helmets of the ancient Greeks and the individualistic *ethos* of the Greek martial spirit which they embody.



Chalcidian Helmets

The method of illustration employed in this study deserves explanation. The ancient Greek helmets that have come down to us are now scattered widely among numerous public and private collections worldwide. A great many examples have never been properly published. Most of the scientifically excavated helmets are published only in obscure excavation reports that are largely inaccessible to the general public. Similarly, many examples housed in museums all over Europe and the Mediterranean are only able to be viewed first hand. Many recently discovered examples reside out of public view in museum storerooms awaiting further study and conservation. A number of privately owned helmets are known only from auction or antiquities dealer catalogs. Among the small percentage of the helmets that have been properly cataloged and published, there is a considerable inconsistency with regards to the quality of the images published. It was decided that the best way to illustrate the helmets would be to avoid using images of varying quality and instead rely on technically precise and chromatically accurate gouache paintings of each example based upon first hand examination, and or numerous color photographs. The aim is to illustrate the objects as consistently as possible and accurately render the condition of the piece and the patina of bronze as it actually appears firsthand as well as the details of incision work, inscriptions, damage, or repairs which are often difficult to capture in a photograph.

The catalog, which forms the core of this study, was compiled with as much information as was possible for the author to obtain at the time of publication. In many cases, measurements

of the helmets were unavailable. More often than not, exact find spots for the individual examples are not known and only anecdotal references to the place of discovery are provided. One must bear in mind that many came to light before the advent and implementation of modern archaeological science. A number of the helmets addressed here are privately owned, and their present locations are not known. Likewise some scientifically excavated and published examples are held in museum storerooms and are not readily available for examination or seem to have vanished all together. Even among the helmets in established museum collections, images are often hard to obtain, and the basic data with regards to provenance, dimensions, and condition can be difficult to acquire. This catalog is as precise as the current state of the subject allows, the focus being to publish a comprehensive comparative analysis and not a detailed study of each example. Although the aim is to disseminate as much information about as many ancient Greek helmets as is possible, it cannot be considered a true *catalogue raisonné* of the subject as certainly a number of examples will have been overlooked. Nevertheless it is hoped that the present work will serve to advance our understanding of the subject and spur further scholarship.



Hellenistic Helmets