**A LION’S SHARE OF ATTENTION: ARCHAEOZOOLOGY AND THE HISTORICAL RECORD**

**L. BARTOSIEWICZ**

Institute of Archaeological Sciences, Eötvös Loránd University
Múzeum krt 4/B, H-1088 Budapest, Hungary

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**INTRODUCTION**

This is a review worth starting with Aesop (?620–564 BC). Eight classical Greek texts written in the Age of Homer (8–7th c. BC) reveal that lion was most frequently mentioned among wild animals, surpassed only by the six common domesticates that have directly surrounded people. References to this beast far outnumbered those to comparably large, dangerous and highly valued carnivores (Fig. 1). This is in sharp contrast with the relative under-representation of lion bones in archaeozoological assemblages. As A. Meyer noted with immense foresight over a century ago, “From the philological side there is evidently no basis to doubt… that lions indeed lived in Europe… around 500 BC… [Although] until recently no lion bones have been found in Greece, one should consider how few excavations took place in those lands”. Only a quarter of a century later, excavations at the 5th–2nd century BC site of Ol’bia, a Greek colony on the Black Sea coast in modern-day Ukraine indeed yielded the first bones of large Felids, attributed at the time to animals kept in a menagerie or the import of precious pelts. Although these possibilities must always be taken into consideration, reconfirming Meyer’s optimistic view large faunal assemblages recovered in the Balkans during the last three decades have produced increasing numbers of lion remains from prehistoric as well as early historical times. This study seeks reconciling the remaining discrepancies between the historical record and archaeozoological evidence.

As for the zoological aspect of this work, there are fundamental difficulties in distinguishing between the bones of Late-Glacial and Holocene lions in Europe. Morphometric differences between the Pleistocene cave lion (*Panthera leo spelaea* Goldfuss, 1810) and the recent lion (*Panthera leo* Linnaeus, 1758) are negligible. While the bones of cave lion tend to be larger, precise identification is often impossible using only sporadically occurring remains. Ancient DNA sequences indicate that cave lion from Austria and Southern Germany represent lineages that diverged from lions in Africa and Asia about 600,000 BP, and became extinct without mitochondrial descendants in those two continents. Depending on convention, even this ancient, distant form, however, may fit within a single species nomenclature. Modern lions are closely related. Cranio-structural traits of the now extinct North African Barbary lion (*Panthera leo leo* Linnaeus, 1758) and Asiatic lions (*Panthera leo persica* Meyer, 1826) are very similar. There must have been a contiguous population inhabiting North Africa and Asia. Moreover, the population in South-East Europe possibly once linked lions in the Middle East and North Africa, although the European form

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1 Voultsiadou–Tatolás 2005, 1878–1879, Table 1.
2 Meyer 1903, 67 (translated by the author).
3 Gromova, 1928.
4 Heptner–Sludskii 1972, 82.

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is sometimes considered part of the Asiatic subspecies. It seems, however, that it was the expansion of human populations along the Nile and the Sinai Peninsula some 4,000 years ago that de facto disrupted gene flow between the lion populations in North Africa and the Middle East.

LOCAL OBSERVATIONS AND EXTINCTION IN THE CONTEMPORARY WRITTEN RECORD

The Balkans and Eastern Europe

In the Iliad, Homer (ca. 8th century BC) uses over two dozen similes in which lions attack domestic animals and may show men attempting to drive the lion away. These similes have been traditionally interpreted as being based on Homer’s personal observation, presumably in Ionia. Three hundred years later Herodotus (?485–?425 BC) noted: “The boundary of the lions’ country is the river Nessos that flows through Abdera and the river Achelous that flows through Acarnania. Neither to the east of the Nessos anywhere in the nearer part of Europe, nor to the west of the Achelous in the rest of the mainland, is any lion to be seen; but they are found in the country between those rivers”. A century later, Xenophon (431–?355 BC) wrote that “lions … are caught in foreign countries in the neighborhood of Mount Pangeum…”. Mount Pangeum is located near Thessaloniki. The next author to mention lions some 50 years afterward was Aristotle (384–322 BC), who already called lion “a scarce animal… not found in many places. In the whole of Europe it occurs only in the tract of country between the rivers Achelous and Nessos” (Fig. 2.1). Although no reference is made to the origins of the animals, it is worth referring here to the list of incidents with lions at the public spectacles which Greek and Roman writers, mainly of the AD first and second centuries recorded. Lions are believed to have died out within the borders of present-day Greece around AD 80–100 (Fig. 2.2).
Records of exotic animal exhibits from Rome and other power centers in the 2nd century BC indirectly show that there must have been a continuing high demand for lions in Europe. Such “displays” consisted mostly of deadly fights between beasts and other beasts or humans.

These games had a long and bloody tradition: Assyrian lion hunts were staged affairs at festivals, with lions released from cages. The earliest recorded such shows in Rome were the venationes (staged circus hunts) of lions (and leopards) in 186 BC by Marcus Fulvius Nobilior and in 169 BC by the Rome city magistrates, when among others, 63 Africanae bestiae (i.e. large Felids) were slain in the Circus Maximus. In 104 BC, Lucius Licinius Crassus and Quintus Mucius Scaevola, also showed “large numbers of lions” there.17

Areas Adjacent to Europe

Following the decline of lion populations in Europe, the regions whose lions were imported for the elites of European Antiquity included Africa, Arabia and Syria as well as Mesopotamia.18 Until approximately the AD 10th century, lions were probably also found in the Azerbaijan area. Their disappearance from the reed thickets and open woodland is primarily explained with an increase in human population and a change in environmental conditions, that resulted in the decline of ungulates in that region (Fig. 2.3).19 It is probably the Asiatic lion that makes repeated appearances in the Old Testament (some 150 times), most notably as having fought Samson in the Book of Judges. They are thought to have existed in Palestine until about AD 1400. Lions could still be found in the vicinity of Samaria and around the 12th century (Fig. 2.4).20 At this point the first wave of lion extinctions in north Africa is worth briefly discussing. Stocks of Barbary lion, the largest of all subspecies, had served as a steady supply to Europe throughout Antiquity: for example Sulla staged 100 “maned” lions in Rome in the 2nd century BC, a gift of King Bocchus of Mauretania.21 It was certainly from Africa that Claudian believed that Stilicho would obtain the “superb lions” (eximii leones) for display at his consular games.22 These written sources are comple-

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16 ALDEN 2005.
17 TOYNBEE 1973, 17.
18 Ibid. 61.
19 HEPTNER–SLUDSKIJ 1972, 80, Abb. 37.
20 GUGGISBERG 1961.
22 Ibid. 61.
mented by the iconographic record. In a number of AD 3rd–4th century mosaics, mostly from North Africa, great hunting parties are depicted, with animals being captured, packed, and shipped to various destinations so that they could be put on stage.23

The earliest known Holocene lions in the British Isles belonged to the Royal Menagerie of the Tower of London. DNA evidence shows that the skulls of two male lions (dated to AD 1280–1385 and AD 1420–1480), found in the moat of the Tower, also originated from Barbary lions.24 Lions disappeared from the Tripoli area by around 1700 (Fig. 2.5) and from the Moroccan coast by the mid 1800s (Fig. 2.6).25

The Middle East and India

Looking at the far end of the eastern range of lion distributions it may be noted that the last known specimen in Pakistan was killed near Kot Deji in Sind province already in 1810 (Fig. 2.7) although lion was distributed even farther east toward the states of Bihar and Orissa in India. A rare specimen was killed in Palamau district (Bihar State) in 1814 (Fig. 2.8).26 The decades to follow saw a rapid decline of Indian lion populations: the last specimen killed at the southern end of its Indian range was shot at Rhyl in Damoh district at the turn of 1847–1848 (Fig. 2.9).27 Lions remained widespread in many areas until the mid-19th century when the advent of firearms led to their extinction over vast areas. The intensity of hunting is clearly shown by reports of slaughtering fifty lions in the district of Delhi between 1856–1858 (Fig. 2.10).28 In 1891, only a generation later, Blanford wrote that “in India the lion is verging on extinction”.29

It is possible, that the lion populations of Asia were not contiguous in recent historical times, since no lions were reported either from eastern Iran or Afghanistan, the region indicated by a question mark in Figure 2. Meanwhile it is worth mentioning that Dashitarjan valley, west of Shiraz in Iran, remained famous for its lions even as late as the late 19th century (Fig. 2.11).30 During the mid-19th century, lions were also recorded in the vicinity of Mosul, Iraq (Fig. 2.12).31 The last lion in Southeastern Turkey was reported in 1870 (Fig. 2.13),32 while at the same time, lions were reported to be still numerous in the reedy marshland along the Tigris and the Euphrates (Fig. 2.14).33 This area had a long tradition of exporting lions. Those captured in Northern Mesopotamia were sent to Constantinople (mid 4th century AD) especially for games organized by the emperor.34

Gaius Cassius (?85 BC–42 BC), quaestor of Syria ordered the shipment of live lions (presumably of local, Syrian origins) to Italy, but the transport was hijacked at the ancient city of Megara in Attica (northern section of the Isthmus of Corinth) on the way to Italy.35 The resilience of the Middle Eastern population is also illustrated by a 1891 report of lions from west of Aleppo in Syria (Fig. 2.15).36

Twentieth century extinctions

Meanwhile, the last Barbary lions were killed in the lowlands of North Africa near Barbuch in Tunisia (1891; Fig. 2.16) and near Batna in Algeria (1893; Fig. 2.17).37 By the 20th century both killings and sightings of lions became sporadic in the Middle East. In 1914, the Turkish governor shot two lions in the area of Iraq,38 while the last known specimen in that country was killed in the lower reaches of the Tigris in 1918 (Fig. 2.18).39 However, a British admiral travelling by train reported seeing a maneless lion near Quetta in north-western

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23 Cr.-N. Gaspar, personal communication.
24 SABIN 2008.
26 Ibid.
27 KINNEAR 1920.
29 BLANFORD 1889–1891.
30 GUGGISBERG 1961.
31 Ibid.
32 USTAY 1990.
33 Ibid.
34 Cr.-N. Gaspar, personal communication.
36 KINNEAR 1920.
37 GUGGISBERG 1961.
38 KINNEAR 1920.
39 HATT 1959.
Pakistan (Fig. 2.19), although “many officers expressed doubts as to its identity, or the possibility of there being a lion in the district”.40

The last observation of lions in Iran was made by American railway engineers near Dizful in 1935 (Fig. 2.20).41 The unconfirmed last sighting of a live lion (between Shiraz and Jahrom) was reported in 1941. A dead lioness was found on the banks of Karun river, Khuzestan province in 1944.

Western North Africa, the most accessible region from Western Europe where lions were available until the early 20th century, had also served as an evident source for animal merchants throughout the Middle Ages.42 The last known Barbary lion was killed by a poacher in the Moroccan Atlas in 1922 (Fig. 2.21), although it is reputed to have survived in the high Atlas Mountains until the 1940s.43 The last population of Indian lions consists of some 350 individuals kept in the Gir Wildlife Sanctuary in Gujarat State (India), located near the northeast coast of the subcontinent. Otherwise, the modern distribution of lions is limited to sub-Saharan Africa.

**ARCHAEOZOOLOGICAL EVIDENCE**

To date, the supposedly earliest remains of subfossil lions in Europe were recovered in the Basque country, along the northern coast of the Iberian Peninsula. They were dated to the pre-Boreal/Boreal period (9600–7000 BC).44 These important finds, however, are beyond the chronological and culture-historical focus of the current discussion, since this population in the Iberian Peninsula must have disappeared by the beginning of the Holocene.45 At this point, the single Iron Age find from Huelva, Southern Spain46 may be attributed to an imported specimen associated with the Roman colonization of the Mediterranean region. Additional finds may change this picture.

Reviewing the archaeozoological evidence of lions in southeastern Europe shows a combination of geographic and diachronic trends. This may be largely described as the withdrawal of lions towards the Southeast. The phenomenon looks far more complex, however, in light of the number and nature of lion remains found.

**Neolithic**

In the Balkans, the earliest evidence of Holocene lions, an upper canine tooth fragment (Fig. 3), came to light from the Middle Neolithic II Phase (ca. 6000 BC) of the Karanovo tell settlement in Bulgaria (Fig. 4.1).47 It is the only find that is early enough to represent the Atlantic Period (ca. 7000–5500 BC) in conventional climatic terms.

In deposits assigned to the end of the Atlantic/beginning of the sub-Boreal (ca. 5500–3000 BC), the presence of lions is evidently more frequent. With the notable exception of the aforementioned Iron Age record from southern Spain,48 osteological evidence for sub-Boreal and sub-Atlantic lions in Europe is restricted to the Ponto-Mediterranean region. At the site of Dikili Tash in Greek Macedonia, a radius was found in a Neolithic (ca. 4460–4000 BC) context (Fig. 4.2).49 In chronological sequence, the next evidence originates from the area of the Late Neolithic cemetery of Zengővárkony in Western Hungary (Fig. 4.3). That specimen is actually known only as the plaster cast of a lower left canine tooth recovered as a stray find from the Lengyel culture (ca. 3500 BC) cemetery before World War II.50

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40 GUGGISBERG 1961.
41 HEANEY 1943.
42 SABIN 2008.
43 GUGGISBERG 1961.
47 BÖKÖNYI 1993a, 13.
49 TRANTALIDOU 2000.
Fig. 3. The labial and lateral views of the earliest Holocene lion find in Eastern Europe, the upper right canine recovered from Karanovo II.

Fig. 4. Lion finds in prehistoric Europe (site codes arranged in increasing chronological order). Legend: 1: Karanovo II, Early Neolithic; 2: Dikili Tash, Neolithic; 3: Zengővárkony, Late Neolithic; 4: Tiszafüldvár–Téglagyávr, Copper Age; 5: Gyöngyöshalász–Encspuszta, Copper Age; 6: Tiszalúc–Sarkad, Copper Age; 7: Mayaki, Copper Age; 8: Bolgrad, Copper Age; 9: Goljamo Delčevo, Copper Age; 10: Slatino, Copper Age; 11: Devetashka Cave, Copper Age; 12: Sozopol, Copper Age; 13: Durankulak, Copper Age and Late Bronze Age; 14: Tiryns, Late Bronze Age; 15: Keos, Late Bronze Age; 16: Delphi, Late Bronze Age–Iron Age; 17: Kastanas, Late Bronze Age–Iron Age; 18: Kalapodi, Iron Age; 19: Tira, Early Iron Age; 20: O1'biya, Early Iron Age; 21: Berezan, Early Iron Age; 22: Chernomorka I, Early Iron Age; 23: Chernovaty, Early Iron Age.
Copper Age – The Carpathian Basin and the Balkans

The greatest number of lion remains is known from the Copper Age, also known as the Chalcolithic. In Hungary, three settlements of this period have yielded lion bones. A late Middle Copper Age (ca. 3000 BC) left pelvis fragment came to light at Tiszaföldvár-Téglagyár (Fig. 4.4). The early Late Copper Age (Boleráz culture, ca. 2500 BC) settlement of Gyöngyös halász-Encspusza yielded a praemaxilla/maxilla (Fig. 4.5). At the similarly late Middle Copper Age settlement of Tiszalúc-Sarkad, 14 of the 49,436 studied animal remains originated from lions (Fig. 4.6). In the Ukraine, largely contemporaneous Copper Age lion finds have been published from the Tripolje culture settlement of Mayaki that included, among others, a proximal radius and a distal tibia fragment (Fig. 4.7). A phalanx media was also reported from the Gumelnitsa culture settlement of Bolgrad (Fig. 4.8). A reference to a yet unpublished Copper Age lion bone is known from the site of Molukhov Bugor.

The first discovery of lion bones in Bulgaria has attracted considerable popular attention. These important prehistoric finds link relevant finds in the Carpathian Basin and near the Black Sea coast to those in Greece. One may wonder, however, whether the conspicuous paucity of lion remains between the Ponto-Mediterranean coast and the Carpathian Basin reflects a pattern in zoogeographical distribution or difference in the intensity of archaeozoological research (Fig. 4). The five Copper Age sites yielding a variety of skeletal parts in Bulgaria include the tell settlement of Goljamo Delčevo, where an atlas fragment was identified (Fig. 4.9). The 2nd horizon of another tell at Slatino yielded a proximal fragment of a right ulna, dated to the end of the Early Copper Age, ca. middle of the 5th millennium BC (Fig. 4.10). The distal end of a right humerus came to light from the Copper Age in Devetashka Cave (Fig. 4.11). Underwater deposits, believed to be of a Copper Age date, have yielded the tibia of a juvenile lion as well as a proximal phalanx in Sozopol on the Black Sea Coast (Fig. 4.12). In contrast to the aforementioned neolithic tooth remains, these bones represent the entire body, often meat rich regions.

The chronological transition toward the subsequent Bronze Age is represented by the stratigraphy of the tell settlement at Durankulak, studied by several experts (Fig. 4.13). Horizon V (Late Copper Age) contained two lion remains, including a complete left mandible. Another ten, Late Copper Age bones came to light from Horizon IV. In addition to skeletal elements representing various parts of the body, two mandibles were recovered. A third, particularly robust mandible was the only Late Bronze Age lion find recovered at this large site.

Late Bronze Age and Early Iron Age – Greece

With the exception of Durankulak, all Bronze Age finds originate from the territory of modern-day Greece. At the site of Tiryns (Fig. 4.14), first a right calcaneus was found in the Mycenean Grave 67 (Late Bronze Age, ca 1230 BC), interpreted as possibly a talisman of some sort. The subsequent recovery of six additional bones including a humerus fragment is indicative of the possibility of meat exploitation. These bones from early and late Mycenaean contexts also offer convincing evidence that lions lived in the Peloponnese in the Late Bronze Age.

A lion’s tooth of MMIII-LMIB date was identified at Ayia Irini on the small island of Ceos: two more, from different animals, were found in House M at the same site in an LMIB–LHII context. They may be regarded as imports, since the small island is unlikely to have sustained lions (Fig. 4.15). A Late Bronze/Iron Age deposit at Delphi (Fig. 4.16) also yielded a tooth fragment. The tell site of Kastanas in Greek Macedonia is located more...
closely to the mainland (Fig. 4.17). Layers spanning approximately one century (13–11: transition to Early Iron Age 1100–1200 BC; 10: Early Iron Age 800–1000 BC; 8: Iron Age 800 BC) yielded a variety of lion bones, largely from peripheral extremity segments. Finally, in central Greece, a 7th century BC lion scapula was found at Kalapodi, showing marks of butchery and traces of burning (Fig. 4.18).

**Early Iron Age – Pontic Region**

Since the much contested discovery of the first Holocene large Felid bones in Europe 80 years ago by Gromova, lion remains have surfaced at several sites along the northwestern coast of the Black Sea. While the possibility was raised that those 5th–2nd century BC specimens from Ol’biya may have originated from morphologically similar tigers, the following Iron Age finds from Ukraine have lent increasing credibility to Gromova’s 1928 identification, as they fit the pattern of lion extinctions reviewed in this paper. By now, lions have been identified in several Early Iron Age assemblages from settlements along the lower reaches of the Bug River and the Odessa region, including Tira (Fig. 4.19), new finds from Ol’biya (Fig. 4.20), Berezan (Fig. 4.21), Chernomorka II (Fig. 4.22) and Chernovaty (Fig. 4.23).

In spite of its survival in the historical historical record, to date no later lion remains have been recovered in the study area. In fact, the aforementioned contemporaneous sources reconfirm that lions had to be imported to Europe already during the 2nd century BC.

**TAPHONOMY AND CULTURAL INTERPRETATIONS**

Taphonomy is a concept first introduced in palaeozoology. It is the study of post mortem processes which affect the preservation, observation and recovery of dead organisms, the reconstruction of their biology or ecology as well as the circumstances of their death. From the viewpoint of archaeological interpretation, its first phase, biostratinomy is of most direct interest. Since biostratinomy is the study of pre-depositional interrelations between the dead animal and its immediate environment, it also includes effects of intentional carcass treatment, i.e. culturally idiosyncratic primary human influence.

While the occurrence of lion remains at certain sites carries primary archaeozoological information, the zoogeographical meaning of these finds can be critically evaluated by studying biostratinomic phenomena such as body part representation and human modifications found on bones. These taphonomic observations are fundamental in understanding the way lions were exploited.

**Defensive hunting**

Large carnivores, often competing with humans for their prey animals, especially in an agrarian setting, may have been considered vermin in the first place. This would mean that they were simply killed, and their bodies were left off-site, or even if they were recovered their complete skeletons show no post mortem interference with the body. Should such animals have intruded into settlements, they may have been buried on location. Although such lion skeletons are yet to be found, this possibility is clearly illustrated by a lynx skeleton recovered from a possibly Migration Period pit in Western Hungary.
Although it is unlikely that lions would have been simply hunted for meat per se, skeletal parts representing various body regions, especially meat rich cuts, at numerous settlements have been interpreted as evidence of eating the flesh of these animals.78 Figure 5 shows a cumulative representation of skeletal elements (excluding loose teeth) from the major, predominantly Copper Age assemblages under discussion here.79

Although the anatomical distribution of lion bones looks sporadic when found only in small numbers, the cumulative graph shows a fair representation of almost the entire body. The remarkable absence of elements from the axial skeleton (with the exception of the atlas vertebra and a single rib fragment80) may be explained with the difficulty of identifying small fragments of these bones. Remarkably, however, most of these finds plausibly represent a range of body parts indicative of local hunting. Given the animal’s dangerous nature and concomitant symbolic meaning in known cultures, it is unlikely that even if eaten, lion flesh would have been considered ordinary meat. It would be therefore misleading to attach modern economic/nutritive value to the body parts represented. It must be noted, however, that the musculature of the pelvis, scapula and humerus must have provided especially large cuts. Outside Europe, lion consumption at the Anatolian site of Boğazköy, the former Hittite capital, has been discussed.81 In addition to a Late Copper Age left third metatarsus, the distal half of an undated left femur was also recovered at the tell settlement of Arslantepe in Central Anatolia.82 Marks of defleshing on such bones from meat-rich body regions, as well as evidence of heat treatment, are usually seen as evidence of eating lions.

78 NINOV 1999, 331.
79 Coded sites included (as shown in Fig. 4): 2: Dikili Tash, 4: Tiszaföldvár, 5: Gyöngyöshalász, 6: Tiszalúc, 7: Mayaki, 8: Bolgrad, 10: Slatino, 11: Devetashka Cave, 12: Sozopol, 13: Durankulak, 17: Kastanas, 18: Kalapodi.
80 MANHART 1998.
82 BÖKÖNYI 1993b, 353. Remarkably, the name of the site means Lion’s Mound in Turkish.
In many cases, lions must have been hunted for trophies. Of these, the animal’s skin, skull and canine teeth would have been most desirable. It is important to note that such trophies evidently represented great symbolic and perhaps economic value, therefore many (but not all!) of them could have been transported to considerable distances either as potential trade items, luxury gifts or personal accessories.

In archaeozoology, flaying may be identified by detecting usually fine, transversal cut marks on the animal’s head and “dry limb [autopodium] bones”, as these are usually removed with the skin from the rest of the carcass as part of the trophy (Figure 6). Following this logic, the selectively recovered metapodia and phalanges and even some skull elements, especially those bearing skinning marks, are often seen as leftovers from lion skins. The “inverted evidence” of a pelt is represented by another, late medieval lynx skeleton found in Hungary, that was found in a nearly intact state, but had been damaged by marks of skinning in the foot region.83

Skull fragments were not necessarily retained as parts of flayed animal skins, but especially those with teeth, such as the maxilla, intermaxilla and mandible associated with the spectacular canine teeth, may have been left in the skin for decorative purposes. An example from outside our research area includes the severed oral section of a lion mandible found in the Ramesside Period palace at Quantir (eastern Nile Delta).84 This possibility is even more likely in the case of the sawn-off maxilla/intermaxilla of a late medieval leopard found in Segesd, Hungary. This oral section of the calvarium contained both spectacular canine teeth and was covered with wear polish on the cut surface, suggesting that the bone was worn most probably attached to the animal’s skin.85

83 BARTOSIEWICZ 1993, 13, FIG. 13.
85 BARTOSIEWICZ 2001b, 152, Figure 1c.

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Skulls thus represent a transitional skeletal element from the viewpoint of cultural taphonomy. They may have been transported together with or partly for the sake of the teeth, but could also serve as a local “quarry” of these precious trophies when an entire lion was butchered on location.86

Canine teeth tend to be treated as items of high prestige (often referred to as amulets or talismans), demonstrating hunters’ prowess to a number of hidden meanings. They most commonly also represent the beast itself by the pars pro toto principle. Given their value, they may be symbols of acquired high status or even heirlooms, inherited through generations. It is of eminent practical importance that they are small and are thus far more easily spread over long distances than skins or perishable meat, not to speak of the complications of shipping the live animals themselves.

This is what makes the findings of loose canine teeth from large carnivores the least reliable of all skeletal parts for the purposes of zoogeographical interpretation. The Neolithic lion canines from Karanovo87 and Zengővárkony88 occur at time periods when no lion bones are known in their respective regions, in spite of the archaeological excavations of respectable sizes in those areas. While these Neolithic specimens may equally originate from rarely hunted local animals, the case of imports is more clear-cut in the case of the three lion’s teeth identified at Ayia Irini on the small Greek Island of Ceos89 as well as in Delphi.90 A Roman Period import is evident in the case of the the canine found at Augusta Raurica in Switzerland.91 On the other hand, skins and teeth of local origins must have been found at the Early and Middle Iron Age site of Boğazköy in Central Anatolia.92

Finally, in light of the copious historical record, one must also reckon with encountering the skeletons of imported, live lions during the later periods of Antiquity and beyond. This is what makes the latest known lion finds identified at Hellenistic colonies so difficult to interpret. It is not really possible to tell, whether later Iron Age finds are the last survivors of the East European population, or the first imports by new settlers. Unfortunately, many classical amphitheaters, together with their surroundings had been excavated in Eastern Europe long before interest in animal bones developed among some archaeologists. Big cats had been imported into Europe for different purposes since early historic times. To date, the medieval lion skulls from the Tower provide the most unambiguous osteological evidence for historic trafficking in lions.93

All animals, and extreme creatures such as lions especially, tend to be seen in a dualistic manner. Shades between the extremes of bipolar perceptions (sensu Claude Lévi-Strauss) such as “destructive/noble” or “agrarian/royal” also exist, and they may be better understood as stages of a continuum defined in taphonomic terms. The concepts outlined here through the interpretation of various skeletal remains within differing cultural contexts are summarized in Figure 7. It is suggested, that with the disappearance of local lion populations in Europe, the vernacular, overwhelmingly negative perception of these animals (rooted in first-hand experience) developed in a more abstract, idealistic picture, best embodied by lions imported as live animals for the purposes of high-status display at popular games.

CONCLUSIONS

Thanks to the increasing body of archaeozoological information gained through the systematic analysis of large animal bone assemblages, the time gap between the latest known Holocene lion find and the first description of a lion hunt by Homer94 from the 8th century BC elapsed in Southeast Europe. In fact, lions mentioned by later Greek authors in Macedonia have also been identified.

86 The articulated maxillary-intermaxillary fragment from Győngyőshalász seems to be representing this case: VÖRÖS 1982–1983.
88 VÖRÖS 1983, 36; In the absence of the original, the hectic fate of this cast may introduce an additional bias in the interpretation of this find.
89 CASKEY 1979, 412; DAVIS 1980, 288.
90 NINOV 1999.
91 SCHMID 1976, 62.
92 VON DEN DRIESCH–PÖLLATH 2004, 42.
93 SABIN 2008.
Holocene lions briefly colonized South-East Europe crossing the Bosphorus from Asia Minor during Post-Glacial times. They seem to have reached the Carpathian Basin with a Late Neolithic/Copper Age continental faunal wave, during the Atlantic Period. The north-westernmost sites where lion bones were recovered include Gyöngyöshalász (Latitude 47.7 N; Longitude 19.9 E) and Tiszalúc (Latitude 48.0 N; Longitude 21.0 E) in the Great Hungarian Plain.

Early finds (even excluding teeth) directly prove that the Copper Age inhabitants of South-East Europe hunted lions for food or to pursue them as pests to their flocks. This fierce animal must have been a relatively common game that interfered with the introduction of established “agrarian” cultures in the area. By the end of European Prehistory, however, important developments took place in the Balkan Peninsula: the Greek alphabet was developed and the first documents of Greek literature were written. The aforementioned earliest written reference by Homer’s 11th Book of the Iliad is a vivid description of how villagers chase away a lion from their herd with the help of dogs. Expanding human populations were evidently threatened by lions whose habitats they increasingly occupied. Lions were not merely hunted for meat: a marked diachronic trend towards extermination emerged. As has been shown in this paper through the example of modern lion extinctions (admittedly exacerbated by the use of firearms), this decline may not have been linear, however. Lion populations seem to have displayed a remarkable flexibility and ability to recover, even under the intensifying pressure of human predation, especially in the Middle East.

Should lions have been hunted simply as pests or a complementary source of meat, however, their teeth might have been less likely to be treasured. There is also at least one clear reference in the Iliad to collecting lion cubs by a deer hunter, illustrating a special attitude to these “royal” beasts: their use as tamed animals or fighting beasts in circus games. Following their extinction in Antiquity, therefore, lions would have been very costly beasts in most places and the expense members of the elite were willing to go through just to put them on display illustrates the hypothetical kudos attached to these animals.

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95 Willms 2003.
97 Quoted by Alden 2005: II. 18.319.
98 Cr.-N. Gaspar, personal communication.
In Late Antiquity, Constantinople, located right between the Black Sea and the entrance to the Mediterranean Sea controlled most trade between Asia, Europe and North Africa. Due to this strategic location, the Byzantine Empire became not only wealthy, but also had first hand access to many goods, including exotic animals. Unfortunately, no bones of lion have been recovered and published from this period. However, *Venationes*, staged hunts involving lions, were depicted on ivory diptychs of the AD fifth and sixth centuries. A dramatic image from the Eastern Empire from ca. 450, shows encounters between eight *venatores* and sixteen lions. Additional artwork includes diptychs from Constantinople by Areobindus (AD 506) and Anastasius (AD 517).99 These scenes of royal entertainment may be contrasted with ‘agrarian scenes’ in Homer’s work, the similes in which the [native European] lion appears as a marauder from whom the flocks and herds must be protected thereby making the two the end points of the lions’ story in Eastern Europe during Antiquity.

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99 TOYNBEE 1973, 63.


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