UNDERSTANDING GREEK EQUESTRIAN IMAGERY IN THE ARCHAIC THROUGH HELLENISTIC PERIODS

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ABSTRACT

ANGELINA PHEBUS: Understanding Greek Equestrian Imagery in the Archaic Through Hellenistic Periods
(Under the direction of M.C. Sturgeon)

This study analyzes equestrian imagery from the Archaic through Hellenistic periods in Greece. I investigate why horse depictions were employed in the contexts of votive offerings, funerary sculpture, and architectural sculpture. I consider whether horses' renderings can be related to socio-political phenomena respective of their physical and historical context by looking at horses in terms of type, conformation, and scale. While athletic monuments, represented by the Delphi charioteer and the Artemision Horse and Jockey in this project, promote individualism of aristocratic victors through portrait-like depictions of competition horses, Classical reliefs are idealized. Prinias A, the Siphnian Treasury, the Parthenon frieze, and Classical Athenian funerary reliefs show the development of the composite type. The Horse and Groom Relief demonstrates the return to individualized depictions of horses on funerary monuments in the early Hellenistic period.

To M.A.H. and N.R.H.

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Table of Contents

LIST OF TABLES

Table

LIST OF FIGURES

Figures

LIST OF ABBREVIATIONS

Abbreviations

AJA	*American Journal of Archaeology*
AntP	*Antike Plastik*
ARV	J.D. Beazley, *Attic Red-Figure Vase-Painters*. 2nd ed. (Oxford 1963)
BCH	*Bulletin de correspondance hellénique*
BSA	*Annual of the British School at Athens*
CJ	*Classical Journal*
ClAnt	*Classical Antiquity*
CVA	*Corpus Vasorum Antiquorum*
GRBS	*Greek, Roman, and Byzantine Studies*
JCS	*Journal of Cuneiform Studies*
JHS	*Journal of Hellenic Studies*
JPR	*Journal of Prehistoric Religion*
JRAI	*Journal of the Royal Anthropological Institute*
MMAJ	*Metropolitan Museum Journal*
ScAnt	*Scienze dell'Antichita: Storia, archeologia, antropologia*
TUBA-AR	*Türkiye Bilimler AkademisiArkeoloji Dergisi*

Chapter 1:

Introduction

This study provides a discussion of equestrian imagery from Archaic through Hellenistic periods in Greece. I explore the reasons why and to what end horse depictions were employed in the contexts of votive offerings, funerary sculpture, and architectural sculpture. I investigate whether particular details of horses' renderings can be related to social or political phenomena with respect to their physical and temporal or historical context. By examining the horse in terms of type, conformation, and scale, one can assess ties between the horse's place of origin and the location of its depiction.

The horse-type framework that is employed for this study was established by S.D. Markman, who divides horse stock in antiquity into three main categories: European, Western/ Libyan, and Asiatic, as defined below (table 1).[1] To this framework, I propose the addition of a Composite type. Through the preexisting typology, equestrian imagery can be appreciated in new ways. Building on Markman's work allows one to understand the socio-political significance and semiotic value of horses via a careful examination of their forms on various monument types. I demonstrate this point through the use of a few well-published examples from the different categories of monuments. Previous studies tend to focus on individual horse depictions or contexts, whether funerary monument, votive relief, or athletic

[1] Markman 1943.

monument, but no studies to this author's knowledge have compared horse depictions on various types of monuments together.

Small scale horse votives are highly schematized and generic in nature, which could be a function of their mass production and the egalitarian ideals that they represent.[2] The emphasis on careful and individualized renderings of horses in athletic monuments is a reflection of the significance of the patron and his or her victory.[3] For continuous friezes and grave reliefs, a Composite type is most often employed to reinforce notions of corporate and polis identity. On such patriotic monuments, horses are deemphasized in favor of riders. Sculptors of funerary reliefs were likely influenced by the Parthenon frieze, and the Composite type continues into the early fourth century B.C.E. In the early Hellenistic period, represented by the Horse and Groom relief, there is a change in the manner in which horses are depicted once again, as evidence shows that some renderings are individualized without regard for reflecting roles within the polis.

Methods

Art in Context

Select examples have been chosen to illustrate various modes of equine representation. In order to engage in analysis that is interpretive rather than descriptive, the

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[2] This will be further explicated in the section entitled "Early Horse Votives and Athletic Monuments."

[3] Golden 2008, 10-11. Generally, patrons and competitors were males, but in the realm of equestrian sports, there are recorded instances of female patrons. One example is the Spartan, Cynisca, who commissioned two monuments to be placed in Olympia for her quadriga-racing victories in the 4th century B.C.E. See the Appendix 2 for Paus. 3.8.1.

works considered must be carefully contextualized. I also use the social and political context of the sculpture – in addition to the physical context – to support these interpretations. By juxtaposing horse imagery from different types of monuments through time, one can understand the manner in which these representations were used to reinforce the social and political ideals at the time in which they were created. The discussion begins with bronze votive figurines that comprise one component of the Olympia assemblage. I then address horse imagery in athletic monuments, and set out some general conventions and conclusions about horses that participated in those events. Following that, I discuss the reliefs on Temple A at Prinias, the Siphnian Treasury at Delphi, and the Parthenon in Athens to provide different contexts in which horse imagery occurs. Finally, I end by examining select grave stelai. The final category of sculpture demonstrates consonance with the Parthenon frieze in appearance and meaning, but funerary reliefs change in character by the Hellenistic period.

By considering the purpose for which these images were created, assessing their type based upon conformational standards, and addressing their scale in reference to their context, I provide a framework for understanding equestrian imagery. While a refined assessment of breed is not possible, several inferences about scale and the presence of an ideal type can be made. The function of the image, not merely its appearance, is crucial to interpretation.

Domestication

To understand the horse types discussed by Markman, one must have a basic understanding of horses in the archaeological record and the history of interaction between horses and humans. What follows is a brief summation of key concepts in zooarchaeological and domestication studies. Horse domestication and the development of the domesticated

horse (*Equus caballus*) from donkeys (*Equus asinus*), onagers (*Equus hemionus*), and wild horses (*Equus ferus)* constitute an active branch of scholarship that exists between the realm of archaeology and biology (fig. 1). There is much debate over the origins of horses, with particular emphasis on where they were first domesticated.[4] It is agreed that the earliest equids came from the Steppe and dispersed into the Near East and Western Europe.[5] Evidence for the domesticated horse does not surface in the Near East before 1800 B.C.E.[6] In the Near East, equids were first used to pull carts, for the earliest identified specimens were too diminutive for riding on a regular basis.[7] Through selective breeding, the hardy characteristics of donkeys and onagers were introduced to the less-robust horse.[8]

Horses reached Greece through various means. Dispersion southward and westward from Europe and the Steppe is one possible means of the spread of equines and equestrian technology.[9] Exchange between Greeks, Anatolians, and North Africans also provides a likely means for explaining entry of horses into Greece. The four horses buried at Lefkandi in

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[4] All images are found in Appendix 3. A full discussion of domestication is beyond the scope of this project. For additional information on horse domestication, see Simpson 1951; Downs 1961; Levine 2002. The Dereivka stallion, found in Ukraine, was alleged to provide the first *E. caballus* skeletal material demonstrating evidence of domestication. This assertion has since been disproven.

[5] Drews 1988, 4-8; Clutton-Brock 1994, 148-149.

[6] Downs 1961, 1196; Anthony and Brown 1991, 36; Benecke 2009, 13.

[7] Downs 1961, 1194. The first wild horses were approximately 13hh (the average today is 15hh), making them equivalent to the size of a large pony today, and hardly fit for being ridden for long stretches. The horse was used as a draft animal prior to its use as a mount.

[8] Littauer and Crouwel 1979, 12; Drews 1988, 74; Hyland 2003, 9.

[9] Summers 2001, 287-290; Anthony et al. 2006, 148.

Euboea provide evidence that advanced horse-husbandry occurred in Greece prior to 950 B.C.E., owing to the presence of iron bits in the mouths of two of the animals.[10]

Skeletal Material and DNA studies

Horse burials represent an impressive resource for the study of equine domestication as well as funerary ritual. The four horses from the Toumba burial at Lefkandi are among the most famous. The burial itself dates to just before 950 B.C.E., and the horses it contains stood at roughly 11.25 hh. Another burial, in Tomb 68 of the Toumba Cemetery in Lekandi, consists of the skeletal remains of two horses.[11]

Understanding the physical forms of equids as they developed under the influence of human intervention is crucial for recognizing how horse-types may have looked and how they may have changed through time. Faunal evidence provides some insight into this domestication process and demonstrates the difficulty of differentiating between *E. caballus*, *E. ferus*, *E. hemionus*, and *E. asinus.* When Markman established his three horse-types, equid skeletal remains were scanty or unstudied.[12] Today a greater focus on faunal remains in archaeological assemblages supports new research in horse domestication and analyses of the various subspecies of *Equus*. The bulk of detailed study has been conducted in northern

[10] Popham et al. 1993, 21-22. It should additionally be noted that these four horses stood at a mere 11 hh, which constitutes a tall pony by today's standards. See Langdon (2008, 162-164) for mention of horse-leader imagery.

[11] Popham et al. 1989-1990; Popham et al. 1993:21-22.

[12] Markman 1943, viii, 3-4, n.11. Equid remains that were preserved in early excavations were not studied with the rigor exercised today, resulting in samples that are stratigraphically problematic. Additionally, even horse skeletons under careful scrutiny may appear indistinguishable with regard to conformation.

Greece, the Balkans, and Anatolia. As an outgrowth of the careful study of skeletal material, new focus has been placed on understanding subspecies via DNA.[13]

Indicators for subspecies or domestication in the archaeological record are based largely on size of the skeletal material. Wild varieties of *Equus* tend to be smaller than their domesticated counterparts. Asses are the smallest equid, onagers are slightly larger, and the true horse is the largest. The process of domestication, though, can also cause an animal to decrease in size, especially during the earliest generations of domesticated varieties.[14] An understanding of subspecies and level of domestication is further muddled by the propensity of equids to crossbreed.

Crossbred animals are difficult to differentiate from zooarchaeological remains, and it must be understood that the condition of an equine exists along a spectrum in which there are a number of possible outcomes resultant from domesticity and subspecies. While some crossbreeds may be sterile, their presence does not suggest that their occurrence was accidental. The mule, for example, is a crossbreed of a horse and a donkey. The offspring of the pairing is almost always sterile, but the combination is replicated because of the favorable outcome of an animal with the hardiness of a donkey and the strength and size of the horse. The mule has been bred since antiquity and is a common equine variant, but because of its sterility, it cannot be considered its own subspecies.[15] The skeletal remains of *E. caballus* and

[13] Levine 2002; Benecke 2009, 14. Studies of ancient horse DNA can also reveal phenotypic characteristics, such as coat color.

[14] Benecke 2009, 18.

[15] Fecundity is one of the factors used to determine whether an animal can be classed as its own species/ subspecies.

the mule are virtually indistinguishable in an archaeological context. In art, however, once a certain amount of realism is undertaken, it is easy to tell the animals apart.

While identifying various subspecies from equids can be difficult depending upon taphonomy and research methods, some studies have successfully differentiated between subspecies. Cognizance of the development of equids through time, and the influence that domestication had on the subspecies' bone structure adds to our understanding of horse types that were defined by Markman and will be used throughout this study. The oldest equine skeletal material comes from the Balkans.[16] Extensive study has been conducted on the 306 horse bones and teeth from Turkish Thrace at the site of Kirkareli-Kanligecit. The subspecies identified at Kirkareli-Kanligecit appears to be domesticated, and is dated between 2600-2300 calibrated B.C.E.[17] From the faunal remains at this site, it is clear that these horses were used as draught animals, and the age at which they were slaughtered is apparent.[18] Horse remains dating to the mid third millennium have been identified from Katsanas in Macedonia. [19] Several examples of Early Bronze Age remains were identified at Tiryns, Lerna, and Nichoria.[20]

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[16] Benecke 2009, 13.

[17] Benecke 2009, 13, 16. These dates are based on radiocarbon dates from five bones. These dates align with the dates of archeobotanical samples taken from the same area.

[18] Benecke 2009, 13. The horses were slaughtered between the ages of seven and ten in most cases. By modern standards, and Classical period standards, these horses would have been in their prime. Perhaps the nature of the work or the earliness of the domestication process caused the animals to have a shorter lifespan.

[19] Benecke 2009, 14.

[20] Benecke 2009, 15.

At Çatalhöyük, three types of equid have been identified and studied extensively.[21] One of the types has been identified as *E. caballus*. In addition, Neolithic remains of *E. ferus* have been identified at Pulur Höyük, Norsuntepe, Tulintepe, and Tepecik.[22] Onagers have been recognized at such sites as Arslantepe.[23] By the Early Bronze Age, wild horses were no longer extant in Anatolia, but it is believed that pockets of domesticated stock persisted.[24]

An exhaustive catalog of horse remains indicated at archaeological sites in Greece and Cyprus from the Geometric period onward has been constructed. This results from the developing interest in the subject of equids in archaeological assemblages, especially over the last two decades. [25]

Horse Types in Greece

Greece does not possess ideal territory for raising horses as they require extensive amounts of land. Since they are herd animals, horses should be kept with other horses. Modern equestrians estimate that one needs approximately one acre of good grassland per capita to ensure an adequate food supply.[26] The conditions in northern Greece would have been more favorable for horse-tending than the Peloponnese and islands. Horse keeping and training require specialized knowledge and an added investment of time and labor. On account of time and cost, raising equines was an activity for the elite.

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[21] Summers 2001, 286.

[22] Littauer and Crouwel 1979, 110; Summers 2001, 289-290.

[23] Summers 2001, 289.

[24] Summers 2001, 290.

[25] Kosmetatou 1993. Reese 1995 presents an addendum to Kosmetatou's work.

[26] Speaking from experience, this seems to me a conservative estimate. Iron Age Greeks may have supplemented their animals' diets as we do today with sweet feeds, but we have no proof of this.

One concern that has risen in the study of Greek horses is determining which breeds are depicted in sculpture. Discerning breed from sculpture in the round and in relief is difficult, and some have stated that it is an impossible feat.[27] The reasons for this are manifold. The rigorous documentation practices associated with horse breeding today did not occur in antiquity in Greece.[28] The issue of determining the breed is compounded by variability between sculptural media and artistic convention.[29] While it may not be possible to identify ancient horse breeds with the level of accuracy that one may obtain today through detailed records and regulated breed standards, some reasonable assumptions and observations can still be made. Proper analysis of equine sculpture requires a consideration of time, media, and the context in which the piece of art was created.

The types of horses found in antiquity can be assigned to one of three categories established via literary evidence by Markman: Asiatic, Western/ Libyan, and European.[30] Markman's schema provides a useful model upon which to base interpretation, and it is roughly in agreement with Richter's general characterization of horses as either "stocky ponies" or "racehorses."[31] Richter's categories correspond to the modern horse designations

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[27] Markman 1943, 3; Downs 1961, 1196.

[28] Even today, horse breeding in Greece is not a widely practiced enterprise. One modern study on the Skyros Pony states that studbooks have only been maintained since the 1980s, and these records are full of unknown sires (Bömcke *et al.* 2011, 73). Troy, as we know from the *Iliad*, gained a reputation for breeding horses during the Late Bronze Age. Hittites were avid horse trainers and breeders, and were careful to breed for a tall and long-legged stock (Drews 1988, 82, 89). There are clear examples of sire records from Egypt (Littauer and Crouwel 1979, 83).

[29] Benson 1970, 33; Eaverly 1986, 156.

[30] Richter 1930, 14-15; Markman 1943, viii.

of "hot-blooded" and "cold-blooded."[32] To seek a more nuanced approach, such as attempting to track Richter's six ancient breeds would not only be impossible, but would likely not bear more fruit than using Markman's tripartite framework. When discussing Greek art, a fourth type – the Composite type – is a useful addition to this framework.

In order to place horses into Asiatic, Western/Libyan, European, and Composite categories, various points of horse conformation must be considered. Fig. 2 demonstrates a modern equine with the anatomy labeled. In discussing equestrian sculpture, most focus is placed on the head, its carriage, and the way it joins the neck. The stoutness of the body is assessed qualitatively, with the general goal of discerning a draught horse, the equivalent to Markman's European type from a finer-boned race horse, like the Western/ Libyan horse, both of which will be discussed in the sections that follow.

The style of the forelock, mane, and tail will also be included in analysis of conformation. In some cases, a mane that stands upright is indicative of an ass, onager, or Asiatic horse. In other cases, close-cropping of the mane is a matter of fashion or practicality. Tails may also be distinctive in a number of ways. I refer to tails as "high-set" and "low-slung" on several occasions. Where a tail is described as "high-set," it is situated high on the croup. In some cases, a high-set tail structure is a distinctive feature.[33]A tail that is "low-slung" sits low on the croup, and commonly occurs in stockier breeds.

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[31] Richter 1930, 14-15. Richter lists the following breeds: Persian, Scythian, Libyan, Thracian, Thessalian, and Theban.

[32] Azzaroli 1985, 170. Hot blooded horses are from warmer climates and are lighter and faster than the shaggier and stockier cold-blooded varieties of Europe.

[33] The Arabian, which will be discussed in the section entitled "Western Horses" is the best example.

Asiatic type

Broadly speaking, the Asiatic type is likely to be most closely related to stock identified in Russia. Herodotus offers a description of the horses of the Sigynnae, a Caucasian group: “Their horses are said to be covered all over with shaggy hair five fingers' breadth long, and to be small, blunt-nosed, and unable to bear men on their backs, but very swift when yoked to chariots. It is for this reason that driving chariots is the usage of the country” (Hdt. 5.9.2).[34] The closest modern parallel is the endangered breed identified as Przewalski's Horse (pronounced Prevalski) or the Tarpan, which is native to Russia and Central Asia.[35] This breed stands at an average 13hh, and is characterized by its dun color, thick neck, large head, and a mane that stands on end.[36] The Przewalski’s horse, much like the horses described by Herodotus, would be better suited for draught work than for use as a mount owing to its conformation.[37] The stocky Asiatic type is depicted frequently in art from the Far East.[38] Examples of this type include the Bronze Statuette from Olympia and horses from the Siphnian Treasury South Frieze.

Western/ Libyan type

[34] Trans. by A. D. Godley 1920. See Appendix 2.

[35] Blakely 1997, 197-199; Levine 2002, 195. Despite modern conservation efforts, the Przewalski’s horse is dying out due to its unwillingness to breed in captivity.

[36] Blakely 1997, 198; Dietz 2003, 191.

[37] Levine 2002, 197.

[38] See S. Lee, (1994, fig. 603), for an example. Also, Gianoli (1969, 67-71, figs.58, 60) provides an informative survey of Asian depictions of horses.

The Western type, also referred to as Libyan, is the stock favored in Sicily and Magna Graecia. Western horses are characterized by their long legs, height, and slender form. "The Libyan horse was superior to the Greek, for it could be ridden horseback without any loss of speed."[39] Since the stock originated in North Africa, for the purposes of this discussion the terms "Western" and "Libyan" will be used interchangeably as first practiced by Markman. Libyan horses were some of the most prized, and were often among the most successful in athletic competitions.[40]

Descriptions of the Western/Libyan type seem to reflect closely another ancient breed, the Arabian. The Arabian is easily recognizable by a thick, curving neck, small triangular head with delicate features, and a high-set tail.[41] The curvature of the neck and tail are especially distinctive because this breed has twenty-three vertebrae instead of twenty-four like other breeds.[42] The abridgement of the spine leads to a distinctive contraction and curvature of the neck as well as a raising of the tail bone. Most of our modern hacks can be traced to the Arabian lineage. Such breeds as the Thoroughbred, the modern race horse *par excellence*, are descended from this fine-boned stock.[43] Western/ Libyan type horses, which bear characteristics similar to Arabians, are easily distinguished in sculpture. The Artemision Horse and Jockey to be discussed later, epitomizes the type. Other examples include the horses associated with the Delphi Charioteer and some of the horses on the East and West friezes of the Siphnian Treasury.

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[39] Markman 1943, 9.

[41] Markman 1943, 10-11, 18. Markman describes horses that fit this description precisely in Egyptian art, but is reluctant to connect these depictions with the Arabian breed.

[42] Blakely 1997, 89.

[43] Blakely 1997, 87.

European type

The European type horses would have been smaller than their Western/ Libyan counterparts, and would have been stocky like the Asiatic type. A description of these animals was offered by Markman: "Generally the 'European' horse seems to have been a small, shaggy animal with a long mane and a flat nose." [44] The Shetland Pony seems to be the closest modern parallel to this type. European and Asiatic horses are difficult to distinguish from one another in sculpture. The equine in the Horse and Groom relief is discussed as an early Hellenistic variant of this type.

Composite type

To the three aforementioned types, which have foundations in actual lineages, I would add a fourth type – a Composite type. There are two main reasons why the additional designation seems necessary. The international character of Greece, beginning especially in the Archaic period, fueled by colonialism, trade, and athletic competitions, would have resulted in an exchange of many types of objects and ideas, and livestock might be counted among these things. Interbreeding of different stock would result in horses bearing a mixture of features outlined above. The Composite type, while not linked to a specific ancient lineage, is a synthetic construct that will aid in and add nuance to our discussion.

The Composite category is broad and encompasses any depiction that does not fit neatly into categories in Markman's schema. The Composite type may reflect a physical reality, as when crossbreeds result in hybrids. It may also be used to describe a depiction that is beyond the realm of realism, but that has characteristics that can be associated with

[44] Markman 1943, 11. Blakely 1997. The Shetland Pony boasts the oldest equid lineage in England.

multiple types. The type consists of a combination of characteristics from the other three categories. For example, a horse may be long-legged, a conformational characteristic associated with the Western type, but it may also have the thick body of an Asiatic or European horse. Some artists present idealized animals, which combine the finest features from the three types. The purpose of this may be to demonstrate the power and superiority of the stock of a particular area. The generic quality of horses on the Prinias and Parthenon friezes may be a means of deemphasizing horses in favor of focusing on the riders, so there are considerations beyond artistic choice that may go into such rendering. The homogeneity of horse body-types on patriotic monuments and grave stelai may also be a mechanism for establishing unity among multiple groups.[45]

Vase Painting

Equestrian images, which occur frequently in vase painting, provide a means of understanding how horses were conceived in a two dimensional medium in Greece. While the focus of this project is horses on sculpture, equines were popular subjects in other media. Horses appear in scenes related to battle, mythology, and athletic events. In Greek vase painting, details are more easily rendered than they would be in marble, limestone or bronze. Since the figures are not required to support themselves, their poses are often more dynamic and have greater variety. A brief description of selected horses on vases from the sixth through fourth centuries B.C.E. demonstrates that equestrian imagery experiences its own developmental trajectory independent of changes in sculpture.

[45] Harrison 1984. This idea will be discussed further in Chapter 4.

The first example of equestrian imagery on vase paintings is a black-figure amphora by the Painter of the Vatican Mourner in the Boston Museum of Fine Arts dating to 530 B.C.E.[46] On both sides of the amphora, the horses serve as mounts (Fig. 3). Fig. 3 shows a horse ridden bareback being controlled with a bridle. Musculature is demonstrated through white incision, and emphasis is added along the mane and shoulder in brown. The horse's neck is thick and curved, and the head is small and triangular. The horse has a thick body with strong quarters and a heavily-muscled shoulder. The legs are spindly, and the front right knee is depicted as a bulbous protrusion.

The reverse of the vase (fig. 4) shows a more evenly proportioned animal, also ridden bareback. The body is still thick, and muscles are still outlined in white, but the musculature has not been over-emphasized at the shoulder. The mane is closely cropped to stand upright, and is rendered by a series of incised lines. The neck on this second equine is more gently curved, and the head sits squarely on the neck. The tail is set low on the rump, especially in comparison to the horse on the other side. As is evident from this piece alone, there is considerable variation in horse depiction, even on the same vase.

A Panathenaic amphora from the British Museum dated to 520 B.C.E. shows a charioteer controlling a team of four horses (fig. 5).[47] Only two of the horses are immediately visible due to the artist's use of overlapping perspective. It is only through counting the legs and observing thin slivers of muzzle that we understand that the amphora

[46] Museum of Fine Arts, Boston: 1970.8; Beazley # 310353; Stansbury-O' Donnell 2006, 131-133, fig. 34; *CVA*: 1, 4-5, fig G.8, Pl.(628) 6.1-2.

[47] British Museum GR 1863.4-30.1, Vase B 135.

depicts a quadriga rather than a biga.[48] Like the previously discussed black figure amphora, the horses themselves are black with white incisions emphasizing musculature. Details on the manes, tail, and the chest on the visible lead horse are in a deep red. The overall composition of the head and neck is similar to that of the horse in the Museum of Fine Arts in Boston (Fig. 3), though the Panathenaic amphora horses discussed here are shown in motion. The bodies are stocky in comparison to the legs, and the thick necks terminate in unnaturally small triangular heads. The animals are shown in the act of competition, with the front legs upraised while the back legs propel the animals forward in unison. The front legs are significantly shorter than the hind legs.

A red-figure column krater in the Warsaw Museum and attributed to the Painter of the Louvre depicts a youth in Thracian garb departing with a woman holding an oinochoe and phiale (475-425 B.C.E.; fig. 7).[49] The horse on this vase is lacking the detail that is evident in previous examples. The head is thick, and the muzzle has a heavy, flat quality. The ears are long, and pinned back, providing some expressiveness to the otherwise stoic face. The mane is stylized and close-cropped. Musculature is outlined in sweeping incisions across the neck and shoulder. The hind quarters are less well defined, but two curved lines offer some definition. The legs are marked out at the knee and hock joints with black incision, and the fetlocks are carefully defined. The chestnut on the horse's left front leg is also marked, signaling that the artist was aware of fine details in horse anatomy even if he chose not to render them.

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[48] A similar rendering is seen on the black-figure neck amphora in the Ackland Art Museum (fig. 6). By the Bucci Painter, inv. 88.15.

[49] National Museum, Warsaw, inv. 147955.

The red figure volute krater by the Painter of the Wooly Satyrs housed in the Metropolitan Museum of Art dates to ca. 450 B.C.E (fig. 8). It depicts a horse ridden by an Amazon.[50] The horse has more realistic proportions than the black-figure examples. Muscles are outlined in black, and particular emphasis is placed on the shoulder. The mane is schematized, standing straight on end and textured with a series of tic marks. The forelock flutters unnaturally in front of the forehead to show that the horse is in motion. Although roughly contemporary with the red-figure column krater (Fig. 7), the rendering of the equine is entirely different, demonstrating the variation that exists in horse images rendered with the same technique.

An Attic red-figure neck-amphora in Arezzo (Fig. 9) is dated to approximately 410 B.C.E.[51] This example shows Pelops and Hippodamia in a four-horse chariot. It seems possible that the artist is influenced by the horses on the Parthenon frieze. The thickness and strength of the bodies is matched by a strong neck and a head carried proudly. The manes are the most clearly Parthenonian feature of the horses on this vase, as they are short-cropped and stand upright. Many manes on the Parthenon frieze and those on the Dexileos stele, Berlin Stele, and Vatican relief discussed in Chapter 3 are marked by the same texture and a similar amount of detail. The perspective employed in this scene allows us to view all four horses pulling the quadriga.

The neck-handled amphora by the Suessula painter depicting a gigantomachy, includes a scene of Ares and Aphrodite in a quadriga (420-390 B.C.E.; fig. 10) It is roughly contemporary with the Arezzo vase, and the perspective similar, but the four-horse chariot is

[50] New York, Metropolitan Museum of Art, Beazley # 207099; *ARV*2, 613, 1.

[51] In the manner of the Dinos Painter; Arezzo, Museo Civico; Beazley # 215325; *ARV*2, 1157, 25.

rendered differently.[52] Equine bodies are thick with muscles emphasized across the legs and chest. The heads are held high, and the base of the neck expands outward in an exaggerated convex manner. The horses' faces are more expressive than in previous examples. The Parthenonian mane arrangement has been modified such that rather than having a ridge textured with incisions to indicate locks, the individual hairs of the manes are rendered in the close-cropped upright style. The forelocks are blown back to demonstrate the speed of chariot. Despite the dynamic pose of the figures, the front and back legs are proportional to one another and to the rest of the animals' bodies, in contrast to the horses on the Panathenaic amphora (fig. 5).

Identifying horse-type from these renderings is problematic. The artistic conventions of black and red-figure techniques consist of physical exaggerations not found in nature or sculpture. The column krater by the Painter of the Louvre Centauromachy (fig. 7) lacks the delicate facial features one might associate with the Western type, and the presence of an individual in Thracian garb suggests that the animal may be of European stock. We cannot assume that vases with racing quadrigas depict western horses although Western/Libyan stock appears with greatest frequency in victory commemorations. Although equines on vase paintings are unlike sculpted horses in many cases, the ideological rational behind rendering them is similar.

[52] Louvre, Beazley # 217568; *ARV2*, 1344.1.

Chapter 2:

Early Horse Votives and Athletic Monuments

Before engaging in a discussion about horse imagery in the Archaic through Hellenistic periods, it is important to consider how equine images were used previously. In particular, I focus on horse votive miniatures, though horses do appear in other contexts, such as plastic decorations on pyxis lids and in Geometric vase painting. Horses and horse-related items are ubiquitous in Iron Age sanctuary contexts, when there is a surge in votive practices.[53] The increase in offerings corresponds to an increase in sanctuary architecture where previously little or none had existed.[54] In fact, horses dominate votive assemblages in this period, vastly outnumbering other contemporary votive animals.[55] The choice to use the horse as the symbol for veneration is striking if one recalls the physical landscape of Greece and how it would have affected one's ability to engage in horsemanship.

Paucity of monumental sculptural material from approximately 700-525 B.C.E. necessitates that one turn to small votives and paintings for information on the horse.[56] These

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[53] Snodgrass 1989, 90, 287; Sourvinou-Inwood 1993, 11. I am omitting a vast body of scholarship on the dedication of horse trappings in funerary and sanctuary contexts as well as studies on equine sacrifice. For additional information on sacrifice see Kosmetatou (1993) and Reese (1995).

[54] Simon 1997,125.

[55] Zimmerman 1989, 2, 63. Zimmerman (1989, 63) informs us that of over four-thousand Geometric animal figurines recovered from Olympia, 979 are equids.

votives lack the realism required to ascertain horse type, and the general convention is a highly schematized rendering.[57] These votives were often produced in mass quantities and exhibit stylistic similarities within given assemblages.[58] It seems that sculptors and bronze casters were not trying to depict particular equine specimens, but rather were providing generic representations of horses. It is the idea of horses or the artists' memories of horses that are represented in sanctuaries. The reasons for their prominence are likely tied to their association with wealth during the Iron Age.[59]

Conformational aspects and elaboration of horse votives vary by region, but Geometric bronze horse votives have a readily recognizable form. The bronze assemblage at Olympia serves as a good basis for discussion. Horses in this assemblage appear primarily as votive miniatures (figs. 11-13), but also appear on tripod ring handles (figs 14-15). Sometimes horses were associated with people, especially on ring handles. In other instances, charioteers with chariots and without horses were dedicated (fig. 13).

Bronze horse votives at Olympia demonstrate common characteristics that define their region, but will also be used here as a reflection of bronze horse votives across Greece. Horse proportions differ by votive, and each object offers varying degrees of schematization. The Olympia figurine in Fig. 11a and 11b dates to the last quarter of the 8th century B.C.E.[60]

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[56] First noted by Markman (1943, 41).

[57] Benson 1970, 37; Zimmerman 1989, 2.

[58] See Zimmerman (1989) for a comprehensive catalog of equestrian Geometric Bronzes. The study details finds by region.

[59] Zimmerman 1989, 3. Other factors, such as close associations between horses and certain deities can also partially explain this fascination.

Details are spare, but an equid is clearly depicted. Ears are short and tabby, the muzzle is cylindrical, and the mouth is demarcated by a single incision. The neck is unnaturally long and uncharacteristically thick. The animal is supported by stubby legs that do not reflect any of the anatomical features of an actual equine leg. Other examples (Fig. 11c and 11d) dating to the third quarter of the 8th century B.C.E. show different levels of elaboration that may be found within the same region.[61] In Fig. 11c, the ears are longer than in the previous example, and the snout is again cylindrical, but disproportionally lengthy. The neck is thick and long and connects to an attenuated body. Legs are long and straight, but additional variation was used to denote the hooves. The figurine in Fig.11d shows an even finer level of elaboration than the votive in Fig. 11c. The muzzle is cylindrical, but is proportional to the head. The breast is also emphasized in a manner not shown on the previous examples. The belly is drawn and thin in relation to the rest of the animal. More attention has been paid to the hind quarters, such that the gaskin and hocks are marked out from the rest of the leg. The elbow is also emphasized, unlike the previous examples. Thus it is clear that elaboration may be individualized, but the votives are schematized.

Additional variations in horse renderings occur, as the pair of yoked horses in Fig. 12a dating to the mid-8th century B.C.E.[62] This example demonstrates that horses are sometimes depicted in action on objects of veneration.[63] Another common variant of bronze

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[60] Fig.11a. Zimmerman 1989, 81, 109, pl. 14.fig. ELI 184; Fig. 11b. Zimmerman 1989, pl. 14, fig. ELI 184b; Olympia Museum.

[61] Fig. 11 c. Zimmerman 1989, 84, pl. 16, fig. ELI 251, Genève, Museé Barbei- Müller, n 27; fig. d. Maas 1978,pl. 46, fig.198 Olympia Museum B 1565.

[62] Fig. 12. a. Zimmerman 1989, 76, pl. 12, fig. ELI 82, Berlin A. O. 6552.

[63] See also Gadolou (2011). The Heliki model from Achaea is a temple/ house model that has a painting of a horse-race on its roof. Dedication of the model is one level of veneration, but the model

votive horse figurines is the stand-alone type attached to a base from the second half of the 9th century B.C.E. (Fig. 12b). [64]

Chariots and charioteers without associated horses were also commonly deposited in sanctuaries. The human figures, like the horses, possess exaggerated and unrealistic features. Charioteer figurines of the Geometric period are epitomized by charioteer type figures from the early third quarter of the 8th century B.C.E. (Fig.s 13a and b).[65] The charioteers' facial features typically include incised eyes and large bulbous noses. Ears protrude from the sides of the head, and often the figures wear high conical caps. The limbs are stiff and lacking naturalism. The chariots are equally schematized, and the details on these vehicles are spare. Often they do not include wheels, but rather are flat bottomed. The yoke mechanism and the manner in which the charioteer controls the horses is usually shown.

In addition to small scale stand-alone equestrian votives, votive horses in action, and charioteer figurines, horses also appear on rim handles (fig. 14).[66] They are featured either alone (Fig. 15a) or in association with human figures (Fig. 15b).[67] Ring-handle horses and humans hold the same characteristics as the votive miniatures.

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further depicts games in honor of the gods on its roof, presenting a second level of devotional sentiment.

[64] Fig. 12.b. Zimmerman 1989, 76, pl. 12, fig. ELI 98, Genéve – Fondation Thétis.

[65] Fig. 13 a: Schweitzer 1969, Pl. 176, 177, Olympia, Museum, inv. B 3005; Fig 13 b. 182-184, Olympia, Museum inv. B 1670; Schweitzer 1969, 147-151.

[66] Fig. 14, Maas 1978, pl. 48, fig. 201 (No inventory number listed in Maas).

[67] There has been lively discussion about votives of sidesaddle female riders. It is debated whether the figures represent deities or mortals. The discourse is too lengthy to be presented here; for a full discussion of these figurines, see Voyatzis (1992). Fig.15a. Maas, pl. 4, fig. 161A, inv. B 7300; fig, 15 b. Maas, pl. 40, fig. 154, Schweitzer 1969, fig 191, Olympia Museum B 4567, height 6 cm.

The rich body of Geometric horse votives demonstrates a fascination with equestrian activities that is carried forth in subsequent periods. Unlike many of the horses in periods to follow, these horses are too abstract to be categorized by type. The interest in horses likely stems from their association with elites. The aforementioned skeletal remains from Lefkandi support the association between prominent figures in settlements and equines. While the meaning of votive offerings in sanctuaries is open to a variety of interpretations, and likely reflects several ideals beyond economic and political concerns, it is the socio-economic and political dimension of equestrian imagery that carries forth into subsequent periods.

Athletic Monuments

Many athletic competitions in antiquity centered on horsemanship, and as a result horses are described or shown in media depicting victories at these events. Participation in athletic games carried serious social and political implications. Competitions were a means to earn fame and legitimize one's wealth and power, and equestrian competitions were the most prestigious of all events.[68] Given the political ramifications of athletic victories, analyzing athletic monuments commemorating equestrian events illuminates a lively aristocratic discourse.[69] To these ends, I discuss the Delphi Charioteer (figs. 16-20), the bronze chariot horse from Olympia (470 B.C.E., fig. 21), and the Artemision Horse and Rider (figs. 22-28).

For athletic monuments, scalar differences between horses and humans as well as horse-type are of utmost importance in addressing the multivalent relationship between the

[68] For a detailed discussion of the "value" of different types of athletic competitions, see Golden (2008: 8-10). See Nicholson (2005, 10) for the comparative values of individual athletes performing physical feats vs. equestrian victory.

[69] Hemingway (2004, 140) points out the various uses of large scale bronze dedications.

dedicator, the athlete, the dedicator's social and political standing, and the dedicator's involvement in the training and care of the animals. Equestrian events were exclusionary on account of the expenses associated with horses.[70] It can be ascertained from cavalry records in lead found in Athens, that in the Classical period that a high quality racehorse would have been valued at approximately 1,200 drachmas, which was four times the average value of a cavalry horse during the same period.[71] A horse owner would be responsible for purchasing horses and financing the maintenance and training of an animal or team of animals, but would also need the means to support travel for the horse or horses should they compete in one of the Panhellenic games. Where a horse team was involved, an owner would inevitably require back-up animals in case one of the team fell ill. Further, the horse owner would have to find a jockey or charioteer, positions which were typically for hire.[72]

The first recorded Olympic games took place in 776 B.C.E., though evidence suggests that they could have been in existence since the 9th century B.C.E.[73] Quadriga races, which were among the first equestrian events established, were featured at the Olympics beginning around 680 B.C.E.[74] Libyans are believed to have introduced Greeks to the quadriga race. Libyans had a supreme stock of animals and practical knowledge of

[70] Golden 2008, 6-7.

[71] Kroll 1977, 89; Bugh 1988, 57. The two caches of lead tablets record cavalry horses from the Classical and Hellenistic Period.

[72] Nicholson 2005, 2-9, 95-96, 100-103; Golden 2008, 12-13. See Nicholson for the development of the roles of jockeys and charioteers.

[73] Crowther 2007, 46.

[74] Christopoulos 1975; Golden 2008. See Table 2 for different competitions and their dates.

horsemanship, which they passed on to the Cyreneans.[75] Libyan or Western stock was comprised of animals far superior to their Asiatic and European counterparts where racing was concerned. As stated in the discussion of horse types, Western/Libyan stock were large enough and strong enough to bear the weight of a rider without sacrificing speed, making them the ideal race horse. For this reason, Sicilians imported the Western stock from Libya, and within a short time their horses, too, were considered top-contenders in equestrian competitions.

While competitions vary by locale, after the 4-horse chariot race, a number of other equestrian events were included such as the horse race, mule-cart race (*apene*), mare race (*kalpe*), 2-horse chariot race, 4-colt chariot race, 2-foal chariot race, and the foal race.[76] Equestrian competitions were divided into separate events for mares and stallions, and were further separated by the age of the horses. Some competitions were specific to one location, such as the *kalpe* and *apene*, which were only performed at Olympia, and only for a brief period of time. In addition to the Panhellenic competitions at Olympia, Delphi, Nemea, and Isthmia, many cities had their own competitions. Major festivals including the Panathenaic festival also included equestrian events such as the *apobates* race, in which a warrior in a chariot would jump in and out of the vehicles while it was moving. The *antihippasia*, a mock cavalry battle, is another competitive military equestrian display.[77]

Jockeys and charioteers are essential components in any equestrian victory, but their inconspicuousness or invisibility in monuments is a testament to the political connotations of

[75] Hdt. IV. 169.3. Markman1943, 8-9; Mitchell 2002, 97. See Appendix 2.

[76] Christopoulos 1975, 494-495; Golden 2008.

[77] Worley 1994, 81.

the competitions and associated victory monuments. Jockeys by virtue of their craft had to be small and were often young boys. Their careers were naturally short- lived as a result of the size and weight restrictions of the position. As a result, many jockeys were hired from local families who lived near the game sites.[78] Racing individual horses was less prestigious than chariot racing. The small size of jockeys on monuments must also have some basis in reality, and thus cannot be justified through purely political motives. It is fitting that an individual with no connection to the patron would be denied attention in the commemoration of the victory. It would not have been advantageous to the patron to honor another individual, though undoubtedly trainers, jockeys, and charioteers would have gained more localized and ephemeral acclaim for victories.[79]

Among charioteers, greater flexibility was allowed with respect to the driver's age and weight. Early charioteers were often friends or relatives of the patron or even the patron himself.[80] For some events, such as the *apobates* race of the Panathenaic festival and the *kalpe* at Olympia, the owner was not permitted to hire a driver, but had to compete himself.[81] With the commodification of the charioteers, patrons would have likely been forced to choose from a group of experienced charioteers rather than employing their own family members.[82] Charioteers received commemorative minimization similar to jockeys, especially in later periods when the athlete was less likely to the patron.

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[78] Nicholson 2005, 109.

[79] Nicholson 2003, 103.

[80] Nicholson 2003, 100-103 and 2005, 2-9, 95-96, and Golden 2008, 12-13.

[81] Nicholson 2003,103.

In addition to the particulars of the sporting events and the participants, it is important to remember that there are multiple meanings for large scale bronzes as sanctuary dedications.[83] First, the dedication provides a physical manifestation of the victory, and maintains the memory of the event. Often the memorials were portable, as in the case of victory odes, which could be recited periodically, or prize amphorae.[84] Monuments were erected not only at the site of the victory, but also in the victor's hometown.[85] Additionally, the games were a means of venerating the gods, and renderings of such action serve as a reminder of the individual's piety. Thirdly, the physical value of the material used to construct the monuments must be fully appreciated to understand the ideological value of the sculptures.[86] The horse in these athletic monuments was a physical proclamation of the status of the victorious dedicator's wealth and political prestige. The commoditized positions of jockeys and charioteers cause their representations to be understated, and the horse becomes the proxy image for the elite sponsor.

The Delphi Charioteer

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[82] Nicholson (2003) discusses the absence of charioteers in several types of commemorative media including odes, vases, coins, and sculpture. He observes that charioteers are either absent from memorials or their images are manipulated to suit the victor better.

[83] Hemingway 2004, 140.

[84] Nicholson 2003, 103.

[85] Hemingway 2004, 126.

[86] Camp 1998, 25, 26; Tiverios 2007, 8. Vases given as prizes for athletic victories constituted part of the value of the victory. The contents of a victory vase, usually olive oil, would have been a substantial reward for the victor.

The Delphi Charioteer (figs. 16-17) and the lost monument (figs. 18 and 19) associated with it provide one example on which to focus the discussion.[87] The figure is dated to 474 B.C.E., and was found beneath the Sacred Way at Delphi.[88] The charioteer stands at 5'11" high, making him life- sized or slightly larger than life-sized.[89] He is an ephebe, with the beginnings of a beard evident on his cheeks (fig. 17-18).[90] The charioteer's face is placid, which marks him as the embodiment of a well-trained and objective-driven athlete.[91] He wears the traditional long garment *(xystis)* of a charioteer, and stands tall with reins in his hands.[92] Reconstructions suggest that there would have been four horses and one or two grooms or youths in the figural group (fig. 19). [93]

The Delphi charioteer has often been linked to an inscription on a base which was found in close proximity to the charioteer and associated fragments.[94] The reading of this inscription is problematic, but many have taken the charioteer to be a depiction of Polyzalos,

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[87] Delphi Charioteer: Delphi Archaeological Museum inv. 3484, 3520, 3540. For a comprehensive discussion of the monument, see Chamoux (1955).

[88] Boardman 1991, 52. The commonly held date is 474 B.C.E. Adornato (2008, 29) dates him between 470 and 450 B.C.E.

[89] Adornato 2008, 51.

[90] Chamoux 1955, 51.

[91] Adornato 2008, 48.

[92] Chamoux 1955, 51.

[93] Boardman 1991, 52; Adornato 2008, 35, fig. 5. Reconstructions of this monument are problematic. Adornato (2008, 49) states that fragments from three horses can be readily associated with the charioteer based upon the style of their execution.

[94] Finley and Pleket 1976, pl. 2a; Adornato 2008, 49-51. The bronze fragments are associated with the charioteer based upon a close analysis of their execution. Prosopographic evidence dictates that the inscription on the base (Delphi, National Archaeological Museum, inv. 3517) precedes the stylistic dating of the charioteer himself.

who is described on the base.[95] Owing to the subject of the sculpture as well as early reconstructions, many believe that the sculpture commemorates an athletic victory. Based on Adornato's assertions, we must be cautious about associating the inscription with the charioteer.[96]

Regarding the horses associated with the charioteer, only fragments, such as the rear legs of one of the horses, remain (fig. 20).[97] The Delphi charioteer's group leaves little room for discussion with reference to horse type owing to poor preservation. From these leg fragments, we cannot gain much insight into conformation characteristics of chariot horses in this monument, though they have been interpreted as life-sized renderings.[98] The lack of feathering on the fetlocks or pastern, however, indicates that the horse was not of the European type, where such a characteristic would be expected. Given the context, it is likely that the horses in the group were the Western/Libyan type.

While an analysis of the type of horse shown on this monument can only be performed to a limited degree, the monument does illuminate some political ideologies relevant to this study. Disassociating the inscription from the charioteer cannot strip the monument of its splendor or make the motives for its creation seem less politically driven. Athletic monuments allow for the memory of a victory to be perpetuated for at least as long

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[95] See Appendix 2 for two reconstructions of the text on the inscription. For a detailed discussion of the inscription, see Adornato 2008, 31-37.

[96] Adornato 2008, 28, 31-41. One of the problems with reading the inscription is determining who the dedicator would have been. Gelon and Hieron, tyrants of Gela have been proposed, but then the inscription cannot be associated with the sculpture. Inscriptions dedicated by Gelon and Hieron would have preceded the charioteer by at least a decade.

[97] See Chamoux (1955, 39-43) for a complete list, descriptions, and inventory numbers of fragments associated with and/or found in close proximity to the charioteer.

[98] Adornato 2008, 51.

as the monument stands. We are still talking about the Delphi charioteer after all. The cost of constructing such a monument demonstrates the large financial stake that a patron would have had in the games. When this monument was intact, it would have presented a powerful image in which the horses – and proxy the wealthy sponsor – predominated.

Olympia Chariot Horse

The large bronze chariot horse statuette (470 B.C.E.) from Olympia provides another example of a bronze dedication (Fig. 21).[99] The figure is well preserved, and is only missing its rear legs below the hocks. Some of its features are found in nature, while others are highly schematized. Markman indicates that the horse's head is very realistic though a bit large and is especially naturalistic around the nostrils and ears.[100] The eyes protrude to an excessive degree. The forelock is a projecting knob, and the mane is carved as a block that stood straight on end.[101] While the mane could easily be seen as a representation of the Asiatic type of mane, the forelock protrusion seen in this figure is not found in nature. The stylized forelock is probably related to an earlier convention that can be seen in Geometric figurines. The horse's neck is smooth and thick, but does not possess the distinctive curve associated with the Western type. The back is flat with little definition afforded to the withers and only a slight bump to indicate the croup. The shoulders and hindquarters are strong, but definition of

[99] Markman 1943, 120; Lullies and Hirmer 1960, 32, pl. 106; Mallwitz and Herrmann 1980, 159-160, pl. 111; Andronicos 1994, 67, fig. 52. Markman dates it to 455-445 B.C.E. based on stylistic grounds, but Mallwitz and Hermann as well as Andronicos date it between 470-460 B.C.E. I follow the more recent dating. The statuette is 22.8 cm high.

[100] Markman 1943, 120.

[101] Archaic horses found on the Athenian Akropolis such as the Persian Rider (Akropolis Museum inv. 606) and The Horse with Traces of a Rider (Akropolis Museum inv. 700) bear similar manes. For more discussion on Archaic horse sculpture on the Akropolis as well as images of mane and forelock configurations, see Eaverly (1998, pls. 3, 15, 16, 21).

musculature is spare in comparison with later examples. The front legs are slightly too long in comparison with the hindlegs.[102] A great deal of effort was placed on detailed rendering of the leg muscles. The horse's proportions are stocky, which is either an indication of type or a reflection of its place of origin.[103] This statuette also provides a good example of chariot equipment including the bit, harness, and chest piece which often do not survive because they are often rendered as separate attachments, are lost by the time of discovery.[104]

Stylization in horse depiction is evident even in this period. As has been noted with Geometric bronze horses, a sculptor may be executing an equine in the sculpture without depicting the likeness of a specific victorious horse.[105] When considered against other examples of horses from Olympia, such as the horses from the quadriga on the east pediment of the Temple of Zeus (460 B.C.E.), one can see evidence for various horse types. [106] While the horses on the pediment have a body type which reflects the western horse, the bronze horse considered here represents an all-around different type. The thickness of the body and the configuration of the head, neck, and mane suggest that this is likely a stylized example of the Asiatic type.

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[102] Markman 1943, 120.

[103]According to Lullies and Hirmer (1960, 32) the bulky proportions are a trait of northeastern Peloponnesian sculpture.

[104] See Waywell (1978, pl. 5) for an example of a carved chest piece and attached bit from an impressive example from the Mausoleum of Halicarnassos. The chest piece is carved onto the horse, while the bit, frontlet, and head piece would have been attachments. The Artemision horse would have also had a bit and bridle attachment (Hemingway 1998, 115-116).

[105] Nicholson 2005, 16.

[106] See Gianoli (1969, fig 17) and Lullies and Hirmer (1960, pl. 111) for the Olympia East pediment horses.

Artemision Horse and Jockey

The Artemision horse and jockey group (BI5177) from around 150-140 B.C.E is an example of a large-scale bronze athletic monument from the late Hellenistic period. [107] In this monument, the long-limbed horse is shown in the midst of action (figs. 22-23).[108] This horse is slightly smaller than life-size, though he is of a larger scale than the jockey.[109] The small jockey, believed to be of Libyan origin, is crouched with reins in hand (fig. 24). Although found separately, Hemingway and others have convincingly argued that they are correctly reconstructed as a group.[110] While diminutiveness is a prerequisite for a jockey, the contrast in size between the horse and rider is emphasized.[111]

The proportions of the horse itself are not naturalistic, but exaggerated, especially in the area of the limbs. There is pronounced disparity between the length of the front and rear legs of the horse (fig. 25). This distortion of features, which includes the lengthening of the

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[107] Schuchhardt 1978: 91; Smith 1991, 54; Hemingway 2004, 89, 149; Smith, reminds us that this is the first example of a large scale bronze monument commemorating a horse race. I accept Hemingway's dating of the group to the second half of the second century B.C.E.

[108] See Hemingway (2004) for discussion of the recovery and reconstruction of this monument.

[109] Hemingway 2004, 50. The horse stands at 2.05 m when measured from the floor to the top of its head. The 2.05m measurement is the equivalent of approximately 20 hh, but horses are typically measured with their feet planted on the ground. Their height is measured to from the ground to the withers rather than the top of the head. The horse's dynamic pose makes him seem larger than he is.

[110] Hemingway 2004, 141; Karouzou (1978) mentions the uncertainty of the pairing in his discussion of the groups, which is partly due to the separation of the figures and damage sustained around the area of the join. Hemingway resolves this uncertainty largely through matching the drapery on the jockey to a fragment on the horse's withers. See Hemingway 2004 (76, fig. 50) for an image of this match.

[111] Hemingway (2004, 114) notes that the scale difference is partly due to the social circumstances outlined in this project, namely that the horse's role in the race was of key importance, while the jockey's position was deemphasized.

rear legs and the shortening of the front legs, is also evident on the Panathenaic amphora in the British Museum (fig. 5).

This animal is depicted in full motion; in addition to the position of the legs the open mouth and flaring nostrils give the viewer a sense of the dynamism of the group (fig. 26). The sculptural group is meant to be viewed from the group's left, which is the direction in which the jockey is facing, at a three-quarter perspective. The odd configuration of the legs is not noticeable from this angle, but the optical correction makes a frontal view of the group awkward (fig. 27). The horse's head is narrow and finely featured and the ears are pinned back. The position of the ears combined with the indications of effort in the muzzle, demonstrate the effort exerted by this animal. . The pronounced curve of the neck often shown in vase paintings of the preceding centuries is nonexistent on this monument.[112] The long and slender neck is met by a chest that appears deep, but is deemphasized in favor of a strong shoulder. A similar level of modeling is used to define the muscles on the flanks and hindquarters, perhaps reinforcing the propulsive power of his limbs. The right hindquarter is the site of a brand depicting a winged Nike bearing a crown.[113] The Nike brand is believed to be a reference to the wealthy horse-owner, which further reinforces both the importance of the owner in this monument and occasion for which the monument was constructed.[114]

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[112] See the previous section on vase paintings. In figs. 5, 9, and 10, though the horses are in motion, their necks remain arched, whereas on this monument, the horse's neck is fully extended.

[113] Hemingway 2004, 101, fig 59. For more information on brands, see Kroll 1977, 87-88. The Nike was one of several common brand types described in the 3rd century tablets from the Dipylon courtyard.

[114] Hemingway 2004. 103. Hemingway states that this could even be a means for conveying the name of the owner, which may be related to the name of the deity.

The Artemision horse is a definite example of the Western/ Libyan type. The horse closely resembles the modern Thoroughbred, which is prized for its speed and spiritedness.[115] This horse lacks the short and shaggy appearance of horses of European and Asiatic origin. This does not imply that the horse depicted came from North Africa, however, but its predecessors may have. It is conceivable that by the second century B.C.E, with increased mobility and demand for animals with particular traits, the horse could have been raised anywhere in the Mediterranean provided that resources were available.[116] By the time that this depiction was made, equestrian competition had been in existence for several centuries. Selective breeding would have emphasized traits favorable for particular events. Artists may have also given emphasis to particular traits in their renderings, which, for this example, might include the elongation of the neck in addition to the rear legs. This horse stands in stark contrast to the bronze horse from Olympia discussed in the previous section, which is undoubtedly the result of differences in the time in which the sculptures were made, but is also likely a product of the changing reality of horses by the Hellenistic period.

Issues of Scale

The emphasis on the horse and a de-emphasis on charioteers and riders has been noted in various types of commemorative media.[117] Despite the scarcity of well-preserved large scale bronze victory monuments, it seems that the same principle is true in sculpture.

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[115] Smith 1991, 54.

[116] Hemingway 2004, 146-148. The details of the shipwreck in which this group was found, as well as theories about the origin of the ship and its contents are given.

[117] Nicholson 2005, 96-115; Golden 2008, 12.

Even in the case of the Delphi charioteer, where most of the accompanying members of the sculptural group are lost, the charioteer's slender proportions suggest that he was to be considered as part of a larger sculptural unit rather than the main focus of the monument. The charioteer's height and elevation in the reconstruction enabled him to be seen over the horses. He was not the primary focus of the piece, however, for the monument was meant to be viewed from the front, where four impressive horses would have dominated the viewer's visual field.[118]

The scalar disparity in athletic monuments which gives favor to the horse rather than the rider or charioteer appears consistently through time. [119] In the case of the Delphi charioteer, the slender figure, while beautifully rendered, would have been dwarfed by the team of horses. This case is more subtle than that of the Hellenistic Artemision horse and jockey group. The victorious horse commemorated here is given center stage, and is the byproduct of the careful breeding by the patron rather than the efforts of a jockey or charioteer. The jockey is a smallish addendum to this marvelous and dynamic animal, and while carefully rendered and equally dynamic, he is dwarfed considerably by his equine counterpart. Regarding the bronze horse at Olympia, there is no way to be certain of its scale in relation to human figures, as none are preserved in association with it.

[118] Adornato 2008, 33. The frontal orientation of the charioteer and his slender proportions support this claim. Reconstruction as a team of four is reasonable, given that the quadriga predominated.

[119] Nicholson 2005, 109-110; Golden 2008, 12. As Hemingway (2004, 50) asserts, the racehorse in the Artemision group is described as smaller than life-size, but still of significantly greater proportions than its jockey.

Chapter 3:

Horses in Relief

While intact examples of large-scale horse sculpture in the round are few, equines in relief are common. The four main contexts in which horses appear in relief are as part of the sculptural programs of buildings, as grave reliefs, as victory monuments, and as figures on statue bases. Of these contexts, I will focus on horses featured in architectural sculpture and on funerary reliefs.

Prinias Reliefs

Despite its poor preservation, the Archaic (mid-7th century B.C.E.) Temple A at Prinias bears a frieze featuring a line of mounted horsemen (fig. 28).[120] The Temple A frieze is the second oldest relief of its type in stone.[121] The building appears to hold echoes of a North Syrian and Near Eastern style.[122] The position of the frieze in relation to Temple A has been debated. It is typically reconstructed as part of the entablature, but it has also been

[120] Beyer 1976, 32-34, 37. The date of the temple is contested. Beyer suggests an early date (735-680 B.C.E.) based upon the construction and style. Others give the temple a later date of ca. 650 B.C.E.

[121] Ridgway 1993, 380.

[122] Pernier 1934, 171.

argued to be either the adornment on an enclosure for a *bothros* near Temple A or else decoration for a dado course, owing to its size.[123]

The early date of this frieze presupposes a schematized rendering of horses, and the intent was likely to present a pattern with horse shapes rather than to express the individuality of various lance-bearers and their mounts. The heads of both horse and human figures extend to the top of the frieze zone. The horsemen are diminutive compared to their mounts, and while the horses, shown in profile view, face forward, the cavalrymen turn to face the audience. This type of composition is not limited to the Prinias reliefs, however.[124] The horses have unnaturally long legs that support the slender body. The necks are gracefully arched in a manner we might expect from the Western type. Tails are low-slung, and are rendered as a single bar-like mass reaching from the rump to just above the back hooves. Whether the horses are moving in a single direction, or converging toward the center of the structure is unclear owing to the state of preservation.[125]

The conformation of the horses on the frieze presents an amalgamation of features from the various horse types, but they are schematized to a degree that makes identification of a single horse type impractical. They do present identifiable characteristics from multiple types. As a result, I have classified the Prinias horses as an early permutation of the

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[123] Ridgway 1993, 380, 402-402, n. 9.10. Ridgway was initially convinced that the frieze was part of an enclosure or a bothros, but in the second edition of her book, she posits that the frieze should most likely be part of a dado course.

[124] See Boardman (1998, 197, fig.392.1; Moscow, Pushkin Ib7, W29.7) for a Middle Corinthian cup by the Painter of the Moscow Gorgoneion, which bears a similar composition.

[125] Ridgway 1993, 381, figs. 34a (Pernier), 34b (Stucchi) give two possible reconstructions.

Composite type. Their long legs and curved necks suggest origination from Western/Libyan stock, but their thick bodies are reminiscent of the Asiatic type.

The purpose for the cavalry on this relief is unclear, in part because its original location has not been ascertained. At the very least, it can be said that horses and riders made interesting subjects to span a frieze.[126] The social, political, or religious implications behind the frieze are lost to us.

Siphnian Treasury

The sculpture on the Siphnian treasury is well-preserved and traditionally dated to ca. 525 B.C.E., though arguments have been made for a later date.[127] Regardless of whether it should be dated to 525 B.C.E. or after the Persian Wars, The frieze is one of the earliest examples of the continuous Ionic frieze found in Greece.[128] The Siphnian Treasury was one of the first treasuries constructed at Delphi following the Samian attack on Delphi and resultant destruction of Delphic monuments (fig. 29).[129] The frieze itself is believed to have been executed by two workshops, which are referred to in scholarship as the workshops of Master A and Master B. [130]

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[126] Brinkmann 1994, 19. The use of repetitious equestrian figures on the span of a frieze is a common Archaic feature. Cf. Ridgway's discussion of monotonous Ionic friezes (1993, 269).

[127] Francis and Vickers (1983, 53) argue that the treasury should be dated to 470 B.C.E. based on the economic circumstances of the Siphnians after the Samian attack of 525 B.C.E and stylistic elements of the sculpture.

[128] Watrous 1982, 159; Ridgway 1993, 392. The earliest example is the Knidian Treasury at Delphi, which dates to ca. 540 B.C.E.

[129] Hdt. 3.57.1–58.4; Neer 2001, 288.

The South and West sides of the frieze, attributed to Master A, are characterized by an archaic style, while the North and East sides credited to Master B is more innovative.[131] The West and South friezes have been identified by some as the Judgment of Paris and the Rape of the Daughters of Leukippos respectively.[132] The North and East sides attributed to Master B's workshop depict a Gigantomachy and stories from the *Iliad*. Master A's style is characterized by two-dimensionality. The figures appear as if they had been drawn onto the marble and then cut out or cut straight back in flat relief.[133] Master B treats his figures as though they are sculpted in the round, and exhibit greater modeling and increased volume. Master B's style is considered to be more innovative than Master A's style.[134] Master B's overall composition is more crowded. Though Master A's South and West friezes are more poorly preserved than Master's A's renderings, the composition seems less crowded. Ridgway notes that Master A has more concern for the pattern created by the figures than the figures themselves, and his figures tend to be more reminiscent of the East Greek "monotonous" frieze identified in examples such as the chariot friezes from Iasos, and

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[130] Ridgway 1962, 24; Francis and Vickers 1983, 65-66; Ridgway 1993, 394-395; Brinkmann 1994, 75-80. The masters are a modern construct commonly used in discussions about this frieze. Ridgway posits that there we four hands total: two masters and two apprentices.

[131] If we are to accept the later date posed by Francis and Vickers, then Master A's workshop executes sculpture in an archaizing manner while Master B's workshop represents a contemporary rather than *avant garde* style. For detailed line drawings of the Siphnian Treasury frieze separated by master, see Daux and Hansen (1987, pls. 107 and 108). All block and figure designations will be derived from Daux and Hansen.

[132] Ridgway 1962, 25 and 1993, 270, 393-394; Neer 2001, 291.

[133] Ridgway 1993, 394.

[134] Ridgway 1962, 25 and 1993, 394-395; Neer 2001, 288.

Kyzikos (520 B.C.E.) and the dancing women from Karaköy.[135] Master A's horses are also rendered in a manner similar to the significantly later Lycian sarcophagus.[136]

Horses are featured in the East, South, and West friezes.[137] The differential preservation of the friezes makes it difficult to describe some of the equestrian groups. The roles that horses played in the frieze vary, but they are most often used to pull quadrigas.[138] The East side is the best preserved of the frieze sections and features two groups of four horses pulling quadrigas in opposite directions (fig. 30). [139] The scene is split into pro-Trojan and pro-Greek factions.[140] Approximately fifty percent of the South frieze remains, and it features either the Rape of Helen or the Rape of the Leukippidai.[141] The South frieze contains three chariots, two of which are well-preserved (fig. 31 and 3).[142] Additionally, two horses intended for use as mounts are preserved in blocks CL 1236 and CK (fig. 31 and 33). One particularly fascinating group on the South frieze is the nude rider that is controlling a spare horse while seated on his own mount (fig. 33). On the West side, which served as the entrance façade, approximately two thirds of the frieze is preserved. Two quadrigas face in

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[135] Ridgway 1962, 26 and 1993, 384.

[136] The sarcophagus dates to the early 4th century B.C.E, but the quadriga groupings on the side panels are similar to horses 11-14 (block CH 2074) and horses 22-25 (Block CG 1310) from the East frieze. See Lullies and Hirmer (1960, 86-86, pls. 193-194) for images of the Lycian sarcophagus.

[137] Horses also appear in both pediments.

[138] Quadrigas are present on in the East frieze on CH 2074 and CG 1310, the West frieze on CP 1416 and CQ 1379, and the South frieze on CM 2160 and CL 3100.

[139] Watrous 1982, 172.

[140] Watrous 1982, 171; Brinkmann 2007, 57-59. The discovery of additional painted names labeling the scenes is critical for our understanding of the events on the frieze.

[141] Watrous 1982, 169-170; Ridgway 1993, 394.

[142] Ridgway 1993, 393.

opposite directions. Aphrodite commands the quadriga moving to the right (fig. 34), while Athena commands the chariot moving to the left (fig. 35). Athena and her horses were winged.[143] It has been argued that Aphrodite's charges would have been winged as well, though Moore does not believe it, and preservation is too poor to be certain.[144] At any rate, the fact that fantastical winged horses and horses without wings are indistinguishable with regard to conformation is worth noting for our purposes.

With the four sides of the treasury described, some notes on the equines should be made. Horses are ubiquitous on this treasury, but the purpose of their inclusion is as auxiliaries in the various scenes. The monument itself is an assertion of Siphnian prestige, and the horses pictured on it are one element of that claim. Watrous and Neer present arguments that make the political overtones of the monument itself seem clear. Additionally, thesauroi such as this one are sacred architecture.[145] The horses depicted on this monument are employed as part of an expression of religious and political ideologies. Equines here are most frequently pictured as draught animals pulling quadrigas for the gods and heroes as on the West and East friezes respectively, but they also appear as conveyors of mounted horsemen.[146] In addition to the horses participating in the scenes, one horse image may also be used to establish the ethnic identity of one of the giants.[147] The sculptural subject is

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[143] Ridgway 1993, 394.

[144] Watrous 1982, 168; Moore 1985, 149-151.

[145] Neer 2001.

[146] It is unclear whether these riders were mortal or divine, and consulted works have not named them.

[147] Watrous 1982,167. A giant on the North frieze is identified as Thessalian because he has a horse on his helmet. Thessaly was famous for its horses. Watrous further notes that identifying figures by

broadly interpreted as an admonition against hubris.[148] Further, Watrous posits that the frieze may have been commissioned by the priesthood at Delphi and may present a conflict that arose between Peisistratus and Delphi over control of the oracular center.[149]

This monument exhibits several conventions in depictions of the horses. This is significant, since it is likely that two workshops were working on the friezes. There seems to have been some agreed-upon formula for rendering similar subjects. For example, mounted horses on the South (Master A, fig. 31) and East (Master B, fig. 30) sides exhibit a similar curvature of the neck and slender proportions. Master B's South and West horses possess manes and tails that appear crimped and wavy in contrast to the straight and flat renderings of the manes on the East frieze, which are reminiscent of the Olympia chariot horse's mane. The manes on the South frieze fly backward to represent the motion of these horses, while the forelocks part and fall to either side of the forehead in a sculptural style that is commonly seen in Magna Graecia (fig. 35).[150] The forelocks of horses from Temple C at Selinus bear this feature.

Quadriga horses on the East frieze and mounted horses on the South frieze bear features that appear to be Western/ Libyan in origin (figs. 34 and 36), such as long limbs, sharply curving necks, and slender proportions. The tail of the nearer horse on the East frieze (fig. 30) is high-set, much as one would expect with the earliest Western horses. A similar characteristic is seen in the nearer mounted horse of the South frieze (fig. 31). The

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their helmets is a Near Eastern convention, which further supports claims of similarity with East Greek tradition.

[148] Watrous 1982.

[149] Watrous 1982, 172.

[150] Ridgway 1993, 353. The Horse and Groom Relief also bears this characteristic, and will be discussed in a subsequent section.

dramatically curved neck of this horse is likely rendered in this way to demonstrate the animal's restiveness, but it may have been a breed characteristic as we see in the modern Arabian. The long delicate legs and the fine features of the head further support this identification.

The difference between horses on the monument is stark when horses for different purposes from the South frieze are juxtaposed. The quadriga team (fig. 32) appears to have thicker overall proportions than the mounted horses (fig. 31). If indeed these horses were rendered by the same workshop, then artists could have been differentiating between horse types. The heavier draught horses, could represent horses selectively bred with Asiatic or European stock. The draught horses pulling the chariots of Aphrodite (fig. 34) and Athena (fig. 35) on the West side appear to have the lighter proportions associated with Western horses. For these reasons, it is reasonable to suggest that both Western/ Libyan and Asiatic or European types are present on the monument.

Parthenon Frieze

Horses are present on about forty-six percent of the frieze blocks of the Parthenon, making the frieze an ideal focus piece for this discussion.[151] While subjects besides the cavalry are depicted on the frieze, I focus my discussion on the horses and cavalrymen. A wide range of horse behaviors are depicted on the blocks. Horses are ridden, led, and pulling chariots in the *apobates* race. In spite of the variety of activities in which the horses are engaged, there appears some standardization with regard to their conformation. The physical

[151] Neils 2001, 132. Horse imagery on the Parthenon is not limited to the figures on the frieze. There are a number of horse and horse-like figures such as centaurs on the metopes, as well as the pedimental horses drawing the chariots of Selene and Helios.

form of these equines and their behavior on the monument will be essential to our understanding of the use of horses in various monuments and identifying horse types. I begin by discussing a few of the interpretations of the frieze, focusing on horses and their handlers. I then offer some historical context regarding the state of the cavalry, which will also be valuable to consider for our analysis of the funerary monuments in the sections that follow. My discussion of the Parthenon ends by looking at specific blocks to highlight features of the Parthenon horses. Following a discussion of horses on the Parthenon frieze, I turn my attention to a selection of roughly contemporary funerary monuments that echo the horse type visible on the Parthenon. I ultimately assert that these horses are idealized and represent a Composite type. I end with a discussion of the Horse and Groom Relief, which demonstrates a horse type that appears in the early Hellenistic Period.

The Parthenon frieze has received a wide variety of interpretations, and the strong equine presence has been interpreted in several ways. The most common interpretation is that the frieze depicts a Panathenaic procession.[152] Whether this is the original Panathenaic festival or a history of the festival has been debated.[153] The horses themselves have been interpreted in several ways. Boardman asserts that the horsemen are likely to represent the fallen from the Battle of Marathon. This assertion has been discounted owing to the fragmentary nature of some portions of the frieze and also Boardman's selective counting of the figures and who actually should be counted among the 192.[154] Others have asserted that

[152] Harrison 1996. Harrison summarizes the various interpretations of the subjects of the frieze. She is especially critical of Boardman's assertion that the mounted figures represent the fallen at the Battle of Marathon. I agree with Harrison's concerns about Boardman's argument.

[153] Nagy 1992. Nagy explores historical, mythological, and symbolic aspects of the Parthenon frieze.

the horses on the frieze may have represented events that transpired over a series of days and at locations other than the processional way. The space requirements for the race, for example, would most surely have necessitated a location other than the Panathenaic Way.[155]

Harrison adds another dimension to these arguments by stating that the horse groups on the frieze represent horsemen from various locations around Attika converging in Athens, and further, that the groupings represent distinct periods in Athenian history. That horsemen are gathering from the Athenian periphery is indicated by representations of landscape including rocks and streams that appear in frieze blocks on the West frieze.[156] The different types of clothing worn by the various groups are suggestive of the ten tribes of Athens. If one were to consider the frieze in context as Osborne suggests, and follow the procession, the next side visible would be the North.[157] By Harrison's account, the North side depicts the four Ionian tribes that would have been in existence in pre-Kleisthenic Athens, an interpretation that is supported by the repeated use of groups of four on that side of the

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[154] Harrison 1984, 230; Harrison 1996, 199. This interpretation is even more problematic when one considers that the Battle of Marathon was a not a cavalry battle, and that the fallen were hoplites.

[155] Xen. *Hipp*. III. 1 and 9. Jenkins 1994, 24-27; Camp 1998, 35-37. Neils 2001, 134; Hyland 2003, 140. The Athenian cavalry performed training exercises and spectacles at the Hippodrome, Phalerum, Academy, and Lyceum. (See Appendix 2.)

[156] Harrison (1996, 209) refers particularly to the first half of the West frieze, with Block VIII as the most clear example.

[157] Osborne 1987, 99, 105 and 1994, 143. Osborne urges viewers to consider the frieze as it would have been viewed. This means not only by looking at it in the order in which it would have appeared to a viewer, but also by remembering that the frieze would not have been visible as it is in museum displays today. The frieze would have been viewed between columns and partially obstructed at all times.

frieze.[158] On the South frieze, Harrison identifies six groups of ten, which she states represent the ten tribes of Athens that would have arisen under Kleisthenes.[159]

` Treating the frieze as a historical document is fraught with its own setbacks, but a reading such as Harrison's seems reasonable. Her interpretation allows for historical, contemporary, and mythical elements of the frieze to be appreciated. Further, her interpretation explains the unusual and varied clothing on the horsemen in the South cavalcade. As Stevenson demonstrated, the clothing on the ten groups on the South frieze varies from group to group. In his interpretation the clothing is meant to mark the differentiation of figures rather than to show cavalry uniforms from the various tribes.[160]

During the construction of the Parthenon (447-438 B.C.E.), the number of men in the cavalry was increased from 300 members to 1000.[161] The implications for this change are far-reaching, both in terms of the capabilities of the Athenian cavalry and also of the frequency that horses are depicted on public monuments. The original 300-man group would have been comprised of the wealthiest horsemen, who would have provided their own mounts.[162] With the increase in the size of the cavalry force, the system for selecting cavalry had to become less exclusionary. Although the cavalrymen (*hippeis*) would still have to be

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[158] Harrison 1984, 230-231.

[159] Harrison 1984, 231.

[160] Stevenson 2003, 629, 644-653.

[161] Bugh 1988, 39-41; Worley 1994, 59-70. Bugh argues that the cavalry increased during the fifty years following the Persian Wars, which was necessary so Athens could remain competitive, and cites the impetus for this as the Battle of Tanagra (458/457 B.C.E.). Worley explains the historical context for rises and falls in cavalry numbers.

[162] Camp 1998, 10.

affluent, they were not as rich as the more restricted cavalry of 300. The state issued a loan (*katastasis*) to the new *hippeis* to assist with the purchase of a new mount for those who could not handle the financial burden. An allowance for feed (*sitos)* was also provided to the cavalrymen during their term of service. Standards for the condition of the mounts were also to be strictly enforced by means of an inspection (*dokimasia).*[163] If horses were deemed unfit during their inspection, the men were required to purchase a new mount with their loan. [164] By the mid-fourth century B.C.E., information on the value of these chargers was recorded by the state record-keepers (*katalogeis*)[165] Several deposits of such records on lead tablets dating from the mid-4th century and third quarter of the 3rd century B.C.E. have been found in two deposits, one in the Market Square of the Athenian Agora and one in the Dipylon Courtyard respectively.[166] While these tablets are later in date than the Parthenon frieze itself, they represent the formalization of a system that would have been in operation during the time of Perikles.

The expanded cavalry would have trained often, and would have participated in many public spectacles throughout the year in order to be prepared for battle at any time. The horses on the Parthenon are likely a reflection of the new administrative interest in these

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[163] Arist. *Ath. Pol.* 49. 1. See Appendix 2.

[164] Bugh 1988, 52-58; Worley 1994. The state issued 1200 drachma to the cavalrymen at the beginning of their term of service. That money was meant to pay for the purchase of a new mount whenever the current mount could no longer pass inspection. Cavalrymen were expected to repay their loan upon completion of their service. The average charger cost around 300 drachmas.

[165] Bugh 1988, 53.

[166] Posner 1974, 579-580; Kroll 1977, 107-140. These documents contained information about the owner of the horse as well as the color, age, and value of the horse itself. If the horse had a brand, then this was also recorded.

cavalry, but further, horse-displays played a major role in the Panathenaic festival. The *apobates* race, which consisted of a soldier jumping off of and onto a moving chariot, was a major competition held during the festival.[167]

With these things in mind, we may turn to the horses themselves. In spite of the variety of activities in which the horses are engaging, they display homogeneity of form. Most of the manes are cropped close to the neck. An exception is on West XII, in which the mane is left long (fig. 36).[168] Some variation in the rendering of the manes is evident, especially in the number of incisions and the detail. These variations could indicate the various hands involved in sculpting the frieze. For example, in North XXXVII, the forelock of the nearest horse is left long and blows backward, although the rest of the mane is close-cropped (fig 37).

The horse in North XXXVII and XXXVIII (figs. 37-38) exemplify the type of horse shown on the Parthenon. [169] In North XXXVII, the central horse's head is thrown upward, indicating his spirited nature, and perhaps indicating that he is being controlled by his rider. An open mouth and flaring nostrils are common expressions for Parthenon horses. The neck is thick and connects with a well-muscled chest and shoulder. Multiple wrinkles of skin at the jawline and the fore of the withers is a typical feature as well. The back is strong and well-formed. All four legs are sturdy and proportional. The detail on this specimen is so finely modeled that veins on the stomach are visible. The hindquarters are strong, and the gaskin, hock, and buttock are clearly defined and well-muscled. In the nearest horse of North

[167] Camp 1998, 27.

[168] Brommer 1977, pl. 36; Bugh 1988, 18. Jenkins 1994, 20-21 Connelly 1996, 70-71. Brommer and Jenkins illustrate the various mane types with several examples from the South frieze.

[169] Brommer 1977, pl. 11, West III.

XXXVIII, the dock of the tail is set low on the rump. The characteristics of these horses are present throughout the frieze, and even appear in the horses competing in the *apobates* race on the North and South sides. In the Parthenon frieze, unlike the Siphnian Treasury frieze, there is no differentiation between draught and mounted horses.

One may draw two immediate inferences from the homogenous rendering of the Parthenon horses. The first is that the sculptors consulted on the general form that the horses of the frieze were to take. The other inference is that the horses have been stripped of their individuality. The horses presented on the Parthenon established an ideal type that was employed in subsequent monuments in the Classical period.[170] Stevenson rightly describes these creatures as ennobled and explains that they were contrived from the imagination.[171]

The Parthenon frieze horses are a good example of the composite type of horse, as defined in the Introduction. Their features do not place them definitely into the Western, European, or Asiatic categories. While no two horses on the frieze are exactly alike, there are several characteristics that are widespread on the frieze. Thick necks and low slung tails, as on the Parthenon frieze, are features likely to be seen in Asiatic and European horses. The shortness of the horses is an Asiatic characteristic, though the animals are clearly strong enough to carry armed men on their backs, unlike early Asiatic specimens. The delicate and spirited features of the heads, on the other hand, are a Western/Libyan trait. These chargers, therefore, borrow traits from the three types initially set out by Markman. The homogeneity

[170] Andersen 1961, 115-116.

[171] Stevenson 2003, 630, 636, 653.

of the depiction of the mounts may also reflect a mass-importation of horses to satisfy the needs of the expanded cavalry. [172]

The size of the horses in relation to their riders has also been noted. Though not immediately apparent owing to the balance of the composition, the Parthenon frieze horses are too small for their riders.[173] The simplest explanation for this is that the sculptors needed to adjust the scale of the figures to fit the horses and riders into the frieze blocks. The disparity in scale could have other explanations, however. The large size of the riders in relation to their horses could be a way of celebrating the men who were serving in the new and impressive force.[174] In addition to the large scale of the *hippeis* in comparison to their mounts, the horsemen are also distinguished by their youthful appearance. While cavalrymen were mostly young men, the extent and prevalence of their youthful appearance could indicate that they were idealized figures.[175] In terms of scale, the role of horse and rider are reversed from what is seen on athletic monuments such as the Artemision Horse and Jockey previously discussed. The horse, still a symbol of wealth, has been de-emphasized in favor of men serving the state.

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[172] Neils (2001, 135-136) points out the presence of bearded men in Thracian dress as evidence for this. While she is correct to assert that the drastic increase in the size of the cavalry likely led to importation of horses, Harrison and Stevenson offer a different explanation for the foreign dress. Harrison (1984, 230-231) explains the differences in clothing as indicative of the different tribes from which the *hippeis* originate. Stevenson (2003, 629) argues that differences in clothing on the South frieze establish ranks of horsemen. For additional discussion of the ranks of *hippeis* on the frieze, see Jenkins 2005.

[173] Neils 2001,115.

[174] Bugh 1988, 64, 77.

[175] Bugh 1988, 64-66.

The Dexileos Stele, the Berlin Relief, and the Vatican Stele

The horses on the Parthenon frieze are prototypical for the horses represented in the Dexileos Stele (fig. 39), the Berlin Relief (fig. 40), and the Vatican Stele (fig. 41). These funerary memorials provide interesting insights into the relationship between family and state, as the monuments were erected by families for men who had served the polis. They also demonstrate a long-standing tradition of showing mounted victors trampling the vanquished. This discussion will be based largely on the Dexileos Stele, because it is the most complete and well-studied of the three monuments. The imagery employed to commemorate these individuals has clear associations with patriotic reliefs. The Composite type is again evident in the horses on these monuments, but the socio-political implications of the monuments are different.

In order to appreciate the three stelai, one must understand the time in which they were produced. The Vatican Relief (440-430 B.C.E.; fig.41), which shows a bearded man mounted atop a spirited steed is contemporary with the Parthenon Frieze. The Berlin Relief fragment (415-410 B.C.E.; fig. 40), contains the forepart of a horse trampling an enemy. The rider is lost, save for a bit of his hair.[176] The Dexileos stele (fig. 39) was created in 394/393 B.C.E. The construction of the Parthenon would have brought a high concentration of sculptors into Athens who would have sought employment during and following the completion of work on the Parthenon. As a result, many of the hands involved with the Parthenon frieze were likely also responsible for carving various funerary stelai, which regained popularity in Attika following the lifting of the anti-luxury decree.[177] Aside from

[176] Clairmont 1970, 100-102.

Parthenon artists working on private monuments, the influence of the Parthenon frieze on later relief compositions is strong. These three reliefs bear horses with the marks of a Parthenonian style, including similarly cropped manes and similarly emphasized musculature.

While the artistic influence of the Periklean age would have been far-reaching, the political situation in Attika underwent serious changes at the end of the fifth century. One period that is particularly important for the Athenian cavalry was the time of the Thirty Tyrants (404/403 B.C.E). The Thirty Tyrants were supported by the cavalry since many cavalry came from wealthier families. As a result, following the expulsion of the Thirty, people were suspicious of the cavalry. This makes the Dexileos Stele a singular monument in a number of ways. First of all, the depiction of cavalry in battle is not common on private funerary monuments; for example, there are only twelve such funerary stelai in the entire corpus of Classical funerary monuments.[178] Dexileos would have been twenty when he died in the Battle of Corinth, and he was commemorated not only on this massive cenotaph that his family erected at the west end of the Street of the Tombs in Athens, but he also would have had his name placed on a collective monument for war dead from that battle.[179] The family is careful to state Dexileos' birth and death date, which is an unprecedented inclusion. They did this likely in order to make it clear that Dexileos should not be associated with the Thirty.[180]

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[177] Kroll 1979, 351; Osborne 1987, 105.

[178] Clairmont 1972, 54.

[179] Clairmont 1970,101, Hurwit 2007, 35-36. The inscription on the stele supports this assertion.

[180] Bugh 1988, 120-129.

One of the most striking differences between the Parthenon horses and the Dexileos horse results from the actions illustrated in the depictions. The Parthenon horses are horses in the midst of a peaceful – if competitive at times – civic setting.181 The horse on the Dexileos relief is a war horse that is rearing while engaging in battle, with Dexileos in the act of spearing a fallen enemy. Dexileos sits atop his mount with an expression that is unexpectedly placid when compared to the dynamic gesture of his upraised right arm and the drapery that flies up behind him.182 Like the riders on the Parthenon, he appears too large for his mount. Just as in the Parthenon, the arched neck and spirited face of the horse are evident. The mouth, though partially damaged, was open. This composition, which features a rearing horse and rider trampling a conquered enemy, is not unique, though it is more common in later periods, and as has been previously stated, it is uncommon in funerary monuments.

Horse and Groom, late 4th c. B.C.E., Athens NM 4464

The Horse and Groom Relief, from the late 4th century B.C.E., presents an entirely different type of horse rendering on a funerary monument (figs. 42-43).[183] The object is thought to be constructed for memorial purposes, but the manner in which the horse is rendered is unlike its predecessors on the Parthenon and aforementioned funerary monuments. Contrary to those horses, this creature is much more individualized and likely represents the European type as it occurred in the later fourth century.

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[181] Jenkins 1995, 29. Neither the *hippeis* not the charioteers appear fully armed for battle, though there are a few examples of armor. None of the figures are engaged in fighting.

[182] Hurwit 2007. The choice to clothe Dexileos while depicting his victim nude has been considered in detail. See Hurwit for the different implications of depicting nude human figures.

[183] Kaltsas 2002, 206.

The Horse and Groom relief depicts a restive horse, which a small groom possibly with African features attempts to control (fig. 44).[184] The relief is argued to be a part of a funerary naiskos.[185] Only two marble slabs from the piece survive, but anathyrosis on the edge indicates that there would have been a third slab at left that contained the horse's tail, and possibly other components of a naiskos.[186] The boy holds what has been identified as food in his left hand and a whip in his right. The group is in high relief, with the horse's rear left leg rendered in low relief close to the slab, while the right foreleg projects outward, completely in the round. The fine detail on this sculpture is unparalleled by the other focus pieces in this study. From the tuft of fur at the forelocks, to the chestnut on the left front leg, to the fine modeling and rendering of muscles and veins, this sculpture is a tour de force of carving. This level of detail is a clear reflection of the artistic conventions of the early Hellenistic period, which tread the line between hyper-realism and exaggerated idealism.

The horse is even more interesting in comparison to the Parthenon horse-type. The close cropping of the mane continues to be fashionable on the Horse and Groom relief, just as it was for the fifth century Athenian reliefs. The body-type too is similar to the Parthenon horses, though this horse seems to be of sturdier build. The body is thick and strong. It is not so thick as to warrant designation as a draught horse, but it is a clear departure from the finely featured North African horses. The stocky horse exhibits features reminiscent of the description of the European type of horse. The thick fur at the fetlocks, while not feathering

[184] Whether the groom should be identified as African or as a generic representation of a vulgar type figure was debated by Schuchhardt (1978, 90-91) and others (Hemingway 2004, 89), who have made the comparison between this groom and the jockey from the mid-second century B.C.E. Artemision group.

[185] Kaltsas 2002, 415.

[186] Schuchhardt 1978, 75-76; Kaltsas 2002, 415.

as one might see on a modern Clydesdale, is thicker than that typically rendered on horses in sculpture.[187] The Asiatic type, while having a similar body type, is typically a shorter animal. That the mane was closely cropped, a fact evident by the length of the forelock, argues against association with the Asiatic type, where the mane would naturally stand on end. Discussion of the animal depicted on the Horse and Groom Relief focuses on the individualism of this animal, and it seems certain that the artist was depicting a particular animal rather than rendering a generic horse from memory.[188] If this is meant to represent a real animal, then it provides insight into the appearance of equines in this period. By this point, horses would appear to be a Composite of the three individual types.

[187] Compare the rendering of fur around the feet of the Delphi horse (fig. 20) with the rendering of the fur on the fetlocks (fig. 42).

[188] Schuchhardt 1978, 79.

Chapter 4:

Conclusions

The attempt to identify horse breeds in Greek sculpture is problematic. Sculptors employ artistic license in the depiction of horses, and thus may depart from the physical reality of the horses they are depicting. The heavily stylized horses of the Geometric period are abandoned in favor of more naturalistic renderings beginning in the Archaic and Early Classical periods, but ultimately one cannot discern the boundary between naturalized and idealized forms in the Classical period. In the Hellenistic period, there is a clear turn toward depictions that are at once idealized and individualized.

The difficulties of breed identification are further compounded by the social and political circumstances under which sculptures were commissioned. Not only do these circumstances seem to affect the extent of idealism, but shifts in purpose also necessitate changes in scale, especially where horses and humans are juxtaposed. For athletic monuments, horses were sculpted at a scale that dwarfs the charioteer or jockey, unless of course these men were relatives of the sponsor. Aristocrats used the power and expense of the horse to bolster their own credibility, and an Olympic victory only added to their legitimacy. Horses were often depicted carrying out their roles in the athletic games, and the success of the horse became a proxy for the success of the individuals who paid for their care, training, and participation in the games. This is not to say that other uses of horse

imagery were not concurrent, but there is a definite shift in the seventh and sixth centuries. The individualism of the animals reflects the individual achievements of the owners, and further demonstrates their competency in either procuring or else breeding quality stock.

The Prinias Reliefs show a stylized equine which dwarfs riders and lacks individuality. While it seems impractical to assign Prinias horses to one specific type category owing to their stylization, it is likely that the stock familiar to the sculptor was influenced by the Western/Libyan type. This assumption is made primarily on the basis of the length of the animals' legs. The Siphnian treasury reliefs demonstrate the change in equine depiction over a century later. The Siphnian treasury horses in general are more realistic and demonstrate a hybridization that would have been the result of contact with various places and exchange of various stocks. The Western/Libyan type can be identified on the East, South, and West friezes, while the Asiatic type is evident on the South frieze of the Siphnian Treasury. The emphasis on this monument is not on the horses, but on the mythological and divine subjects that drove them. The mere presence of the horses in such quantity could have been an assertion of Siphnian wealth and evidence of a political struggle over the oracle at Delphi. For the Parthenon, the presence of horses still indicates prestige, but the emphasis has moved from the animals to the men interacting with them. The homogenizing effect of the Parthenon horse- renderings represents the unity of Attika in spite of political divisions of the region into separate tribes. The wealth indicated by the number of horses on this monument reflects the prosperity associated with a unified deme. The selected grave stelai demonstrate the manner in which wealthy families adopted pro-polis symbols for placement on individuals' monuments to maximize their prestige.

In the Hellenistic Period, the emphasis returns to individualism and the prestige with which horsemanship is regarded. This is evident in both the Artemision Horse and Jockey and the Horse and Groom Relief. This distinction is evident in spite of the fact that the two horse depictions represent different types of equestrian monuments. Both temporal and contextual differences can affect the interpretation of these monuments, but in both cases the horse-type is easily discerned.

Some common features that enable identification of a specific horse type or the presence of an ideal form can be isolated from considering horses depicted on different types of monuments. The horses of the second millennium B.C.E. Asia Minor are likely descended from the Asiatic type of horse, which would bear a resemblance to the modern Przewalski's Horse. The Asiatic type is commonly shown as a draught horse as in the examples from Olympia or on the South frieze of the Siphnian Treasury. From the 7th century through the 2nd century B.C.E., the Western type appears to be the favored stock for athletic competition. Arguably, the Western/Libyan type is still favored in the form of the modern racehorse, the Thoroughbred. Western/Libyan horses were taller as a result of selective breeding and domestication. Their longer legs resulted in a lengthier stride and greater height, which would make them ideal for riding and racing. European horses likewise contribute to the equine gene pool in antiquity, as is evident in the Horse and Groom relief. The modern parallel of European stock are likely the Shetland ponies and the larger draught horses that bear similar traits, such as the Shire or Belgian.

Horse imagery is employed in a variety of media during the Archaic through Hellenistic periods. An examination of relief sculpture and sculpture in the round from several contexts reveals a notable pattern. Geometric horse votives represent a generic mode

of representation. The purpose of these objects as items of religious devotion, and their depositional context within the sanctuary could represent community unity. As Snodgrass suggests, the homogeneity of the votives is indicative of corporate identity. In the seventh and sixth centuries, the character of votives changes, with more individualized and realistic dedications becoming the norm.

As aristocracy and a governmental system revolving around tyrants shifts toward polis-focused democracy, horse imagery is predominantly used as a means of demonstrating the strength and unity of the polis. In the case of both funeral reliefs at Athens and architectural sculpture such as the Parthenon frieze, the horse is generic and idealized. The focus of these pieces is not the horses themselves, but the riders they are conveying. In the Hellenistic period, individuality is celebrated once again through horse imagery.

APPENDIX 1: Tables

Table 1. Examples of horse types in Greek Art.

Type	**Characteristics**	**Examples**
Asiatic	• Shaggy hair • Blunt nose • Small • Stocky Proportions • Not strong enough to carry a rider for extended stretches	• Olympia Chariot Horse • Siphnian Treasury (South Frieze)
Western/ Libyan	• long legs • tall • curving neck • slender proportions • tail set high on rump • fine-featured face • strong enough to carry a rider long distances	• Horses associated with the Delphi charioteer • Artemision Horse and Jockey • Siphnian Treasury (East and West frieze)
European	• small • shaggy • long mane • stocky proportions • flat nose • not strong enough to carry a rider a long distance	• Horse and Groom Relief
Composite	• does not fall easily into one of the previous categories • possesses a combination of traits from the previous types	• Prinias Reliefs • Parthenon Frieze • Dexileos Stele • Berlin Relief • Vatican Stele

Table 2. Equestrian competition dates. All dates derived from Christopoulos 1975 and Golden 2008.

Date	**Event**
680 B.C.E.	Olympic 4-horse chariot race begins
648 B.C.E.	Horse Race
500 B.C.E.	Mule cart race/ apene
496 B.C.E.	Kalpe
482 B.C.E.	Hieron's 1st horseracing victory at Delphi
444 B.C.E.	*Kalpe* and *apene* are abolished
420 B.C.E.	Lichas' chariot victory at Olympia
416 B.C.E.	Alcibiades' chariot victory at Olympia
408 B.C.E.	Olympic 2-horse chariot race
396 B.C.E.	Cynisca's 1st chariot victory at Olympia
384 B.C.E.	Olympia 4-colt chariot race
372 B.C.E.	Troikus' chariot victories at Olympia
356 B.C.E.	Phillip II horseracing victory at Olympia
268 B.C.E.	2-foal chariot race
256 B.C.E.	Foal Race

APPENDIX 2: Texts

I. Paus. 3.8. I

Archidamus left sons when he died, of whom Agis was the elder and inherited the throne instead of Agesilaus. Archidamus had also a daughter, whose name was Cynisca; she was exceedingly ambitious to succeed at the Olympic games, and was the first woman to breed horses and the first to win an Olympic victory. After Cynisca other women, especially women of Lacedaemon, have won Olympic victories, but none of them was more distinguished for their victories than she.

II. Hdt. IV. 169.3

Furthermore, in my opinion the ceremonial chant[1] first originated in Libya: for the women of that country chant very tunefully. And it is from the Libyans that the Greeks have learned to drive four-horse chariots.

III. Hdt. 5.9

[1]As for the region which lies north of this country, none can tell with certainty what men dwell there, but what lies beyond the Ister is a desolate and infinitely large tract of land. I can learn of no men dwelling beyond the Ister save certain that are called Sigynnae and wear Median dress.

[2] **Their horses are said to be covered all over with shaggy hair five fingers' breadth long, and to be small, blunt-nosed, and unable to bear men on their backs, but very swift when yoked to chariots. It is for this reason that driving chariots is the usage of the country.** These men's borders, it is said, reach almost as far as the Eneti on the Adriatic Sea.

[3] They call themselves colonists from Media. How this has come about I myself cannot understand, but all is possible in the long passage of time. However that may be, we know that the Ligyes who dwell inland of Massalia use the word “sigynnae” for hucksters, and the Cyprians use it for spears.

IV. Inscription from base commonly associated with the Delphi Chartioteer, Delphi, National Archaeological Museum, inv. 3517, Translations derived from Adornato 2008, 31.

Gelon [who won the Pythian games in the horse race, dedicated] me to you [son of Deinomenes]: give him glory, noble Apollo.

OR

[Gelon offered me to you], Polyzalos dedicated me [son of Deinomenes]: give him glory, noble Apollo.

V. Hdt. 3.57.1–58.4

[1]When the Lacedaemonians were about to abandon them, the Samians who had brought an army against Polycrates sailed away too, and went to Siphnus; [2] for they were in need of money; and the Siphnians were at this time very prosperous and the richest of the islanders, because of the gold and silver mines on the island. They were so wealthy that the treasure dedicated by them at Delphi, which is as rich as any there, was made from a tenth of their income; and they divided among themselves each year's income.[3] Now when they were putting together the treasure they inquired of the oracle if their present prosperity was likely to last long; whereupon the priestess gave them this answer:

[4] “When the prytaneum on Siphnus becomes white
And white-browed the market, then indeed a shrewd man is wanted
Beware a wooden force and a red herald.”

At this time the market-place and town-hall of Siphnus were adorned with Parian marble. [3.58.1] They could not understand this oracle either when it was spoken or at the time of the Samians' coming. As soon as the Samians put in at Siphnus, they sent ambassadors to the town in one of their ships; [2] now in ancient times all ships were painted with vermilion; and this was what was meant by the warning given by the priestess to the Siphnians, to beware a wooden force and a red herald. [3] The messengers, then, demanded from the Siphnians a loan of ten talents; when the Siphnians refused them, the Samians set about ravaging their lands. [4] Hearing this, the Siphnians came out at once to drive them off, but they were defeated in battle, and many of them were cut off from their town by the Samians; who presently exacted from them a hundred talents.

VI. Ath. *Pol.* 49. 1

The Council also inspects the Knights' chargers, and if anybody having a good horse keeps it in bad condition, it fines him the cost of the feed, and horses that cannot keep up with the squadron or will not stay in line but jib it brands on the jaw with the sign of a wheel, and a horse so treated has failed to pass the inspection. It also inspects the mounted skirmishers, to see which it considers fit for skirmishing duty, and any that it votes to reject are thereby deposed from that rank. It also inspects the foot-soldiers that fight in the ranks of the cavalry, and anyone it votes against is thereby stopped from drawing his pay. [2] The Knights' roll is made by the ten Roll-keepers elected by the People; and they pass on the names of all whom they enroll to the Cavalry Commanders and Tribe Commanders, and these take over the roll and bring it into the Council, and opening the tablet on which the names of the Knights have been inscribed, they delete those among the persons previously entered who claim on oath exemption from cavalry service on the ground of bodily incapacity, and summon those enrolled, and grant discharge to anyone who claims exemption on oath on the ground of bodily incapacity for cavalry service or lack of means, and as to those who do not claim exemption the Councillors decide by vote whether they are fit for cavalry service or not; and if they vote for them as fit they enter them on the tablet, but if not, these also they dismiss.

VII. Xen. Hipp.3.1

Now we come to duties that the cavalry commander must perform himself. First, he must sacrifice to propitiate the gods on behalf of the cavalry; secondly, he must make the processions during the festivals worth seeing; further, he must conduct all the other obligatory displays before the people

with as much splendour as possible, that is to say, the reviews in the Academy, in the Lyceum, at Phalerum, and in the Hippodrome.

VIII. Xen. Hipp. 3.9

The formation that would add most to the beauty of the exercises at the inspections has already been explained. Provided his horse is strong enough, the leader should ride round with the file that is on the outside every time. He will be galloping all the time himself, and the file whose turn it is to be on the outside with him will also be galloping. Thus the eyes of the Council will always be on the galloping file, and the horses will get a breathing space, resting by turns.

APPENDIX 3: Images

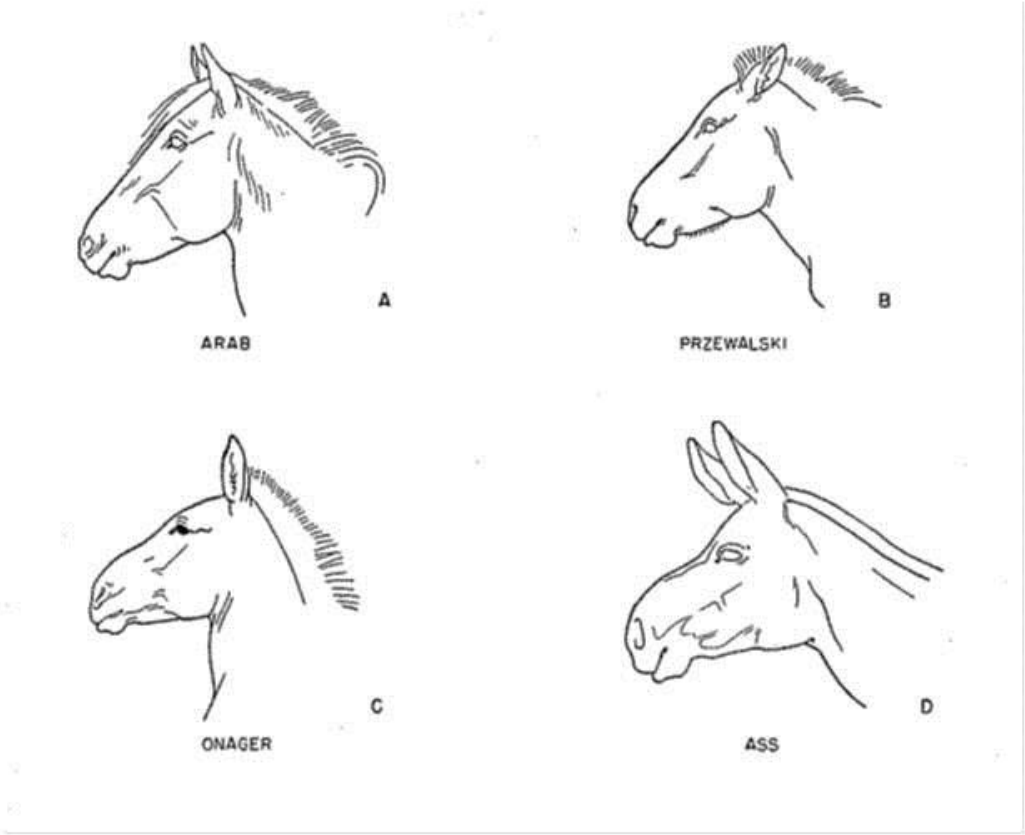


Fig.1. Modern equids and their distinct facial characteristics. (Image derived from Simpson 1951, Figure 3.)

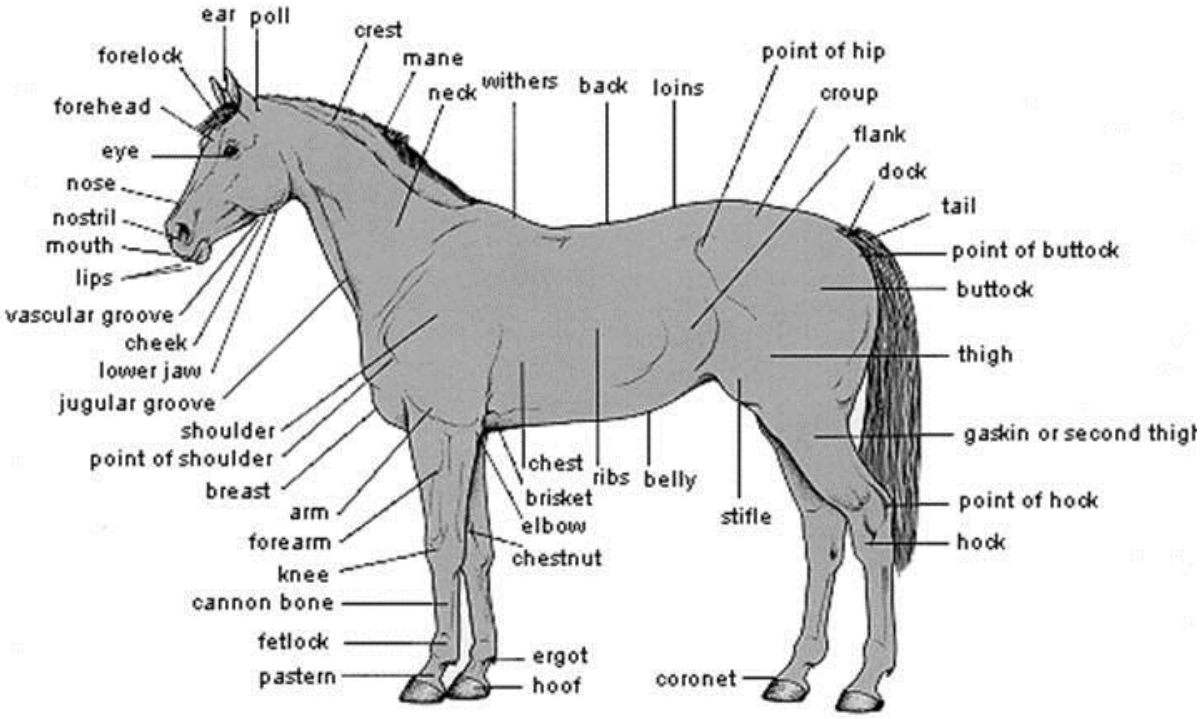


Fig. 2. Equine anatomical terms. (Image from Horse Directory Australia.)

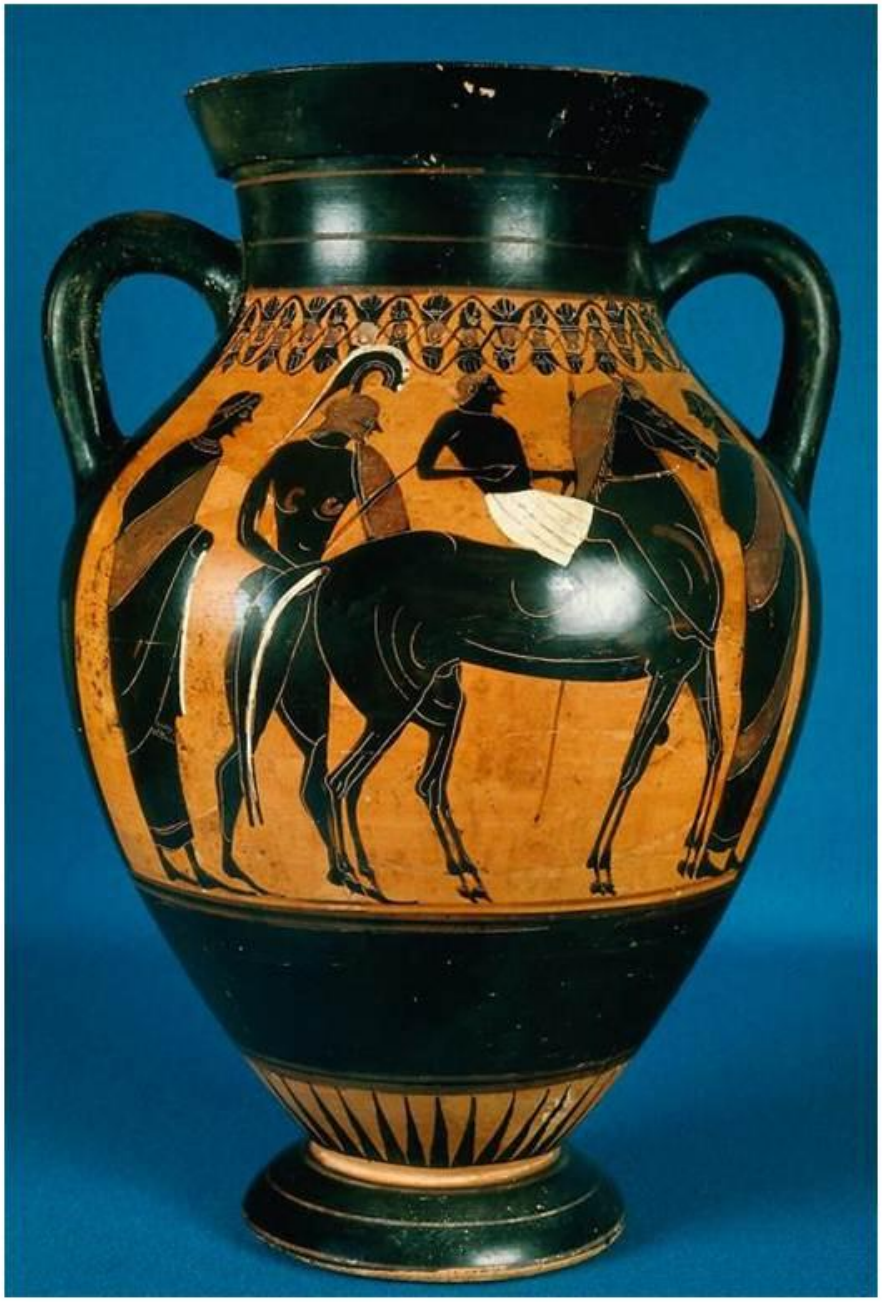


Fig. 3. Black-figure amphora by the Painter of the Vatican Mourner. (Boston, Museum of Fine Arts: 1970.8. Image from ARTstor.)

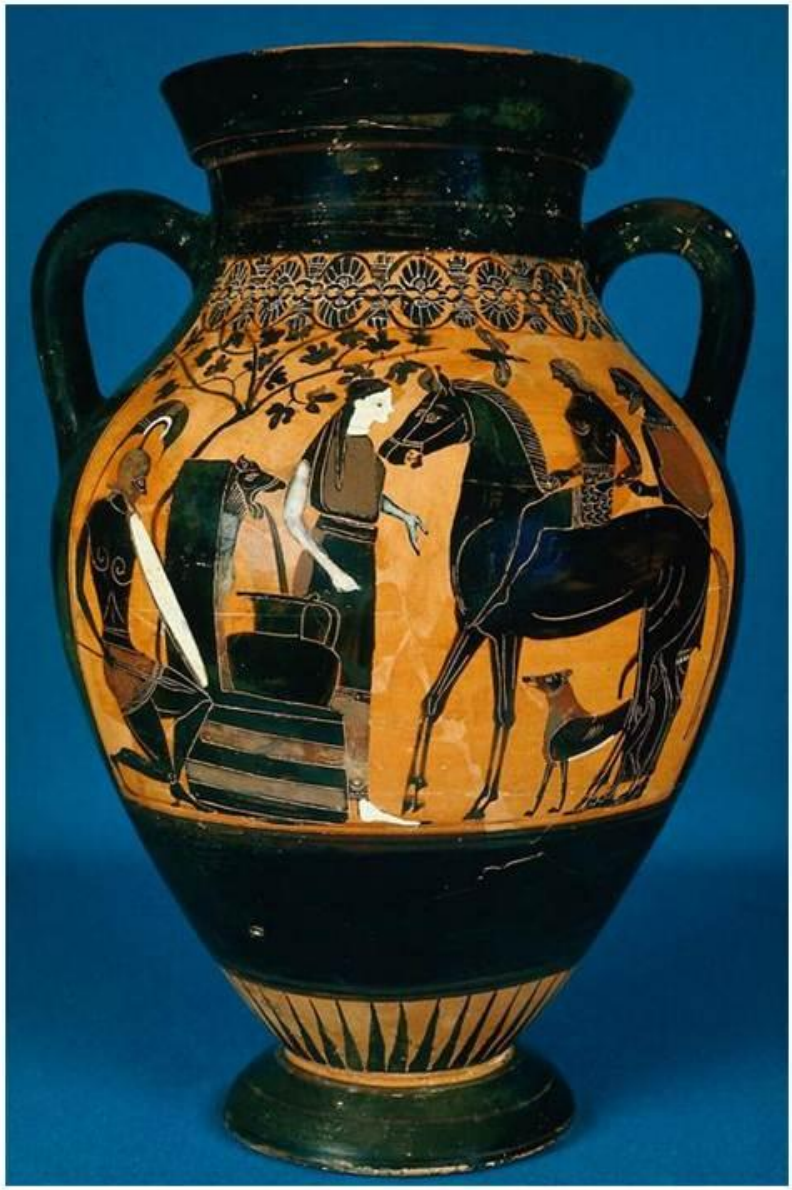


Fig. 4. Black-Figure amphora by the Painter of the Vatican Mourner. (Boston, Museum of Fine Arts: 1970.8. Image from ARTstor.)

Fig. 5. Panathenaic amphora with a chariot race found in Kameiros, Rhodes. (The British Museum, GR 1863.4-30.1, Vase B 135).

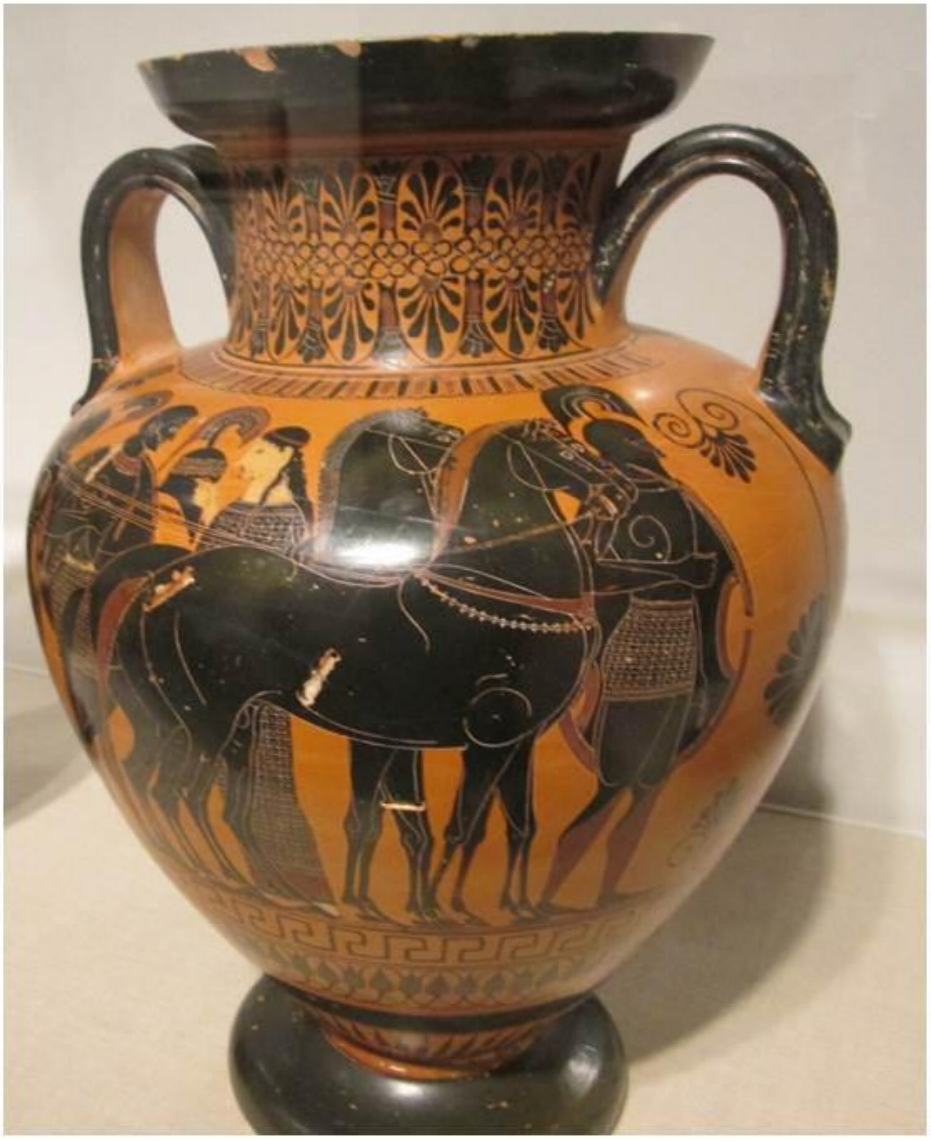


Fig. 6. Attic black-figure neck amphora by the Bucci Painter. (Ackland Art Museum, # 88.15. Photo by author.)

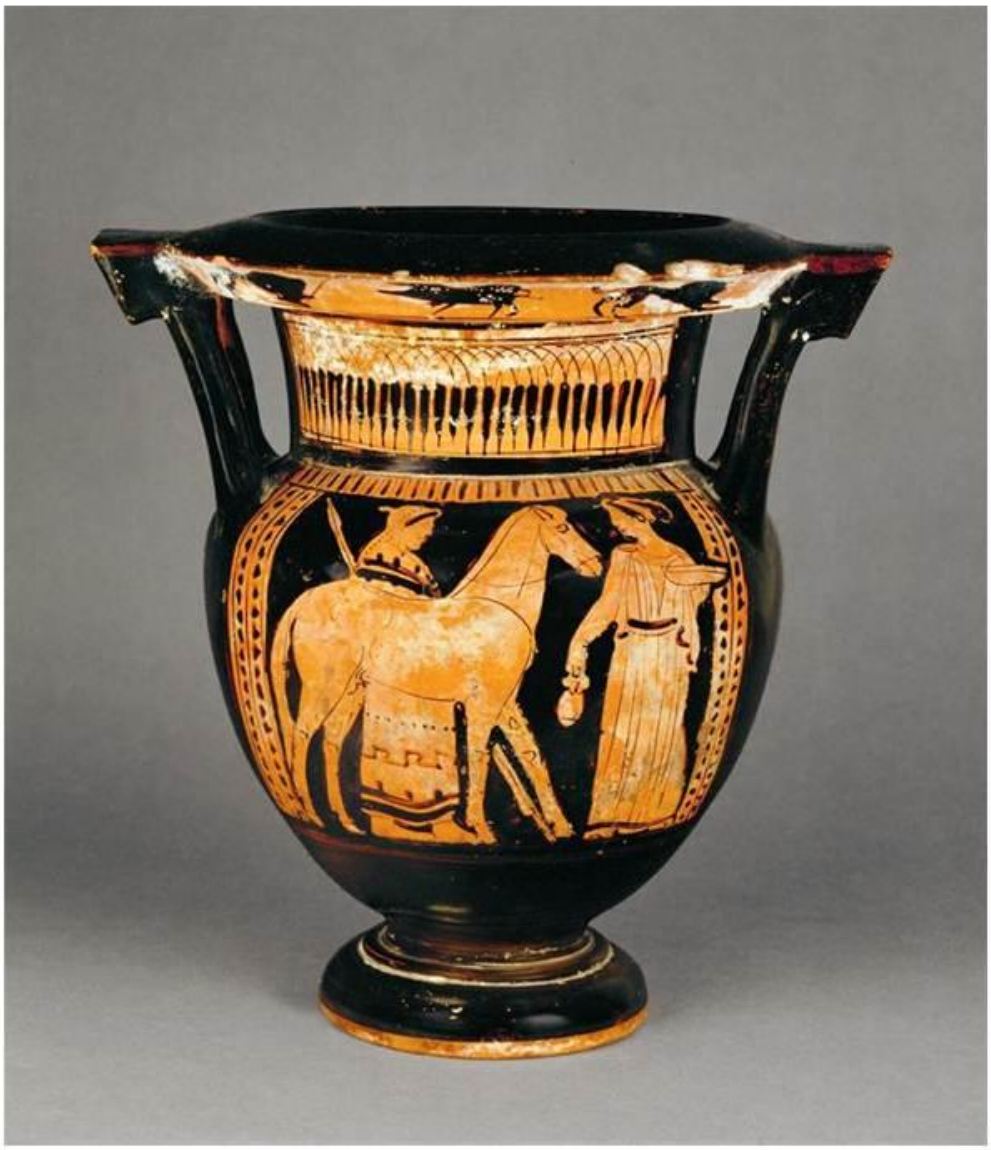


Fig. 7. Red-figure column krater by the Painter of the Louvre Centauromachy. (National Museum in Warsaw, inv. 147955; Image from ARTstor.)

Fig. 8. Attic red-figure volute krater by the Painter of the Wooly Satyrs. (New York, Metropolitan Museum of Art, Beazley # 207099. Image from Perseus.tufts.edu.)

Fig. 9. Attic red-figure neck amphora in the manner of the Dinos Painter. (Arezzo, Museo Civico, Beazley # 215325. Image from Perseus.tufts.edu.)

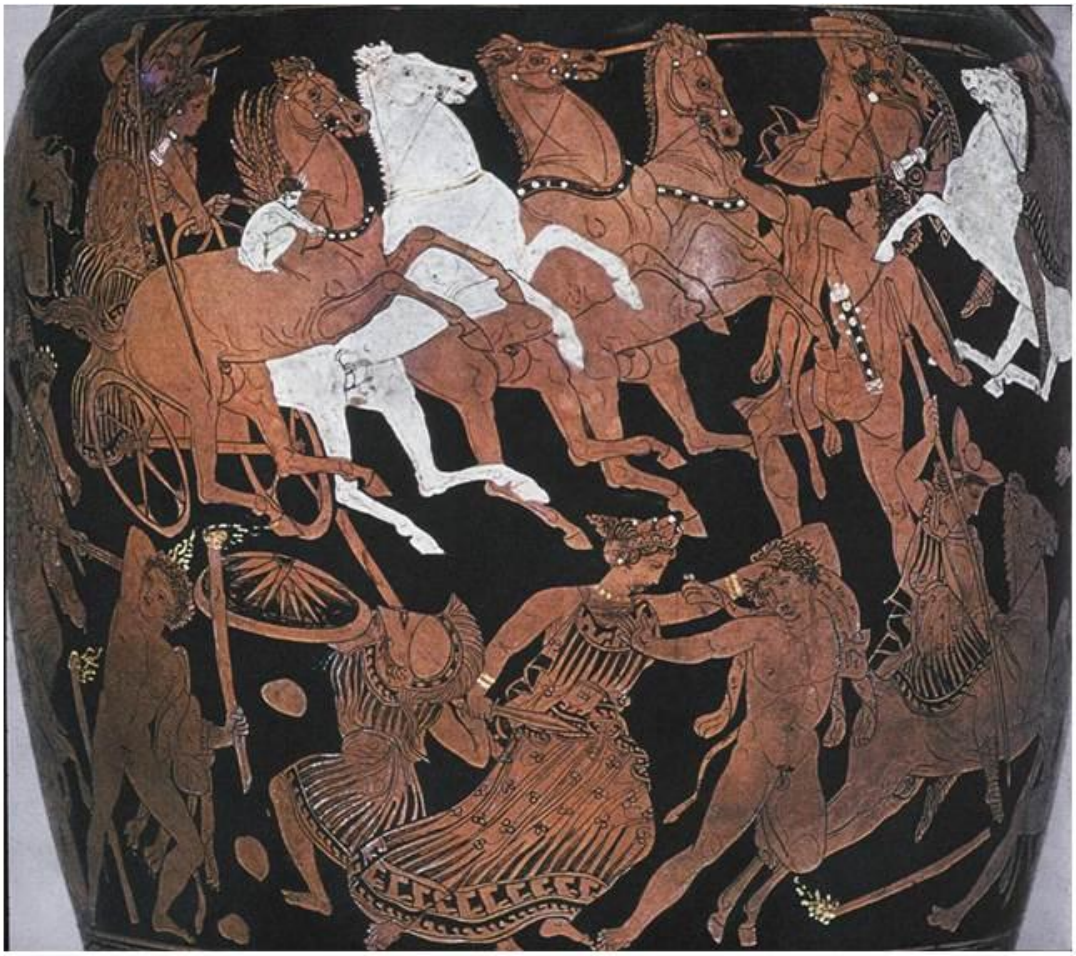


Fig. 10. Red-figure neck-handled amphora, by the Suessula Painter. (Paris, Musée du Louvre, Beazley # 217568. Images from ARTstor.)

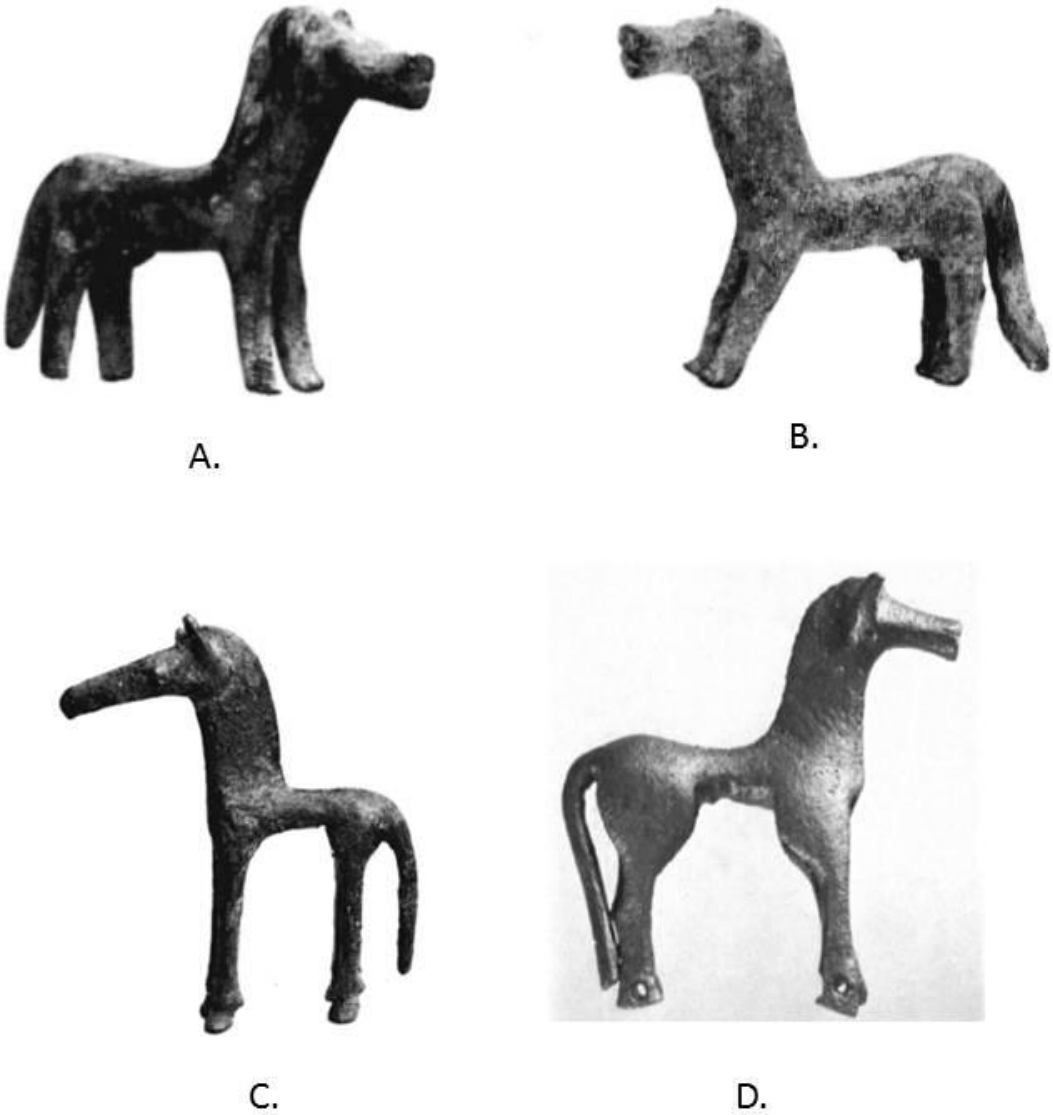


Figure 11. Geometric horse votives from Olympia. C: Geneve, Museé Barbei; D: Olympia Museum B 1565 (Images derived from the following: A. Zimmerman 1989, fig. 184; B. Zimmerman 1989, fig. 184b; C. Zimmerman 1989, fig. 251; D. Maas 1978, fig.198.)

A.

B.

Fig. 12. Bronze votives from Olympia. A: Berlin A. O. 6552; B: , Genéve – Fondation Thétis. (Images derived from: A. Maas 1978 fig. 82; .B. Zimmerman 1989, pl. 12, fig. ELI 98.)

A.

B.

Fig. 13. Chariot votives from Olympia. A: Olympia Museum No. B3005. B: Olympia Museum No. B 1670. (Images from ARTStor.)

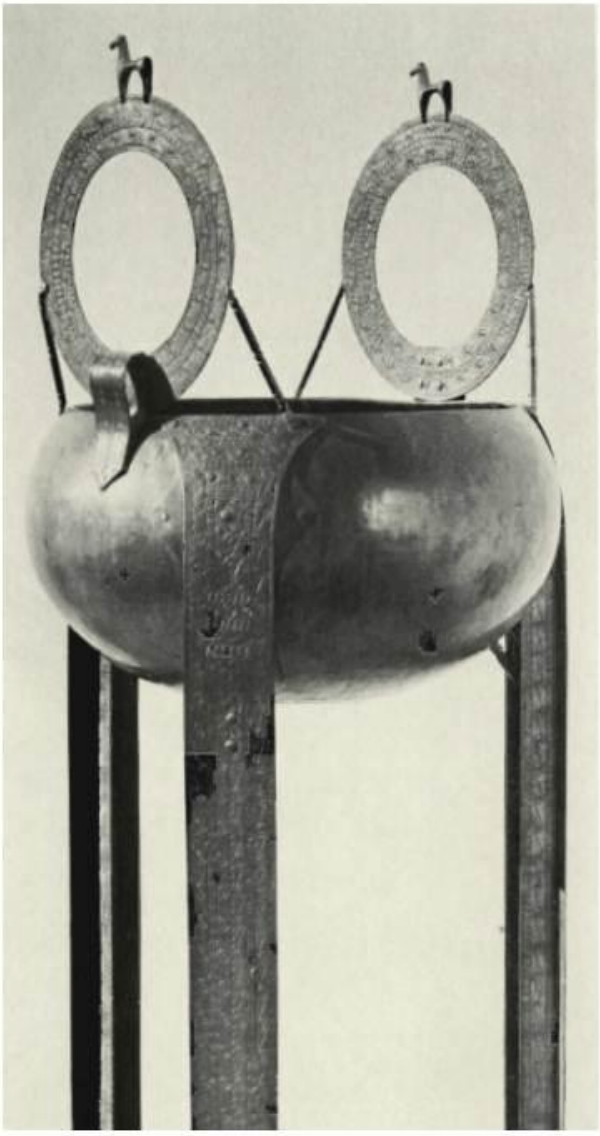
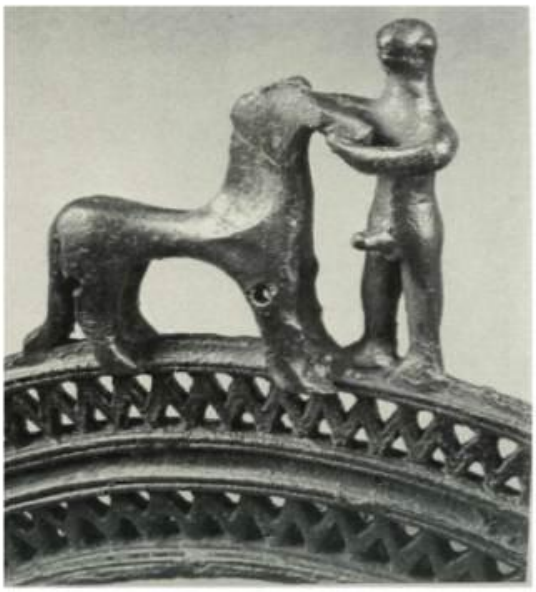


Fig. 14. Bronze tripod cauldron with horses on ring-handles from Olympia. (Image derived from Maas 1978, pl. 48.)

A.



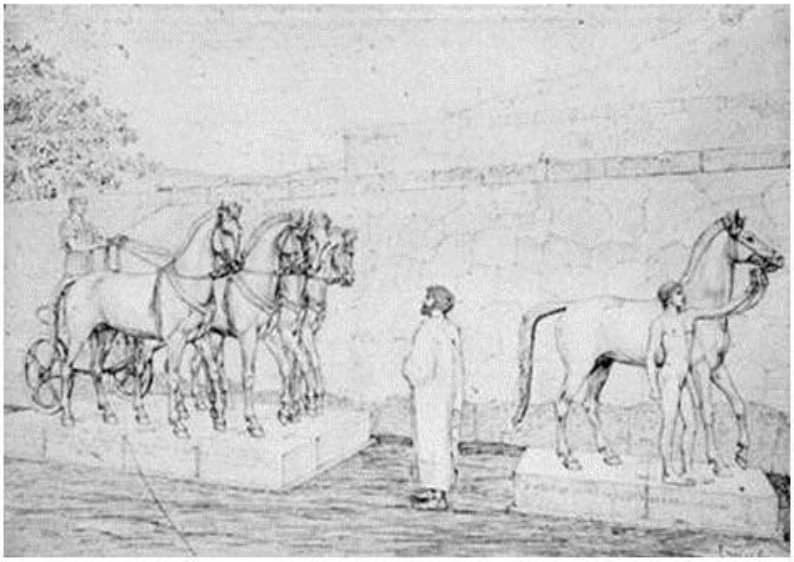
B.

Fig. 15, Bronze Ring handles from Olympia. A: Olympia Museum, inv. B 7300, Maas 1978 pl. 41; B: Olympia Museum, inv. B 4567, Maas 1978, fig. 154 .

Fig. 16. Bronze, Delphi Charioteer, Delphi Archaeological Museum, inv. 3484, 3520, 3540. (Images from ARTstor.)

Fig. 17. Bronze, Delphi Charioteer, details of face, Delphi Archaeological Museum, inv. 3484, 3520, 3540. (Images from ARTstor.)

Fig. 18. Delphi Charioteer, detail of face. Delphi Archaeological Museum, inv. 3484, 3520, 3540. (Images from ARTstor.)



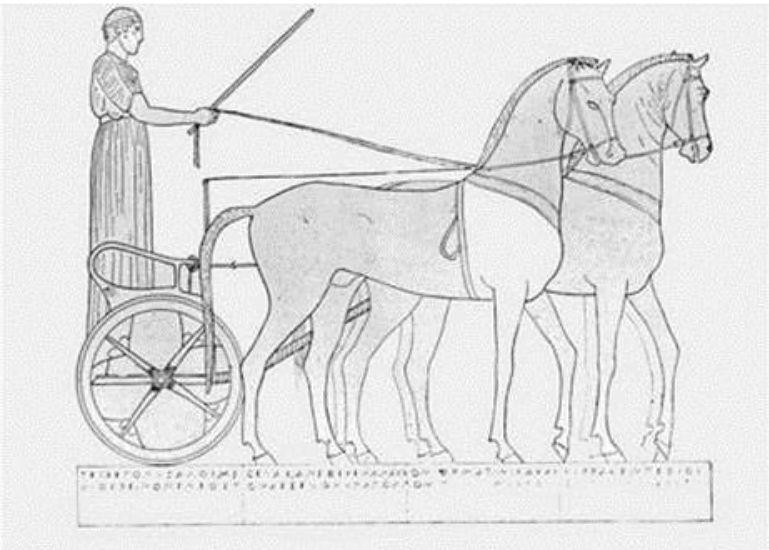


Fig. 19. Two reconstructions of the Charioteer Group from Sanctuary of Apollo at Delphi. (Images from ARTstor.)

Fig. 20. Bronze fragment of the Chariot Group, Sanctuary of Apollo, Delphi. Delphi Museum. (Image from ARTstor.)

Fig. 21. Olympia Chariot Horse Statuette, Olympia Museum, inv. B 1000. (Image from ARTstor.)

Fig. 22. Bronze, Artemision Horse and Jockey, Athens National Archaeological Museum BI5177. (Photo from Hemingway 2004, pl. 1.)

Fig. 23. Bronze, Artemision Horse and Jockey, Athens National Archaeological Museum BI5177. (Photo from Hemingway 2004, pl. 2.)

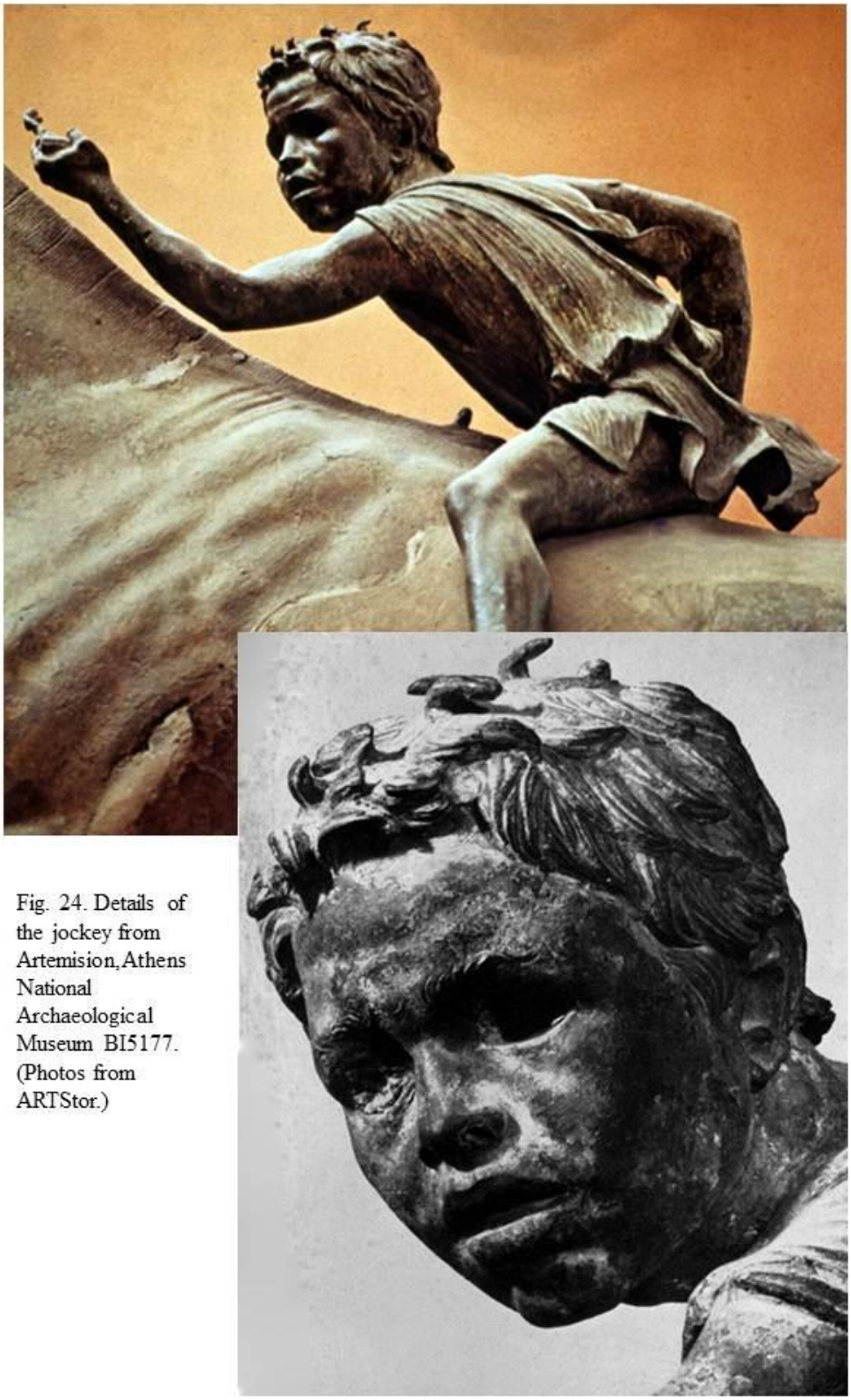


Fig. 24. Details of the jockey from Artemision, Athens National Archaeological Museum BI5177. (Photos from ARTStor.)

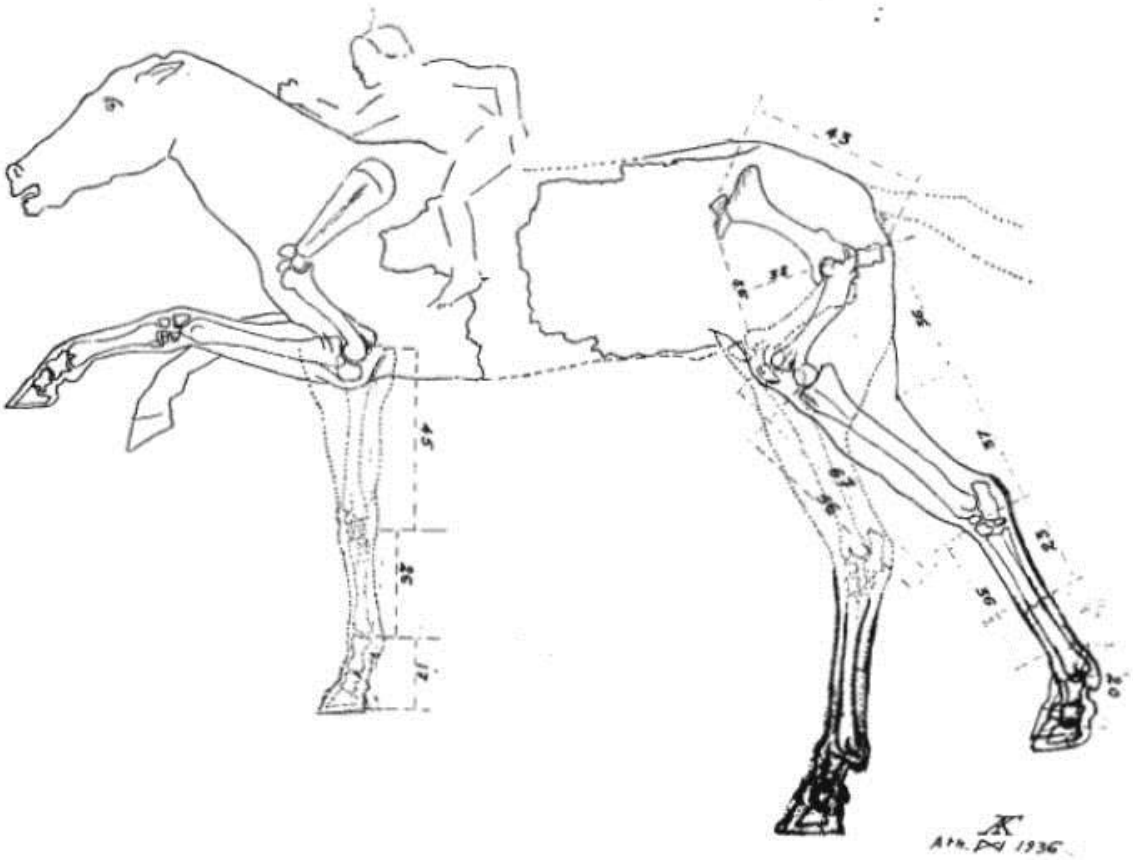


Fig. 25 . Drawing showing proportions of limbs of the Artemision Horse. (Drawing by G. Kastriotis reproduced in Hemingway, 2004, 26, fig. 27.)

Figure 26. Detail of the Artemision horse, Athens National Archaeological Museum BI5177. (Image from ARTStor.)

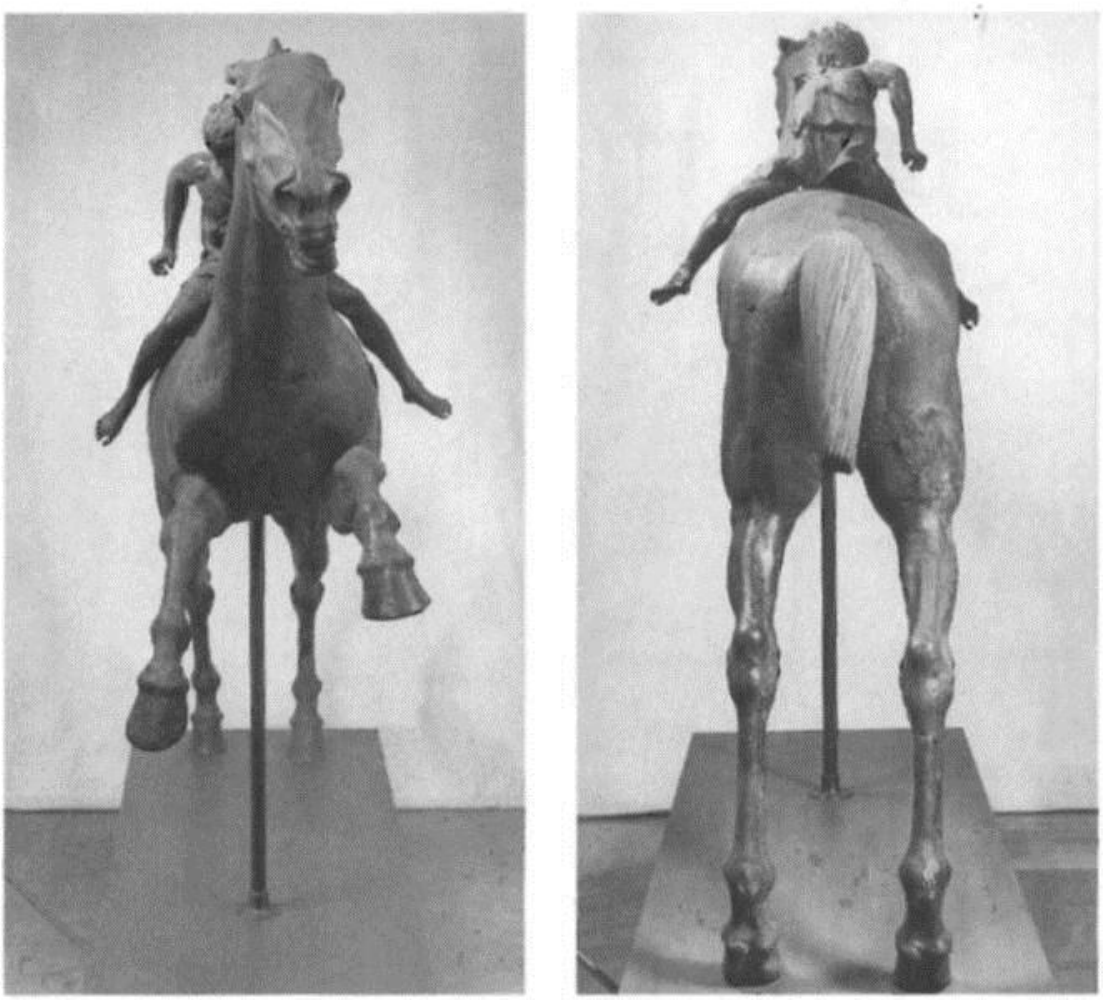


Fig. 27. Front and rear views of the Artemision Horse and Jockey group, Athens National Archaeological Museum BI5177. (Image from Hemingway 2004, 50, figs. 30 and 31.)

Fig . 28. Limestone, relief from Prinias Temple A. (Image from ARTstor.)

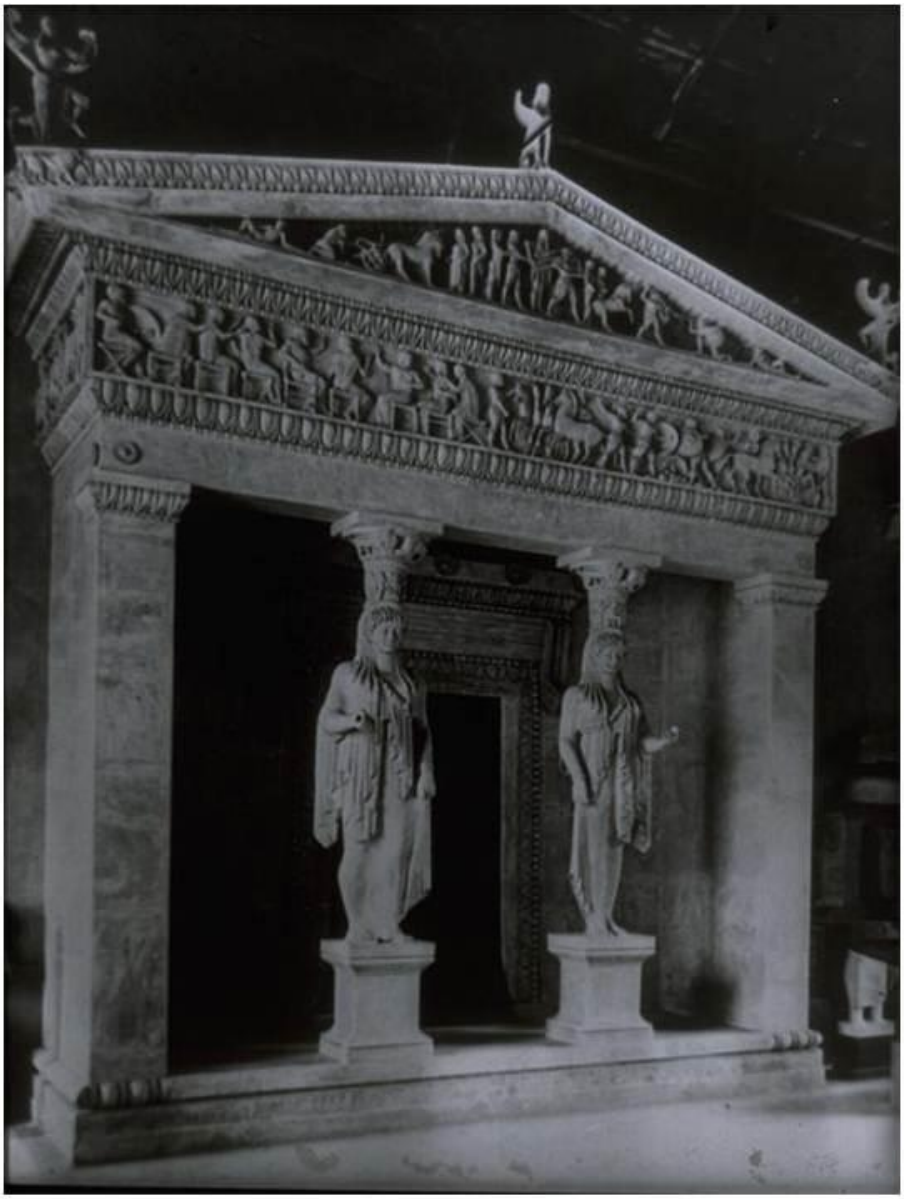


Fig. 29. Marble, Siphnian Treasury, reconstruction of the façade, Archeological Museum, Delphi. Image from ARTStor.

Fig. 30. East frieze, Siphnian Treasury, Archeological Museum, Delphi. (Image from ARTStor.)

Fig. 31. South frieze. Siphnian Treasury, Archeological Museum, Delphi. (Image from ARTStor.)

Fig. 32. South frieze. Siphnian Treasury, Archeological Museum, Delphi. (Image from ARTStor.)

Fig. 33. South frieze. Siphnian Treasury, Archeological Museum, Delphi. (Image from ARTStor.)

Fig. 34. West frieze, Siphnian Treasury, Archeological Museum, Delphi. (Image from ARTStor.)

Fig 35. West frieze, Siphnian Treasury, Archeological Museum, Delphi. (Images from ARTStor.)

Fig. 36. Detail, Parthenon frieze, "*dokimasia*" scene, West XII. (Image from Brommer 1977, pl. 36.)

Fig. 37. Detail, Parthenon frieze, North XXXVII. (Image from ARTstor.)

Fig. 38. Detail, Parthenon frieze, North XXXVIII. (Image from ARTstor.)

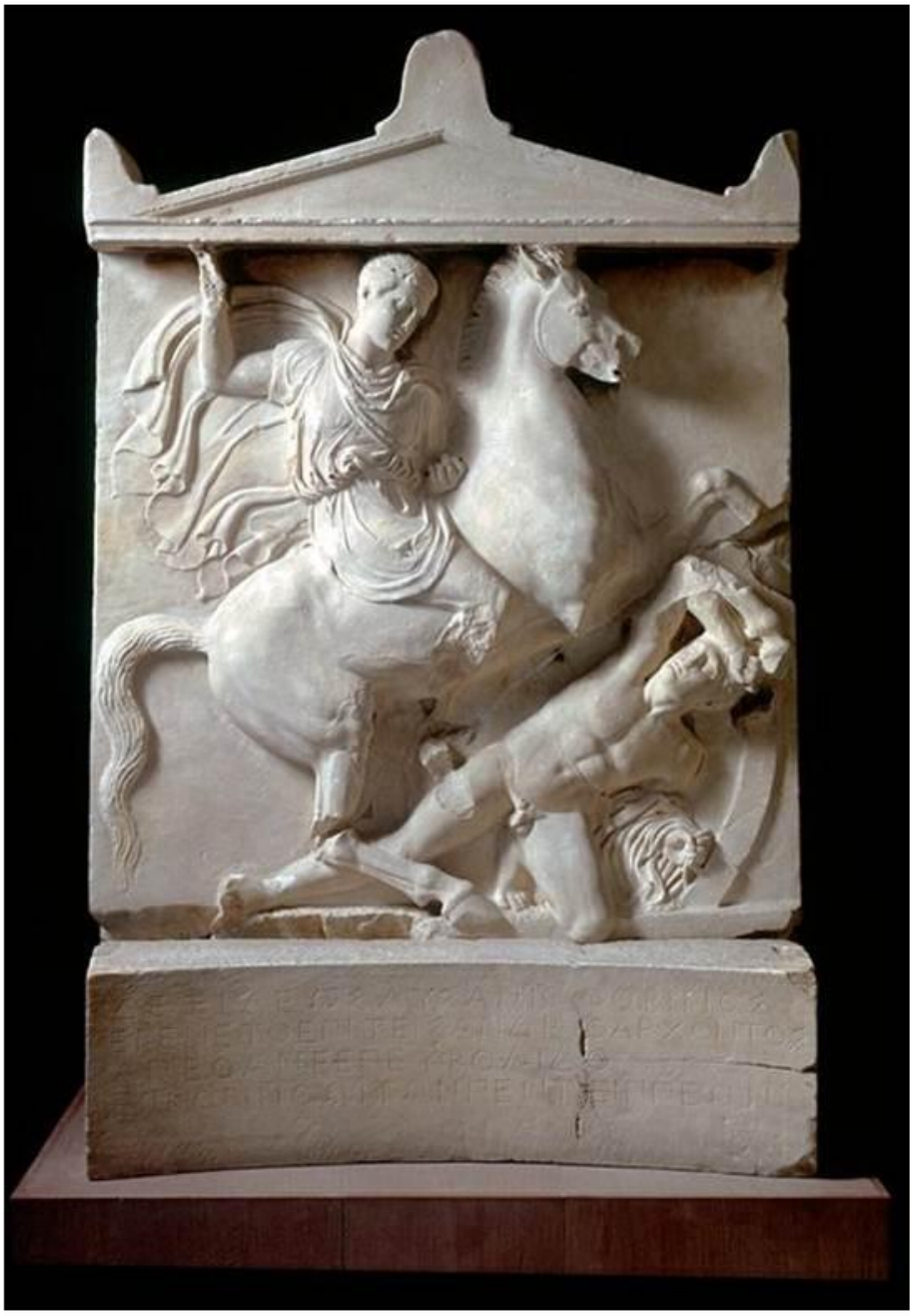


Fig. 39. Dexileos Relief, Athens, Archaeological Museum of Kerameikos , Inv. P1130. (Image from ARTstor.)

Fig. 40. Vatican Relief, Vatican Museum, Musei Vaticani 1684. (Image from Daltrop and Roncalli 1972, 78.)

Fig 41. Berlin Relief, inv. K7390. (Image from ARTStor.)

Fig.42. Marble, Horse and Groom Relief, National Archaeological Museum, Athens, inv. 4464. (Image from Kaltsas 2002, fig. 415.)

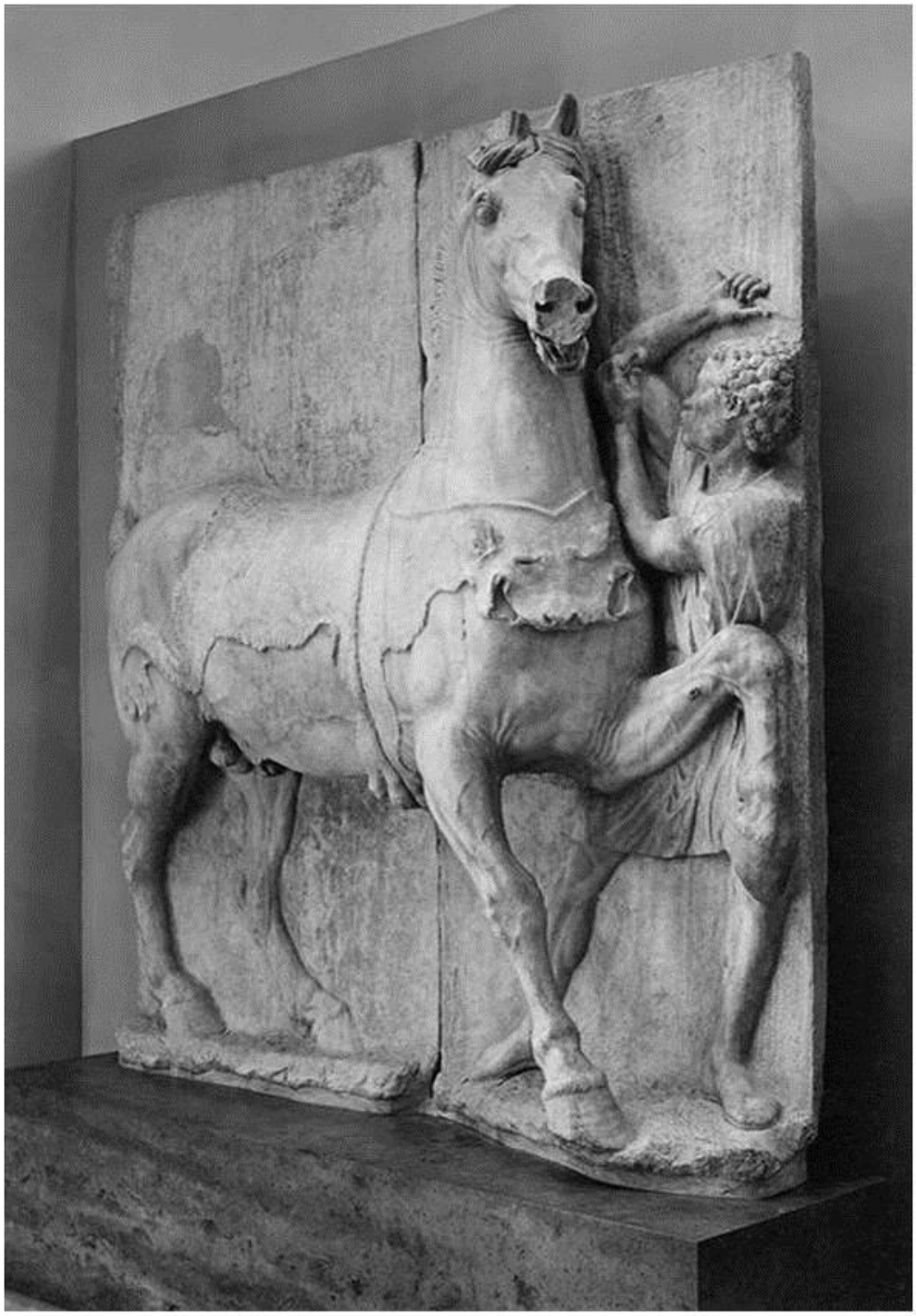


Fig 43. Marble, Horse and Groom Relief, National Archaeological Museum, Athens, inv. 4464. (Image from ARTStor.)

Fig. 44. Detail of the groom, Horse and Groom Relief, National Archaeological Museum, Athens, inv. 4464. (Image from ARTStor.)

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