Cavalry in Hellenistic Greece

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CAVALRY IN HELLENISTIC GREECE

By

John G. Cebalo

Submitted in partial fulfillment of the requirements for the Master of Arts degree in the Department of History
Northern Michigan University
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ABSTRACT

This paper was originally intended to be a purely tactical study. It was for this purpose that the works of the ancient authors were read first. However it was found that though cavalry tactics varied from battle to battle, they were, in essence, but multiple shadings of the same basic principles.

After a preliminary examination was made of secondary sources, it was found that the changing economic and social situations in Hellenistic Greece caused many variations, not in tactics, but rather concerning who was a cavalryman, and further yet, which states possessed viable mounted arms. And since the situation of the Hellenistic cavalry powers could not be fully appreciated without some examination of the position of cavalry in earlier eras, some attention had to be focused on these times. As a result, extensive use was made of the interlibrary loan facility. Works covering the entire span of Greek history were read, not only to help clarify the situation for the author, but also to help weave this, the final episode, into the overall story. Examination was also made of available periodicals, but little was gained from this.

This work then, is a study of all the factors, historic, geographic, social, economic, and tactical, which lead to the formation of the cavalry powers of Hellenistic Greece.
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INTRODUCTION

This paper is a study of cavalry in Hellenistic Greece. In order to fully understand this era some attention must first be paid to earlier times; pre-Alexandrian and Alexandrian Greece.

The section on pre-Alexandrian Greece includes the following: The early development of cavalry tactics on the peninsula is traced. The knights class of Athens is surveyed in order to typify the situation as it existed in most Greek cities. Attention is also paid to Thessaly, the earliest cavalry power in Greece, along with the general scope of pre-Alexandrian cavalry warfare.

The second part, on Alexander and the Successors, covers the following: The rise of Macedonia, and the cavalry tactics of Alexander are explored. The possibilities of the elephant as a substitute for cavalry is examined. A look is taken at the infantry to cavalry ratio of different armies. The uses and misuses of Alexander's principles as applied by his Successors are looked at.

The final segment begins with a survey of the general economic and social conditions of post Alexandrian Greece. Attention is focused on the specific social and political situations in Achaea, Aetolia, Sparta, and Macedonia. Mounted mercenaries are the next topic of consideration followed by an examination of the leadership variable. Finally, the specific tactical characteristics displayed by the Aetolian, Achaean, and Macedonian cavalry are reviewed.
Warfare in ancient Greece went through several phases. But the changes were only of the secondary and not of the primary variety and in most cases were short lived. For twelve hundred years the infantryman, the heavily armed infantryman, dominated warfare on the peninsula. This is the one concrete fact that stands above the ever eddying and shifting tides and currents of ancient tactics. From the Homeric hero who fought, "helmet to helmet, shield to shield," to the Macedonian phalanx at Pynda, this single truth runs through Greek history.

Before the hoplite reforms revolutionized warfare in the seventh century, battles were often the chaotic affairs described by Homer. For the muscular man behind the body length bullhide shields, it was not deemed necessary to keep in tight formation, individual skill and initiative being stressed instead.

The predominance of the heavy infantry was sustained for two reasons. First, Greek society was heavily tradition bound. Homer and the Homeric sagas were taken as gospel, Homer wrote of the days when men were men and a real man fought with a shield and spear. Archers, for example, no matter how useful, were looked down upon. Although tradition was important, another aspect of the situation weighed heavily on the Greek consciousness, stark reality. The reality of the situation was this; the hoplite panoply was expensive, and the cost of procuring this equipment restricted the extension of the warrior class to well to do farmers and merchants.

The lightly armed infantry had its day. In mountainous Greece a javlineer or slinger could easily outmaneuver and wear down a heavier opponent, providing of course that the opponent had no light troops of
his own. But light troops by themselves could never win a battle. And since the propertied class, in states where warfare on land predominated, had traditionally been responsible for the defense of the homeland, the lightly armed poor, being unable to contribute significantly to the war effort, were excluded from political privilege.3

The lower classes, which until classical times had played the most minor of roles on the battlefield because of their inability to equip themselves in the accepted fashion, gradually, after the Athenians had proven their worth as peltasts, began to grow in importance. The increasing number of light troops did not, however, mean a decrease in the number of heavy armed. As has been shown, although the light troops proved to be, if properly handled, of great importance, it was also obvious that they could not go it alone.

Greece is a very poor land with the spectre of famine always hanging just over the horizon. Greek soil, of necessity, had to be cultivated year after year. This cultivated land was in the fertile valleys and these precious few acres had to be defended at all costs. True, a light infantry force in a mountainous area could hold its own. On a plain, however, it could not stand up to the charge of a heavily armed wedge of spearwear. For the lightly armed the only life-saving solution would be retreat to the surrounding mountainsides. The hoplite however, would not bother to pursue, for what he was interested in, the harvest, now lay open before him. To cut off the enemies food supply, to destroy his crops, was to destroy him. Logically, to stop a hoplite force, one needed a hoplite force.

In the eighth century the rise of the new urban commercial class,
broke the power of the ruling aristocracies. These political changes were hastened by the introduction of new military equipment and tactics from Caria. With the evolution of hoplite warfare and its restricted and closed tactical formations, the combat usefulness of the chariot-borne noble rapidly diminished. This declining tactical influence was coupled, and directly related to, his sinking political influence.  

Aristotle spoke of Geometric Age communities which were politically dominated by aristocratic horsemen. These were not cavalrymen in the conventional sense, but more in the nature of dragoons, heavily armed infantry who used horses for transportation to the battlefield, and once there, engaged as an infantryman. They were accompanied by mounted squires, who kept their masters horses and spare javelins for them, while the master fought.  

Although these early efforts at mounted warfare might appear to be somewhat cumbersome, as indeed they were, they also left the Greeks feeling dissatisfied, but at least it was a beginning and it did encourage further development along equestrian lines. But restrictions would never cease to accompany the mounted man on the peninsula. There were no horse-shoes and in stony country a mount would quickly go lame. Stirrups and saddles were also lacking, and in rough country a rider and his horse were soon parted. On campaign horses needed a great deal of fodder and water, and since the Greeks were in the habit of campaigning only during the fairer months, when water was scarce, the horses often went thirsty.  

Although the word "horsebreeding" usually envisages, large open lands and although the Iliad refers to Argos as "horse pasturing" and Pindar refers to it as the "land of horses," yet the Argives, historically
never possessed a cavalry arm worth mentioning. The probable reason for this could have a great deal to do with another word, with which the ancient poets used to describe, the plain in the Argolis: the word is "thirsty."

Conditions in Thessaly however were much like those of the Macedonian steppes. It has a hot-cold type climate, but unlike the Argolis, many rivers scribble their signatures across the landscape, and these conditions, plus its extensive plains make Thessaly ideal horse rearing country.

The plains were fertile also, and in production of all kinds of cereals Thessaly easily surpassed the rest of Greece.

A major cavalry power, in the latter part of the Hellenistic Age was Aetolia. The Aetolia Thucydides describes is wild and backward, but the potential that existed here, although it lay dormant through the early Hellenistic period, was always there. Strabo described the district: "The Old Aetolia was the seacoast extending from the Achelous to Calydon, reaching for a considerable distance into the interior, which is fertile and level; here in the interior lie Stratus and Trichonium, the latter having excellent soil. And again he refers to "... Plemon ... situated near Calydon in a district both fertile and level ...".

The general economic condition of Ancient Greece was never really good. There was a lack of almost everything except people. Few regions were self sufficient and warfare naturally disrupted the flow of goods. With the coming of the Peloponnesian Wars the situation deteriorated even more. There existed such a shortage of foodstuffs that Rostovtseff classifies the situation as "catastrophic." There were few rich and many poor, large estates and famine. Money was scarce.
This grim economic portrait would be to some extent, duplicated in the late Hellenistic period, and it would prove to be at both times, a major factor concerning the size of a states cavalry arm. For few people in either period could afford to room and board at least one horse, and considering the conditions of most states, if there had been an excess of horse flesh, it does not seem beyond the realm of possibility that it would have been used as a dietary supplement.

A social study of a typical pre Alexandrian city will be a good illustration of the cavalry class in Greece at this time. The society to be under magnification, is Athenian.

Xenophon expected that the typical Athenian knight of the fifth century would have a town house and an estate in Attica, a farm from which he would derive his income. There was no taxation, as it is now known, in Athens, but rather public duties. The duty of the knight was to provide his own horse and arms. In Solon's four class system, the second class was actually known as the knights class, and they were expected to meet the standards specified above. During the fourth century however, the economic spectrum was being refocused, and a man's true worth was now measured in hard cash, not land. It was not uncommon to be a member of the highest property class and at the same time stand on the brink of poverty. The knight, however, was still expected to provide for himself as before, and since many undoubtedly could not, the class itself must have shrunk. Because the law did not keep up with the changing economic situation, class replacements were unheard of.

There was another reason however for the small knights' class, and why it was not salvaged, let alone enlarged, and this was political. The
cavalry had supported the oligarchic dictatorship of the Thirty. Since a repetition of this incident was among the last things desired by the democracy, the cavalry, although allowed continued existence, lacked enthusiastic support.

As the years slipped by, the conditions that the knight experienced became increasingly depressive. Citizens with large cash reserves showed little inclination to serve their city on horseback. Duty in this arm was now actually looked down upon, and considered to be the easy way out of one's obligation. Added to all this were rising prices, and a poor knight might have to invest as much as half years' income on a horse, not to mention his squire. In later times these crushing expenses were partly borne by the state, but by then discipline within the arm had become so slack that it became almost tactically useless.

The situation of the fourth century Athenian knight is probably typical of the position held by knights in other cities such as Argos, Corinth, Sicyon and Thebes. As restricted democracy (if not oligarchy) replaced tyranny, and the economic situation changed, with the base of power shifting also, it must have seemed excellent political insurance, to have the knights' class as small as possible. Sparta of course was an exception. No knights class existed in Laconia, and admittance to the small cavalry arm was subject to open competition. Besides, the Spartan was renowned as a foot soldier, and far be it from a Spartan to break with tradition.

The premier cavalry state of pre Alexandaria Greece differed from its compatriots not only socially, but also geographically. Or as seems more appropriate, its geography dictated its social structure. Thessaly
was 3,000 square miles of plains, surrounded by mountains, open, yet isolated. The land, naturally partitioned by its many rivers was the scene of a vast feudal society, large landowners ruling over a serf population. Although the Thessalians had in their possession a constitution, the tagea, the power of the ruling aristocratic families was in reality, practically unlimited. Intense rivalries between the lordly families dampened any feeling of unity that might have existed, and substituted for it intense particularism and loyalty for the local aristocracy. Each Lord, of course, had his own army, and since the country was naturally prosperous and ideal for horse breeding, the armies were to a great extent mounted. Indeed to the average Greek, the wealth of Thessaly proverbial, and the first victory in horse racing at Olympia went to a Thessalian. Although by the close of the fifth century there was still no sense of unity, and only isolated city states, there was no land hunger and no social problems. The situation was fluid, but stable.

Thessalian was synonymous with horse. Horses and horsemen were common on Thessalian coins. An early army sent to the aid of Athens consisted entirely of cavalry, and this is typical. These early cavalry armies were made up entirely of the nobility and their mounted retinues. Their object was usually booty.

The first Thessalian to make a concentrated effort to curb the power of the Lords was Jason of Pharnae, and for this it was necessary for him to employ a standing army of 6,000 mercenary hoplites. The aristocratic cavalry and the untrained hoplites of the few cities were not only tactically but politically outmatched by Jason. Jason's premature demise put
an end to what surely would have been a Thessalian challenge for supremacy in Greece. It is unfortunate too, for the composition of Jason's army would have been unusual for pre Alexandrian Greece. At a time when the cavalry arm of most Greek cities was if not almost nonexistent (Argos, Corinth, Theles, Sicyon, Sparta), at least small (Athens), a Thessalian army composed of 25,000 hoplites and 9,000 cavalry could have proved a shock.

Thessaly then, was the exception. But Macedonia too, although few details are known of its early social structure, seems to have been a quasi-feudal society. The Macedonians had a king, but the early kings were just figure heads. Macedonia will be discussed later; as for now, certain conclusions can be drawn from what has just been shown. To begin with, a simple statement of fact seems indicated: I shall call this, with due modesty, Cebalo's Theorem, (with reference to Europe). The theorem then, is \( A = H \), Aristocracy equals Horses. From the chariot-borne nobleman on the plain at Troy, through the cavalry of Archaic, Classical and Hellenistic Greece, to the feudal knight, the formula runs its course. But perhaps another letter could be added to the formula, \( A = H = D \), Aristocracy equals Horses equals Disunity and this especially applies to pre Alexandrian Greece. The areas of Greece where comparative political stability reigned were the lands that were speckled by city states, where either hoplite democracy or monarchy dominated. Here there existed, in a sense, unity. Although stability existed in Thessaly and Macedonia, there was little unity, and their was almost no progress.

In pre Alexandrian Greece, there were basically two opposing schools of thought regarding cavalry tactics. Circumstance fathered both of them,
and divided them, simply, between the have's and the have not's.

Again, Athens is typical of a city in the negative category. Due
to specific geographic and social conditions its knight's class was small,
and since its means were slight, its outlook was also proportionally
reduced. Xenophon speaks of cavalry in terms of patrols, reconnaissances,
ambushes, raids and attacks on stragglers. He feels that the cavalry
should learn from the behavior of the wolves and kites. Or in other
words, cavalry should only be on the periphery of the battlefield.

Thessaly and Macedonia were states at the opposite end of the spectrum,
and likewise the responsibilities assigned to their cavalry were correspond-
ingly larger. Since few particulars are known of early Macedonia, a brief
campaign history of the Thessalian cavalry will serve as an illustration
for both. The history of the Thessalian mounted arm is long and brilliant,
and the Thessalians had established themselves as acknowledged horse masters
very early in Greek history. In the seventh century they helped Chalcis
defeat Eretria in the Euboean War, and in the early sixth century they were
participants in the first Sacred War. Although the Thessalians were the
first to demonstrate to the other Greeks the potential of cavalry, they had
in turn, demonstrated to them, that their potential was limited. In the
later fifth century they were defeated numerous times on terrain favorable
to cavalry by hoplites in massed formations or within prepared positions.
The Greeks soon realized that since the Thessalians lacked an effective
infantry force, a solid base around which to operate, a Thessalian cavalry
charge was strictly a one-time hit or miss proposition. This is not to say
that the Thessalians were proven to be totally ineffectual, far from it.
In 455 Athens sent a hoplite army to ravage Thessaly. The Thessalian
cavalry however was omnipresent and prevented the Athenians from dispersing and going on foraging and looting expeditions. The Athenians, forced to conduct a defensive campaign, retired, having accomplished nothing. In 353 in another Sacred War, the Thessalian horse showed what it could do when operating with solid infantry support, a Macedonian phalanx, and proved the deciding factor in the Phocian defeat.

The Thessalians, although undisputably the premier cavalry power in pre-Alexandrian Greece were plagued by one glaring weakness, the lack of effective infantry. The best unsupported Thessalian cavalry could hope for, as shown by the Athenian invasion, was not victory, but rather the prevention of an opponents victory. Indeed it was this lack of infantry that would have put a curse on any attempt at Thessalian expansion, even had there been a temporary union of the noble families. With sound infantry support, as with Philip's phalanx, they were unbeatable. But they would never succeed in having both excellent cavalry and solid infantry. This is a most delicate combination, and can usually be created and harmonized only by one with the ability of a Philip or an Alexander. Thessaly's blessings were double edged ones, the origin of their prominence, geography, would in the end turn on them, and they would no longer be the masters, even of their own plains.

In pre Alexandrian times then, cavalry warfare had been confined largely to small patrolling and raiding actions. When two armies were about to enter battle, the cavalry forces from both sides would usually meet between the two armies, in a simple infantry-like fight, the vanquished being pursued as far as their friendly lines by the victors. Both forces then retired behind their respective bodies of infantry and waited for the
hoplites to slug it out. Since a city's cavalry force was the source of great civic pride, undoubtedly it was an ego boost to find that the darlings of one's city could out duel the darlings of the other city, and this seems to have been the chief logic behind these actions. The infantry was there to fight, why not the cavalry.

Organized cavalry flanking movements were not used. There were two reasons for this: The first major conditions was geography. Flat lands in Greece, with the exception of Thessaly, are rare. The virtue of the light infantryman was his maneuverability. The virtue of a cavalryman lay in his speed. As the light infantryman, the horseman could easily outmaneuver a hoplite formation. Unlike the light infantryman he could not retreat to topography that was inaccessible to the hoplite. Wherever he could ride, the hoplite could march. To be effective the horseman needed room to maneuver. In Greece this was lacking. In a head-to-head infantry-cavalry confrontation the horseman would loose. On a mountain road a cavalry column could be held up with greater ease than a hoplite column. The hoplite relied on his own armor and the shield of the man at his side for protection from the peltasts' stones and javelins. The horseman was at a great disadvantage, protected only on one side by a shield, his horse completely exposed to a peltasts wrath. To be effective a cavalryman needed the opportunity to make a flank or a rear attack, and then have a viable route of withdrawal. In Greece, these conditions were hard to meet.

For scouting, cavalry proved of value and as an instant deterrent for enemy scouting and raiding parties. These are positive military qualifications and definite ones. The chariot had outlived its combat
usefulness and if cavalry only had places at ceremonies they would never have been found on the battlefield. This leads to a second geographic consideration, again, productivity of the soil. Where a city is living at a subsistence level, living luxury items are seldom tolerated. There is a difference between amassing wealth and amassing non-productive live stock. That cavalry were useful had been shown. But that their usefulness was limited is proven, in part, by their small numbers.

The second reason for the lack of flanking actions seems to have been simply that it slipped the minds of everyone involved. That such things were possible is not hard to understand when one considers that it was not until the time of Epaminandos, that the en masse attack on that part of the enemy line that was susceptible to stress, was first attempted. So it is not surprising that the cavalry arm which actually, in itself, was rather new, should still be in a stage of tactical infancy, when infantry had been used in the same massed head-to-head formations for a thousand years.

The role played by cavalry was unchanged until late in the fourth century. In this brief period the mounted arm flourished as never before and never again. The cavalry's rise to prominence had a distinct meteoric quality about it, the aurora was born, radiated, and waned, all within the space of thirty years. The origin of its catalyst came from a very unlikely place, the wilds of Macedonia.
ALEXANDER AND THE SUCCESSORS

Macedonian society was of the feudal-tribal type. The land was divided between a few large estates and many small landowners who were in fact the backbone of the country.\(^4^3\) The territory was called a kingdom, but the authority of its early monarchs was highly questionable. Although the cavalry played a prime role in Alexander's conquest of Asia and the quarrels of his Successors, its political influence had recently declined. During the fourth century the Macedonian kings created an infantry force from among the free yeomentry who made up the mass of the people, in part to check the power of the aristocracy, who previously, as in Thessaly, had provided the only effective military force.\(^4^4\) In essence this is the same thing. Jason of Pharae attempted to do with his 6,000 mercenary infantry. However, once Jason was assassinated, all his efforts came to naught; in Macedonia on the other hand there was at least the pretense of royalty, and if one king stumbled along the way, there was always another to carry on. In Macedonia, as in Thessaly, there existed a most unlimited energy potential, but this potential that hovered about the plains was of the multiple nuclei variety, and it was not until Philip that it could be captured and concentrated.

Philip's son, Alexander, is remembered as a tactical genius. And tactically speaking, his influence was felt on the Hellenistic world for two hundred years after his death. Granted, Alexander was an innovator and experimenter and he never stopped juggling the composition of his phalanx. But his main impact had been felt in cavalry tactics. Simply, Alexander changed the primary role of the cavalry. From duties on the fringe of the battle Alexander shifted the main burden of winning the battle from the infantry to the cavalry. This move had no historic precedent
and was to Greece, revolutionary. It was also completely successful—
but it was successful in Asia, not in Greece.

An actual cavalry attack might take one of several forms. A knight
could ride up to a hoplite formation and either thrust with spear or
hurl a javelin; however in doing so, whether he stayed to fight or turned
to retreat, his mount was vulnerable to any spear, thrust or hurled, from
the formation. The horses used by the Greeks were too small to be
armored so this difficulty was never satisfactorily settled.45

The alternative was the timeless frontal attack. These shock
tactics seldom succeeded, for the rider was just as likely to be unhorsed
or have his mount impaled beneath him, as he was to trample the opposing
hoplite. For a shock attack to be effective, two conditions must first
be met: The rider must be an excellent equestrian and he must have an
undivided resolve to advance. Under the leadership of Alexander and most
of the Successors these demands were satisfied. However, the enemy
also needed to cooperate to a degree. A weak spot in the line must be
offered, either a numerical disadvantage, or troops of questionable
morale. And, as for the attackers, they needed the cooperation and un-
flinching support of their infantry.46 Of all the successful cavalry
charges Alexander made in Asia, not one of them was made against heavily
armored Greek mercenaries. If a breakthrough attempt was successful,
unquestioned leadership and discipline were required to halt the charge
after the maximum effect had been achieved, and to reform and go wherever
assistance was needed.47 In the future, battles would be lost because
of "over-pursuit," but Alexander never made this mistake. More than once
he rode a horse into the ground, but this only came after the battle had
been decided.
Alexander's swiftness, decisiveness and accuracy are well known. If Alexander ever made any tactical mistakes they are not apparent. He used his cavalry for three purposes, to fight enemy cavalry, to attack infantry in the flan and rear, and to break the line. For Alexander the last of these was the most important, and the first the least. He would delay the cavalry charge until just the right moment, and then pounce. His Successors usually made the mistake of opening a battle with a charge, or at least committing their cavalry to early. Added to this was the fact that the charge was usually made against troops who were armed after the Macedonian fashion, while Alexander attacked soldiers armed as Persians. But perhaps the most important reason for Alexander's success is also the most fascinating because at first glance it seems so obtuse. The Macedonian cavalry achieved such a high degree of success because of the infantry. Without the backing of the solid phalanx it is questionable if even Alexander could have succeeded. But one must keep in mind that the phalanx was in large part a reflexion of Alexander, so the proposition in itself is somewhat ambiguous.

An engaging sidelight to Alexander's campaign is supplied by the composition of the allied cavalry. Although many cities provided only token equestrian aid one state provided assistance in depth, Thessaly. This is of interest for two reasons: First, Thessaly was the logical choice, but since logic is many times sparingly applied by history, this in itself is somewhat of an event. And second, for the comparison, on equal terms of leadership and infantry support, of the fighting qualities of the Macedonians and Thessalians. Alexander's line of battle consisted of a containing and striking wing, the Thessalians were used as light
cavalry and were stationed on the defensive wing.\textsuperscript{49} Alexander never hesitated to use them and treated them as the equals of the Macedonian cavalry.\textsuperscript{50} And, under good leadership, usually Macedonian, the Thessalians, were excellent.\textsuperscript{51} That the Thessalian equestrian was equal in skill to the Macedonian cannot be doubted. But the star of the Macedonians would always show the brighter of the two because of that one intangible quality that the Thessalians would ever lack: Leadership.

With the Asian conquests, a new (for the Greeks) tactical innovation was brought to the attention of Europe, the quadruped, or, elephant. Elephants were used for numerous purposes with various degrees of success. The appearance of one of the aforementioned was guaranteed to spook a horse and so they were used in the place of cavalry screens. At Ipsus a line of elephants prevented the hard riding Demetrius from returning to the battlefield.\textsuperscript{52} In honor of this event the Seleucids adopted the elephant as their dynastic symbol.\textsuperscript{53} Many Hellenistic generals went out of their way to make the elephant live up to its advanced billing. Light troops were scattered among elephants in flank positions to act as a source of mutual protection. Elephants were stationed in gaps in a phalanx to act as a solidifying agent.\textsuperscript{54}

The elephant proved effective in 275 against Gauls who had never seen one. Phyrous used them in Italy, and others employed the quadrupeds in attacks on weak field fortifications.\textsuperscript{55} But if all the battles of the Hellenistic period in which the elephant took part are considered, they are found more often to be the cause of defeat instead of victory. An elephant on the rampage was almost impossible to control, and could just as easily wade through troops on either side. All that was needed to
put an elephant in this frame of mind, was to kill his mahout or wound him. Elephants could be disabled in various ways: one of the later Ptolemys had the ground in front of his troops strewn with flat boards bedecked with spikes. These were effective. Another major tactical problem was the beasts' I.Q. Elephants were too intelligent to obey orders blindly, and refused to commit suicide by charging into the spikes if a phalanx stood firm.56

It seems that some of the Successors must have toyed with the idea of eventually substituting elephants for horses for they were used time and again but with questionable results. Although the elephant was occasionally effective when employed instead of cavalry screens, and to disorient horses, in Greece it was never much of a determining factor. In Greece elephants were used in small numbers against the Gauls and by Antiochus and the Romans. Although an elephant's tactical capacities were limited, it was never the less an awesome creature, and it seems logical that if it had been at all possible, the Greeks would have employed at least some of them on a constant basis to supplement the mounted arm. Two problems, however, arise. The first is transportation. How would one get an elephant to Greece? There was of course the overland route through Thrace and Macedonia and down the peninsula, but not only was this long, but too many different borders must be crossed and some of them were bound to belong to hostiles. Besides there would be the problem of supplying the elephant with food along the route. Elephants were transported by sea, but this must have been at best a precarious operation. Ancient ships were delicate and in most cases restricted structures. Elephants were probably stored in transports used for horses, but the
specifics are unknown. In any case a moody elephant afloat must have proved a stimulating experience for ancient sailors. The second obstacle to quadruped employment in Greece was economic. The shortage of food in Greece was proverbial. The cities barely had enough to feed their own populations plus a handful of horses; the very idea of providing year round room and board for an elephant must have been almost laughable. Of the three times the elephant was used in Greece, the first, the invasion of the Gauls, can be considered as the second "national" emergency in the history of the peninsula. The first was, of course, the Persian onslaught. With their very civilization threatened drastic measures were indicated, and one of these measures was the use of the elephant. Resources must have been pooled and Greek ships employed in transporting feed for them. Concerning the other two times the elephant was used, once by the Romans and once by Antiochus, both parties had the resources of empires behind them, and they, too, probably imported the necessary feed by sea. Of the cities in Greece during the Hellenistic period who could have afforded elephants, those that were centers of trade, specifically, Athens and Corinth, both were now so far out of the military mainstream that the employment of elephants would have been a useless extravagance.

It seems, then, that the elephant could never have entirely replaced cavalry, even in Asia. As far as Greece is concerned elephants were impractical, both from a geographic and an economic viewpoint.

Numbers and percentages play a fascinating role in the history of Greek cavalry. The first time it becomes possible to trace, with any accuracy, numerical variations, begins with the Macedonian invasion of Greece.
Philip marched south to Chaeronea with an army of 30,000 infantry and 2,000 cavalry, a grand total of 6% mounted. Later when Alexander marched against Thebes his army numbered 30,000 infantry and 3,000 horse, this is the familiar (9%) 10:1 ratio that will be found so often in Greek history. When Alexander landed in Asia his army was composed of 32,000 infantry and 5,100 cavalry, at least 15% of his army being mounted. At this point two objects of interest crystallize.

The first noticeable point is the ascending arithmetic percentages concerning numbers of cavalry: They are 6%, 9%, and 15%. Now it seems likely that the percentages increased as more cavalry became available. The percentage is smallest when Macedonia was opposed by all the Greeks. When Macedonia and its allies attacked Thebes the percentage increased.

The invasion of Asia by Macedonia, the Greek allies, and the subject states, increases it more. Alexander left 12,000 infantry and 1,500 behind him in Greece. Of the cavalry force in Asia, there were 1,800 Macedonians, 1,800 Thessalians, 600 Greeks and 900 Thracian and Paeonian horse, a total of 5,100 of which 35% was native Macedonian. Of the entire military establishment available to Alexander, in Europe and Asia, there were 44,000 infantry and 6,600 cavalry, roughly 14% cavalry, almost equal to the percentage taken to Asia. The percentage of cavalry left in Greece was 11%, a slight increase from the Theban war.

This brings up the second point of concern: If Alexander had had more cavalry available at the start of his campaign, would he have used them, and would the horse have played as important a part in warfare on the Greek mainland as it did in Asia? In spite of the increasing percentages this does not seem likely. This statement is made in view of the
following facts. The battle at Chaeronea was fought in mountainous
terrain, where the cavalry were of minimal value. And although the
percentages of the mounted arm left in Europe by Alexander did increase,
the expansion was not a substantial one. As will be shown also, when
the Greeks revolted, the mounted percentage of the Macedonian army was,
although somewhat larger, nowhere near as great as the number used by
Alexander in Asia. Alexander, it must be mentioned not only fought two
different type of war. The first, in Greece, was in restricted geography,
and against a heavily armed opponent. The second in Asia, was a war of
speed and movement, and against an opponent neither as skilled nor as
weightily arrayed. Basically, the Asian effort demanded the horse and
Greece did not.

Something must be said concerning the students of Alexander, the
Successors, and how they applied and misapplied his principles. The
politics of the subsequent Asian military jealousies, which would soon
turn into dynastic quarrels, need not be traced. But what is important
are examples that classify the actions of this period. The solution to
every problem, it seems was to stock up on hay burners. As has been
mentioned, the Successors never passed up an opportunity to copy Alexander's
tactics. In light of this it is understandable why none of them was ever
consistently successful. The tactics were sound ones, but they had
originally been used under vastly different circumstances. Admittedly
it is but common sense to follow the adage concerning, "if something
works, use it," but by doing this the Successors were in effect trying to
destroy mirror images of themselves. The chances of victory in a situation
such as this can only be even. The armies were equally trained,
equipped, and generalized. To find a winning combination under these circumstances is at best difficult.

In every major battle of the early Hellenistic period, cavalry proved to be the deciding factor. This statement is meant to include both the correct and incorrect use of the mounted arm. What is of interest here, are again, ratios, and what seems to have amounted as an attempt by the Successors to improve on Alexander's tactics. The way to do this—get more cavalry. In 321 Ariarathes marched to war with an army of 45,000 of which a staggering 15,000, or 33% were cavalry. That same year Eumenes had 20,000 heavy infantry and "five thousand cavalry, by whom he had resolved to decide the encounter."

In 320 Antigonus defeated Eumenes with 10,000 infantry and 2,000 horse—17%. In 316, in Armenia, Antigonus defeated Eumenes with 22,000 foot and 9,000 horse—31%. In the Sinai in 314, Ptolemy with 18,000 infantry and 4,000 cavalry—18% beat Demetrius and his army of 11,000 infantry and 5,000 cavalry—31%.

The statistics are intriguing. In many cases almost a third of an army was mounted. There were probably two reasons for this. The first has already been stated. It must have been felt that what Alexander could do with 15% of his army on horseback, could be done with twice the ease, if double this percentage were mounted. It should be admitted that given the topography of Asia, a large mass of cavalry could in fact immobilize a phalanx. True, but the psyche of the Successors is well illustrated by Diodorus . . . " Eumenes was encamped on the plain of Cappadocia well suited for cavalry action." As the early Greeks on the mainland had looked for terrain suitable for hoplite action, so the Successors looked
for cavalry country, to make the cavalry decisive. And, of course, if this fact was always borne in mind, then the more cavalry the better the chance of winning. The second reason for the exorbitant multitude of horses had to be that economics in Asia presented few problems. The east had always been regarded by the Greek, and rightly so, as the land of wealth and fertility. So, with the combination of an ample treasury and an equally sufficient supply of food, the procurement and maintances of a large equestrian arm presented no problems.

Conditions in Greece immediately following Alexander's death, represented somewhat of a tactical dilemma for the combatants. The news of Alexander's death started a brush fire of pent-up hostility which culminated quickly into the Lamian War of independance. The dilemma mentioned is in reference to the following: Alexander had just spent the last score or so of years, winning battle after battle with an expanded cavalry arm. It had become apparent then that cavalry could be decisive; admittedly cavalry had won its battles in Asia, but perhaps it could be made to win battles in Greece also. On the other hand large numbers of horseman had usually proved impractical for warfare on the peninsula, and if 10% of the entire force were mounted, this was usually considered sufficient. The problem, then, was which tactics to use, the progressive or the reactionary. The solution of this question would have a great deal to do with that age old determinant in Greece, geography, and once again with numbers, ratios.

From the beginning, oddly enough, it was the Greeks and not the Macedonians, who tried to make the optimum use of the mounted arm. The first battle around Lamia saw a Macedonian army of 20,000 infantry and
1,500 cavalry (7%) opposed by an allied army of Greeks consisting of 22,000 infantry and 3,500 cavalry (18%), 67 ... Two thousand being Thessalians exceptional for their courage. In these especially the Greeks trusted in victory." 68 Perhaps because the battle was fought in Thessaly—cavalry country—and perhaps because the Greeks had so many natural cavalry-type allies, or maybe it was because the Macedonians played into their hands, all of these in the end, added up to a Macedonian defeat. The battle undoubtedly made both sides "cavalry conscious." The Greeks saw the horse as their salvation, while the Macedonians, were determined not to make the same mistake twice.

The Macedonian army received reinforcements, and soon it had 40,000 infantry and 5,000 horse (11%). 69 The Greek forces had increased slightly also to 25,000 infantry and 3,500 cavalry (13%). 70 "The Greeks placed their chief hope of victory in the latter, because the men were brave and the ground was level." 71 They, in an effort to stop the daily shrinkage in manpower, decided to offer battle at Crannon. The Macedonians, however, whose cavalry were being slowly but surely defeated, had learned their lesson well, and, not waiting for the outcome of the cavalry battle, assaulted the badly outnumbered Greek infantry and drove it from the field. The Greek cavalry, with no base of support, had to withdraw.

It should be noted here that Crannon was in Thessaly, and also that the Macedonians increased their mounted percentage. I believe, in light of the battle, that this expansion was not conceived with the idea of winning the battle with cavalry, but merely of neutralizing the Greek mounted until the phalanx could do its work. When it is considered that the Macedonian infantry force was nearly twice the size of the Greeks,
one must wonder at the outcome if the two had been of equal size, and consequently of the validity of anything that may seem demonstrated here. On the other hand, however, it must be remembered that Thessaly does not possess typical Greek geography, so in honesty it must be stated, that here conclusions are difficult to draw. The answers can never be known. Did the Greeks overreact, or did the Macedonians underreact? Or, according to the circumstances, did they both respond correctly? Although these questions appear unanswerable they are important because of a series of reactions they may have produced. If the Greeks had won, and proven the usefulness of an increased cavalry force, might not the Greek states of the Hellenistic Age have increased the number of mounted? On the other hand, did the Macedonian victory set the trend for the Age, and encourage the states to keep their cavalry forces around the 10% mark? Either conclusion however must be based on some false premises. Namely, a Greek victory would have occurred in very uncommon conditions, while the Macedonian triumph was achieved by a numerically superior infantry force. In any case it is not easy to believe that these huge efforts had no effect on the Greeks tactical conscience, but which? The only answer to these questions would have been a battle in Attica, or better yet, the Peloponnesse.

Crannon illustrated a situation which proved that Greece was unique at this time as far as mounted warfare was concerned. It was the only time during the early Hellenistic Age when the eventual victors lost the preliminary cavalry battle. In Asia this was impossible to do. In Asia there was an unwritten rule that went "He who loses battle of the horse, loses also battle of the foot." The territory of what was
considered to be a plain in Greece was considerably smaller than a plain in Asia. What this amounted to was that in this limited space it was the cavalry which could, in fact, be outmaneuvered by the infantry. The Macedonian phalanx at Lamia, after the Macedonian cavalry had been routed, was able to withdraw to higher ground. This would have been impossible in Asia. When this was attempted at Gaza, it resulted in the capture of 8,000 hoplites.

So in Greece then, the capabilities of cavalry were limited, while in Asia there seemed to be no boundaries that could be put on their usefulness. For Greece, the end of the fourth century marked the beginning of the decline of "cavalry conscious" tactics. The situation, for the mounted arm, returned to the norm of pre Alexandrian times. Cavalry warfare in past Alexandrian Greece differed from that of earlier days chiefly in the fact that there were now some new faces doing the same old things. But in one case in particular the old tactics were polished and perfected as they had never been before.
POST ALEXANDRIAN

Economic and social conditions in Greece at this time had deteriorated to the norm that had existed at the time of the Peloponnesian War. Indeed there were many similarities between the two eras, including a shrinkage in the number of cavalry used. As mentioned earlier, only small numbers of cavalry existed in pre-Hellenistic Greece, and this was explained by the existing political and economic situations. The complementary reduction in cavalry in this age was also caused by social and economic conditions, but of course in this period there were different types of pressures being exerted.

There was a decline in population, and in the older established city states there existed a complementary decadence in any feelings of civic responsibility.

The freshly Hellenized east must have seemed to the Greeks as the promised land, the land of plenty. The prospect of new and more fertile areas of settlement drew off the fluid population of mercenaries and craftsmen, and it also enticed many farmers to leave their hereditary lands which had literally been worked to death. In an attempt to create a new urbanized society in lands that had been chiefly agrarian, colonization was encouraged by the kings of Egypt and Syria. The same movement occurred in Greece; it was not of a planned, but rather of a reactionary nature, as the Greeks were introducing an expansive new urban life. This population drain to the east was not helped by the social conditions that already existed in Greece. While the early Hellenistic period saw the middle class in control of most of the wealth, these conditions soon changed and affluence was restricted to a very few. In addition people were reluctant to marry, or if they did, to have more than one or two
children. 76 There arose a love of display of money and ease. 77
The standard of living for the few had been raised, and the rich got richer. These people had found the good life and they were determined to keep it. The land was owned by private citizens and the small farmers who could wring nothing more out of their land sold out. 78

The ethics of warfare changed. Not only did this further decrease the population but it also all but stripped the peninsula of most of the coined or uncoined precious metals. Wholesale pillage and devastation was common. 79 Sacred temples were robbed, 80 and the entire coast line was at the mercy of the ever-expanding pirate fleets. 81 In the poor agricultural areas, where no gold was available, men and cattle were taken as booty instead. 82 Those pioneers who were wealthy could be ransomed, the others were simply sold into slavery. 83

The final decay had set in, chaos reigned. The mines at Athens and Euboea were abandoned. 84 The entire peninsula was politically unstable and revolutions were common. 85 The soil was poor, and there was a lack of timber and metal. 86 Compared to the east, Greece was impoverished. It was said that the stewards of Ptolemy and Seleucus were richer than the kings of Sparta. Exports declined and brought about a corresponding drop in a state's purchasing power. 87 There were a few, and in light of later happenings, interesting exceptions. Aetolia, Acarnania, and Epeirus increased in population and maintained themselves on their own resources. 88 The well-forested districts of Achaea and Elis also flourished. 89

As stated earlier, two general conditions would plague Greece during this period and effect the role of cavalry. The first has just been covered, it was, political, economic and social, or to combine them,
material conditions. Another major deficiency existed in Greece at this time too, and for want of a better word I shall call it, spiritual, or moral.

This situation can be best typified by example, and since Athens was discussed earlier, it is appropriate, for the sake of comparison, that Hellenistic Athens now be examined.

The year the Greeks were defeated by Macedonia (338) every Athenian ephebe received a year of military training, was issued by the state with a shield and spear, and was further required to spend one year in garrison duty at one of the frontier forts. As short as a quarter of a century, or one generation later (313) the royal soldier of fortune, Demetrius, landed in Athens and found that things had changed. Military training was regarded as a nuisance, and since entrance into the ephebic corps had been made voluntary, enrollment had fallen off. In 301, with the same conditions in effect, that of voluntary service, the ephebe register had fallen from 800 to only 30. "The corps of epheses was thereafter composed of young men of good families; and while it remained, like the cavalry, a source of civic pride and an armament to religious processions, it became almost a negligible military factor. The epheses were instructed, in all the martial arts and in addition were given philosophical training. Since instruction was actually given in all branches, with no specialized infantry training, and with the accompaniment of philosophy, it seems that the program had lost sight of its original purpose of simply producing competent killers, and had become an item of status and fashion. In 282 the Athenians could only send 1,500 men to the Greek forces at Thermopylea who were attempting to stop the Gauls.
The state of the Athenian cavalry was no better. At the Panathenaean festival, competition was held, and prizes given for, general appearance and military equipment. Nothing is mentioned concerning skill displayed at horsemanship, or with weapons.

Economically, during this period, Athens flourished. Militarily, the city had the means, but not the will. For the Athenians, and this is typical of most of the older states, affluence was more important than conquest. Although Athens remained wealthy and respected, she was prosperous, not because of her natural resources or agrarian dispositions, but rather as a center of trade, so she did not suffer the fate of many of her inland contemporaries.

These, then, were the general prevailing characteristics, and when examined they will help to answer the question concerning the size of mounted contingents. The conditions influencing the specific antagonists will be examined later. For now, the era as a whole will be considered.

During this period, when an historian, usually Polybius or Livy, mentions the size of an army, frequently the ratio of infantry to cavalry can be figured to be 10:1 or 9:1. Although few specific figures are available concerning infantry to cavalry ratios in pre-Hellenistic Greece, it is known that cavalry contingents were very small. Herodotus makes no mention of Athenian or Platean cavalry at Marathon, and the only Greek cavalry present at Platea were Thessalians, fighting for Persia; the allied Greeks had none. Also it was mentioned that there were various reasons for these diminished numbers, tactical, economic, and political. Emphasis here, with the exception of the time of the Peloponnesian wars, was put on the political conditions.
Stress in the late Hellenistic age must be put mostly on the prevailing economic and tactical situations. A question arises here concerning the political situation which can never be satisfactorily answered, but which must be considered. Class warfare in Greece at this time was rife. Tyrants rose and fell, promising ever more and more to the lower classes. The upper class suffered economically and politically, and to appease the lower classes, their power was broken. The upper class of course, was synonymous with the knights' class. This will account for the small numbers of cavalry in states in which these tumultuous conditions existed, but what of the others?

The new powers of this era were the Aetolian and Achaean Leagues. The older powers, which, though in eclipse, were still strong, were Sparta and Macedonia. The number of cavalry used by Sparta had always been small, probably because of traditional and geographic reasons. Many times Philip V of Macedonia would march south with an army that had a 10:1 ratio, and sometimes the ratio would be larger in favor of the cavalry. Certainly tactical thinking must have been the dominating feature here, for no one could threaten Philip politically, and economically, he was comparatively well off. The political question arises when the two Leagues are considered. Walbank says of them, "... in spirit the Achaean League, like the Aetolian was oligarchic." Now oligarchy can be equated with a strong aristocratic class, and the aristocratic class has never been too thrilled about the idea of walking to a war. In Thessaly where aristocracy abounded, cavalry were also numerous. True, the geographic conditions of Aetolia and Achaea could not compare to Thessaly, but then the geography of western Europe, during the Middle Ages
could not stop every nobleman and his bodyguard from riding to war. 
No, there must be something else. When armies from the two Leagues are referred to, again and again, with robotic like regularity, the 10:1 figure surfaces. Perhaps a clue is offered by Rostovtyeff when he said that the power of the Achaean League came from the bourgeois class in the cities.99 What follows is pure speculation, but could be the answer to the 10:1 question, though there is no evidence. Might not the ruling class have realized that it could not reign supreme by its own will. Meaning, that this class could not force its designs upon the lower classes, but could rule only with the agreement of the lower classes. In both cases they amount to almost the same thing, a subservient multitude. Perhaps then, the aristocracy of these two places, in an effort to avoid the fate of aristocrats were suffering in other areas of Greece, had incorporated into their respective constitutions, a clause, stating that the mounted nobility could never comprise more than 9% of the Leagues army. They probably felt that if the lower classes never felt threatened they would be secure. If this was their logic, they were correct, for the Leagues were never racked by major social problems.

Of the remaining two facts to be considered, the tactical and economic, the tactical situation, which must be closely equated with the geography remained the same. The same conditions prevail all through Greek history. The general economic situation as mentioned, was bad, and would have an effect on the number in the cavalry class. The declining fertility of the soil, the abandonment of farms, the migrating population, and the new dependence on trade instead of agriculture, must have brought a corresponding decrease in the food supply. The land that could
be tilled lacked workers. But this is the same old story concerning productivity of the soil and the primary concern of first feeding the people, then the livestock. In this respect it mirrors the conditions of the late pre-Hellenistic period: Lack of produce to feed a large number of animals.

But there was another economic principle that cast its shadow over the land, and when this is combined with the moral deficiency which will be discussed, it is a wonder that any knights' class existed at all. Reference is made here, to the shrinking supply of precious metals. It seems possible that even with a minimal supply of cash, a noble, if his land was still productive, and if labor was available could still retain membership in the knights class. True, his armor might have been passed down through generations, but at least his mounts could be stabled. But as has been shown this was not the situation, and an agricultural inadequacy did exist. If a noble had possessed money instead of land this would have been sufficient, grain from the Crimea could always be purchased. Here also, as mentioned, this was not the situation. It would seem that the shortages of agriculture and money would present an impossible situation. And who would be looted, only those who had something to lose, the nobility. It seems unlikely that there was any way a compromise could have been made. Most of the historical material pertaining to this era, is in reference to the new powers, Achaea and Aetolia, who as mentioned, during this period of national suffering, were in turn prospering. In the older states that are not mentioned the cavalry arm was probably almost nonexistent. Although as these older states were incorporated into the Leagues, they were subject
to manpower contributions, it is probable that they sent mostly infantry, and that the aristocracies of Achaea and Aetolia simply put more of their members on horseback to keep the ratio at 10:1. As noted, there were a few very wealthy people in the older states, and as Athens demonstrated, these few were more interested in staying wealthy, than in gaining fame. And so these few who could really afford to be members of the equestrian class had no desire to do so. It must be mentioned to, that by now, they also had little talent left in this area. If a cavalry force must be provided, there were always mercenaries for hire. Even in the younger, vital Leagues, this rot had set in (more of this later under Philopoemen). But if conditions had begun to deteriorate even in the newer states, what must they have been like in the old?

A survey of the leading powers in this era is in order. Now that the general pattern is known, attention will be focused on how this affected each state and helped to mold its society, and especially its cavalry. First the Peloponnese.

Here the Achaean League had finally begun to flower, but its beginnings had been humble. It was a land of poor soil, with a rocky coastline. Before the League the Achaean had been poor and weak, their total strength being less than that of one large city or about 10,000 men. They were good fighters, but poorly equipped. This did not however, hold true for the cavalry. This arm was in shameful condition. Although only the wealthiest citizens were theoretically found in it, it was hardly a functional, let alone, elite unit. Polybius was to say of their antics, "These horseman at that time had neither experience or bravery, it being the custom to take common horses, the first and cheapest they could procure,
when they were to march; and on almost all occasions they did not go themselves, but hired others in there places and stayed home. Their former commanders winked at this, because, it being an honour among the Achaean, to serve on horseback, these men had great power in the commonwealth, and were able to gratify or molest whom they pleased.\textsuperscript{101}

Described here is the oligarchy mentioned earlier, and again the mystifying fact, that the knights class, for a growing young polity acted so old.

As for the other power in this area, ancient Sparta, the reforms of Agis and Cleomenes were noble attempts, but they came too late. That the last kings never had a viable cavalry arm is easily explained. Before the ascent of Agis, Sparta suffered from the problems that plagued most of the older states, wealth in the hands of a few and the virtual disappearance of the middle class.\textsuperscript{102} It was this wealthy class, and one must assume that this was the knights' class, that has Agis slain. With the ascension of Cleomenes, the abolition of debt, redistribution of land and enfranchisement of new citizens,\textsuperscript{103} this class must have suffered economically. Added to this, was the fact that they were a constant threat to the monarchy, and this must have lead Cleomenes to keep his thumb on them, and hire mercenaries in their stead.

Across the Gulf of Corinth from Achaean, lay the new Aetolian League. In the third century, it was a land of mostly poor soil, a federation of warlike villages, a race of warriors who had culturally never caught up to the rest of Greece, and who never would. But it had an innate visor that Achaean lacked, a cohesive spirit, natural defenses, and 20,000 armable men.\textsuperscript{104} The shepards and peasants of this simple land had, over
the centuries, seen little change in their life style. But for one thing it would have been a classically Homeric type of society, and this one thing was the lack of cities. But like the warrior kings of the Iliad, these people too must have their leaders, and their leaders were mounted.

The geography of this area lends itself to a natural northern expansion, as topographically, this is the path of least resistance. The land at the end of this corridor was Thessaly, and the ambitious Aetolians did in fact combine parts of these plains into their League. And the fact that Aetolia, despite its generally poor soil and mountainous terrain, possessed such excellent cavalry may have something to do with this expansion. However it does seem unlikely that the Thessalians were the Leagues only cavalry, for one has but again to consider the conditions in the Middle Ages, for Aetolia too, was quasi-feudal. It was feudal in the sense that there was no center of gravity, no capital, no geographic balancing point. In this respect it was like Thessaly, and like Thessaly its cavalry would receive the begrudged admiration of its adversaries. Thucydides wrote what the Athenians expected to find there when they invaded in 426: "The Aetolians though a warlike nation, dwelt in unwalled villages, which were widely scattered: and as they had only light armed soldiers they could be subdued without difficulty before they could combine." Obviously this is not quite the Aetolia that has just been described. Some changes had taken place.

Some changes yes, but not fundamental ones. And the Achenian expedition of 426—it was wiped out.

The once omnipotent Macedonia was still strong, but it was having
problems. The power of the Antigonid kingdom had degenerated considerably from what it had been during the reigns of Philip II and Alexander, although it was still the premier power on the peninsula. Its means had shrunken. Gone were the days when wealth poured in from the Asian conquest; now the country was thrown back on its own resources. These resources were meager, in fact the economy operated on a plain barely above the subsistence level, and because of the countries pressing agricultural problems, prolonged campaigning was impossible. Expeditions must return north with the coloring of the leaves so that the troops could disperse and harvest. Indeed the country was in such a poor monetary state that the employment of mercenaries was virtually impossible.

The ever active Philip however, changed all that, by reworking the gold mines of the Chalcide. Philip, upon his death, left the kingdom in excellent condition. There were 30,000 infantry and 5,000 cavalry on the roles, enough grain stored to last for ten years and enough money to hire 10,000 mercenaries. Indeed, Macedonia had not been in as excellent an economic position for many years. But unfortunately Perseus squandered it, as he squandered so many opportunities.

Of interest here is a percentage. It is 14%, and it refers to that part of the army that composed the cavalry arm. This is higher than the usual 10% found in most Greek armies. This 14% happens to be the same as the percentage of cavalry in the combines European and Asian army of Alexander, at the time he first crossed over to Asia. Coincidence? There are a couple of possible answers. Philip was a very good tactician, with a flexible mind, and he was not threatened by his nobility, so if he thought that he needed this many horse there should have been a good
reason. Since the Macedonian infantry man was equipped by the state, additional cavalry could be also. Perhaps he felt that the final battles of independance against the Romans would take place in cavalry country, as indeed they almost did. And then again, Philip who liked to think of himself as a decendant of Alexander (this was a popular pastime in Greece), at the end of his life became increasingly unbalanced. Could he not, within the dark recesses of his mind, been planning his own invasion of Asia?

These then, were the forces involved. Before the tactical characteristics of three of them are discussed, there were a couple of variables that will help to further characterize cavalry warfare at this time. These variables are the employment of mercenaries and the leadership factor.

Mercenary employment had become so common at this time that at the battle of Rhaphia two-fifths of the cavalry and one-fourth of the infantry fighting for Ptolemy had been hired. And this was not the first time during the Hellenistic age that mercenary cavalry had been used in large numbers. Pyrrhus used large numbers of cavalry from such unlikely places as Acarnania and Athmania, and also from Aetolia and Thessaly. It was the charge of the Thessalian horse that decided the battle of Heradea in his favor. Thessalians also found employment under Philip, and were used with good results at Cynosephala. And this is another instance of the Thessalians fighting somebody else's war.

The Aetolians were famous for selling themselves as mercenaries, and this is probably the reason that their League rose to prominence. Of course a little pirating helped too, but both occupations brought money into that poor land. From the death of Alexander, Aetolians had been
following this trade. Like Switzerland, centuries later, Aetolia was able to satisfy the manpower demands of any employer, anytime. Again like Switzerland the country was gripped by a "mercenary madness." As later the Swiss towns would have to look their gates to keep their young men in, the League was faced with the same problem. In 199 shortly after the Romans had defeated the Macedonians in Illyria, the Aetolians considered it to be an opportune time to join the winners and declared war on Philip. They were, however, wrong. The Aetolians had just hired out to Ptolemy 6,000 infantry and 500 cavalry. More would have gladly gone, indeed the country would have been entirely depleted of its manhood, had not the League's council put a ban on further enlistments. It was, however, too late, for the loss of these troops had so seriously weakened the country, that Philip had no trouble marching through it, and ravaging it from end to end.

The most interesting story of this period concerning mounted mercenaries originates in Asia. Perseus in an effort to stockpile manpower for a final effort against Rome, entreated a group of Gauls to travel from their Asian homeland to serve under him. The Macedonian king, however, was somewhat of a skinflint, and realizing how much it would cost him, had a change of heart. In view of later happenings this is unfortunate; for the Gauls were a unique lot, "They were on their way then five thousand cavalry and an equal number of infantry who matched their pace to that of the horses, and in turn seized the riderless horses of fallen cavalry men for further use." Perseus tried to back out by hiring only a fraction of their number, but they would not have it, and so with hard feelings made their way back to Asia.
The very fact, in view of the prevailing economic and social conditions, that Greece was able to offer itself as a source of mercenary cavalry, seems contradictory. Thessaly, of course, as always, had always done so. But how could the rest of Greece, in such turmoil, be the origin of equestrian hirelings? The fact that this state existed in Greece, was taken into consideration by prospective employers. Monetary compensation was offered: a cavalryman was paid twice as much as a hoplite. In addition an allowance was given to the knight for the upkeep of his horse, and it seems probable, that these horses themselves had been issued to the knight by the state. But who then was a mercenary horseman? Since the older nobility showed little interest in the martial arts, he was probably a poorer younger brother, or the family hothead. He might even have been someone's groom, who had learned to ride, and inherited some armor. In any case it does not seem that the mercenary cavalry were the social elite of an army, the most colorful by far, and probably the most enthusiastic, but lacking somewhat in dignity.

Any military force, to be successful, needs leadership, but perhaps a cavalry force needed it more than an infantry unit. The life of every man in an infantry formation was closely interwoven with the lives of the men around him. He was but one part of a whole (especially in a phalanx) and had to learn to think of himself as such. The horseman was different. He was trained as an individual, his life was in his own hands, and so too, largely, was the decision of whether to stay or run. There can be two kinds of leadership: leadership exerted by the group upon itself, and leadership exerted by an individual upon a group. In the first
category must fall the horsemen from Aetolia and Thessaly. Although neither produced a cavalry leader of note, both had exemplary combat records. Achaea and Macedonia occupy the second category. It seems that when a group can provide itself with leadership, it will let no one man step forward to guide it. On the other hand, a group that cannot lead itself, will remain weak, until one of exceptional ability and his disciples, have been unearthed. Example: Achaea and Macedonia.

Those of the first group will never rise to exalted heights, but they will be consistently good, while those of the second group, having the ability to perform great deeds, once the leadership is gone, will again, sink into oblivion.

The general condition of the Achaean cavalry before the ascension of Philopoemen has been described. The office of Hipparch, cavalry commander of the League, was treated, as a mere stepping stone to the office of Strategos, commander in chief of the League's army. 123 So the usual procedure was simply to accept the office and step on as few toes as possible. Polybius expands on the problems of being Hipparch: "Sometimes again, commanders neither feeble nor corrupt, do more damage to the soldiers by intemperate zeal than the negligent ones, and this is still oftener the case with regards to cavalry." 124 Philopoemen, who had spent years fighting as a mercenary in Crete, was in every sense of the word a professional soldier. Upon his appointment to Hipparch, he recognized the need for drastic change, but he, unlike those who came before, was diplomatic enough and intelligent enough to get his points across.

The watchwords for Achaean mounted actions from this time on are
precision and confidence, and also consistent victory. These distinctive features not only characterized the mass of cavalry but the leaders of the cavalry who had learned their trade under Philopoemen.

An interesting example (and especially so since it refers to the same League) of lack of leadership is given by Pausanias when he describes the Achaean attempt to stop the Romans before Corinth in 146. It must be remembered that two generations had passed since Philopoemen's reforms, and even his students had passed from the forefront. The Achaeans and the Romans then, stood facing each other and "... when Nummius advanced to meet them, the Achaean horse at once took to flight, without waiting for even the first charge of the Roman cavalry."\textsuperscript{125}

The quality of leadership for the Macedonian army fluctuated just as drastically as that of Achaea. While Philopoemen believed that a general should direct his army from the rear, so that he might get a better overall view of the tactical situation, Philip disagreed with this. Philip was a very active equestrian and was usually found leading his cavalry into battle. In 208 Philip had his first encounter with the Romans. The Roman fleet landed between Sicyon and Corinth and sent landing parties ashore to loot. Philip, who had been debauching himself in Argos when he heard the news, immediately lead an unsupported body of cavalry out after the scattered foragers. The Macedonian infantry left a little later and hurried to catch up. Philip, with only his cavalry, succeeded in driving the Romans back to their ships where they reembarked.\textsuperscript{126} It was at Sicyon that first mention is made of Philip being unhorsed: "... he was dashed against a tree by his charging horse, and broke off one of the two horns on his helmet against a projecting..."
branch. An Aetolian who was accompanying the Romans later found this horn, and displaying it to others, started the rumor that Philip was dead.

A second example of Philip's leadership qualities, and the reactions he inspired in his men, was shown in a battle against the Aetolians and Romans. Philip led a charge against them. Almost immediately his horse was pierced by a javelin and, "... threw the king sprawling on his head." As if in a Homeric epic a great battle developed around him. Courage was displayed on both sides; "... conspicuous was his own fighting also although he had been forced to go into battle on foot among horsemen." As the tide turned against the king and his guards, "... he was seized by his men, was lifted upon another horse and fled." Philip was certainly not wanting in courage or his men in inspired loyalty. This can all be sharply contrasted with what happened to Perseus. Perseus was also seized by his men, but for the purpose of turning him over to the Romans. It was the lack of leadership on Perseus' part, that lead the Macedonian cavalry to desert the phalanx at Pydna, and in consequence leave it to its doom.

The cavalry arms of the different belligerents during this era, while having the similarities already mentioned, also displayed some very distinct individual characteristics. In order to get a better image of these states some attention must be paid to their tactical efforts, for an army reflects its country. And the cavalry being part of that army, must reflect the prevailing conditions among the aristocracy.

Attention will here be focused on three areas, Aetolia, Achaea, and Macedonia.
In the first recorded actions of the Aetolian horse in Acarnania in 220, the cavalry dismounted, and with some light infantry occupied the high ground. Unlike the Archaic cavalry who rode to battle, then dismounted and fought as hoplites, the Aetolians were here used like dragoons. It is the only instance, in this period, that any cavalry force was used as such, and by doing so, the Aetolians displayed their first tactical quality, ingenuity.

Another Aetolian characteristic was recorded by Polybius. Polybius, whose low regard for Aetolia in general is well known, could still say of their mounted arm, "... the Thessalian cavalry in squadron and column are irresistible, but when their order is once broken up, they have not the skill in skirmishing by which each man does whatever the time and place suggest: while, on the other hand exactly the reverse is true of the Aetolians." Here is the exemplification of another native trait, individuality. The League was a very loose collection of individuals, not individual cities, because there were none, but individual families and people.

Polybius said something else concerning the Aetolian cavalry, in reference to the help they gave the Romans at Cynosopha. The Macedonians had temporarily gained the upper hand on the Romans. "... what prevented them, more than anything else from entirely routing the enemy was the gallantry of the Aetolian cavalry, which fought with desperate fury and reckless valor. For the Aetolians are as superior to the rest of the Greeks in cavalry for fighting in skirmish order, troop to troop, or man to man as they are inferior to them both in the arms and tactics of their infantry for the purpose of general engagement."
Two truths are revealed here. The first is that of the courage displayed by the cavalry, and the second concerns the inferiority of Aetolian infantry. As was the case with Thessaly, Aetolia's strength also proved to be its weakness. Aetolia was a land of individualists, strongwilled, self-reliant, ever courageous mountaneers. The Aetolians lacked discipline, and discipline was the fundamental ingredient to any successful infantry formation. The Aetolian hoplite was barely adequate, and sometimes not even that. The Aetolian light infantry was good, but here uniformity is seldom stressed. As for the cavalry, it was characterized by dash and natural ability, but nowhere among the ancient authors was it ever suggested that it could operate in massed formation. The cavalry was probably composed of a band of petty chieftains jealous of their particularism, who could not conceive of having another give them orders, for more than the briefest period.

As far as the Achaeans were concerned, leadership may be considered to be the major determining factor in their performance. Aratus spent five years in the League's cavalry, but in a series of consecutive losses to Cleomenes proved that he had learned very little. Philopomen and his pupils would lead the cavalry to its finest hour. The incident at Corinth has already been described.

At the battle of Sellasia in 222 the Achaeans only provided 300 cavalry for the allied army. Whether they had been so decimated by their earlier struggle against Sparta, or that this number represented the sum of their competent horseman is not known. Probably it was a combination of both. This is an example of the hard times that had befallen this arm.
Philopoemen’s newly reorganized equestrians met their first test in 207 during an invasion of Elis. The Achaean cavalry proved itself the equal of its Macedonian allies, and superior to the Elean and Aetolian horse, against whom the Achaeans fought, and carried the day.\textsuperscript{137}

The new qualities, exhibited by the Achean horse, are best described by Polybius: "With the use of industry they grew so perfect to such a command of their horses, such a steady exactness in wheeling round in their troops, that in any change of posture the whole body seemed to move with all the facility and promptitude, and, as it were, with the single will of one man."\textsuperscript{138}

An example of the competence and confidence which this new era had brought for the Achaeans was shown in 190 when Seleucus lay siege to Pergamum with a force of 4,000 infantry and 600 cavalry.\textsuperscript{139} The Pergamene made sallies from the city but with little effect. An Achaean relief force of 1,000 infantry and 100 cavalry arrived in the city. The force was an experienced one under the command of Diophanes, a pupil of Philopoemen.\textsuperscript{140} Because of the general ineffectiveness of the Pergamene counter-attacks and disdain for the small number of Achaean reinforcements, a decidedly lackadaisical atmosphere settled over the Syrian camp and the army became very careless. When the Achaean force marched out from the city and confronted the enemy in battle formation the Syrians at first regarded them with curiosity and then amusement. Since the Achaeans simply stood before the city and made no threatening moves, the Syrian formations gradually broke up and straggled back to their camp. But this is what Diophanes had been waiting for and he advanced, "... ordering the infantry to follow as fast as they could, he himself, at the head of
the cavalry with his own troop, the horses being given the loosest possible rein, and a shout raised at the same moment by every footman and trooper. The wild charge of the mounted startled the Syrians and they scattered. Isolated pockets of resistance were dealt with by the approaching phalanx. Seleucus eventually managed to rally his forces and bring them back to the siege lines. However, on the following day, precisely the same incidents occurred. the Achaeans marching out from the city and then waiting in battle formation. The Achaeans again routed the Syrian force, only this time Seleuens was unable to rally his dispersed army, and the siege was broken.

What is demonstrated here, is the cooperation that existed between the foot and the mounted arms of the Achaean army, not to mention the mutual confidence with which each regarded the other. The dashing cavalry charge unsupported by a sturdy line of shields would have had no hope of success. Likewise, a small compact body of infantry moving alone on an Asian plain could easily have been cut off and surrounded. And this perhaps best exemplifies the entire development of the Achaean cavalry. During this period neither arm ever left the other in a lurch. These successes can only be credited to Philopoemen, who alone virtually reconstituted the entire army of Achaea. The Achaeans lacked the natural ability that the Aetolians possessed, for the Aetolians had no single outstanding leader, yet proved consistently excellent fighters in their own right. The Achaeans, on the other hand seem to have had no outstanding martial qualities. They were however, able to respond to a competent drill master. It is interesting to contemplate on what future the Aetolian League might have had, had they had a Philopoemen. Philopoemen, starting
with the smallest segment of the army, the cavalry, overhauled it, and then as Strategus, whipped the infantry into shape. With both arms operating at maximum efficiency separately, he logically then, set about synchronizing them. The results were a string of victories. The victories were not singularly those of the cavalry, but intensely cooperative efforts. Therefore in most actions the cavalry played few outstanding roles; however, these victories would not have been possible without an efficient mounted arm. While the Aetolians were better horsemen, and although their cavalry victories were spectacular ones, all too often it was their inferior infantry, or a disruptive link between the two arms, that lead to disaster. But the Achaeans under Philopomen and his students never had this problem.

The characteristics of the Macedonian cavalry were similar to those of the Achaean. The chief triumphs and distinctions of the Macedonian horse came under the generalship of Philip V. The significance that Philip placed in his mounted arm lay chiefly in its contributions to his flying columns. During the social war Philip marched and counter-marched, to and fro across the Peloponnese and Aetolia with a speed that amazed his opponents. His cavalry was significant only in that it, along with the extensively called upon light infantry, was used as rear and flank guards on many occasions. The services the cavalry provided was unspectacular, but the protection given was flawless.

A war is a very personal thing, and it should never be forgotten, that it, regardless of the fact that they occurred several millennia ago, are fought by flesh and blood creatures, who were, in essence, but modern man displaced a couple of thousand years. To keep this paper from becoming
submerged in theories, statistics, and abstractions, and to illustrate this very personal endeavor, the following quotation from Livy is offered. It is one of a very few times that an ancient author gives a blow for blow account of a cavalry versus cavalry conflict, and it also exemplifies the different techniques employed by the Macedonian and the Roman cavalry.

The Macedonian troops were used to seeing,

"... wounds dealt by javelins and arrows and occasionally lances, since they were used to fighting with Greeks and Illyrians, when they had seen bodies chopped to pieces by the Spanish sword, arms torn away, shoulders and all, or heads separated from bodies, with necks completely severed or vitals torn open..."^{143} they were horrified.

"The kings forces assumed that the type of fighting would be that to which they were accustomed, that the cavalry, alternately advancing and retreating would now discharge their weapons and now retire, that the swift movements of the Illyrians would be useful for sallies and sudden charges, and that the Cretans would shower arrows on the enemy advancing in disorder. The Roman attack, no more vigorous than stubborn, prevented the carrying out of this plan; for just as if they were in regular line of battle, both the skirmishers, after hurling their spears, came to a hand-to-hand combat with their swords, and the cavalry, as soon as they had charged the enemy, stopping their horses either fought from horseback or leaped from their saddles and fought mingled with the footmen. So neither the king's cavalry, unused to stationary battle, could stand against the Romans, not his infantry, running to and fro and almost unprotected by armour, against the light armed Romans equipped with shield and sword and prepared alike for defense and offense."^{144}
At Pydna in 168, Perseus attempted to use a corps of cavalry whose horses had supposedly been trained to remain calm in the presence of elephants. As it turned out however, the horses of this "anti-elephant" group were just as awed by the quadropeds as the rest of the cavalry, and did not stand up to them. The key role played by the Macedonian cavalry at Pydna came when things started to go badly for the Macedonian infantry. The cavalry, lead by Perseus, did not get into the actual battle, but rather used the disorganized infantry as a shield between themselves and the Romans. The results of this disgraceful action could easily have been foretold. Actually few Macedonians fell on the battlefield but rather most of them were slain during the post-battle panic, for it was a panic and not a retreat. The Macedonians lost 20,000 dead and 11,000 prisoners. The cavalry did not stop galloping until they had dispersed to their homes. This gross mismanagement of the mounted arm cost Macedonia whatever hope it might have had for eventual recovery. Its army for all intents and purposes was completely destroyed.

One cannot help but realize the similarity between this last action and the performance of the Achaean horse before Corinth. In both cases, lack of leadership brought about disaster. This is the key point, and where Macedonia proved to be so much like Achaean. With effective leadership the Macedonian cavalry, like the Achaean, was the best in Greece. The Macedonians like the Achaean, although never spectacular were consistently good. The eventual lack of guidance in both cases, lead to not only a useless mounted arm, but also the destruction of their respective armies.

It is time to summarize, briefly, the general findings of this study.
CONCLUSION

Greek cavalry, like medieval cavalry, was chiefly composed of equestrians from the ranks of the nobility. Service in a Greek cavalry arm was regarded just as highly as knightly duty in the Middle Ages. There was however, a major difference. In the Middle Ages, the infantry supported the heavily armored knight, but in the latter part of this period this gave rise to certain difficulties. European nobility was most obstinate in its refusal to recognize the ascendancy of the Swiss pike, the English longbow, and gun powder. They paid for their reluctance. Cavalry in Greece never experienced this problem. Here, from the very conception of the mounted man, cavalry proved to be inferior to infantry. With brief exceptions, the cavalry never thought to challenge the tactical superiority of a lower class. In Greece social status never interfered with tactical realities. However, the specifics of the cavalry situation in Greece were constantly changing, and although the tactical situation, for all intents and purposes, remained static, the economic and social conditions, in many cases, caused severe alterations.

A city's cavalry arm in pre-Alexandrian Greece was generally quite small. Social and political conditions were largely responsible for this, but geography and tradition also played a part. Tactically too, cavalry was the inferior of heavy infantry. These tactical limitations are best exemplified by the problems experienced by the Thessalians.

Alexander's revolutionary tactics were successful because he was fighting a different type of enemy in a different type of war. His Successors failed to emulate him simply because the composition of their respective armies were so much alike. The elephant, the new weapon as far as the Greeks were concerned, proved to be impractical, chiefly from
economic reasons. The battle of Crannon demonstrated once and for all that the tactics of Asia were not the tactics of Greece, and after this the Greeks reverted back to the tactics of pre-Alexandrian days.

The economic conditions of post-Alexandrian Greece were similar to those of the pre-Alexandrian era, and there was a corresponding reduction in the number of cavalry. But the number of cavalry declined for other reasons also: The new savagery in warfare, and the almost complete absence of any feelings of civic responsibility. The oligarchic governments of Achaea and Aetolia gave rise to speculation concerning collaboration between the bourgeoisie—mass and the aristocracy, and it was concluded that there may well have been a segment in the respective constitutions concerning the number of nobility allowed to deploy as cavalry. Leadership certainly proved to be a variable regarding the battlefield performances of the different cavalry arms. And as each state responded to a particular kind of leadership, so each state also displayed its own particular tactical characteristics.

The similarities concerning the rules that governed, who was in the cavalry, and how much cavalry there was, in both the pre- and post-Alexandrian eras are two obvious to be ignored. The chief difference lies with the belligerents of both eras, and they, as has been shown, were very different.
FOOTNOTES


3 Ibid, p. 50.


5 Greenhalgh, Warfare, p. 146.

6 Anderson, Horsemanship, p. 15.


11 Ibid., p. 4.

12 Ibid., p. 5.


15 Ibid., X. 2.4.


17 Ibid, p. 96.

18 Ibid, p. 95.

19 Anderson, Horsemanship, p. 89.

20 Ibid., p. 128.
21 Ibid., p. 129.
22 Ibid., p. 133.
23 Ibid., p. 133.
24 Ibid., p. 134.
25 Ibid., p. 139.
26 Ibid., p. 138.
30 Ibid., p. 29.
31 Ibid., p. 40.
32 Ibid., p. 43.
33 Ibid., p. 146.
34 Ibid., p. 110.
36 Ibid., p. 71.
37 Ibid., p. 71.
41 Ibid., p. 130–1.
45 Adcock, *Art of War*, p. 50.
46 Ibid., p. 51.
47 Ibid., p. 51.
48 Ibid., p. 52.
49 Ibid., p. 51.
50 Tarn, Hellenistic Developments, p. 57.
51 Westlake, Thessaly p. 223.
52 Adcock, Art of War, p. 53.
53 Ibid., p. 54.
54 Ibid., p. 54.
55 Ibid., p. 56.
58 Ibid., XVII. 8.
59 Ibid., XVII. 17.
60 Westlake, Thessaly p. 212.
61 Diodorus, Diodorus, VIII. 16.
62 Ibid., VIII. 30.
63 Ibid., VIII. 40.
64 Ibid., XIX. 40.
65 Ibid., XIX. 80.
66 Ibid., VIII. 40.
67 Ibid., VII. 12.
68 Ibid., VII. 15.
69 Ibid., VII. 15.
70 Ibid., VII. 15.
71 Ibid., VII. 16.

74 Ibid., p. 95.


77 Ibid., XXXVI. 17.


80 Ibid., p. 201.

81 Ibid., p. 195.

82 Ibid., p. 203.

83 Ibid., p. 204.

84 Ibid., *Economic Life*, p. 129.


86 Ibid., p. 204.


91 Ibid., p. 9.

92 Ibid., p. 128.

93 Ibid., p. 128.

94 Ibid., p. 128.

95 Ibid., p. 158.

96 Ibid., p. 294-5.


Ibid., p. 208.


Ibid., p. 48.

Ibid., p. 57.


Ibid., p. 6.

Ibid., p. 256.


Ibid., p. 61.

Ibid., p. 62.


Ibid., XXX. 43.

Ibid., XXX. 41.

Ibid., XLIV. 31.

Ibid., XLIV. 31.

122 Ibid., p. 181.
124 Ibid., X. 22.
127 Ibid., XXVII. 33.
128 Ibid., XXVII. 33.
129 Ibid., XXVII. 32.
130 Ibid., XXVII. 32.
131 Ibid., XXVII. 32.
133 Ibid., IV. 8.
134 Ibid., XVIII. 19.
136 Polybius, *Histories*, II. 94
138 Plutarch, *Lives*, Philopoemen. IX.
140 Ibid., XXXVIII. 20.
141 Ibid., XXXVIII. 20.
142 Ibid., XXXVIII. 20.
143 Ibid., XXXI. 34.
144 Ibid., XXXI. 34.
145 Ibid., XLIV. 41.
146 Ibid., XLII. 44.
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