

Article

# Greek Geometric Animal Figurines and the Origins of the Ancient Olympic Games

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**Abstract:** According to the prevailing scholarly opinion, Geometric bronze animal figurines found at Olympia represent cattle and horses which were put under the protection of the divinity in this form. This view is challenged here for various reasons including literary testimony and comparisons with contemporary shrines containing similar dedications (especially Kato Syme on Crete). This paper argues that the bovines depicted were feral, and the figurines were offered by foreign aristocrats visiting the sanctuary especially for the sake of hunting these animals. Similarly, the horse figurines are interpreted as depicting feral equines, which were presumably captured and taken away by the visitors. After examining the cultic regulations related to the Olympic Games (timing, crowns, exclusion of married women and the *penteteric* periodicity), it is suggested that excessive hunting led to the extinction of some game animals and thus to a radical shift in the cult practice and ultimately resulted in the introduction of athletic events, i.e., in the Olympic Games.

**Keywords:** ancient Greece; Olympia; hunting; rituals; animal ceremonialism; Olympic Games

## 1. Introduction

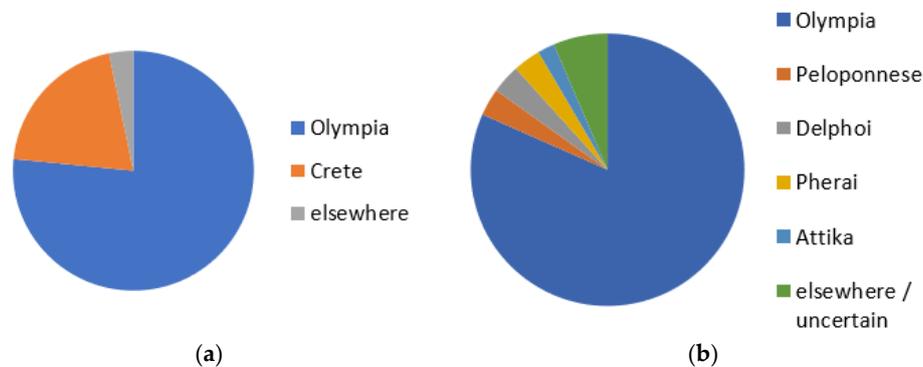
There seems to be no connection between animals and the Olympic Games. Contrary to the impressive Greek Geometric tripod cauldrons, animal figurines of the same period have never been connected with the Games, they were treated instead, e.g., by Taita (2009) and Sinn (2010) as an isolated group of dedications, clearly attesting that the sanctuary was not a centre for athletic contests from the very beginning of its existence. While this conclusion is most probably correct, I will try to show that the animal figurines can nevertheless reveal the real origins of the Games.

Based on the analysis of the distribution patterns of different animal figurines throughout Greek sanctuaries and by investigating the identity and possible motivation of the dedicators, I will first suggest a coherent reconstruction of the dedicatory practices. Next, I will examine the represented animal species and question the commonly held assumptions. This examination will provide a model that accounts both for the appearance and the disappearance of the animal figurines at Olympia and other shrines. At the same time this model will explain the emergence of the athletic contests at this particular location. Finally, some archaeological and ethnographic parallels will be adduced to corroborate this reconstruction, along with the examination of cultic regulations related to the Olympic Games.

## 2. Statistical Information

It would seem appropriate to start by establishing some basic facts and statistics. Greek Geometric animal figurines were typically made of clay and bronze and they most often depict widespread ungulate herbivores or birds living in the Mediterranean. There is no corpus or systematic collection covering all of them, but based on the publications concerning individual sites, it is fairly clear that the vast majority, i.e., ca. 4500 pieces made of bronze show bovines and equines, while rams, goats

and birds amount only to a few hundred pieces and the remaining taxa (e.g., stags, hares or exotic animals like lions) are represented only sporadically, i.e., ca. 10 times each. Since there is a quite recent monograph on the horses (Zimmermann 1989) and I tallied the bovines systematically myself, it is possible to chart the provenance of the most common types (Figure 1).



**Figure 1.** Provenance of bovine and equine figurines in Geometric Greece: (a) cows; (b) horses.

It is noteworthy that some of the bovines are clearly marked as bulls, while in most cases the sex is not indicated. There is, however, not a single figurine which would definitely depict a female cow suckling a calf, so all the figurines could be simply called bulls. This is avoided, however, because we cannot know if the difference between the two groups was intentional or not and therefore cow will be used here as a synonym to describe the bovine figurines in general, irrespective of the sex of the animals.

It should be added that all of the figurines with known provenance were found in sanctuaries and can thus be regarded as votive dedications; the vast majority of them were found at Olympia. At this site, the number of equines reaches almost that of the bovines, and these two groups together make up ca. 99% of the entire material (Heilmeyer 1979). Looking at the composition of animal figurine assemblages found in other sanctuaries, however, this ratio turns out to be unparalleled. In most cases, horses account for the majority of animal figurines with no or only sporadic cows. Where the cows are more numerous and indeed dominant, as in the case of Crete or the Theban Kabeirion, the horses are almost entirely missing. For example, at Kato Syme on Crete in the sanctuary of Hermes and Aphrodite, there were ca. 300 bovine figurines, the second largest assemblage of bovines after Olympia and they were accompanied mainly by bucks (male goats) and rams and only by a handful of horses (Schürmann 1996).<sup>1</sup> It is also interesting to note that the percentage of horses and cows found at Olympia compared to the entire material is basically the same (ca. 75%), but the remaining horses are quite evenly scattered all over Greece, while the bovines are found almost exclusively on Crete.

### 3. Dedicators and Dedicatory Practice

There are some important questions resulting from these observations: who dedicated the figurines, why were they offered and what caused this peculiar distribution pattern?

Since there are no dedicatory inscriptions nor explicit written sources about the dedicatory practices in this early period, these questions are not particularly easy to answer. On the basis of previous studies, e.g., Furtwängler (1890), Heilmeyer (1979), Herrmann (1964), Zimmermann (1989), Andrews (1994), however, it seems to be safe to conclude that the figurines were produced during the 9th–8th centuries BCE either by local workshops (in Argos, Korinth, Lakonia and on Crete) or in

<sup>1</sup> From Crete, there are seven bronze horse figurines known, four of them decorating vessels and coming from the Ideaen cave (Zimmermann 1989, p. 293).

the case of Olympia, by itinerant bronzesmiths coming from different regions of the Peloponnese and working temporarily in the neighbourhood of the sanctuary.<sup>2</sup>

The dedicators of the figurines are generally supposed to be mainly locals. In the smaller, local shrines, where usually only a few figurines were dedicated, this is certainly likely to be true. But can we assume the same at those larger sites which produced the bulk of the figurines, i.e., at Kato Syme on Crete and in Olympia? The pilgrims were certainly coming from Crete in the first and from the Peloponnese in the second case, but contrary to the usual explanation they can hardly be termed as local visitors. The further implications of supposing only local dedicators left votives especially in the case of Olympia have not been recognized, and so they deserve to be mentioned here.

Assuming such a scenario, it should be first unexplained why local people around the sanctuary would and could have attracted bronzesmiths from distant regions. It is obviously possible to assume that they were more prosperous than those living at a greater distance from the sanctuary and could thus afford more elaborate and expensive dedications, perhaps even in significantly larger numbers, since Elis was renowned for its agrarian wealth from the Late Classical period onward. Even myths located large herds of cattle in this region.<sup>3</sup> Clearly identifiable dedications made by individuals from Elis (e.g., attested by dedicatory inscriptions) are practically unknown at Olympia at any time. Most important in this context is certainly their absence during the Archaic period. Large numbers of dedications offered by individual inhabitants of the neighbourhood are therefore not very likely at such an early period either. The absence of individual votive inscriptions is of course an *argumentum ex silentio*, but it is perhaps more relevant than other similar arguments, since there are some collective dedications made by the Eleans and other local peoples which are attested by inscriptions on a few metal vessels (Siewert 1991). The absence of personal dedications can therefore not be attributed to a general lack of interest in inscribing votives. To suppose, conversely, that the votive figurines would be collective votives, would be quite strange since there are absolutely no parallels for such a dedicatory praxis in the Greek world in general or at Olympia in particular.

Finally, considering the parallel case of the Kabeirion, assuming only local dedicators left votives it remains unclear why they would have been made both in Crete and in Olympia only during the Geometric period, and why the supposed local dedicators ceased to continue this practice in later centuries. General trends have been invoked for this change by Snodgrass (Snodgrass 1989), but as the large numbers seem to be a local feature at both places, and since they seem to be unrelated, one would expect an equally local cause for the abandoning of the practice as well.

Supposing external dedicators in Olympia is therefore much more likely, even if some problems seem to remain open. For instance, it is not clear why all the wealthy owners of these animals (or at least most of them) would have come from the Argolid, Korinth and Lakonia equally and precisely to

<sup>2</sup> The local workshops of the Peloponnese were identified by Herrmann (1964). Zimmermann (1989) arrives at significantly different results in this respect, but the approach of Herrmann remains more convincing and seems to be generally accepted (Heilmeyer 1979; Rolley 1994, pp. 97–101; Coldstream 2003). On-site production at Olympia is absolutely clear, and it is generally assumed that the craftsmen working here were most probably itinerant. A certain (and not insignificant) proportion of the figurines is usually considered as the product of “local” craftsmen, imitating imported prototypes or emulating their visiting fellows. Heilmeyer (1979, p. 275) counted 4042 animals and considers (ibid., p. 137) 568 pieces as products of foreign (non-local) workshops, but admits that the entire “local” production was more or less dependent on the Argive school. “Local” style defined in this way could be simply termed as provincial Argive and is not necessarily more local than the one constituting the Argive school proper, which is also mainly known (especially in its earliest phase) from pieces found at Olympia. Defining “local” by extending the meaning of the term to embrace both Messenia and Arkadia, as done by Morgan (1990), is problematic as well, for precisely those regions which lie closest to Olympia do not show any marked connections with the sanctuary. Zimmermann (1989, p. 63) argues for a much higher percentage of foreign imports (43–47% of the horses) than Heilmeyer and shows that the stylistic judgments on which these estimates are based are bound to be highly subjective, and the matter cannot be settled with absolute certainty. It is, however, highly improbable that bronzesmiths working permanently in this region would specialize exclusively in small figurine dedications and since other local bronze products (e.g., tripods, weapons, etc.) and indeed major settlements or cemeteries are entirely missing, it is not very likely that most of the figurines would be produced by local craftsmen, however we define the meaning of this term.

<sup>3</sup> Xen. *Hell.* 3.2.26; Polyb. 4.73. For the herds of Augeias see, e.g., Paus. 5.1.9. For large herds of exceptional size Livy 27.32.9. The numerical data regarding the size of the herds in this region, which are given by Homer (*Il.* 11.670–761) are probably not to be taken literally.

Olympia, and why they offered such simple and inexpensive votive dedications and only during the Geometric period. An answer to the first question referring to the fame of the sanctuary is absolutely unconvincing for this early period, as it is characterized by isolated settlement nuclei and restricted communications (Ulf 1997, pp. 37–40). As attested by the large and expensive tripod dedications, the fame of the sanctuary was clearly emerging in this period, but this reputation should not be taken for granted from the earliest periods and it should be rather explained than used to explain contemporary phenomena. As a source for the sanctuary's reputation, ancient sources (Strab. 8.30.3) offer two explanations: the Olympic Games and the oracle of Zeus. Neither can be safely dated back to the Geometric period and the bronze figurines have apparently nothing to do with either. An ancient (fertility) cult of a female goddess was proposed by several modern commentators<sup>4</sup> partly on the basis of late literary *testimonia* and partly because of the numerous animal figurines. Even if this hypothesis were essentially correct, however, it can hardly explain on its own the wide and rather peculiar radiation of the cult. For it is beyond reasonable doubt that external dedicators are not likely to have come from the vicinity, most importantly from Messenia, Arcadia or Achaia, but from more remote areas. This observation strongly argues against the theory of a simple fertility cult spreading gradually. In theory, it would be possible to suppose dedicators coming neither from the neighbourhood of the sanctuary nor from the home of the votive producers but from anywhere else (e.g., the intermediary regions listed above), but similar figurines are not found in these areas, so there is no reason to suppose this.

It is thus worth considering in detail who the dedicators might have been and why the small figurines were offered in the sanctuary. As the figurines were relatively easy to produce and therefore cheap, and because they are present in large numbers, one is tempted to suppose a large number of relatively poor dedicators and mainly local ones. But none of these reasons is compelling: low costs imply poor dedicators only if we assume that each dedicator left just one figurine (or a few) and nothing else in the sanctuary, and this is by no means certain (and all might have dedicated other things as well); the large numbers are likely to result from large number of visitors, but maybe also explained by recurring visits of the same, relatively small group of visitors, who may come from any distance. At any rate, the producers of the figurines came mainly from the same areas as those of the large tripod cauldrons and it is therefore reasonable to suppose that the accumulation of small dedications in Olympia is equally due to the exceptionally large attractivity and supra-regional importance of the sanctuary and not a purely local phenomenon. This consideration strongly argues for the assumption that similarly to the tripods, the dedicators of the figurines were of the same origins as their producers, i.e., they were most probably external visitors of the sanctuary, coming mainly from the northeast and southern Peloponnese. Is it possible that the dedicators of the tripods and those of the figurines were identical? I think it is reasonable to assume that they were,<sup>5</sup> because otherwise the numerous figurines would require a high number of relatively wealthy dedicators, all being able to afford a visit to the distant sanctuary. Numerous well-to-do visitors are not very likely to be found anywhere during the Geometric period and are especially unlikely to be present at Olympia before ca. 700 BCE, when the first pits were dug to provide drinking water for a large number of people (Mallwitz 1988; 1999, pp. 196–99). In addition, the bullheads on the earliest cauldron handles (Maass 1978, p.18 n. 26) and the numerous horse figurines on the later ones clearly show that the two groups of dedications were intimately connected with each other. It would be therefore quite logical to search for a cultic context, which could account for dedicating both types of objects by the same group of dedicators.

<sup>4</sup> Herrmann (1962); Sinn (2010, p. 81); Robertson (2010, pp. 70–73).

<sup>5</sup> Morgan (1993, p. 24) clearly differentiates the dedicators of the figurines from those of the tripods and supposes two different social groups, connecting the animal figurines to the "average visitor" and the tripods to "the richer man". The horse figurines do not fit this pattern, even according to Morgan (1993, p. 23), and there is nothing to prove this in the case of the bovines.

Of course, relatively poor local dedicators could also be assumed, especially in the case of clay figurines and in order to settle the question of the dedicators, one has also to consider the possible reasons for dedicating the figurines. In this respect, two obvious and peculiar facts call for some kind of explanation. The first is the exceptionally large number of dedicated pieces as compared with both contemporary and later sanctuaries; the other is the assemblage of the material in Olympia, i.e., the relative percentages of the species depicted in Olympia. As already mentioned, at least ca. 90% of the bronze material is made up of cows and horses, which are represented continuously (i.e., without much fluctuation over the centuries under discussion) in more or less equal numbers,<sup>6</sup> and this ratio is unparalleled elsewhere. Moreover, looking at the role played by the two animals in Greek cult, it is apparent that cows were the most prestigious and ubiquitous sacrificial animals, but horses were almost never used for this purpose. It is therefore legitimate to wonder if a common factor can be expected for dedicating equine and bovine figurines. I think, considering the large numbers involved, the approximately equal proportion is unlikely to be accidental and because the two groups were produced by similar workshops it is plausible that they were dedicated by the same group of people and at a similar frequency. As such, even if the reason for their dedication was not exactly the same, it can be safely assumed that it was similar. In this case the large number of the Olympia figurines cannot simply be explained by the ordinary sacrificial customs observed all over Greece, and there is no reason to assume a direct link with real animal sacrifices even for the bovines at Olympia. In such a case, one would certainly be surprised to find that in later centuries the dedication of cow figurines practically disappears, when the sacrificial practices are not likely to have changed radically. Also in the Kabeirion in Boiotia, where bronze bull figures are similarly abundant and indeed almost the only species represented throughout several centuries, the analysis of the archaeozoological material has shown (Schmaltz 1980) that in reality these animals were sacrificed rather seldom in comparison with ovicaprids, which are, however only sporadically represented among the votives. According to the available archaeozoological data (Hägg 1998; Forstenpointer 2003), this sacrificial pattern prevailed in most Greek sanctuaries and consequently (i.e., assuming some kind of correlation with the real sacrifices performed in the sanctuaries) the generally low frequency of dedicating bovine figurines or statues in Greek sanctuaries can be regarded as normal. This observation underlines the exceptional character of the cow figurines at Olympia and suggests that another kind of explanation is needed for their dedication, just as in the case of the Kabeirion.

Considering Syme and the Kabeirion, one can see that the recipient deity was clearly not decisive (the figurines could be dedicated to any divinity, just as the living bovines could be sacrificed for any god or goddess) and as most Geometric sanctuaries did not receive bovine figurines in similar numbers, it is equally clear that chronological factors were not responsible either. A common feature of the cults involved, e.g., fertility or initiation can be perhaps supposed, but some more specific local factor seems more likely.<sup>7</sup> Here the famous passage of the *Iliad* (11.670–761) comes to mind, where Nestor related the mutual conflicts of Elis and Pylos. The cause for the conflicts were always herd animals and considering the important role played by monuments celebrating military victories in the later history of the sanctuary, it is tempting to connect the early dedications to similar events as well. One could imagine, e.g., that after winning a great number of horses and cattle during a raid, as related by Nestor, the victors would have dedicated some figurines representing the booty or the share of

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<sup>6</sup> Snodgrass (1987, p. 206 fig. 64) would imply a marked decrease in the percentage of bull figurines from proto-Geometric times to the Geometric period. Even if the adopted chronology made it possible to discern such a change, the absolute numbers of species involved differ so drastically from each other that statistical comparison between the two sets of data becomes rather meaningless (18 proto-Geometric versus 1764 Geometric pieces).

<sup>7</sup> Schmaltz (1980; 1983, pp. 101–3) developed the idea that the main reason for the exceptional popularity of bovine figurines was some cultic reason in connection with the deity worshipped both at the Kabeirion and at Olympia. Schmaltz refers in this context to the cult of Dionysos at Elis, where there is marked evidence to show that Dionysos was worshipped in the form of a bull, but does not want to connect the bull figurines of Olympia with this cult. The cult of Zeus in general can hardly account for the thousands of figurines at Olympia either since bull figurines are absent from other sanctuaries of Zeus.

the gods. Such a practice is, however, not indicated by the epic: the gods were regularly honoured with animal sacrifices and not with statuettes. The commemoration of animal sacrifices in the form of statuettes is not very likely either,<sup>8</sup> since in later centuries, when similar sacrifices were regularly held, it was by no means usual to erect a monument depicting the sacrificial animal<sup>9</sup> and horses were certainly not sacrificed at all.

If it was not for the ritual role of horses and cows, not even some other major events involving both species that figurines representing them were dedicated in such numbers at Olympia, then it was most probably the dedicators, their everyday living conditions or personal emotions, which determined the practice and are reflected by the figurines. In this respect it is interesting to note that sentiments toward cattle and horses were generally quite different (Lorenz 2000, pp. 324–25) and are therefore not likely to account for the roughly equal numbers of the figurines. If this were decisive, equine figurines should far outnumber bovine ones, as is the case in most other sanctuaries. The prevailing opinion<sup>10</sup> thus takes the figurines as a reflection of the living conditions of the dedicators themselves, and suggests that in this form the most valuable animals were put under the protection of the divinity. This hypothesis could perhaps explain the presence and the large number of animal figurines in Olympia, if the underlying notion of large-scale pastoralism during the Geometric period in the surrounding region could be substantiated,<sup>11</sup> but is clearly less suited to account for the conspicuous gaps in the distribution pattern. One wonders for instance, why in Crete the method would have been applied only to cattle, rams, goats and not to horses, and why most well-to-do farmers or herders in ancient Greece applied this method practically exclusively to their horses and did not choose this simple method for their cattle even in those areas which show marked environmental similarities with Olympia, i.e., are well-suited or even renowned for cattle rearing and/or are clearly in close contact with this sanctuary. The most conspicuous instance belonging to both categories is the case of the Argolid, where the Heraion attracted only horse dedications, but Thessaly is a prime example of the first and Sparta of the second. As such, this kind of interpretation should for several reasons not be taken as the definitive explanation for the dedication of animal figurines.

The most important common feature of cattle and horses in ancient Greece was that they were valuable belongings (horses in particular can be termed “luxury items” or “prestige goods”) and their relatively cheap representations could therefore be thought as expressing notions connected with wealth and status. If they were dedicated by people wealthy enough to own and to use these animals, they could express their success and pride but also their anxiety about or related to them; if on the contrary they were dedicated by those who were simply eager to acquire them, the figurines could stand for their hopes. Assuming this last possibility one can hardly see why the practice of dedicating these figurines (especially those of the bovines) would not have developed at other places and why the practice disappeared at Olympia as well as at other sanctuaries, since poor people desiring to become more prosperous were certainly present everywhere and in all stages of history and both horses and cows continued to represent wealth and status during the following centuries as well (Howe 2008, pp. 31–33, 39–44). As such, the alternative is to be preferred, because assuming wealthy dedicators

<sup>8</sup> Such a practice was plausibly suggested for the terracotta bovine figurines at the Heraion of Samos, since there it is proven by the osteological remains that cattle were the most frequently dedicated animals (Baumbach 2004, pp. 161–62 with references).

<sup>9</sup> The bull of the Korkyreans (Paus. 10.9.3–4) is surely an exception that proves the rule.

<sup>10</sup> Heilmeyer (1972, 1979); Guggisberg (1996); Schürmann (1996); Taita (2009); Sinn (2010).

<sup>11</sup> The extent of pastoralism and the assumption of large herds in the vicinity of Olympia can rely exclusively on references taken from Homeric epic, from much later sources and the dedication of figurines themselves. As the studies dealing with the problem in general show, transhumant large-scale pastoralism is very unlikely under the circumstances of Dark Age Greece; Cherry (1988, pp. 27–29) against Snodgrass (1987). For the entire debate concerning agro-pastoralism versus transhumance, see the excellent summary in Howe (2008, pp. 13–25) and for the Dark Age especially (*ibid.*, pp. 34–38). Considerations based on ethnographic parallels from Africa, where cattle rearing forms the real basis of the economy and clearly plays an important role in those societies McInerney (2010) cannot prove that the imaginary world of Homeric epic faithfully depicts the reality during the Greek Dark Age, since the references to large herds may equally derive from and pertain to the conditions of the Bronze Age, when specialised large-scale herding is much more probable (Cherry 1988, p. 29).

one can more easily imagine that they changed their dedicatory fashions for whatever reasons (e.g., simply because new modes and types of representing their wealth and status emerged). The material from the sanctuary at Kato Syme can be regarded as an appropriate parallel in this respect. Here the bovine figurines disappeared and were replaced by representations of the dedicators themselves, who are characterized as aristocratic hunters engaging in homoerotic affairs, the famous practice of male initiation described by later sources in detail. Further implications of this change will be considered below; in the present context, however, it is important to note that the dedicators were not ordinary or poor local people, but the wealthiest of a wider region. The same is most probably true for Olympia as well. For the question of whether the well-to-do “aristocratic” visitors at Olympia were local or mainly external, we have a valuable source of information, the victors of the equestrian games. The available data clearly show that these victors always came from outside the surrounding region<sup>12</sup> suggesting therefore that the wealthy owners of the horses, i.e., the dedicators of the horse figurines, were (like their manufacturers) also coming from abroad. Of course, local aristocrats cannot be excluded altogether, but they are not likely to account for a large percentage of the dedications.

The sheer number of the horse figurines points in the same direction as well. From the near contemporary literary sources, i.e., Homer and Hesiod, it is evident that horses were exclusively used for pulling the chariots of the aristocratic warriors and played absolutely no role in agricultural activities on a subsistence level (Lorenz 2000, pp. 103–5). Horses (whether few or many) in the possession of ordinary farmers or herdsmen can therefore be practically excluded and it is appropriate to assume that horse figurines were connected with and dedicated by wealthy people, who can be termed as the elite. The relatively even distribution and (in comparison with Olympia) low numbers of the horse figurines all over Greece (Zimmermann 1989), even in regions which were essentially well-suited for horse-keeping (e.g., Argolid, Thessaly), show that horse-breeding and the dedication of horse figurines were indeed restricted to the elite and there is nothing to suggest that it would have been otherwise in the case of Elis. In other words, the dedication of horse figurines does not reflect a large number of horses, but that of wealthy aristocrats. The large number of equine figurines cannot, therefore, result from purely or mainly local dedicators, since it is quite unlikely for Elis to have developed horse-breeding aristocrats in such extravagant numbers.

So even if the exact reason for dedicating the animal figurines still remains a mystery, one can safely conclude with Herrmann (1972, p. 72), Morgan (1993, p. 23) and Eder (2006, p. 554 n. 5) that the majority of dedicators must have been foreign (i.e. not local, but certainly Greek) aristocrats visiting the sanctuary on a regular basis. Why would well-to-do people have dedicated such unpretentious, simple figurines instead of objects which could readily reflect their wealth and status? The answer lies partly in the assumption, mentioned above, that these offerings were probably only part of their dedications, the most impressive ones being the tripods. It is even conceivable that the figurines were not only or not primarily dedicated in order to represent the wealth or status of the dedicators (the terracotta ones are especially ill-suited for such a purpose), but presumably to fulfilled some kind of ritual obligation. This would explain their large number as well as their relatively low costs, their often careless renderings and the variety of materials used, i.e., bronze as well as clay. A modern parallel would be the coins thrown in the Fontana di Trevi at Rome.

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<sup>12</sup> Moretti (1957, nos. 33, 52, 81, 96, 103, 106, 110, 113, 117, 120, 124, 127, 136, 141, 147, 151, 152, 157, 164) listing for the 7th–6th centuries victors from Sikyon, Thebes, Athens, Sparta, Epidamnos, Korinthos and Gela, and some more 50 victors from the 5th century BCE. It is only at the end of this century that local winners appear in equestrian contests (Moretti 1957, nos. 350, 364, 365). The only local winner in the race of *quadrigae* is the community of Dyspontion (Moretti No. 39 allegedly at Ol. 27 = 672 BCE). Even if this piece of evidence is historically true, it does not seem to be enough to postulate local winners for the early period, when there is absolutely no information about the winners of the equestrian games. If there were some, or if it could be taken as probable for the contemporaries, Hippias of Elis could have easily introduced even fictive local Elean winners in his list, but apparently even this local sophist refrained from doing so. The force of this *argumentum ex silentio* can moreover be tested by looking at the athletic contests, where local victors appear much earlier (Moretti 1957; Phigalia: 95, 99, 102; Lepreon: 267, 276, 309, 331, 338; Pisa: 15; Dyspontion: 2). Even if the earliest local victor(ie)s may not be historical, those from the 6th–5th centuries cannot be dismissed.

It remains to be asked, what this ritual obligation, i.e., the exact reason for dedicating the figurines, could have been. This question is basically the same as the one mentioned in the previous paragraph and considered as an objection against assuming wealthy dedicators; but accepting the quite inescapable notion of aristocratic dedicators it can be formulated in the following way as well: Why did the “aristocrats” of a wide region became fond of visiting Olympia regularly and why did they develop the strange habit of dedicating among other things small animal figurines at this particular sanctuary, so far away from their home?

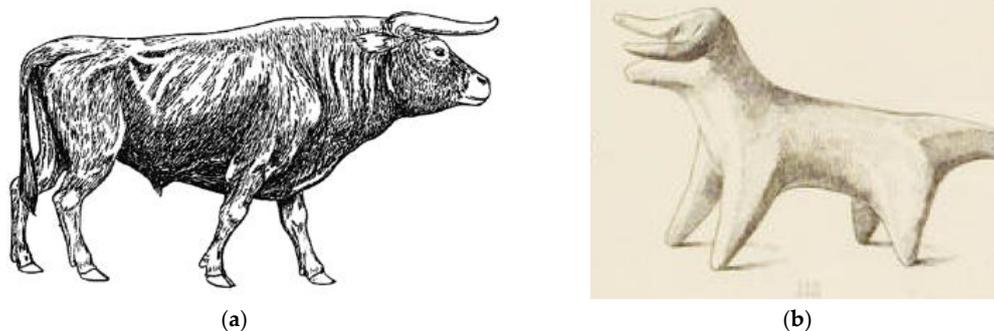
#### 4. The Depicted Animals

In order to answer the above question, one further question has to be answered first: what do these figurines really depict? They are rendered quite summarily and as the comparison of two lists compiled by different scholars (Table 1) clearly shows, it is often difficult to tell, even for specialists, what kind of animal is intended.

**Table 1.** Identification of the animal species among the bronze figurines found at Olympia.

(Heilmeyer 1979, p. 275)	(Zimmermann 1989, p. 63 n. 2)
1885 Rinder	1323 bovidés
1583 Pferde	979 équidés
20 weitere Hoftiere	28 oiseaux
10 Jagdtiere	9 cervidés, 7 ovi-capridés
3 Skarabäen	3 scarabées
417 Ausnahmen/unkenntlich	6 autre quadrupèdes (lions et lièvres)

Nevertheless, one feature seemed to be so obvious that it has never been questioned:<sup>13</sup> it was assumed as a matter of fact that most of the figurines depicted domesticated animals and were dedicated by the owners in order to secure their fertility or for some other unknown reason. However, this is by no means certain and in the case of bucks, rams, stags, hares and birds it is absolutely sure that they are actually wild taxa. The bovines are not so clearly marked in all cases, but many of them have horns strongly resembling those of the aurochs both in their position, form and their size: they are often inward-curving and the angle formed by the skull’s axis and the horns is less than 60 degrees (Figure 2). These are the main formal characteristics by which aurochs can be identified and differentiated from their domesticated counterparts (Van Vuure 2005, pp. 120–35). In addition, the horns are much longer than those of ordinary cattle. It is moreover quite clear that these figurines show a peculiar distribution pattern: they are present only in two regions, at Olympia and on Crete.



**Figure 2.** (a) *Bos primigenius* (Bojanus 1827); (b) Olympia B 5137 after Furtwängler (1890, Pl. X fig. 112).

<sup>13</sup> Heilmeyer (1972, pp. 87–88); Sinn (1981, pp. 37–38); Morgan (1993, p. 22); Schürmann (1996, pp. 219–20); Taita (2009, pp. 378–79).

It must be added that the characteristic features described above are not uniformly observable on all the figurines, but they occur very frequently in all periods and workshops identified among them.<sup>14</sup> They are not restricted to the bronze figurines, but are equally present in the clay figurines dedicated at Olympia as well. These features can thus be considered constant and are definitely not to be regarded as personal, local, regional or chronological idiosyncrasies. The resemblance to anatomical reality and the contrast with bovine figurines clearly depicting ordinary cattle in other Greek sanctuaries strongly suggest that the rendering of the horns at Olympia is not accidental nor a general convention of Greek Geometric art, but a realistic element of the otherwise schematically-modelled animals. The conclusion seems to be inevitable that the bovine figurines found at Olympia and at Kato Syme do not actually depict domesticates.

To be more precise, it should be admitted that besides the figurines showing the characteristic features of wild bovines there are many other ones whose inwards curving horns are either smaller or positioned like those of usual domesticated bulls/oxen. If their numbers increased in later groups, one could take this as reflecting the gradual extinction of aurochs, partly due to the spread of cattle. But in fact, there seems to be no such correlation and therefore I suggest another explanation. It is possible that the cows represented were not genuine wild animals, but feral ones, i.e., domesticated bulls and cows which escaped and continued living in the wild for centuries. Given the ideal environmental conditions for raising cattle and the dense settlement network of the region during the Bronze Age which disappeared during the Early Iron Age, it is quite probable that there were many animals which could escape human control a few centuries prior to the appearance of the figurines. The horns of such bovines can be compared to the horns of most figurines and it does not present a problem that in some cases the horns resemble those of ordinary cattle. In fact, there are no skeletal remains of aurochs in Olympia, nor is there any incontrovertible osteological evidence for their presence on Crete,<sup>15</sup> the only other place where similar representations are attested in considerable numbers, but the remains of feral animals cannot be distinguished from their regular domesticated counterparts. In addition to the famous cups from Vapheio, two passages in Homer can be interpreted as evidence for the presence of feral cows in Greece and a gloss in Hesychius explaining a word as a special Laconian term for wild oxen shows that such animals were certainly present on the Peloponnese.<sup>16</sup> More importantly, feral bovines may have found ideal conditions in the vicinity of Olympia, since this is a marshy environment typically preferred by the aurochs, and it is very likely they were extremely rare elsewhere in Greece. By the time of Herodotus, wild and feral bovines were certainly extinct in all Greece, but were to be found in Macedonia from where their horns were still imported to Hellas.<sup>17</sup> Crossbreeds of wild or feral and domestic animals are also possible and supposing that the manufacturers carefully depicted at least the horns of the animals, this could explain the large variability among the figurines as well. But in reality, the bronzesmiths, most importantly those working outside the region, may often have had to produce the figurines without seeing the real animals or their trophies and so they simply relied on their knowledge of cattle.

An interesting difference between the bovine figurines found at Olympia and Kato Syme on the one hand and in the Theban Kabirion on the other, is discernible in their chronology: the series disappears from Olympia and Kato Syme after the Geometric period, whereas they continue for

<sup>14</sup> Heilmeyer (1979, nos. 90–91, 230–236, 246–247, 383–386, 390, 391, 412–416, 511, 513, 583, 585, 763, 767, 774, 778, 781, 783, 826, 827, 856, 857, 881–889).

<sup>15</sup> For Olympia, see Benecke (2006a, 2006b); for Crete: Papasteriou (1985, p. 124 with references); Nobis (1996). Admittedly, the archaeozoological material dates from the Bronze Age and most recently the identification of these remains has also been challenged (Vigne 1999, p. 300; Shapland 2010, p. 122).

<sup>16</sup> Hom. *Il.* 12.22–23; *Od.* 16.295–296; Hesych *s.v.* κατράγοντες. For a discussion of the meaning of βόαγρια, see Trümper (1950, p. 36); Chantraine (1956, p. 46). Both argue for a meaning which would be independent of wild bovines (but nonetheless deriving from hunting), but are exclusively based on linguistic parallels and considerations which are not absolutely compelling and do not take the passage from Hesychius into consideration (let alone the material evidence).

<sup>17</sup> Hdt. 7.126 with Keller (1887, pp. 53–60; 1909, pp. 341–43). For the distribution area and habitat of the aurochs, see Van Vuure (2005, pp. 48–52, 245–58).

several centuries at the Kabeirion and even become more numerous.<sup>18</sup> This fact also supports the hypothesis that in Olympia the figurines represent not domesticated but wild or feral animals and strongly suggests that their disappearance is not due to some change in the dedicatory practices, but can be explained by the extinction of the wild or feral bovines.

Pursuing this line of reasoning, one is inclined to interpret the horses as feral as well. Of course, these animals are not recognisable and distinguishable from their domesticated counterparts on the basis of their small representations, but if all the other taxa which are depicted are wild or feral animals, the horses are likely to belong to the same category. Homer (*Od.* 21.347) describes Elis, the region surrounding Olympia as *hippobotos* (“horse-grazed”) and mentions large herds of horses here (*Il.* 11.670–761). Feral horses are also implied by the cult legend (told by Pausanias 8.14.5–6) for a shrine of Artemis Heurippa at Pheneos in nearby Arkadia. And last but not least, the differences clearly observed between the assemblages of Kato Syme and Olympia do not seem in this way haphazard, but clearly reflect the different natural environments of the two sanctuaries. Kato Syme is located in a high mountain environment, clearly unsuitable for horses but ideal for rams and goats, while the marshy lowlands around Olympia are typically favoured by bovines and equines. In this respect, a good parallel to the area surrounding Olympia is offered by the Rhône delta, where feral horses as well as feral cattle live together in the Camargue even today (Van Vuure 2005; Duncan 1992). Horses were of course not hunted to be sacrificed or consumed, like wild bovines, goats and rams, but they were presumably captured to be tamed and used as high-prestige domesticated animals. This practice may have contributed considerably to the attraction of the region and may also explain the dedication of large numbers of horse figurines as well as the name and the prominent role of Hippodameia at Olympia. If the horses were captured and removed from their original living environment, a ritual restitution may have been considered appropriate, similar to the dedication of figurines representing ordinary game animals. In both cases, it was essential for the hunters to secure the procreation of the hunted or captured animals by mitigating the wrath of their former owner, the master or mistress of the animals.

A general consideration points towards feral animals around Olympia as well. Herds of cows are not easily movable for long distances, especially on such difficult terrain as the Peloponnese, so the animals sacrificed and consumed in the sanctuary must have originated from the vicinity. But in this case, supposing they were domesticated, one may well wonder who their owners were and why these people would have allowed the visitors to slaughter their animals in the sanctuary. That there were private herds of cattle in this region seems to be evident and is explicitly mentioned by Homer, but the owners are reported to have protected their herds vigorously. Generosity or hospitality seems not to have been characteristic of them, quite on the contrary: a *quadriga* sent to a race at Elis was retained by deception and only the charioteer returned to Pylos (*Iliad* 11.698–702). As such, it is quite reasonable to assume that foreigners could only feast in the sanctuary if they found wild or feral animals around it, or if they remunerated the owners. During the first centuries of the sanctuary, the first method seems to have prevailed, and after the extinction of the feral bovines, when they were replaced by domesticated ones, the second. This led to the increasing wealth and influence of the Eleans during the Archaic period but certainly not earlier.

Based on this identification of the depicted taxa as wild or feral, one can find a reasonable explanation for the large number of figurines dedicated at Olympia and also for their disappearance. As the written sources (Xen. *Anab.* 5.3.8–11; Paus. 5.6.6 both referring to Skillus) quite clearly show, the region around the sanctuary was regarded as a superb hunting ground and the figurines most probably represent game animals. The aurochs-hunt was a royal activity depicted several times on Assyrian palace reliefs and as their numbers were decreasing, the hunting of aurochs generally became

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<sup>18</sup> The chronology given by Schmaltz (1980) would indicate a roughly continuous habit of dedication, but an increase after the Geometric period is more likely, as suggested by Langdon (1982, p. 596).

a privilege of the aristocracy in premodern Europe as well (Van Vuure 2005, pp. 55–64), so it is extremely likely that the impressive bulls were regarded as exclusive game animals in Geometric Greece as well. Kato Syme offers a nice parallel and a corroboration for this idea, since the bull figurines there are similarly rendered and found in similarly large numbers, and it is quite clear that the sanctuary was frequented by hunters (Lebessi 1985; Langdon 2008, pp. 89–94): they are clearly depicted as such on the bronze plaques dating from the early Archaic period and written sources (Ephoros, *FrGrHist* 70 F 149 = Strabo 10.4.21) also attest that hunting was commonly practised on the island.

In general, animal figurines are not a dominant class of dedications in major Greek sanctuaries. Especially after the Geometric period, statuettes or statues of animals on their own are rare compared to human or divine figures. In contrast, while this is true for Olympia during later centuries, animal figurines are clearly the most abundant class of dedications at this site during the Geometric period. Moreover, it is certainly true that depictions of animals are often found in great numbers in shrines frequented by hunters. Furthermore, ethnographical observations made quite recently among Siberian peoples also furnish the underlying rationale (Karjalainen 1927, pp. 5–6; Ivanov 1959): large number of wooden figures depicting fishes and animals were placed at sacred trees in order to affect the successful catch of the animals. A similar reason can most probably account for the appearance of numerous animal figurines at Kato Syme and there can be little doubt that the same applies to the stone reliefs depicting various kinds of animals at Göbekli Tepe. This site was recently discovered and identified as the very first temple complex and even if archaeology cannot provide conclusive proof concerning the dedicators and the occasion for the dedication, the connection with hunting can hardly be denied.<sup>19</sup> It is therefore quite reasonable to assume that hunters were generally inclined to depict their most important or prestigious game animals and that these animal images were often gathered at sacred places or sanctuaries from the earliest periods in human history until quite recently.

Here, the general resemblance of the abundant animal figurines at Olympia to Palaeolithic cave art might be considered as well. Although the exact purpose and meaning of these well-known and magnificent paintings is far from clear, it is absolutely certain that those who produced them were hunters and that the depicted animals were wild and were usually hunted. Nevertheless, the actual hunt is never depicted and wounded animals are represented only sporadically. In general, the large number of animal depictions found at Olympia and Kato Syme may be compared to the large herds of animals covering the Palaeolithic caves and make the connection with hunting even more plausible. It is even interesting to note that the combination of bovines and horses is a constant feature of the prehistoric compositions and that they always dominate the scenes<sup>20</sup> similarly to the Geometric bronze figurines of Olympia. Local variations in the depicted fauna, like those between Olympia and Kato Syme, were also observed (Leroi-Gourhan 1992, pp. 370–72), in some caves the horses being accompanied by aurochs, in others by bison.

It is remarkable, however that “the species most abundant in the art are not those most abundant in contemporary faunal assemblages. This is true both at the global level with reindeer and red deer dominating animal bone remains, whereas bison and horses appear most frequently in the art and the local level. In Cantabria, although both the most commonly depicted and the most commonly hunted taxa vary in different micro-regions, there is always an inverse relation between the two”

<sup>19</sup> “Göbekli Tepe is located on a limestone ridge far from water sources. It is a poor place for a settlement, but has an expansive view over the Harran Plain. No remains of houses have yet been found, but only public buildings with large T-shaped stelae depicting wild animals and, increasingly through time, humans. Fox bones are surprisingly prominent among the faunal remains, and foxes appear on the stone pillars. Fox and gazelle skins may have covered floors, walls, or benches in the structures, given the high proportions of foot bones in the assemblage. . . . Some see these sites (i.e., Kfar Horesh in the Galilee Hills and Göbekli Tepe) as settlements of foragers contemporary and in interaction with nearby farmers, or as ritual centers for mobile foragers. However, Verhoeven argues convincingly that they are special-purpose ritual sites used by those farmers to carry out ceremonies focused on hunting and wild animals” (Schmidt 2006; Russell 2012, p. 62).

<sup>20</sup> The constant combination of horses and bovines (aurochs or bison) is frequently described, e.g., by Leroi-Gourhan (1964, pp. 107–12). Horses represent ca. 30% and bison and aurochs together equally ca. 30% of all the depicted animals in Palaeolithic art, as counted by Leroi-Gourhan (1983, p. 137).

(Russell 2012, p. 14). A similar situation is observed not only in the case of Palaeolithic cave art, but in widely different regions and periods (e.g., in Çatalhöyük) and seems to be true in general. The artistic representations are therefore not to be connected with the regular subsistence hunt, but with special occasions, which already come close to sport hunting. The two are not always easily separated from each other, since hunting in general is typically (and especially if large animals are concerned) much more complex than a mere subsistence strategy, and sport hunting often retains many of the features of subsistence hunting (Russell 2012, pp. 155–68). It is therefore only natural that the aristocrats of early Greece who visited Olympia for the sake of sport hunting were eager to depict the animals similarly to their prehistoric predecessors.

Horses were of course not hunted to be killed and eaten, like bovines, goats and rams, but they were presumably captured to be tamed and used as high prestige and luxury markers, but practically useless domesticated animals. This practice may have contributed considerably to the attraction of the region and may also explain the dedication of large numbers of horse figurines as well as the name and the prominent role of Hippodameia at Olympia. As the horses were captured and removed from their original living environment, a ritual restitution was considered appropriate, similar to the dedication of figurines representing ordinary game animals.

## 5. The Origin of the Olympic Games

We have thus arrived at a reasonable explanation for the origin of the Olympic Games. This issue was enigmatic already in Antiquity and modern researchers were equally unable to propose a satisfactory theory. The oldest explanation, already proposed in Antiquity (Meuli 1941), suggested that the Games originated from funeral ceremonies, while the most widespread idea during the 20th century was that they were a test to select the best successor or ruler, or a ritual contributing to maintain the energies of nature (vegetation magic or *hieros gamos*).<sup>21</sup> Alternatively, it was often argued that the games would have started from initiation ceremonies (*rites de passage*) involving entire age-groups of young men.<sup>22</sup> It is not surprising perhaps, that a thorough review of the research history concluded that the real origins cannot be identified and even if somebody happened to find the right explanation, this would be impossible to verify (Ulf and Weiler 1980).

Of course, it was always puzzling that according to ancient sources the Games would have originally consisted of only a single *stadion* race, because this event is not particularly exciting or spectacular. It certainly seems to strain credulity that people living far away from the sanctuary would readily have agreed to undertake a long and troublesome journey only to attend an event which lasts only some 30 s. Various scholars referring to the complex games mentioned in Homeric epic, therefore assumed there to have been multiple contests.<sup>23</sup> The assumption of a number of other events taking place in addition to the *stadion* is actually a very attractive one, but there are also some serious objections against the hypothesis of early games in the Homeric fashion. It is hard to see why other contests, which were practised later and were even more popular than the *stadion* race would have been neglected in this way, and it is equally unclear why precisely the *stadion* race was selected as the most ancient game, if not for the simple reason that this was really the case, since running events are certainly not very important in the games described in epic.

In addition, the Homeric parallels were noticed in antiquity as well and it would have been quite easy to adjust the history of the Olympic Games in this sense, but this apparently never occurred as a possibility and the primacy and exclusivity of the *stadion* race was never questioned. This would be quite surprising, if the entire matter were mere fiction. So, it is reasonable to suppose that it was not only the *stadion* race which attracted visitors from far away, and it is equally likely that the other events,

<sup>21</sup> Cook (1904); Frazer (1911); Vallois (1926); Cornford (1927); Drees (1962).

<sup>22</sup> Jeanmaire (1939, pp. 413–18); Brelich (1969, pp. 449–56); Burkert (1972, pp. 108–19).

<sup>23</sup> Gardiner (1925, pp. 87–88); Herrmann (1972, pp. 80–81). Golden (1998, pp. 39, 43–45).

which are not recorded by the literary tradition, were not the same as those practised subsequently. Hunting as the very earliest kind of sporting activity is therefore the best possible candidate to fill this gap and it only remains to be asked why precisely the short distance run was selected first or why this became considered as the very first contest at the Games. The similarities between the Olympic Games and the Dorian Karneia strongly suggest, I think, that the *stadion* evolved from a ritual race similar to the *staphylodromia* and was therefore naturally the very first athletic discipline (Patay-Horváth 2015, pp. 17–20). That hunting was intimately connected with some kind of running in early Greece is clearly demonstrated by Ephorus (*apud* Strabo 10.4.20), who records that it was precisely these two activities that were closely supervised in the Cretan education system obviously preserving some very old customs.<sup>24</sup> The ritual chase and subsequently the running contest was most probably performed after each successful hunt (or at the end of the hunting season), as part of the ceremonies celebrated in honour of the dead animal, a practice which is well-attested among various peoples and is referred to as “animal ceremonialism” (Hallowell 1926; Ivar et al. 1962, pp. 74–75, 93, 385–86).

This hunting hypothesis can be corroborated by looking at the most important, basic features of the Olympic Games, i.e., their location and timing. Both remained unchanged throughout Antiquity, like the crown awarded to the winners. It is only to be assumed that these conspicuously constant features were fixed simultaneously with the first games and that they were not selected arbitrarily. No convincing explanation has been suggested for them thus far, but starting from the above hypothesis, a coherent explanation begins to emerge.

First of all, it was hard to understand why it was precisely Olympia, obviously located quite far away from all the main political centres of Early Iron Age Greece, which attracted the most numerous and most valuable votive dedications, i.e., the wealthiest dedicators from the earliest times. Hunting as an aristocratic pastime par excellence,<sup>25</sup> which is often practised in remote locations, seems to be a convenient explanation. Moreover, it has already been observed (Russell 2012, pp. 165–68) that hunting is particularly prominent during periods of state formation and provides an important mode to display elite power. As the highly valued wild or feral animals were presumably only to be found in this region, the aristocratic hunters naturally selected this sanctuary to offer their dedications.

The usual explanation that the sanctuary was a neutral meeting place does not really explain the choice of this particular sanctuary, since many others could have been selected for the same reason. Moreover, it does not explain, how the visitors, arriving from widely different regions, could have come to meet each other and to enter into competition. Even in later periods, it was necessary to announce the exact date of the festival in order to make sure that everybody arrived approximately at the same time, but this practice of sending envoys can be practically ruled out for the earliest periods. The worshippers, i.e., the potential participants of the earliest contests must have been able to calculate the approximate date of the festival on their own. And the date itself was surely not selected arbitrarily but was connected with the rituals practised in the sanctuary. If the rituals which ultimately led to the establishment of the Games were really connected to the hunt of wild or feral bulls, the choice of the hottest summer months is perfectly logical: for this is the mating season of these animals (Van Vuure 2005). In other times of the year, bulls live separately from the cows and are therefore not easy to locate. During the rut, however, they become readily visible and it is precisely this time of the year which is traditionally preferred for hunting animals with a similar behaviour (e.g., the deer).

It is also a strange fact that the festival coincided with the full moon. The light of the moon was regarded in Antiquity as dangerous and it is therefore not surprising that most festivals generally avoided the middle of the month on lunar calendars, when moonlight was most visible (Deubner 1956).

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<sup>24</sup> The importance attached to running is further demonstrated by the fact that according to the law code of Gortyn adult citizens with full legal capacities were designated as *dromeis* in contrast to the younger *apodromoi*; for which, see: Willetts (1955, pp. 11–14); Bile (1992, p. 13).

<sup>25</sup> In general, see, e.g., Fox (1996); Barringer (2001). For the importance of hunting in Bronze and Early Iron Age Greece, see: Hamilakis (2003); Guggisberg (2005).

Conversely, hunting peoples are inclined to attribute a positive character to the moon. For instance, the Inuit assume that the spirit of the moon god Igaluk governs the game animals (Haase 1987, pp. 60–62). If their numbers fell significantly and more were needed, the shamans would visit the moon and ask him for more animals.

In addition, there are two ritual features which can be safely regarded as specifically and exclusively connected to the Olympic Games: the crowns given to the winners and the exclusion of married women. We have no firm evidence on the age of their introduction and can simply observe that the other Panhellenic games imitated the use of crowns, while had no prohibitions against women. The wild olive crowns thus certainly predate the beginning of the 6th century BCE, but the exclusion of married women is also unlikely to represent a secondary or later addition. Both features may be seen as relics of the most ancient cult practice at the sanctuary and corroborate the idea that the Games evolved from hunting.

It is remarkable that, judging from the Homeric epic, winners of athletic games were generally rewarded with valuable prizes, while at Olympia there were no awards apart from the crown of the wild olive-tree. It is easy to understand that once established at the most prestigious Games, this practice came to be imitated in other sanctuaries as well, but how it became an accepted custom contrary to the general trend is a much more difficult question. It is reasonable therefore to suppose that the high popularity of the Games resulted not only or not primarily from the intangible prestige of the Games (which would be quite unexpected for newly established contests), but that winners won some prize which was materially valuable even without the organizers offering it. Valuable prizes could have been offered by the participants themselves, but later on this was not practised at all. So, the possibility is rather strong that the valuable goods won by the successful participants were the game animals and that the crown was just a distinction marking the favour of the gods at the feast where the game animals were consumed.

Furthermore, the wild olive-tree providing the victor's crown was certainly not typically connected with Zeus, like the oak in Dodona (Weniger 1919, pp. 11–16), or the white poplar in Olympia (Bötticher 1856, pp. 441–44). Other deities do not seem to have a special relationship with this tree either. However, the only other grove of wild olives is attested on a hill which was crowned by a shrine dedicated to Artemis (Paus. 2.28.2–3) and Artemis was certainly often associated with different kinds of trees (Farnell 1896–1909, p. 429). The sacred *kotinos* ("wild olive-tree") was called Kallisto ("most-beautiful"; Weniger 1895); and in Arkadia Artemis Kalliste was venerated in a shrine standing on the supposed tomb of the nymph Kallisto, surrounded by many wild and cultivated trees (Paus. 8.35.8). Moreover, at Troizen Artemis was linked with a wild olive-tree and hunting (Paus. 2.32.10). The cultic prominence of Artemis at Olympia was noted already earlier<sup>26</sup> and as already mentioned, the region was certainly a superb hunting ground (Xen. *Anab.* 5.3.8–11; Paus. 5.6.6). As such, one is entitled to suppose that the wild olive-tree at Olympia was originally sacred to Artemis and hunting played a major role in her cult. It is even probable that originally the festival and the games were celebrated in her honour. The centre of the sanctuary, the main ash altar of Zeus, was always and exclusively constructed with the water of the river Alpheios (Paus. 5.13.11), which has no obvious connections with Zeus, but is intimately linked with Artemis (Paus. 5.14.6 and 6.22.8). It is therefore logical to assume, in accordance with the archaeological evidence I have outlined elsewhere that the ash deriving from the sacrifices was originally sacred to Artemis and was integrated only subsequently in the cult of Zeus (Patay-Horváth 2015, pp. 125–28).

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<sup>26</sup> Weniger (1907, pp. 96–114); Solima (2011, pp. 127–39); Heiden (2012).

The exclusion of married women, while girls were allowed to be present as spectators,<sup>27</sup> points in the same direction. The reason for this regulation, which is evidently a religious taboo, has been searched for in vain (Fehrle 1910): the explanation based on the cult of Demeter (Drees 1962, pp. 119–24) is totally unsubstantiated and the other attempt (Mouratidis 1984, pp. 50–54) seeking a derivation from the cult of Herakles is equally unsatisfactory because it is based on two unwarranted assumptions, i.e., that the sanctuary had been established for the sake of holding sports events and that the cult of Herakles was more ancient than any other at this site. In fact, the exclusion of married women is unattested in any cult of Zeus, but there is a direct parallel in the cult of Ephesian Artemis (Artem. *Oneirokrit.* 4.4; Achilleus Tatios 7.13.), which strongly suggests a derivation from the cult of Artemis. And since the separation of adult women is widely attested among hunter-gatherers the practice ultimately derives in all probability from hunting practices.<sup>28</sup> A practical reason for the exclusion might be that the scent of menstrual blood is demonstrably repelling to herbivores, especially to ungulates such as deer (March 1980). The taboo against menstruating women is most widespread among hunting peoples than any other (Kitahara 1982).

## 6. From Hunting to Athletics: The *Penteteric* Periodicity

It is significant to reiterate that all the available evidence points to the importance of hunting and can be seen as a corroboration of the hypothesis that the Olympic Games evolved from ceremonies connected with this special kind of activity. It remains to be asked, how and why hunting was eventually replaced by athletic contests. An analysis of the origins of the *penteteric* periodicity (i.e., occurring every four years) of the Games can provide an answer to this question.

Ancient literary tradition unanimously states that from their very beginning the Olympic Games were celebrated, like their modern successors, every fourth year, but there is only one mythical explanation for this periodicity (Paus. 5.7.9), which actually shows that the real reasons were unknown even in Antiquity. An annual periodicity at the outset can still be regarded as the most likely assumption, since the Olympic Games were part of a religious festival which were most often celebrated annually. Moreover, there are indeed some *penteteric* festivals, which are reported by ancient sources, to have evolved from annual celebrations (Chaniotis 2011, p. 13; Brulé 1992, pp. 24–25).

For the annual celebrations there is also an archaeological corroboration. The wells dug into the soil of Olympia were evidently necessary for providing enough drinking water in the heat of the summer for a relatively large crowd of people, and according to the ceramic finds discovered in these wells, A. Mallwitz (1988) concluded that they were first dug around 700 BCE. Now, it is likely that the reason was the reduction of festival frequency causing the appearance of larger crowds at the same time in and around the sanctuary. Commencing from the traditional starting date (i.e., 776 BCE) and assuming that the first 25 games were annual, we arrive at about 700 BCE. for the first *penteteric* celebration.

There is, however, an alternative hypothesis, that the *penteteric* periodicity derived from an *octaeteric* cycle.<sup>29</sup> For the Olympic Games were not celebrated simply every fourth year, but at an interval of 50 or 49 months resulting, according to a widespread hypothesis, in a cycle of 99 lunar months, which is equal to eight solar years with the festival falling alternately in Apollonios or Parthenios (Hannah 2005, pp. 37–39). This hypothesis has been challenged (Miller 1975) with good reason and it is more likely that the alternation of 49 and 50 months was not regular. Moreover, even if *octaeteric* festivals are known from Delphi and Sparta (Richer 1998, pp. 155–71), there is no evidence

<sup>27</sup> Dillon (2001, pp. 237–39). The assertion (ibid., pp. 106, 238) that women in general were barred from the Olympic Games is erroneous, since Pausanias 6.20.9 explicitly states that virgins were theoretically not excluded from watching the Games. Kyle (2007, pp. 225–28) argues for the admission of some virgins as a special privilege and quite correctly concludes that “even if virgins, in general, were not banned from the male games, realistically, they were not there.”

<sup>28</sup> Frazer (1911, pp. 190–204); Burkert (1979, p. 118); Sansone (1988, pp. 52–54); Röhrich (1993, p. 397); Russell (2012, p. 161).

<sup>29</sup> Drees (1962, p. 113); Lévêque (1982, p. 8); Burkert (1992, p. 81).

that the Olympic Games were ever celebrated with this frequency at any period. This can be definitely ruled out before the traditional foundation date and is equally unlikely before ca. 700 BCE, because the underlying calendar system was of oriental origin and was most probably adopted by the Greeks only during the Orientalizing period (Nilsson 1962, pp. 47–51). The very system of alternating months was most probably unknown to Pindaros (3 *Ol.* 35) or to his contemporaries, and one can safely assume that the *octaeteric* cycle applied for computing the date of the festival was the result of a long evolution rather than the starting point of the system. As such, it is impossible to assume an *octaeteric* frequency for the earliest games and annual celebrations remain the most likely hypothesis (unless we postulate a much later inception and a lower total of games than traditionally).

Two issues remain open even in this case: (1) why the original frequency was changed at all and (2) why the selected frequency was precisely a *penteteric* one.

For the first question, only Mallwitz (1988) has tried to find an answer. He assumed that the annual rhythm of the first games was abandoned and that the *penteteric* periodicity was adopted because the chariot races were introduced at the 25th festival (Paus. 5.8.7), so that transporting the chariots every year to the location of the Games would have involved very high costs for the owners. It was correctly objected, however, that chariot owners were particularly wealthy and not driven by economic considerations, as shown by the introduction of several equestrian games in the festival circuit, which were regularly attended by the same aristocrats (Lee 1988, p. 114). Besides this hypothesis does not offer an answer for the second problem, i.e., it does not explain why the new frequency chosen was a *penteteric* one. This is a serious disadvantage, because considering the equestrian contests introduced at the beginning of the 6th century BCE, a biennial or *trieteric* rhythm could be expected: this frequency was the rule at the Nemean and Isthmian Games from the outset and it never changed throughout Antiquity. At Olympia, however, there are no signs of this frequency. As such, the entire explanation can most probably be ruled out.

The reason for adopting the *penteteric* rhythm is often sought within the *octaeteric* cycle. As the *octaeteric* periodicity is unlikely to have preceded the *penteteric* one and did most probably not represent the original system, this hypothesis cannot account for the change of the basic annual system and does not seem to be a compelling reason for the subsequent adoption of a *penteteric* festival either. Obviously, a *trieteric* festival could equally have resulted from it (as in the case of the Nemean and Isthmian Games) and there were some other regularly recurring events which used the *penteteric* frequency but had surely nothing to do with the Olympic Games or with the *octaeteric* periodicity (Hdt. 3.97; 4.94. Diod. 5.32).

Astronomical and logistical considerations proposed so far are therefore not likely to have played a decisive role in determining the frequency and do not explain the change from the annual celebrations. I think therefore, that other explanations should be looked for. As already mentioned, there were some religious festivals held annually, which were, however, celebrated more lavishly every fourth year. The most well-known example is the Panathenaia, but the Karneia of the Dorians was most probably of the same type. In contrast, the Olympic Games were celebrated only every fourth year while local annual festivals were lacking (Ziehen 1939, p. 46). This difference should be stressed and requires some kind of explanation, since otherwise there are striking similarities between Karneia and the Olympic Games.

How are these to be interpreted? It is unlikely, that the Karneia would have influenced the Olympic Games or vice versa, since the athletic games and the sanctuary are not an exclusively Dorian establishment and there is no apparent reason why the Olympic Games should have influenced only the Dorians in such a way. Some kind of common origin seems to be more plausible and the clue lies, I think, in the running event, which is so conspicuous in both. Now, the *staphylodromia* was a chase and it can be reasonably supposed that the *stadion* race developed from a similar ritual, since its most important mythical *aition*, the chariot race between Oinomaos and Pelops is also basically a hunt or chase and not a real race, as it is conventionally called. For the chase practised at the *staphylodromia* there are several ethnographic parallels (Wide 1893, pp. 76–77) and these unequivocally show that the

pursued person actually represented some kind of animal, so the ceremony can be most conveniently called a ritualised hunt. As regards hunting, one can observe that it is intimately connected both with the origins of Greek athletics in general and specifically with Olympia. As already mentioned, the vicinity of the sanctuary was renowned as an especially good hunting ground, and Artemis, the goddess of wild animals and hunting, had more altars in the *altis* than any other divinity apart from Zeus. This exceptional cultic popularity of Artemis in and around Olympia was noticed long ago and the correct explanation, i.e., that she was venerated as the goddess of the hunt, was also offered for the phenomenon (Weniger 1907, p. 98).

As noticed above, the exclusion of married women is also paralleled only in the cult of Artemis and this fact strongly implies that the *panegyris*, which was celebrated *penteterically* in honour of Zeus, was originally a festival for Artemis and retained an important ritual prescription even after the change of the honoured deity. A striking confirmation of this hypothesis can be seen in the fact that while there is no annual *panegyris* attested for Zeus at Olympia, Strabo (8.3.12 C 343) explicitly mentions more than one for Artemis. In this way the curious absence of annual celebrations could be explained as well: the *penteteric* festival emerged from the annual celebrations an usual way, i.e., retaining the annual ones, but after a while the honoured deity changed from Artemis to Zeus. Hunting, which was the core of the festival, gradually disappeared and was finally abandoned altogether, while athletic contests evolving from the running ritual practised after each successful hunt, began to be held as a replacement. These phenomena, i.e., the change of the honoured deity and the change in the cult practice (abandonment of the hunt and emergence of the athletics) must have occurred at approximately the same time and were surely closely related to each other.

Now, one might of course ask, what the reason for these changes could have been. The answer is, in my view, quite simple: the intensification of hunting attested by the rapid growth of votive dedications in the sanctuary during the 8th century BCE<sup>30</sup> and presumably the spread of agriculture dramatically reduced the number of game animals. And because it was impossible to raise more of them or to reduce the number of the hunters, hunting became unpredictable and often unsuccessful. This might explain the divergence of the annual and *penteteric* celebrations. For a certain period, hunting was still feasible, but success became increasingly rare, i.e., wild or feral bulls were caught only irregularly, e.g., every other or third year. When the animals became extinct, hunting continued with other game animals at the annual festival of Artemis Elaphia, and the wild bovines were replaced by domesticated ones at the festivals celebrated at larger intervals. Following this change, there was of course no point in retaining the tutelary goddess and another deity could be chosen.

It cannot be determined exactly when this change occurred, but the reason for choosing the *penteteric* periodicity can be discerned quite clearly. For it cannot be mere coincidence that already by the time of Homer (*Il.* 2.402–403; 7.313–315; *Od.* 19.420–423), it was common practice to sacrifice a four-year-old (*pentaeteros*) ox or bull for Zeus. The reason for this is simply, as already pointed out by the ancient commentaries (*Arist. Hist. Anim.* 575.5b), that the animal is then at its peak, and this is therefore the best time to slaughter it. At a large *panegyris*, however, some younger animals must have been killed as well in order to provide enough meat for all the participants, but precisely because of this it was reasonable to let some time pass without slaughtering or sacrificing afterwards in order to raise the numbers again. The exact period necessary to compensate for the loss caused by the mass slaughter at a *panegyris* depended on several factors, but considering the low reproduction rate and the maturation of bovines at the age of 1.5–2 years, the minimum interval practised was one of two years (i.e., to skip the year immediately following the *panegyris*).<sup>31</sup> But if it was the goal to provide the largest possible number of sacrificial animals at a single occasion and at regular intervals, without

<sup>30</sup> Maass (1978, p. 228); Heilmeyer (1979, pp. 21–23).

<sup>31</sup> This principle led to the *trieteric* periodicity observed at Nemea and Isthmia and it was retained apparently because the number of participants and attendants did not rise to such a high level as at Olympia, so it was not necessary to slaughter all the available animals.

considerable risk of diminishing their total number, then the *penteteric* periodicity had to be chosen, since a shorter interval would have meant less animals and waiting for more than four years would have been obviously uneconomical. The interval thus resulting between two *panegyreis* was certainly sufficient to regenerate the herds and it is therefore not surprising that this periodicity was adopted for the two largest Panhellenic festivals at Delphoi and at Olympia.

## 7. Conclusions

According to the hypothesis presented here, wild or feral cows represented a special attraction of the region surrounding Olympia and may explain the early popularity of the sanctuary. The animals were hunted by aristocrats arriving from distant regions of the Peloponnese and following the hunt the same animals were most probably cooked in the tripod cauldrons dedicated and found in large number at Olympia. The dedication of small animal figurines made of bronze and terracotta can equally be explained from rituals observed by hunters. This cult practice is absolutely different from the usual sacrifices to the Olympic gods so often described by the Homeric epic. The practice is not implausible, however, since Olympia is conspicuously absent from the epic, and also because the miniature animal figurines from Geometric Olympia reveal a cult practice that is fundamentally different from those generally known from epic and later Greek sanctuaries. It is therefore unlikely a mere coincidence that the early cult at Olympia, not mentioned by Homer, seems so intimately linked precisely to Artemis, the Mistress of Wild Animals – the goddess who is so conspicuously under-represented in the epic, but played such an especially important role in Olympia.

The Olympic Games, most probably consisting initially in a ritual chase, can be supposed to be part of the ceremony accompanying the common feasts after the successful hunt (an expression of “animal ceremonialism”). The rapid growth of votive dedications in the sanctuary during the 8th century BCE is then explained by the intensification of hunting, which inevitably led to the extinction of the wild or feral bovines. Thus hunting, the core of the annual festivals held at the sanctuary, gradually disappeared and was finally abandoned altogether. The first athletic contests, the running events, are likely to have evolved from rituals practised after each successful hunt, and presumably attained greater importance as the hunt became increasingly difficult. Finally, as hunting became impossible, the ceremonies were transformed into running contests, and by adding new athletic disciplines, the games eventually developed into a replacement event for the aristocrats, who visited the sanctuary previously for the sake of hunting.

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