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# Hunting Kings

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Nimrod, the builder of cities from Babel to Calah, was the first “mighty man” on earth, and a “mighty hunter before the Lord.” So were other African, Asian, European, and New World kings. They hunted everything from lions to guanacos, on four of the six continents, from the beginning of recorded time. But why? Hunting provided meat, and it may have also provided military exercises; but most kings subsisted on domesticated animals and plants and delegated their wars to specialists. In addition, chasing animals cost money and time, and more than a few kings were killed or maimed in the act of bringing down game. The benefits seem to have been outweighed by the costs. Much about human history, and also prehistory, seems to have been adaptive. Hunting was *the* human adaptation for hundreds of thousands of years. But it seems to be a vestige most kings cannot shake.

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Nimrod: he was the first on earth to be a mighty man.

He was a mighty hunter before the Lord; therefore it is said,

“Like Nimrod a mighty hunter before the Lord.”

—Genesis 10:8-9

A dozen generations after Adam was created, and three generations after the Flood, Nimrod set up a kingdom at Babel, Erech, and Accad in the land of Shinar (Sumer); and at Nineveh, Rehoboth-Ir, Resen, and Calah in Assyria. Thereafter, whenever he got an opportunity, he went out to hunt.

When, toward the end of the fourth millennium B.C., the world’s first empires emerged, emperors delegated many responsibilities to others. They entrusted the business of government to their civil service, the business of war to their generals, the hard labor in pastures and fields to their tribute-paying subjects or slaves, and their soldiers were treated as spear and arrow fodder. But, whenever they got an opportunity, they went out to hunt.

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The kings hunted in the cradle of civilization, in the Near East—from Sumer to Assyria to Babylon; they hunted in Egypt and in the Far East—from India to China. They also went hunting in Europe and the New World. They hunted, among other things, lions, leopards, tigers, rhinoceroses, wild boars and guanacos. And they left the evidence everywhere—from the *Tanakh* to the inscriptions, from chronicles to poems, on *bas reliefs* and oracle bones. Hunting has always been the sport of kings.

But why? Hunting offers one obvious benefit—meat; it also offers other possible advantages, such as training for war. But it is time-consuming: Some monarchs have spent entire seasons in their forests, chasing game on horses. And it is dangerous: More than one magnate has been wounded or killed in the woods. This article surveys the evidence on the world's empires to answer the following questions: Why did kings hunt? Given the costs, was it worth it?

## A History of Hunting Kings

Both before and after Nimrod's rule, kings were known to go hunting. Ashurbanipal and his ancestors bagged lions on the Tigris; Thutmose III corralled a herd of elephants on the Nile, whereas Amenhotep III went after wild cattle. In the Far East, Akbar the Great used 50,000 beaters on a tributary of the Indus; similarly, *Qin Shihuangdi* took 1,000 carriages and 10,000 horses, to chase game by the China Sea. In the Far West, Inca emperors collected 30,000 heads of guanacos, vicunas, cats, and bears in a day; Aztec emperors were well known for shooting birds with slings. Xenophon hunted in Athens, and Hadrian hunted in Rome. Kings hunted wherever there were kingdoms—on four of six continents and through the 5,000 years since history began.<sup>1</sup>

### The Near East

History began with writing. Some of the first scripts come from Sumer—on the lower Euphrates—where Nimrod was remembered, although much later, to have built his cities; toward the end of the fourth millennium B.C., the figure of a king of Uruk (Erech) was carved into a rock—the *Lion Hunt Stele*—shooting cats.<sup>2</sup>

Other hunters, such as the kings of Israel and Judah lived during the same period. By seventh century B.C., Ashurbanipal, or Osnapper—the “great and noble” emperor, whose father and grandfather invaded Jerusalem—was covering

his palace on the Tigris with lion hunting scenes. He had written into the sandstone: "I, Ashurbanipal, king of the universe, king of Assyria, in my lordly sport I seized a lion of the plain by his tail." In Ashurbanipal's 20,000-plus clay tablet library, he kept a copy of the *Gilgamesh* epic—where the king of Uruk "stalked and hunted down" the bull of heaven, thrusting his sword between its horns. Many of Ashurbanipal's ancestors were experts at bringing down game. Tiglathpileser I shot 4 aurochs in the desert, 800 lions from his chariot, and another 120 lions on foot; Ashurnasirpal I killed 257 wild oxen and 370 lions; Ashurnasirpal II claimed the heads of 200 wild ostriches, 390 wild bulls, and 450 lions. These traditions continued in Babylon and Persia. At the start of the sixth century B.C., Nebuchadnezzar II—who went to Jerusalem to capture the king but took "the king's mother, the king's wives, his officials, and the chief men of the land" into captivity in Babylon—covered the blue and gold glazed bricks of his Ishtar gate with aurochs, *sirrush*, and 120 lions. At the end of the sixth century B.C., Cyrus the Great—who returned the exiles from Persia to Judah, having been ordered to rebuild the Jerusalem temple—took hunting lessons from his father, and in his *paradeisos*, or parks, sent "the best of his foot and horse" to chase wild animals in relays (Ashurbanipal [1989], *Lion Hunt Inscriptions*, 3rd relief; Ashurnasirpal I [1989], *Colossi from Calah*; Ashurnasirpal II [1989], *Banquet*; Cyrus the Great [1969], *Cylinder*; Ezra 1:2; Ezra 4:10; *Gilgamesh* [1989], vi.141-146; *Assyrian and Babylonian Chronicles* [1975], 5, Year 7; Tiglath-Pileser I [1989], *Prism Inscription*; Xenophon [1994], *Cyropaedia*, i.6; 2 Kings 24:15).

## North Africa

There were others hunters in Egypt. Toward the end of the fourth millennium, around the time the *Lion Hunt Stele* was being carved near the Euphrates, a *Hunter's Palate*—with slaughtered ostriches, ibex, rabbits, and lions on it—was left in a nobleman's grave on the Nile.

Later on, there were hunting kings. Toward the end of the 15th century B.C., the pharaoh of New Kingdom, Thutmose III, hunted an elephant herd of 120 heads. "It is because there is no exaggeration and no lie therein that I have said this," his scribe chiseled into the rock. Amenhotep II, son of Thutmose III—who took 89,600 captives from Palestine—shot 12 wild cattle at breakfast, carried off a Nubian rhinoceros, and killed 7 lions "in the completion of a moment"; and Amenhotep III, grandson of Thutmose III—who took women as tribute from Gaza—sailed downstream on the royal barge to bag 75 wild cattle and was wildly successful in bagging lions

(*Amarna Letters* for tribute [1992]; Amenhotep II [1969], *Memphis and Karnak Stele, Aramant Stela*; Amenhotep III [2001], *Wild Cattle Hunt*; Thutmose III [1982], *Gebel Barkal Stela*).

## The Far East

There was a “Mound of the Dead,” or *Mohenjo-daro*, on the Indus River by the third millennium B.C., with brick mansions, streets at right angles, and profusions of seals. One seal shows India’s *Maheshvara*, or great god Shiva, as “Lord of the Hunt.” He sits under a horned headdress, wearing a tiger’s skin, in the company of elephants, rhinoceroses, tigers and water buffalos, with his legs crossed and his phallus erect.

By the second millennium, the Aryans and their alphabet invaded; later on, there were Sanskrit epics about hunting kings. In the *Ramayana*, Prince Rama wins princess Sita because he is able to lift, bend, and string Shiva’s enormous bow “as if it were mere play.” And in the *Mahabharata*, the great king Dushyanta rides out into the forests with hundreds of elephants and horses, armed with lances and maces. Wounded elephants run mad: “dropping dung and urine and streaming with blood, the wild tuskers trampled many men;” and thousands of deer die. But the king finds a girl in a hermitage (“be my wife, buxom woman!”) and fathers Bharata—the legendary first emperor, Bharat, of India (*Ramayana* [1984–1996], i.66.16; *Mahabharata* [1983], i.7b).

Late in the first millennium, in the wake of the invasions by Alexander the Great, Megasthenes crossed the Indus as an ambassador from the court of Seleucus I. He described India’s first historical emperor, Chandragupta Maurya, on his way out to hunt—surrounded by concentric circles of spear-men, in a crowd of armed women. “Some are in chariots, some on horses, and some even on elephants, and they are equipped with weapons of every kind, as if they were going on a campaign.” Ashoka, Chandragupta’s exemplary grandson, “abolished the time honored royal sport of hunting in which his grandfather used to indulge with so much pomp and magnificence.” But other emperors revived it (Ashoka [1997], *Rock Edict* 8; Megasthenes [1877], *Indika*, fragment 27).

The greatest of all Indian hunters may have been the Mughal Emperor Akbar. On Tuesday, March 11, 1567, at 8:15 a.m., “the equitable mind of the *Shahinshah* felt a desire for hunting.” He trotted off to Lahore with tens of thousands of subjects, where they hunted for a month, by daylight and torchlight, with arrows, lances, and muskets. “While the officers and other persons, both high and low, were actively engaged in driving the game, H.M.

was chiefly engaged in establishing the foundations of justice and in developing inward and outward civilization,” his civil servant and biographer, Abu-l-Fazl, apologized. “On account of these higher reasons His Majesty indulges in the chase, and shows himself quite enamored of it” (Abu-l-Fazl [1977], *Akbarnama*, ii.80, 282; Abu-l-Fazl [1997], *Ain-i-Akbari*, ii.27).

There were similar happenings in China, where the legendary third millennium emperor, *Huangdi*, was a hunter. He fought against enemies whose armies had “snake bodies with human faces or the heads of oxen with tiger noses”; and he used eagles, pheasants, hawks, and kites to bring down his prey. Other catches were forecast on oracle bones. By the middle of the second millennium B.C., Shang dynasty pyromantics were burning cattle scapulas and turtle shells, then inspecting the cracks and writing their prophecies up. “If the king goes out to hunt, the whole day he will not encounter the great winds,” they guessed; or “if the king hunts, the whole day he will have no disasters and it will not rain” (*Liezi*, 2 [1990]; Sima Qian [1993], *Shi ji*, 1; HJ29093 and HJ29234 in De Bary & Bloom [1999], p. 13).

Toward the end of the third century B.C., China’s first historical emperor, Qin Shihuangdi, set up his Supreme Forest, or *Shanglin*. Just 2 years into the next dynasty, that forest became common land: “As to all the former parks and preserves, gardens and ponds of the Qin, it was ordered that the people be allowed to cultivate them.” But before long, Han poets were taking part in imperial hunting parties, in imperial parks with stocked with yaks, elk, aurochs, zebras, onagers, and rhinos, on 10,000 horses, with “a hundred, a thousand settings to visit in the pursuit of pleasure; palaces, inns, villas, and lodges, each with its kitchens and pantries, its chambers of beautiful women.” Two millennia later, the founder of China’s last dynasty, the Qing, claimed he had killed 135 tigers, 132 wild boar, 20 bears, 25 leopards, 20 lynx, and 96 wolves as well as hundreds of ordinary deer. Emperors, and their ancestors, encouraged their subjects to practice agriculture. “People will love their rulers and obey his commandments even to death, if they are engaged in farming, morning and evening,” they thought. But most emperors liked to hunt (*Book of Lord Shang* [1928], ii.6; Kangxi [1975], *Self Portrait*, c.1; Sima Xiangru [1971], *Wen xuan*, 8; Sima Qian [1993], *Shi ji*, 8, 117, 126).

Marco Polo showed up at the court of Kublai Khan in A.D. 1271 and stayed for 17 years. Polo wrote that Khan had four wives and kept a rotation of six concubines every three nights; he lived in “the greatest palace that ever was” and loved to hunt. Kublai Khan left his capitol at Beijing every year on the March 1, and traveled toward the coast—on 4 elephants, with 10,000 tents, 10,000 falconers, and 10,000 “watchers,” who covered the ground in search of “great or fierce beasts.” Half a millennium later,

Samuel Taylor Coleridge woke up in an opium stupor and wrote a poem about *Shangdu*, or Xanadu, Kublai's summer hunting palace—where “twice five miles of fertile ground/With walls and towers were girded round:/And there were gardens bright with sinuous rills,/Where blossomed many an incense-bearing tree;/And there were forests ancient as the hills,/Enfolding sunny spots of greenery” (Coleridge [1797/1968], *Kubla Khan*, l. 6-11; Polo [1926], *Book*, ii.18-20).

## Europe

Contemporary emperors hunted in Europe. In 146 B.C., Scipio Aemilianus Africanus had Carthage burned, paving the way for Augustus, the first emperor of Rome. Scipio and his Greek friend, Polybius, were “devoted to the chase;” and so was Augustus' worst enemy, Marc Antony, who fished and hunted in North Africa with Cleopatra and their fellow “inimitable livers.” Augustus, like most emperors, encouraged his subjects to farm. A hunter, in love with his boars and stags, neglected his health and neglected his wife. It was better to stay home and till the soil “for the sake of the empire, that it may prosper.” But most emperors were hunters (Horace [1983], *Odes*, i.1; Plutarch [1973], *Life of Antony*, 28-29; Polybius [1992], *Histories*, xxxix.8; Virgil [1999], *Georgics*, 1).

By the second century A.D., the Roman emperor Hadrian was killing lions “with his own hands” and founding a city in Asia called *Hadrianutherae* or Hadrian's Hunt. Not much later, Commodus, the philosophical emperor Marcus Aurelius' son, hunted in the circus in Rome. He killed 100 lions with 100 javelins and shot off the heads of several ostriches—then brought the heads over to his senators' boxes. “And though he spoke not a word, yet he wagged his head with a grin, indicating that he would treat us in the same way,” said the senator Cassius Dio (Cassius [1914], *Roman History*, lxix.10, lxxiii.21; *Historia Augusta* [1922], *Hadrian*, xxvi.3).

Arrian, who hunted with Hadrian in Greece, wrote an *Anabasis* about Alexander the Great, and a short book *On Hunting*. He talked about prey ranging from rabbits to lions, “showing how they are to be caught by ingenuity and skill” (Arrian [199], *On Hunting*, i.3).

Four centuries earlier, Xenophon the Athenian, who died the year before Alexander was born, wrote his own *Anabasis*, plus another short treatise *On Hunting*. He said a great deal about dogs. Of all the pleasures in life, the chase offered the most benefits: It made men “modest and straight,” and kept them out of trouble in the courts. “The one group attacks wild animals,

the other their friends,” he thought (Xenophon [1999], *On Hunting*, xii.6, xiii.16).

## The Far West

There was less big game in the New World, so some kings pursued birds. Bernardino de Sahagún, who came to Mexico from Salamanca in 1529, wrote a chapter on “How the Rulers Took Their Pleasure” in his *History of the Things of New Spain*. “They shot with bow and arrow—with a bow, with a shaft, with bird arrows, with darts,” he wrote; or they used birding nets (Sahagún [1954], *Florentine Codex*, viii.10).

Other Spaniards wrote about Inca hunters. Pedro Cieza de León came to the New World at 16 and published the first part of his *Chronica del Perú* a year before he died, in 1554, in Spain. He talked about outings in the high Andes, where tens of thousands of beaters gathered, “or 100,000 if it was so ordered.” Bernabé Cobo, who came to Lima in 1599 and died there over half a century later, referred to those public hunts as *chacos*. As many as 20,000, 30,000, or 40,000 heads were taken at once—guanacos and vicunas, bears, foxes, and wild cats (Cieza de León [1959], *Chronicle*, ii.16; Cobo [1979], *History*, ii.29; Garcilaso de la Vega [1966], *Royal Commentaries*, vi.6).

## Why Kings Hunt

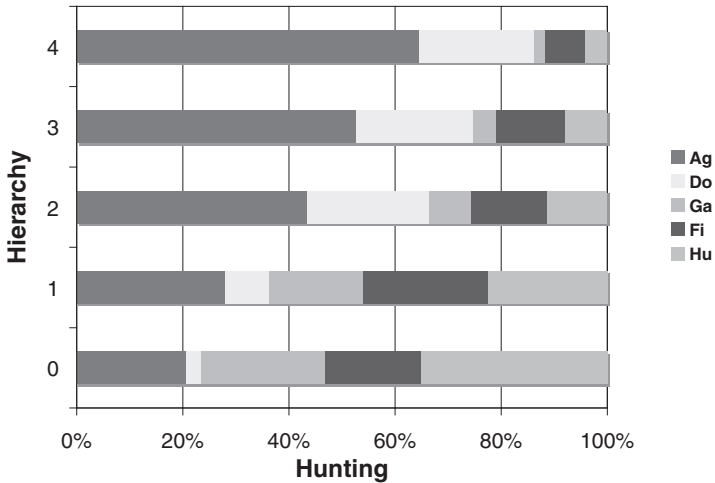
### To Get Meat

Hunting fed just a fraction of the people in most kingdoms; but that fraction seems to have included kings. Empires were built on agriculture—on domesticated animals and plants (Figure 1); but most emperors ate game.

Kublai Khan set aside 3 months—December, January, and February—for his subjects to hunt, to the extent of a 40-day radius from his Beijing palace; he ordered that all large carcasses get sent to his court. “To be more particular: of all the larger beasts of the chase, such as boars, roebucks, bucks, stags, lions, bears, and so on, the greater part of what is taken has to be sent, and feathered fowl likewise,” Marco Polo remembered. The animals were gutted and shipped in on carts, and the haul was “immense.” Where distance prohibited the supply of fresh meat, subjects were ordered to send skins—to be converted into supplies for the emperor’s army (Polo [1926], *Book*, ii.17).

India’s third emperor, Ashoka, set up a rock edict to say: “Formerly, in the kitchen of Beloved-of-the-Gods, king Biyadasi, hundreds of thousands of animals were killed every day to make curry. But now with the writing of

**Figure 1**  
**The Contribution of Hunting to Subsistence**  
**Decreases With Hierarchy**



Note: Ag = Agriculture; Do = Domestic Animals; Ga = Gathering; Fi = Fishing; Hu = Hunting. Codes taken from Barry and Schlegel (1982) for subsistence and Murdock and Provost (1973) for hierarchy.

this *Dhamma* edict only 3 creatures, 2 peacocks and a deer are killed, and the deer not always.” Another edict protected other species: parrots, minas, geese, ducks, bats, queen ants, boneless fish, tortoises, porcupines, squirrels, deer, bulls, wild pigeons, wild asses, “and all 4-footed creatures that are not useful or edible” were exempt from the hunt; but most emperors would fail to abide by those edicts (Ashoka [1997], *Rock Edict 1, Pillar Edict 5*).

Huge hunting preserves were set aside in Europe. Early in the ninth century, Charlemagne sent out a *capitulary*—a set of royal orders, in chapters—to say that “in our forests no one shall dare to steal our game, which we have already many times forbidden to be done.” And Charlemagne’s grandsons counted hunters (*bersarii*), greyhound trainers (*veltarii*), and beaver hunters (*bevaraii*) among the servants at their palaces (*Capitulary for the Missi* [1975], c. 39; Hincmar of Rheims [1970], *On the Palace*, 2).

There were enormous reserves in England, where in the 11th century William the Conqueror “made great protection for the game, and imposed



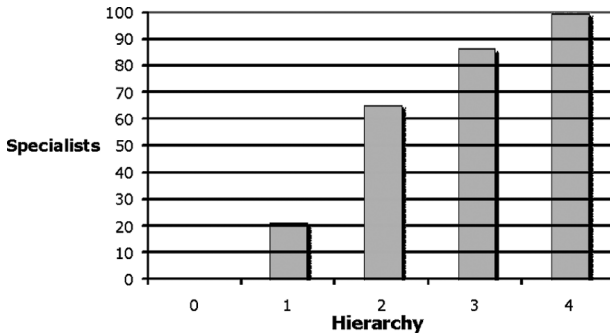
laws for the same; that he who so slew hart or hind, should be made blind.” When the Conqueror’s fourth-generation descendant, King John, capitulated to his barons by signing the *Magna Carta*, he promised to open his enclosures—which by then included close to a third of the land in England. “All forests which have been afforested in our time shall be disafforested at once,” his barons wrote. But the hunting didn’t stop. The Conqueror’s 20th-generation descendant, King Charles I, ran roughshod over his subjects’ houses and farms, to put in a park for red and fallow deer from Richmond to Hampton Court. “They who did not wish the king’s health could not love him; and they who went about to hinder his taking recreation which preserved his health might be thought, for aught he knew, guilty of the highest crimes,” his supporters decried; but his enemies disagreed—and on a cold day in January of 1649, they chopped off the king’s head (*Anglo-Saxon Chronicle E* [1961], 1087; Clarendon [1958], *History*, i.208-212; *Magna Carta* [1992], c. 47; Poole, 1955).

## To Learn How to Fight

Some kings learned how to make war in the wilderness. Samson—who delivered the Israelites from the Philistines’ hands—showed off his prowess by tearing a lion asunder; David—who killed the Philistine, Goliath, with a sling, and tens of thousands in battle—started off smiting bears and lions. “The Lord who delivered me from the paw of the lion and from the paw of the bear, will deliver me from the hand of this Philistine,” he believed (Judges 14:6; 1 Samuel 17:37).<sup>3</sup> On the other hand, it was not always necessary to learn how to fight at all. Kings delegated most jobs relating to politics—for instance, they let chamberlains manage their treasuries, and they let generals manage their wars (Figure 2). Why risk their necks in the woods, if they never went into the field?

It is true that kings, who were remembered as great warriors, were generally remembered as great hunters. In Egypt, the great elephant hunter, Thutmose III (“the flaming serpent who destroys his enemies”) leveled 350 cities in 17 campaigns; Amenhotep II, his rhinoceros-hunting son (“the world being in his hand in a single knot”) took 89,600 captives from Palestine. Assyria’s Ashurbanipal, one of the outstanding lion hunters of all time, made war on his brother in Babylon—bringing “chariots, coaches, palanquins and concubines” home. In sum, the world’s great conquerors—from Alexander to Genghiz—were all great hunters; and all of the world’s first emperors—from India to China and beyond—went after large armies, as they went after large game (Amenhotep II [1982] *Great Sphinx Stele*,

**Figure 2**  
**The Proportion of Societies With Full Time Political Specialists Increases With Hierarchy**



Codes taken from Ross (1983) for political specialization and Murdock and Provost (1973) for hierarchy.

*Memphis and Karnak Stele*; Ashurbanipal [1927], *Rassam Cylinder*, 6th Campaign; *Assyrian and Babylonian Chronicles* [1975], 14; Thutmose III [1969], *Gebel Barkal Stele*, *Karnak Annals*, Year 23).

The most explicit connection was drawn by Xenophon, whose writings instructed Alexander the Great. “I charge the young not to despise hunting or any other schooling; for these are the means by which men become good in war,” he wrote. Hunting made the body healthy, improved hearing and sight, kept men young, and trained them for military campaigns. They would bear up on longer marches, be able to sleep on harder ground, get used to obeying orders, and learn not to desert their posts. “Of such men, therefore, are good soldiers and generals made.” Among others, Polybius agreed. He reminded Scipio Africanus, his eminent Roman friend, that members of the royal house of Macedon, Alexander for instance, had always been “devoted” to the chase. It was the best of all possible ways to train young men (Polybius [1992], *Histories*, xxxi.29; Xenophon [1999], *On Hunting*, i.18, xii.1-9).

But when their armies took the field, plenty of kings stayed home. Empires were always established by conquest, and the emperors who won them were always good fighters. But many of their heirs did not bother: Dynasty founders showed off the scars on their breasts, but their descendants showed off their “family portraits.” Some delegated wars to their generals; others delegated wars to their eunuchs. Caesar built an empire in

Rome by winning battles from Gaul, to Britain, to Spain, to North Africa, to the Near East. But his fifth-generation descendant, Gaius, led an army to the beach, then issued an order to “Collect sea shells!”; and 5 centuries later, when Justinian I tried to win back Rome, he sent his 74-year-old eunuch Narses from Constantinople to complete the job. In Assyria, Ashurbanipal’s grandfather, Sennacherib, sent his field marshal and “chief eunuch” to set siege to Jerusalem in 701 B.C.; Bagoas, “a eunuch in physical fact but a militant rogue in disposition,” led Darius III’s Persian armies. In India, Akbar the Great promoted his eunuchs as *mansabdars*: Among other things, they commanded his legions. A century after Kublai Khan, the great Ming emperor, Yongle, made his general Gang Bing in charge of the capital—then went off on a hunting party. To indicate his loyalty, Gang Bing proceeded to castrate himself. He ended up as chief palace eunuch and was deified after he died (Abu-l-Fazl [1997], *Ain-I-Akbari*, i.77; Procopius [1914], *Gothic War*, iv.26; Sallust [2000], *Jugurtha*, lxxxv.30; Suetonius [1993], *Gaius*, 46; Diodorus of Sicily [1970], *History*, xvii.5; Zhang Tingyu [1974], *Ming shi*, 304; 2 Kings 18:17).

## Why Kings Should Avoid Hunting

Hunting was extremely expensive. Kings lost time with their ministers and with their families; they spent enormous resources on elephants and horses, hounds, hawks, manpower, and fodder. In addition to the obvious time and money costs, there were huge risks. Hunting kings and kings in training, that is, their sons were often wounded. And more than a few died.

### Time and Money

Kings set aside enormous parks; they stocked them with game; they maintained well-caparisoned elephants and horses; and they bred thousands of hawks and dogs. Some of these costs of the chase would have been inevitable in any case—either to bring meat to the table or to go to war. Even if were less land, some land had to be set aside for domesticated food; furthermore, cavalries needed mounts. But the pageantry was unnecessary and very costly.

When Kublai Khan went out hunting in March with his 10,000 tents, his own awning was covered with ermine and sable: They called him the *King of Furs*. Akbar the Great kept 12,000 elephants of the largest class, another 20,000 elephants of other classes, 12,000 one-eyed antelopes, and 12,000

rams, rhinoceroses, ostriches, and hippopotami “to serve for the chase.” In his *Memoirs*, Akbar’s son and heir, the World Seizer Jahangir said that although he “discharged all the elephants, excepting those effectually trained for war,” the pursuit of an antelope (“I continued in a state of debility and anxiety of mind for nearly a month”) nearly did him in (Jahangir [1999], *Memoirs*, 79, 104; Polo [1926], *Book*, ii.20).

Other kings wasted a lot of time. Philip II Augustus, the Capetian king—whose successor, Philip IV “the Fair,” would be done in by a boar—survived a hunting accident at Senlis at the age of 14. He grew up, went on the third crusade, invaded England, and consolidated the government of France—but it was not enough. “King Philip is hunting sparrows and tiny birdies here with falcons, and his men don’t dare tell him the truth—that, little by little, they are going downhill,” his troubadours complained. Four centuries later, the first Stuart king of England, James I, wrote an advice book for his son and heir, Charles. He thought hunting and hawking were honorable and noble pastimes, but hoped the boy might cultivate other interests. “Observe that moderation, that ye slip not therewith the houres appointed for your affaires, which ye ought ever precisely to keepe,” he wrote (Bertran de Born [1986], *S’ieu Fos Asissi*; James I of England [1994], *Basilicon Doron*, 3).

## Morbidity and Mortality

Hunting cost more than time and money: Hunters were often injured, and more than a few died. Some were felled by stray arrows, whereas others were felled by their own arrows; some caught cold in the forest, and others fell off their horses. It is impossible to quantify the time and money costs or the morbidity and mortality risks. However, a list of anecdotes is impressive: Plenty of kings were wounded or killed chasing game in the woods.

One day in August of 1227, Genghis Khan—whose grandsons included Kublai—fell off his horse in a hunt. “My flesh pained me as we hunted the wild horses of Arbuqa,” he remembered; and he died soon after. Another of Genghis’ descendants, Akbar’s grandson, Shah Jahan, was attacked by a Bengal cat. “A badly wounded tiger bounded up and hung on with its claws fixed in his elephant’s head;” the emperor clubbed the tiger with his matchlock, and the elephant crushed it against a tree (Manucci [1907], *Storia do Mogor*, ii.2; *Secret History* [2001], 267).

Further West, other royals were hurt. Herod the Great, who got elected “king of the Jews” by Marc Antony and the Roman senate, and might have slaughtered a few potential rivals in Judea, brought down 40 wild animals in a day (boars, wild asses, stags) and ran in with his own sons. People talked about how

they had “plotted against him, and waited for an opportunity to kill him while hunting.” More than a millennium later, Fulk V of Anjou, Jerusalem’s fourth crusader king, rode after a hare but fell off his horse. “The saddle struck his head, and his brains gushed out” (Josephus [1997], *Jewish War*, i.14.4, 21.13, 24.8; Paris [1852], 2:16; William of Tyre [1941], *History of Deeds*, xv.27).

Occasionally, ancient Greeks and Romans were injured. One day in 327 B.C., one of Alexander’s officers, Lysimachus, killed a *leo magnitudinis rare*—a “lion of rare magnitude.” Later, Alexander kidded Lysimachus about the injury he got: a laceration “down to the bone,” that almost cost him his life. The Macedonians, worried about what would happen if Alexander were defunct, voted that he should never again risk his life on a hunt. Alexander died anyway 4 years later, and Lysimachus went on to become a king in Asia Minor. Four centuries after that, Hadrian got hurt in the forest. Hadrian was tall, well built, a good horseman, and unusually skilled with his javelin, but “once in a hunt he broke his collar bone and a rib,” his Roman biographer said (Curtius [1971], *History*, iv.14-16; *Historiae Augustae* [1922], *Hadrian*, xxvi.1).

At least two Roman emperors died hunting, after Constantine moved the capital to Constantinople. Late in the ninth century, Basil I got lifted off his horse onto the horns of a stag; he “struck off the head of the faithful servant” who got him down, and died later of a fever in his palace. In the middle of the 12th century, John II Comnenus, whose sister Anna wrote a book about the crusades, got taken out in a ravine called the Crow’s Nest. A boar overturned his quiver, “one of the falling arrows pierced the emperor’s skin,” and the arrow was poisoned (Gibbon [1995], *Decline and Fall*, 48; Choniates [1984], *Annals*, 39).

Many more European kings were wounded in the woods with course of time. After the last Roman emperors relocated to Constantinople, Merovingian kings rose up in the West. In the sixth century, Clovis’ son, Lothar, was out hunting in the forests outside Paris when “he fell ill with a high temperature,” took to his bed, and died. A little later Chilperic, a son of Lothar’s, had gone out to hunt at Chelles, when a subject stepped out of the shadows to stab him—“and that was the end of this wicked man.” Childeric, the last of Clovis’ line, would be eliminated in the same way:

His dissolute way of life was incensing all the great men of the palace; so finally one of them, annoyed even more than the others, struck Childeric a death-dealing blow whilst he was out hunting in the woods and thought him safe. (Gregory of Tours [1974], *History of the Franks*, iv.21, vi.46; *Suffering of St Leudegar* [1996], 13)

Then in the ninth century, the Carolingians took over. They were avid hunters, and suffered for it. Court poets talked about Charlemagne going out at first light, armed with iron spears and linen nets, onto fields covered with herds of stags: “the venerable beacon of Europe makes his way before the breeze”; and they talked about how Louis the Pious, his son, was more interested in *feras* than *barberas*—in wild animals than wild men. But Charlemagne and Louis lost at least three descendants in the forests. One died in Compiègne, where his friend accidentally, “by the devil’s action,” struck him in the head with a sword. Another was speared by a boar or “unintentionally wounded by one of his vassals while hunting, and died.” The third fell from his horse chasing deer in a thicket near Frankfurt and was “hurt in the ribs”—but, unlike his unlucky cousins, recovered (*Annals of St Bertin* [1991], 864; *Annals of Fulda* [1992], 884; Einhard, *Charlemagne and Pope Leo*; Theodulf of Orleans [1987], *Power Will Not Abide Being Shared*).

Before the second millennium began, there was another empire east of the Rhine. Otto the Great was waited on by his independent Bavarian, Lotharingian, Franconian, and Swabian dukes, after his accession in the year 936; a century later, “more from ignorance than intention,” Ernest of Swabia was struck down in the woods, when the arrow from a knight missed a doe. By the middle of the 13th century, the Holy Roman Emperor and *wonder of the world* (*Stupor Mundi*), Frederick II, who wrote a treatise on hawking (*De Arte Venandi cum Avibus*), died of dysentery at his hunting lodge in the south of Italy, the Castel del Monte. In the 16th century, another Holy Roman Emperor, the *great huntsman* Maximilian I (“the Great Huntsman killed 100 ducks with 104 shots”), wrote another 2,500 word treatise on hunting for his grandsons; he died in the Austrian hills of a chill he had caught on the chase—leaving his empire to one of those grandsons, Charles V (Maximilian I [1901], *Das Jagdbuch*; Paris [1852], *English History*, 1250; Thietmar of Merseburg [2001], *Chronicle*, vii.14).

William the Conqueror lost two of four legitimate sons in the woods. Richard, his third son, went “galloping in pursuit of wild beast” in his father’s New Forest and got crushed between a hazel branch and the pommel of his saddle. He confessed, was absolved, and died. Twenty years later, William Rufus (the Red) got pierced through the heart in the same forest by Walter Tirel’s “carelessly aimed” arrow. Just 3 months before, in the New Forest in May, one of the Conqueror’s bastard grandsons had been laid low by another arrow.

While the king’s knights were out hunting, and were aiming their shafts at does and stags, one of the knights shot an arrow at a wild beast and accidentally struck the noble youth Richard, duke Robert’s son. He fell dead on the

spot. (Florence of Worcester [1854], *Chronicle*, A.D. 1100; Orderic [1980], *Ecclesiastical History*, v.11-15, x.14)

This list is not close to complete.

## Benefits and Costs

Evolutionary psychology is predicated on the assumption that humans are collections of vestiges; that Pleistocene ecologies shaped our mental and physical traits, which are often at odds with modern environments, and maladaptive behaviors resulted. Hunting was *the* human adaptation on the savannah for hundreds of thousands of years. Good hunters won mates by providing meat; or they attracted them by *showing off* the talents involved in killing game. Human bodies and minds should have been shaped to reflect those facts.

In foraging societies all over the world—from Africa, to Australia, to the Americas—successful 20th century hunters collected more mates, and raised more sons and daughters, than unsuccessful hunters; the same was probably true of prehistorical foragers for most of the last 100,000 years. Some hunters might have benefited their mates and children directly, by providing meat. Others might have attracted mates and helpers by showing off the physical prowess it took to hunt. In any case, in agricultural societies—in historical societies—the parameters changed. The costs might outweigh the benefits for hunting kings.<sup>4</sup>

Largely as a result of their own invention, most people now live in environments vastly unlike the ones they evolved in. But in historical societies, as in prehistorical societies, human behaviors have often been means to the spread of genes. Civilizations began as the products of conquest, on circumscribed parts of the planet, where the subjected were unable to run away. Even writing and counting—the historical record itself—started out as a tax collection device. Kings everywhere have wiped out their most potent competitors and run governments with the help of trustworthy eunuchs—their sterile castes; they have collected girls captured by their generals in war and procured by their governors as tribute—thousands or even tens of thousands of women, who have given them dozens or hundreds of children.<sup>5</sup>

On the other hand, for the past 5,000 years, the historical record—from the chronicles, to the codes, to advice manuals, to odes—has been filled with hunting kings. The bulk of that evidence is enormous. From the friezes on Ashurbanipal's Assyrian palace, to the inscriptions on Egyptian temples, to the marks on Shang dynasty oracle bones, to travelers' accounts of great Mughal courts, the descriptions of royal hunting fill volumes. But why?

Neither kings, nor the thousands of women and children in their families, nor the thousands of men in their bureaucracies, nor the thousands of men in their armies, were at risk of going hungry: They were vastly outnumbered by farmers, who supplied them with food on demand. All kingdoms and empires were built on agriculture and on domesticated animals and plants. Grain was usually abundant; and so, often, was meat—from birds, or mammals, or both. Hunting was not necessary to keep kings fed; furthermore, it was absolutely unnecessary that kings hunt to feed themselves.

As far as Xenophon and others were concerned, good hunters grew up to become good fighters. Hunting animals in the woods was a good training for hunting men in wars. It made men fit, good on a horse, better with weapons, and knowledgeable of terrain. Most kingdoms and empires were established, and defended, by conquest. But it is not obvious that kings always led their own armies. Conquerors fought their own wars; but their heirs delegated many battles to their generals. Why not delegate training exercises? Why not delegate hunts?

The costs were enormous. Some kings assembled extravagant menageries with thousands of animals; they hired or maintained tens of thousands of beaters or falconers; they camped in enormous bivouacs, outfitted in silk or sable; they caparisoned the elephants and horses they rode in silver and gold. Some of those animals and materials—the horses, the tents—would have been usable otherwise; but others—the falconers, the furs—would not. Furthermore, most kings devoted enormous amounts of time to the chase. Kublai Khan gave 3 months every year—December to March—to the hunt. And others, such as the great Mughal emperor Akbar were “continually” running off into the forest. Some had to be warned by their ministers, others had to be warned by their fathers, not to neglect the duties of their offices, for the sake of the chase. On the hunt, as in everything else, kings were ostentatious: They showed off enormous amounts of manpower, horsepower, material resources, and time. But it is not clear why, given an option to show off in extravagant palaces, they felt it necessary to show off in extravagant tents. And it is not obvious why—given an option to stay safe at home, surrounded by bodyguards, provided with a steady diet by their field laborers, and women collected as tribute by provincial governors—they felt it necessary to show off their physical prowess by bringing down big game.

Because, most of all, hunting was dangerous! Many kings lost their lives the woods, as did ministers and family members. Alexander the Great’s lieutenant, Lysimachus, was seriously wounded in the leg; Genghis Khan died after a fall from his horse. Charlemagne’s son, Louis the Pious, worried some of his court poets because he spent too little time at war and too



much time in the forest. But Louis ran a bigger risk than that: He lost at least three grandsons—Charles the Child, another Louis, and a Carlomann—to fatal hunting accidents. And William the Conqueror, who incurred the enmity of many of his subjects for the severity of his forest laws, lost two sons, and at least one grandson, in his New Forest, where they got leveled by low branches or stray arrows, chasing after stags.

So maybe it is a vestige

## Notes

1. I have confined this discussion mostly to the indigenous empires: India and China in Asia, Mexico, and Peru in the Americas; Mesopotamia and Egypt in the Near East—with a little about Europe. Good general surveys on these areas include Kuhrt (1995) on Mesopotamia, Shaw (2000) on Egypt, Majumdar (1951-1996) on India, Huang (1997) on China, Smith (2003) on Aztecs; D'Altroy (2002) on Incas, and the *Cambridge Ancient History* (1982) on Greece and Rome. Kelly (1995) is a good overview of hunting in prehistory and on hunting in history (see Allsen, 2006; Cartmill, 1993).

2. Mesopotamia, Egypt, and India all developed writing at around the same time: see Houston (2004).

3. It is a little bit interesting that Israel robbed his older brother, Esau, of his birthright—when he “went to the field to hunt for game” (Genesis 27:5).

4. See Wilson (1978) and Barkow, Tooby, and Cosmides (1992) on evolutionary psychology; see Lee and DeVore (1968) and Hill (1982) on human evolution and hunting. Hill and Hurtado (1996) and Smith (2004) review evidence that better hunters have higher reproductive success; see Bliege Bird, Smith, and Bird (2001) and Hawkes and Bliege Bird (2002) on hunting as “showing off.”

5. See Carneiro (1970) for the classic article on the origin of civilization; see Schmandt-Besserat (1996) on early writing. See Betzig (1986, 1992a, 1992b, 1995, 2002, 2005, in press-a, in press-b) on Darwinian history. I thank Matt Cartmill, Kim Hill, and the Quinlans for reading this article.

## References

- Abu-l-Fazl. (1977). *Akbar Nama* (H. Beveridge, Trans.). Delhi, India: Ess Ess.
- Abu-l-Fazl. (1997). *Ain-I-Akbari* (H. Blochman, Trans.). Delhi, India: Low Price.
- Allsen, T. (2006). *The royal hunt in Eurasian history*. Philadelphia: University of Pennsylvania Press.
- Amarna letters*. (W. L. Moran, Trans.). Baltimore: Johns Hopkins University Press, 1992.
- Amenhotep II. (1969). *Memphis and Karnak Stele* (J. B. Pritchard, Trans.), *Ancient near eastern texts*. Princeton, NJ: Princeton University Press.
- Amenhotep II. (1982). Great Sphenix Stele (B. Cumming, Trans.), *Egyptian historical records of the later eighteenth dynasty*. Warminster, UK: Aris & Phillips.
- Amenhotep III. (2001). *Wild cattle hunt* (J. H. Breasted, Trans.), *Ancient records of Egypt*. Chicago: University of Illinois Press.

- Anglo-Saxon Chronicle*. (D. Whitelock, Trans.). London: Eyre and Spottiswoode, 1961.
- Annals of Fulda*. (T. Reuter, Trans.). Manchester, UK: Manchester University Press, 1992.
- Annals of St Bertin*. (J. Nelson, Trans.). Manchester, UK: Manchester University Press, 1991.
- Arrian (1999). *On Hunting* (A. A. Phillips & M. M. Willcock, Trans.). Warminster, UK: Aris & Phillips.
- Ashoka (1997). *Edicts* (R. Thapar, Trans.), *Ashoka and the decline of the Mauryas*. Bombay, India: Oxford University Press.
- Ashurbanipal. (1927). *Rassam cylinder*. (D. D. Luckenbill, Trans.), *Ancient Records of Assyria and Babylon*. Chicago: University of Chicago Press.
- Ashurbanipal. (1989). *Lion hunt inscriptions* (D. D. Luckenbill, Trans.), *Ancient Records of Assyria and Babylon*. Chicago: University of Chicago Press.
- Ashurnasirpal I. (1989). *Colossi from Calah*. (D. D. Luckenbill, Trans.), *Ancient Records of Assyria and Babylon*. Chicago: University of Chicago Press.
- Ashurnasirpal II. (1989). *Banquet*. (D. D. Luckenbill, Trans.), *Ancient Records of Assyria and Babylon*. Chicago: University of Chicago Press.
- Assyrian and Babylonian Chronicles* (A. K. Grayson, Trans.). New York: J. J. Augustin, 1975.
- Barkow, J., Tooby, J., & Cosmides, L. (Eds.). (1992). *The adapted mind*. New York: Oxford University Press.
- Barry, H., & Schlegel, A. (1982). Cross-cultural codes on contributions by women to subsistence. *Ethnology*, 21, 165-188.
- Bertran de Born. (1986). *Poems* (W. Padden, Trans.). Berkeley: University of California Press.
- Betzig, L. (1986). *Despotism and differential reproduction: A Darwinian view of history*. Hawthorne, NY: Aldine-de Gruyter.
- Betzig, L. (Ed.). (1992a). Roman polygyny. *Ethology and Sociobiology*, 13, 309-349.
- Betzig, L. (Ed.). (1992b). Roman monogamy. *Ethology and Sociobiology*, 13, 351-383.
- Betzig, L. (1995). Medieval monogamy. *Journal of Family History*, 20, 181-215.
- Betzig, L. (2002). British polygyny. In M. Smith (Ed.), *Human biology and history* (pp. 30-97). London: Taylor & Francis.
- Betzig, L. (2005). Politics as sex: The old testament case. *Evolutionary Psychology*, 3, 326-346.
- Betzig, L. (in press-a). Fertility in the Bible and Ancient Near East. In R. Goldberg (Ed.), *Judaism in biological perspective*. Boulder, CO: Paragon.
- Betzig, L. (in press-b). The end of the republic. In P. Kappeler (Ed.), *Primate behavior and human universals*. Chicago: University of Chicago.
- Bliege Bird, R., Smith, E. A., & Bird, D. W. (2001). The hunting handicap: Costly signaling in human foraging strategies. *Behavioural Ecology and Sociobiology*, 50, 9-19.
- Book of Lord Shang*. (J. J. L. Duyvendak, Trans.). Chicago: University of Chicago Press, 1928.
- Cambridge Ancient History*. Cambridge, UK: Cambridge University Press, 1982.
- Capitulary for the Missi, 802. The Reign of Charlemagne*. (H. Loyn & J. Percival, Trans.). London: Longman's, 1975.
- Carneiro, R. (1970). A theory of the origin of the state. *Science*, 169, 733-738.
- Cartmill, M. (1993). *A view to a death in the morning*. Cambridge, MA: Harvard University Press.
- Cassius, D. (1914). *Roman history* (E. Cary, Trans.). New York: Macmillan.
- Cieza de León, P. (1959). *The Incas* (H. de Onis, Trans.). Norman: University of Oklahoma Press.
- Clarendon, Edward Earl of. (1958). *History of the Rebellion and Civil Wars in England* (W. Dunn Macray, Ed.). Oxford, UK: Author.
- Cobo, B. (1979). *History of the Inca Empire* (R. Hamilton, Trans.). Austin: University of Texas Press.

- Coleridge, S. T. (1797/1968). *Kubla Khan*. In E. H. Coleridge (Ed.), *Complete poetical works*. London: Allen & Unwin, Oxford: Clarendon.
- Coniariates, N. (1984). *Annals* (H. Magoulias, Trans.). Detroit, MI: Wayne State University Press.
- Curtius, R. (1971). *History of Alexander* (J. C. Rolfe, Trans.). London: Heinemann.
- Cyrus the Great. (1969). *Cylinder* (J. B. Pritchard, Trans.), *Ancient Near Eastern Texts*. Princeton: Princeton University Press.
- D'Altroy, T. (2002). *The Incas*. Oxford, UK: Basil Blackwell.
- De Bary, W., & Bloom, I. (1999). *Sources of Chinese tradition* (2nd ed.). New York: Columbia University Press.
- Diodorus of Sicily. (1970). *History* (C. H. Oldfather, Trans.). London: Heinemann.
- Florence of Worcester. (1854). *Chronicle* (T. Forester, Trans.). London: Henry Bohn.
- Garcilaso de la Vega. (1966). *Royal commentaries of the Incas* (H. Livermore, Trans.). Austin: University of Texas Press.
- Gibbon, E. (1776-1788/1995). *The history of the decline and fall of the Roman Empire*. Harmondsworth, UK: Penguin.
- Gilgamesh*. (M. G. Kovacs, Trans.). Stanford: Stanford University Press, 1989.
- Gregory of Tours. (1974). *History of the Franks* (L. Thorpe, Trans.). Harmondsworth, UK: Penguin.
- Hawkes, K., & Bliege Bird, R. (2002). Showing off, handicap signaling, and the evolution of men's work. *Evolutionary Anthropology*, 11, 58-67.
- Hill, K. (1982). Hunting and human evolution. *Journal of Human Evolution*, 11, 521-544.
- Hill, K., & Hurtado, A. M. (1996). *Ache life history*. Hawthorne, NY: Aldine-de Gruyter.
- Hincmar of Rheims. (1970). *On the governance of the palace* (David Herlihy, Trans.), *Feudalism*. London: Macmillan.
- Historia Augusta*. (D. Magie, Trans.) London: William Heinemann, 1922.
- Horace. (1983). *Complete odes* (W. G. Shepherd, Trans.). Harmondsworth, UK: Penguin.
- Houston, S. (2004). *The first writing*. Cambridge, UK: Cambridge University Press.
- Huang, R. (1997). *China: A macro history*. London: Sharp.
- Jahangir. (1999). *Memoirs* (W. M. Thackston, Trans.). New York: Oxford University Press.
- James I of England. (1994). *Basilicon Doron*. In J. P. Sommerville (Ed.), *Political Writings*. Cambridge, UK: Cambridge University Press.
- Josephus, F. (1997). *The Jewish war* (H. St. J. Thackeray, Trans.). Cambridge, MA: Harvard University Press.
- Kangxi. (1975). *Self Portrait* (J. D. Spence, Ed. & Trans.). New York: Vintage.
- Kelly, R. (1995). *The foraging spectrum*. Washington, DC: Smithsonian.
- Kuhrt, A. (1995). *The ancient near east*. London: Routledge.
- Lee, R., & DeVore, I. (1968). *Man the hunter*. New York: Aldine-de Gruyter.
- Liezi* (A. C. Graham, Trans.). New York: Columbia University Press, 1990.
- Magna Carta*. (J. Holt, Trans.). Cambridge, UK: Cambridge University Press, 1992.
- Mahabharata*. (J. A. B. van Buitenen, Trans.). Chicago: University of Chicago Press, 1983.
- Majumdar, R. C. (1951-1996). *History and culture of the indian people* (6th ed.). Bombay, India: Bhavan.
- Manucci, N. (1907). *Storia do Mogor* (W. Irvine, Trans.). London: John Murray.
- Maximilian, I. (1901). *Das Jagdbuch*. Innsbruck: Verlag der Wagner'schen Universitäts-Buchhandlung.
- Megasthenes. (1877). *Indika* (J. W. McCrindle, Trans.). London: Trubner.
- Murdock, G. P., & Provost, C. (1973). Measurement of cultural complexity. *Ethnology*, 12, 379-392.
- Orderic, V. (1980). *The ecclesiastical history of England and Normandy* (M. Chibnall, Trans.). Oxford: Clarendon.

- Paris, M. (1852). *English history* (J. A. Giles, Trans.). London: Henry Bohn.
- Plutarch. (1973). *Lives* (R. Warner, & I. Scott-Kilvert, Trans.). Harmondsworth, UK: Penguin.
- Polo, M. (1926). *The book of Marco Polo* (H. Yule, Trans.). London: John Murray.
- Polybius. (1992). *Histories* (W. R. Paton, Trans.). Cambridge, MA: Harvard University Press.
- Poole, A. L. (1955). *Domesday book to Magna Carta*. New York: Oxford University Press.
- Procopius. (1914). *The Gothic War* (H. B. Dewing, Trans.). London: Heinemann.
- Ramayana*. (R. Goldman and others, Trans.). Princeton: Princeton University Press, 1984-1996.
- Ross, M. H. (1983). Political decision making and conflict. *Ethnology*, 22, 169-192.
- Sahagún, B. de. (1954). *Floretine Codex, or general history of the things of New Spain* (A. Anderson, & C. Dibble, Trans.). Santa Fe, NM: School of American Research.
- Sallust. (2000). *The war with Jugurtha* (J. C. Rolfe, Trans.). London: Heinemann.
- Schmandt-Besserat, D. (1996). *How writing came about*. Austin: University of Texas Press.
- Secret History of the Mongols*. (U. Onon, Trans.). Richmond: Curzon Press, 2001.
- Shaw, I. (2000). *Oxford History of Ancient Egypt*. London: Oxford University Press.
- Sima Qian. (1993). *Shi ji* (B. Watson, Trans.). New York: Columbia University Press.
- Sima Xiangru. (1971). *Wen xuan* (B. Watson, Trans.). *Chinese rhyme prose*. New York: Columbia University Press.
- Smith, E. A. (2004). Why do good hunters have higher reproductive success? *Human Nature*, 15, 343-64.
- Smith, M. E. (2003). *The Aztecs* (2nd ed.). Oxford, UK: Basil Blackwell.
- Suetonius. (1993). *Lives of the Caesars* (R. Graves, Trans.). Harmondsworth, UK: Penguin.
- Suffering of St Leudegar*. (1996). *Late Merovingian France* (P. Fouracre & R. Gerberding, Trans.). New York: Manchester University Press.
- Theodulf of Orleans. (1987). *Power will not abide being shared* (P. Godman, Trans.). *Poets and Emperors*. Oxford, UK: Clarendon.
- Thietmar of Merseburg. (2001). *Chronicle* (D. Warner, Trans.). Manchester, UK: University of Manchester Press.
- Thutmose III. (1969). *Memphis and Karnak Stele* (J. B. Pritchard, Trans.). *Ancient near eastern texts*. Princeton, NJ: Princeton University Press.
- Thutmose III. (1982). *Gebel Barkal Stela* (B. Cumming, Trans.). *Egyptian historical records of the eighteenth dynasty*. Warminster, UK: Aris & Phillips.
- Tiglath-Pileser I. (1989). *Prism inscription* (D. D. Luckenbill, Trans.). *Ancient Records of Assyria and Babylon*. Chicago: University of Chicago Press.
- Virgil. (1999). *Georgics* (G. P. Goold, Trans.). Cambridge, MA: Harvard University Press.
- William of Tyre. (1941). *A history of deeds done beyond the sea* (E. Babcock & A. C. Krey, Trans.). New York: Free Press.
- Wilson, E. O. (1978). *On human nature*. Cambridge, MA: Harvard University Press.
- Xenophon. (1994). *Cyropaedia* (W. Miller, Trans.). Cambridge, MA: Harvard University Press.
- Xenophon. (1999). *On Hunting* (A. A. Phillips & M. M. Willcock, Trans.). Warminster, UK: Aris & Phillips.
- Zhang, T. (1974). *Ming Shi*. Beijing, China: Zhong hua shu ju.

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