

## Caesar's Elks: Interpolation, Myth, or Fact?

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### 1. The Problem

Any Swedish academic teacher reading the sixth book of Caesar's *De bello Gallico* with a group of undergraduates will feel a certain anticipatory pleasure when the students come to Caesar's remarkable description of the Hercynian forest and the curious animals that roamed its secret interior.<sup>1</sup> The text of the passage in question, chapters 25 to 28, is as follows, in the English translation by EDWARDS 1979, 351ff:

It is known that many kinds of wild beasts not seen in any other places breed therein, of which the following are those that differ most from the rest of the animal world and appear worthy of record.

There is an ox shaped like a stag, from the middle of whose forehead between the ears stands forth a single horn, taller and straighter than the horns we know. From its top branches spread out just like open hands. The main features of female and of male are the same, the same the shape and the size of the horns.

There are also elks so-called. Their shape and dappled skin are like unto goats, but they are somewhat larger in size and have stumps of horns. They have legs without nodes or joints, and they do not lie down to sleep, nor, if any shock has caused them to fall, can they raise or uplift themselves. Trees serve them as couches; they bear against them, and thus, leaning but a little, take their rest. When hunters have marked by their tracks the spot to which they are wont to betake themselves, they either undermine all the trees in that spot at the roots or cut them so far through as to leave them just standing to outward appearance. When the elks lean against them after their fashion, their weight bears down the weakened trees and they themselves fall along with them.

A third species consists of the ure-oxen so-called. In size these are somewhat smaller than elephants; in appearance, colour, and shape they are as bulls. Great is their strength and great their speed, and they spare neither man nor beast once sighted. These the Germans slay zealously, by taking them in pits; by such work the young men harden themselves and by this kind of hunting train themselves, and those who have slain most of them bring the horns with them to a public place for a testimony thereof, and win great renown. But even if they are caught very young, the animals cannot be tamed or accustomed to human beings. In bulk, shape, and appearance their horns are very different from the horns

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<sup>1</sup> This paper is a revised version of one originally published by me in ASZTALOS – GEJROT 1995:15-37, under the heading "Caesar's Elks and Other Mythical Creatures of the Hercynian Forest". This revision, besides correcting certain misunderstandings on my part concerning the life-cycle of the elk and the geography of ancient Gaul and modern France, presents my arguments in a more consistent sequence. I have gratefully adopted corrections offered by Prof. Theodore W. Pietsch, Seattle.

of our own oxen. The natives collect them zealously and encase the edges with silver, and then at their grandest banquets use them as drinking-cups.<sup>2</sup>

The students' reaction upon receiving this information is invariably an amused incredulity mingled with wonder that Caesar was capable of believing such patent nonsense and reporting it in serious terms. The part that most of all moves Swedish readers to laughter is his description of the anatomy of the elk,<sup>3</sup> and of the German method of trapping this unfortunate animal with a view to killing it.

This reaction is, of course, not unique to Swedish, or even Scandinavian students; but the amusement may be stronger in the Nordic countries, not only because the elk nowadays only survives in numbers in northern Scandinavia, but even more because this, the largest European member of the *Cervidae*, is the prime game of Swedish hunters every autumn, the hunt being a ritual, surrounded by an aura of male come-togetherness and jocularitas, and possibly — owing to its fundamentally democratic and popular character — also by stories of heavy drinking and wild shooting, exceeding those associated with the killing of any other big game. In brief, the shooting of the elk is part of the Swedish national heritage and thus a subject that Swedish students would naturally feel that they know quite a lot about — hence,

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<sup>2</sup> (6,25,5) multaue in ea genera ferarum nasci constat quae reliquis in locis visa non sint; ex quibus quae maxime differant ab ceteris et memoriae prodenda videantur haec sunt.

(26,1) Est bos cervi figura, cuius a media fronte inter aures unum cornu existit excelsius magisque directum his, quae nobis nota sunt, cornibus; (2) ab eius summo sicut palmae rami late diffunduntur. (3) Eadem est feminae marisque natura, eadem forma magnitudoque cornuum.

(27,1) Sunt item quae appellantur alces. Harum est consimilis capris figura et varietas pellium, sed magnitudine paulo antecedunt mutilaeque sunt cornibus et crura sine nodis articulisque habent, (2) neque quietis causa procumbunt neque, si quo afflictas casu conciderunt, erigere sese aut sublevare possunt. (3) His sunt arbores pro cubilibus: ad eas se applicant atque ita paulum modo reclinatae quietem capiunt. (4) Quarum ex vestigiis cum est animadversum a venatoribus, quo se recipere consuerint, omnes eo loco aut ab radicibus subruunt aut accidunt arbores tantum, ut summa species earum stantium relinquatur. (5) Huc cum se consuetudine reclinauerunt, infirmas arbores pondere affligunt atque una ipsae concidunt.

(28,1) Tertium est genus eorum qui uri appellantur. Hi sunt magnitudine paulo infra elephantos, specie et colore et figura tauri. (2) Magna vis eorum est et magna velocitas, neque homini neque ferae quam conspexerunt parcunt. (3) Hos studiose foveis captos interficiunt; hoc se labore durant adulescentes atque hoc genere venationis exercent, et qui plurimos ex his interfecerunt, relatis in publicum cornibus, quae sint testimonio, magnam ferunt laudem. (4) Sed assuescere ad homines et mansuefieri ne paruuli quidem excepti possunt. (5) Amplitudo cornuum et figura et species multum a nostrorum bouum cornibus differt. (6) Haec studiose conquisita ab labris argento circumcludunt atque in amplissimis epulis pro poculis utuntur. (Caesar, *Guerre des Gaules*, ed. Constans 1972; orthography and punctuation somewhat changed by me).

<sup>3</sup> *Alces alces alces* (Lin.), which, though smaller, is on the whole identical with the North American moose.

Caesar's story of Germans cunningly trapping unlikely elks in an unrealistic fashion will strike these students as very funny indeed.

This paper is an attempt to defend Caesar as a naturalist; that is, to put his story into a perspective that renders it more or less rational. In the following discussion, we shall, however, restrict ourselves to the most unlikely part of the story, namely the description of the elk. The reports on the reindeer and the ure-ox do not contain the same, sensationally impossible details, and may therefore be left aside. If the elk story can be defended, the credibility of the two other stories will automatically increase to the point where they may be explained as hearsay, slightly misunderstood, but not completely impossible.

Our discussion is in three parts and will, first of all, concern the question of the authenticity of the text itself; then we shall attempt to trace the story of a stiff-legged animal back to its roots, a problem that is entangled with the question of the nature of the elk itself; we will finally discuss the likelihood of Caesar's having actually seen an elk with his own eyes or observed other natural phenomena that led him to believe that this incredible story was applicable to the elk.

## 2. The Authenticity Question in Classical Scholarship

The students' reaction echoes that exhibited by many scholars during the first half of the 20th century, who regarded Caesar's account of the Hercynian forest as spurious in its entirety and representing an accidental or wilful interpolation. This discussion was mainly conducted in Germany, where the interpolation theory was strongly advanced by H. MEUSEL<sup>4</sup> and A. KLOTZ<sup>5</sup>. Their view was that a number of passages in the *Bellum Gallicum* were either marginal notes that had been introduced accidentally into the text or even downright forgeries by an interpolator; this theory<sup>6</sup> was primarily founded on literary and linguistic considerations and only secondarily on the subject matter itself. The only scholar who appears to have discussed at length the credibility of Caesar's animal descriptions themselves, was W.W. HYDE:<sup>7</sup> while regarding the section in question as spurious, he traced the history of the story of a stiff-legged animal through

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<sup>4</sup> MEUSEL 1910, pp. 20-75.

<sup>5</sup> KLOTZ 1910.

<sup>6</sup> For a thorough report on the great number of arguments used, see KALINKA 1929.

other classical sources, thereby giving Caesar's story a traditional setting. The interpolation theory remained virtually unchallenged for almost two decades, until F. BECKMANN<sup>8</sup> defended the authenticity of the text, not only in the matter of the language and the factual contents of Caesar's description of the *Hercynia silva* but also of the other disputed, geographical excursions, namely those concerning the rivers Maas and Rhine (*BG* IV 10) and on Britain (*BG* V 12-14).<sup>9</sup> BECKMANN systematically examines and rejects, first the linguistic arguments used by MEUSEL and KLOTZ in support of the interpolation theory (pp. 86-103); on pp. 158-161 he furthermore contends that the description of the Hercynian forest does not from a contextual point of view hang in the air, as it were, but is rather an excursus to an excursus. He defends the authenticity of the animal descriptions (p. 160) in the following manner:

Die Mitteilung über den Elchfang der Germanen enthält freilich für unser empfinden einen anekdotenhaften Zug. Doch wenn Meusel (J.B. 1910,29; Komm. II 528) sie Caesar als einen 'kritisch veranlagten Natur' absprechen, dagegen ganz ähnliche Angaben Diodor (III 27) und Plinius (n.h. VIII 39) als 'Raritätensammlern' belassen will,<sup>10</sup> übersieht er zunächst, daß die Beschreibung der Fauna fremder Länder in der antiken Länderbeschreibung von jeher einen festen Platz einnahm und teils aus ungenügender naturwissenschaftlicher Kenntnis, teils aus Lust am Fabulieren zahllose Kuriosa wunderlichsten Art zu melden wußte, die oftmals das bei Caesar Erzählte an Seltsamkeit noch überbieten.

Weiter bedenkt er nicht, daß die Frage nicht lautet, ob Caesar durchgehends an die Richtigkeit seiner Angaben selber geglaubt hat, sondern, ob er die Lust verspürt haben kann, seinen römischen Lesern beiläufig solche Dinge zu erzählen. Diese Frage läßt sich nicht verneinen.

We shall return to a discussion on BECKMANN's standpoint at the end of this section. BECKMANN's vindication<sup>11</sup> of the authenticity of Caesar's geographical excursions was

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<sup>7</sup> HYDE 1917-18. This paper unfortunately has not been available to me, and I have perforce relied on KALINKA's short, but highly appreciative précis (KALINKA 1929, p. 53). The salient point of this paper, in relation to my own, is that HYDE regarded the passage in question as an interpolation.

<sup>8</sup> BECKMANN 1930.

<sup>9</sup> Another, early rejection of the interpolation theory, albeit not so comprehensive as BECKMANN's was OPPERMANN, 1933.

<sup>10</sup> In a footnote BECKMANN adds a reference to STEINITZ 1927, p. 183f. In this paper, which I have not been able to read myself, STEINITZ apparently maintains that Caesar's hunting story is, on the whole, in accord with known techniques among the Germanic peoples and the Finns. I find this difficult to believe, as BJÖRKLÖF's authoritative treatise (cf. below, note 24) does not mention any hunting method even remotely similar to that described by Caesar; the oldest, known way of catching an elk by means of an artificial device is that which has been used the world over for all big game: the camouflaged pit with sharpened stakes (cf. BJÖRKLÖF 1994, p. 115).

<sup>11</sup> It was accepted by LÖFSTEDT, 1933, p. 175 note 2, with the following comment: "Hoffentlich wird diese wichtige und auch in methodischer Hinsicht mustergültige Untersuchung der Jagd nach geographischen Interpolationen bei Caesar ein Ende machen." LÖFSTEDT's copy, with own his marginal annotations, of BECKMANN's monograph is now in the possession of the Royal Library, Stockholm.

not universally accepted: a rear-guard action was fought by H. FUCHS<sup>12</sup> who devoted some space to arguments that would speak for the interpolation theory in conjunction with our passage. Remarkably enough, he only discussed the lacking overt subject of 25,1 *noverunt* and the exact meaning of 25,4 *huius Germaniae* but left the question of the animals and their qualities almost entirely aside; only the following, generalizing judgment hints at his having considered the narrative itself problematical: "... in dem Abschnitt über den Hercynischen Wald finden sich Wendungen, die es zweifelhaft erscheinen lassen, ob die dort mitgeteilten Nachrichten von vornherein für die *Commentarii* bestimmt werden sind."

Later, KLOTZ, who had been so impressed by BECKMANN's study that he declared himself defeated,<sup>13</sup> found new strength in the review by FUCHS and resumed his original position in a long paper.<sup>14</sup> As regards the problems offered by the Hercynian forest, however, he only remarked that FUCHS had said everything that was necessary. Another defender of the interpolation theory, G. JACHMANN<sup>15</sup> introduced his paper on the interpolation question with the following, dogmatic remark: "Die Unechtheit gewisser geographisch-ethnographischer Partien in Caesars *Bellum Gallicum* ist eine unbestreitbare Tatsache, die nochmaligen Bewieses nicht bedarf" (p. 161). Fully in the same spirit he dismissed our passage as a forgery (p. 183).

The final crushing of the interpolation theory came by the hand of K. BARWICK, who first devoted a monograph and, three years later, a paper to the vindication of the disputed passages.<sup>16</sup> The arguments of both sides were later brilliantly reviewed, unfortunately only in the Swedish language, by H. HAGENDAHL,<sup>17</sup> who unhesitatingly sided with those who regard these passages as genuinely by Caesar's own pen — he particularly supported BARWICK, whose monograph he nominated as one of the most important modern works on Caesar's *Commentarii*.

The discussions for and against the interpolation theory are mainly based on linguistic arguments — with the exception of HYDE's paper —, and give very few arguments concerning the authenticity of the actual description of the Hercynian forest and its curious animals: even the editors appear to have contented themselves with a

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<sup>12</sup> FUCHS 1932, particularly p. 252f. and 257.

<sup>13</sup> KLOTZ 1931.

<sup>14</sup> KLOTZ 1934, particularly p. 95.

<sup>15</sup> JACHMANN 1940.

<sup>16</sup> BARWICK 1938 and 1942.

<sup>17</sup> HAGENDAHL 1949.

summary rejection. Thus, MEUSEL<sup>18</sup> athetized the whole section (VI 25-28) and epitomized his rejection by the comment on 27,2 *crura sine nodis articulisque*: "eine solche Fabelei soll Caesar geglaubt und ohne die leiseste Andeutung eines Zweifels weiter erzählt haben?!" CONSTANS<sup>19</sup> is no less scathing in the Introduction (p. XIV) to his edition, where he attributed our passage to a secretary of Caesar's, concluding: "Il ya telles puérilités sur la faune de la forêt hercynienne qu'on répugne à attribuer à un esprit comme le sien". Later, in his review on BECKMANN's work he revised this stand, and suggested that the description of the Hercynian forest was added only in imperial times<sup>20</sup> — we may note that Constans' edition, originally published in 1926, was reprinted without changes for the tenth time as late as 1972, the furious discussions of the nineteen-thirties and forties notwithstanding!<sup>21</sup>

As we are, ourselves, convinced that BARWICK and HAGENDAHL were successful in rejecting the interpolation theory and that it is not possible to dismiss this passage out of hand as spurious and unworthy of Caesar, we will still join the students in appreciating the unconscious humour of his rather inept description, but we have every reason to subject it to a closer scrutiny.

### 3. Caesar's Stiff-legged Elk: the Mythical and the Factual Background

The essence of the question may be stated thus: did Caesar have any factual basis at all for his fantastic account or did he carelessly take over and recount traditional information, awarding by his own initiative fabulous qualities to the elk, an animal that he would therefore not have seen with his own eyes?<sup>22</sup> The question so summarily killed by BECKMANN, in the passage quoted above, actually turns out to be of crucial importance. If Caesar had re-told a traditional story, adding that he had had this information from older sources, we should have had no reason to react. Our disbelief stems from the fact that Caesar recounts a traditional story without reference to the tradition, and applies it to a hitherto virtually unknown animal, as if he had seen it with his own eyes. We thus partially agree with MEUSEL, KLOTZ, CONSTANS, and other

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<sup>18</sup> C. Iulii Caesaris *Commentarii de bello Gallico*, erklärt von Fr. Kraner und W. Dittenberger. Siebzehnte, vollständig umgearbeitete Auflage von H. Meusel, Berlin 1920, II.

<sup>19</sup> César, *Guerre des gaules*, Texte établi et traduit par L.-A. Constans. Paris (Budé), 1926. Repr. 1972.

<sup>20</sup> CONSTANS 1931, p. 73f. *REA* 32 (1931), p. 73f.

<sup>21</sup> Another, late adherent to the interpolation theory is NIELSEN 1945, particularly p. 113.

<sup>22</sup> This appears to be the standpoint of ROSE 1936, p. 213, note 77.

scholars, when we maintain that it is hardly in Caesar's character to introduce, without any ostensible motive, a tall tale into an otherwise fairly dull, geographical account.

In order to find a reasonable explanation to this puzzle we now follow two trails, namely the history of the story about an animal with stiff legs and the physical nature of the elk.

The nature of the elk seems, on the whole, to have been of very little concern to scholars to whom this animal may have been almost as mythical as it was to Classical Antiquity. It is perhaps not to be wondered at that the first attempt we have seen so far to effect a reconciliation between Caesar's description and reality is offered by a Swedish naturalist, John BERNSTRÖM. In the great, modern encyclopaedia on the cultural history of the middle ages in Scandinavia, *Kulturhistoriskt lexikon för nordisk medeltid*, this learned scholar wrote a series of articles on various mythical and factual beasts in the Scandinavian fauna. His articles on the elk and the elephant are particularly illuminating as regards our problem.

In the article on the elk (Sw. *älg*), BERNSTRÖM not only traces the history of the word *älg* itself but also carefully records the appearance of this animal in ancient and medieval literature; so doing, he appears to lean heavily on PAULY-WISSOWA<sup>23</sup>, but adds some information of his own.<sup>24</sup> BERNSTRÖM assumes that Caesar had really seen an elk, in the form of a stiff-legged and undernourished calf. He furthermore reports, but does not evaluate, the story of the German method of hunting the elk. The stiff legs BERNSTRÖM correctly traces to an older, Greek tradition, which attributed this quality to the elephant.

The latest and most authoritative treatise of the elk is the 300-page *Älgen i vår historia och vardag* by Sune BJÖRKLÖF,<sup>25</sup> a most learned work, unfortunately published only in the Swedish language. BJÖRKLÖF, recounting Caesar's words, concludes: "Caesar's description, however curious it might be, apparently refers to an elk calf."<sup>26</sup>

Both BERNSTRÖM and BJÖRKLÖF, thus, accept that Caesar may actually have seen an elk, albeit one in a sorry shape. There is, indeed, nothing intrinsically impossible in the notion that an elk may have presented itself to Caesar's sight in the

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<sup>23</sup> PAULY-WISSOWA 1905, article "Elefant".

<sup>24</sup> BERNSTRÖM does not mention, however, that Tacitus (*Germ.* 43,13) assigns the name of *Alces* to a Vandal god. Cfr ROSENFELD 1940, pp. 1-6, and BICKEL 1940.

<sup>25</sup> BJÖRKLÖF 1994.

more distant parts of Gaul. In prehistoric times this animal was to be found all over Europe, including northern Italy, and the diminution of its geographical spread is linked to the advance of civilisation.<sup>27</sup>

We must switch at this point to the other question, namely that which concerns the history of the story concerning an animal with stiff legs. We may note that BERNSTRÖM follows PAULY-WISSOWA in attributing the tradition to Ctesias. Whether this is correct or not is a rather difficult question, for it appears to be founded on two passages in Aristotle,<sup>28</sup> rejecting older, erroneous ideas about the elephant's legs. Aristotle does not explicitly name Ctesias as the object of his polemics — he only uses general phrases: *w(/sper e)/lego/n tinej* (“as some used to allege”) and *o( palaio\j h)=n lo/goj toiou=toj* (“The old account”), which are rather remarkable ways of referring to a literary source from the generation preceding his own. On the other hand, he does mention Ctesias by name in those instances where he rejects his notions on the temperature of the elephant's sperm.<sup>29</sup> In the absence of clear evidence that Ctesias did report the story of a stiff-legged elephant, which we have not been able to find in the extant fragments,<sup>30</sup> it is perhaps safer merely to record that a Greek tradition concerning the elephant's stiff legs existed even in the 4th century B.C., but that it was rejected already by Aristotle.

We may state, at any rate, that it is quite probable that Caesar knew the older Greek tradition that there did exist an animal with stiff legs, but also that he had very good reason to regard with suspicion its attribution to the elephant: both Aristotle's words and his own experience would contribute to a his scepticism.

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<sup>26</sup> My translation. BJÖRKLÖF 1994, p. 16: ”Caesars beskrivning, hur kuriös den än är, tyder på att den avser en älgkalv.”

<sup>27</sup> BJÖRKLÖF, op. cit. 16ff.

<sup>28</sup> Aristotle, *Historia Animalium* II,1 (498a): (O d' e)le/faj ou)x ou/(twj w(/sper e)/lego/n tinej, a)lla\ sugkaqi/zei kai\ ka/mptei ta\ ske/lh, plh\n ou) du/natai dia\ to\ ba/roj e)p'a)mfo/tera a(/ma, a)ll' a))nakli/netai h)\ e)pi\ ta\ eu)w/numa h)\ e)pi\ ta\ decia\/, kai\ kaqeu/dei e)n tou/t% t%= sxh/mati, ka/mptei de\ ta\ o)pi/sqia ske/lh w(/sper a)/nqrwpoj — The elephant does not behave as some used to allege, but settles down and bends its legs, though it cannot on account of its weight settle down on both sides simultaneously, but reclines either on to the left or on to the right, and in that posture goes to sleep. Its hind legs it bends just as a human being does (Aristoteles, *Historia animalium*, I, Ed. A. L. Peck, Loeb Classical Texts, 1979).

Idem, *De gressu animalium* IX (709) )Ende/xetai me/ntoi kinei=sqai kai\ mh\ e)/xontoj kamph\n tou= ske/louj, w(/sper ta\ paidi/a e(/rpousin. kai\ peri\ tw=n e)lefa/ntwn o( palaio\j h)=n lo/goj toiou=toj, ou)k a)lhqh\j w)/n — It is possible, however, to move even if the leg has no bend in it, as happens when children crawl. (The old account attributed such motion to elephants, but it is untrue). (Aristoteles, *Parts of Animals, Movement of Animals, Progression of Animals*, Edd. A. L. Peck — E. S. Forster, Loeb Classical Texts, 1968).

<sup>29</sup> *Historia animalium* 523a and 606a, *De gressu animalium* 736a.

<sup>30</sup> HENRY 1947.

This leads us to further questions: what induced Caesar to take over this story and attribute it to the elk? Did he make up all the remarkable details about the hunting method? Did he have a local source for this part, or was this story, too, imported from the Greek? Did he, finally, link the hearsay evidence with something he had seen with his own eyes?

There almost certainly existed a contemporary, Greek tradition concerning an animal with so stiff legs that it could be captured by means of an undermined tree. This is indicated by Diodorus Siculus' account (III 27) of the elephant, which has all the qualities of Caesar's elks:<sup>31</sup>

For it is the habit of this animal, whenever it has had its fill of grazing, to lie down to sleep, the manner of which it does this being different from that of all other four-footed animals; for it cannot bring its whole bulk to the ground by bending its knees, but leans against a tree and thus gets the rest which comes from sleep. Consequently the tree, by reason of the frequent leaning against it by the animal, becomes both rubbed and covered with mud, and the place about it, furthermore, shows both tracks and many signs, whereby the Ethiopians who search for such traces discover where the elephants take their rest. Accordingly, when they come upon such a tree, they saw it near the ground until it requires only a little push to make it fall; thereupon, after removing the traces of their own presence, they quickly depart in anticipation of the approach of the animal, and towards evening the elephant, filled with food, comes to his accustomed haunt. But as soon as he leans against the tree with his entire weight he at once rolls to the ground along with the tree, and after his fall he remains there lying on his back the night through, since the nature of his body is not fashioned for rising. Then the Ethiopians who have sawn the tree gather at dawn, and when they have slain the beast without danger to themselves they pitch their tents at the place and remain there until they have consumed the fallen animal.

Unfortunately, we are not sufficiently informed on the life of Diodorus to state positively whether his account precedes Caesar's story or not. LESKY<sup>32</sup> links Diodorus' life to an event in 36 B.C., which rather suggests that his story is younger than that of Caesar. The present discussion would have profited considerably, if we could have pointed at an undoubted, direct literary source to Caesar's elk story; but the account of Diodorus, who is not known as an independent historian but as one who relies heavily on his sources, indicates at the very least that elephant stories were in active circulation

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<sup>31</sup> English translation by OLDFATHER 1979, p. 157f.

<sup>32</sup> LESKY 1971, p. 871.

in Caesar's time and that Caesar almost certainly had a story of this kind in mind, when he wrote his own description of the elk.<sup>33</sup>

This is borne out by the quite astonishing way these two accounts agree in details: both mention that the animal leans against a tree to get its sleep, that the hunters find its resting-place thanks to the tracks it leaves, that the tree is undermined by sawing or cutting, and that the animal overturns the tree and follows it to the ground. Caesar's story is brief and dry to the point of dullness, whereas Diodorus's account, being longer, offers more information of a drastic kind. Thus, where Caesar is content with noting that the elks leave tracks for the hunters to find, Diodorus elaborates on the elephants' rubbing their resting trees and smearing them with mud; Caesar's way of informing us that the trees are unstable (*tantum ut summa species earum stantium relinquatur*) is abstract in the extreme, while Diodorus is clear and concise: "until it requires only a little push to make it fall" (*me/xri a)\n o)li/ghn e)/ti th\n r(oph\n e)/x\$ pro\j th\n ptw=sin*); finally, Diodorus offers us the picture of the elephant's remaining on his back all the night through, until the hunters come to finish it off, whereas Caesar abandons the falling animal to its fate.

A reasonable conclusion of the foregoing is that Caesar was acquainted with the elephant story in the shape in which Diodorus reports it from an unknown source, but, having seen elephants at the Circus and during his career abroad, he regarded it as pure fiction.

#### 4. Did Caesar ever See an Elk?

We have now reached the third question: what persuaded Caesar to recount this improbable story, while removing the elephant and introducing a new animal in its stead? Discarding the theory that Caesar did this merely to tell a tall story in the middle of his rather dry geographical commentaries, we are bound to argue that he had observed some natural phenomenon that offered a credible background to the incredible story. Our thesis, thus, is that while in Gaul or at the German border, Caesar made observations that transformed the tale of the stiff-legged animal, from an implausible

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<sup>33</sup> STÜBE 1921, p. 450-452, traces this story from Greece to India, where it was told, not about the well-known elephant, but about the rhinoceros. The origin of this version of the story was probably China: Stübe here refers to Laufer 1913, p. 361-364. STÜBE in verification recounts a Chinese variant of the story, dating to the T'ang dynasty (618-907 A.D.).

account of the elephant, to a perfectly sensible description of another, hitherto fairly unknown animal, called *alces*.

In our view, two chains of events, both admittedly hypothetical but nonetheless perfectly possible and quite likely in the circumstances known, led up to the description we are offered in *De bello Gallico*.

First of all, we assume that Caesar himself only saw an elk at a distance, probably in the early morning, when ground-fog would render details hazy and only allow of a general impression of the elk. Caesar's comments on the size of the elk and on the state of its antlers actually fit a bull calf in his first winter quite well. Caesar's hypothetical observation could have taken place during an early reconnaissance ride or even by Caesar's looking outside the palisade of a temporary camp, before the bustle of the new day had broken the night's silence. This appears a more reasonable assumption than that of BERNSTRÖM and BJÖRKLÖF, who, as we have already mentioned, both propose that Caesar was shown an elk, in the shape of an undernourished calf: for although this goes a long way to explain Caesar's estimation of the elk's size, we are still at a loss to explain why he should believe that it had legs that would not bend — at close quarters, even an elk calf obviously possesses visible joints on all its legs. The reproduction in Plate I, of N. TIRÉN's painting (originally produced as a wall chart for school use), will give a very good impression of the kind of landscape the elk prefers, as well as the impression this animal would have given Caesar, save that our discussion presupposes more hazy conditions.

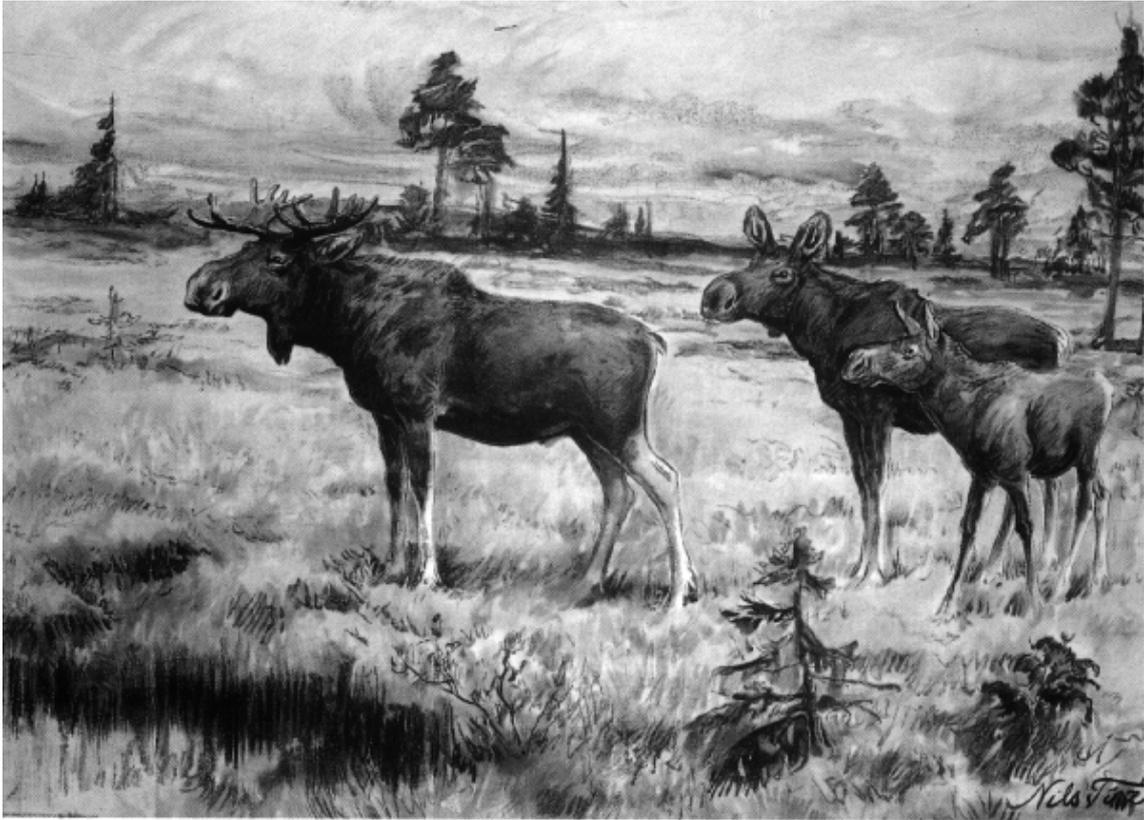


Plate I: Nils TIRÉN, *Älg (Elks)*, 1918. Reproduced from BJÖRKLÖF 1994, p. 52.

Since Caesar is careful to observe, in the beginning of his treatise of the Hercynian forest, that the animals he is describing had never been seen in the Roman parts of the world, we may take this to mean that they were rare in those parts of Gaul which the Romans had just conquered. Hence, if his description of the elk is based on any kind of actual experience on his part, this should have occurred during a foray to the very edge of Roman territory.

The second chain of events is linked to the observed habits of the bull calf in its first year. Details pertinent to this discussion are offered in the popular treatises of ANDERSSON — SVENSSON<sup>34</sup>, HAMILTON<sup>35</sup>, and HANSTRÖM<sup>36</sup> respectively, as well as in the more comprehensive, specialised work by BJÖRKLÖF. The latter, especially, offers a wealth of detail on the subject (p. 70ff.); the facts enumerated below form an amalgamate of the information offered by these four sources.

The elk cow never wears antlers. The bull, on the other hand, sports antlers that, having been felled in December, grow out anew in early spring in order to

<sup>34</sup> ANDERSSON — SVENSSON 1979, pp. 97ff.

<sup>35</sup> HAMILTON 1978, particularly p. 181 and 185.

<sup>36</sup> HANSTRÖM 1960, particularly pp. 213ff.

reach their full size in the autumnal rutting season. Furthermore the bull, born in May or June, during its first winter grows only small antlers, more similar to buttons or short spindly nails than to the spreading edifices of the mature animals. These are usually felled only late in winter. The antlers are by nature covered with a felt-like skin.

These facts firmly set the time for Caesar's hypothetical observation to late winter or very early spring, this being the only period when a bull elk of any age may be observed without antlers at all or, in the case of the calf, with very small ones, and thus fitting the description of a creature that is *mutila cornibus*. Furthermore, in this season, the elk does present a rather shaggy aspect, being in the process of shedding its winter fur.<sup>37</sup>

In late summer, before the rutting season, the bull elk habitually performs an action that may have influenced Caesar's description: he rids his antlers of their covering skin; this process is dubbed *fejning* in Swedish, a word that is associated with thorough house cleaning or the sweeping of chimneys; it is here best rendered by the English "sweeping" ("shedding" being too undramatic a way to describe this action). The bull very violently scrubs its antlers against bushes and small trees, sometimes attacking a tree so hard that it breaks and falls. In this process, blood will be spilled, the ground around the tree will be heavily torn and trodden, the skin covering the antlers will be ripped off and left lying about in blood-soaked flakes. There might even be a pair of broken antlers to fortify the impression of an elk having met with a violent fate. The trees so attacked often stand alone, not in a dense forest but in a clearing.

This habit of the bull elk is, in our opinion, the last link in the hypothetical chain that persuaded Caesar to take over a Greek description of the life and death of the elephant, and to transpose it into an account of the elk and of the German way of hunting for it. If, during a foray, late in the winter season, into the more distant parts of Gaul, Caesar had first observed an elk at a distance, possibly at that time only seeing it at a standstill or at a walk,<sup>38</sup> and then in late summer came across a place in open terrain, where an elk bull had violently swept off its antlers, leaving a felled tree and all that evidence of some violent proceeding which we have just enumerated, we may

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<sup>37</sup> Cf. in particular HAMILTON 1978 with illustrations.

<sup>38</sup> The elk is endowed with very long legs; it generally moves rather slowly at a walk, although it can move very fast indeed if frightened (speeds up to 60 kph have been reported); it is not a good jumper, climbing fences up to the height of 2 meters rather clumsily; it is an extremely good swimmer, elks having been seen crossing the Sound from Sweden to Denmark, and from Sweden to the Baltic islands of Åland and Öland (cf. BJÖRKLÖF 1994, p. 79f.). Even a major continental river as wide as the Rhine would therefore have offered no obstacle at all to its wanderings.

imagine that a local pathfinder might have informed him, perfectly correctly, that this commotion had been created by an elk. Caesar would then have been quite justified in considering that he had found the true and original object of the Greek story of the animal with stiff legs. Among his contemporaries, his account could, in fact, be regarded as a welcome correction of a story that was blemished by its treatment of an animal whose habits were too well known by educated Romans to allow of this kind of fanciful embellishment.<sup>39</sup>

In this way, all the elements of Caesar's story can be accounted for. His impression of the elk's size and colour and the nature of its antlers and legs was the result of his having seen a young bull of a shabby aspect. The animal's reputed manner of resting and falling over with an undermined tree found its confirmation in the tracks left by an elk bull violently sweeping off its old antlers, these tracks being open to the interpretation that the animal had fallen over and struggled for a long time in vain to regain its footing, before being slaughtered and removed by the hunters.

## 5. The Hypothetical Observation

One problem remains to be discussed: Caesar habitually returned to Rome in the winter season, leaving his legions in garrison; this being a custom that gave him very little occasion to observe elks on the German border in early spring. Remarkably, however, Caesar had had to forgo this habit in the winter of 54/53, that is, the winter preceding the very actions reported in the sixth book. Owing to unrest among the tribes of Gaul and among the Germans west of the Rhine, Caesar had spent this winter with his legions near Samarobriua (present-day Amiens) in Northern Gaul. In order to quell the threat of rebellion as soon as possible, he collected four legions and advanced into Nervian territory, devastating the countryside and capturing people and cattle. In the beginning of the sixth book of *De bello Gallico* (ch. 3,1-3), Caesar states that this brief foray into the lands of the Nervians took place *nondum hieme confecta*, that is, before the winter camp was broken. After his quick and successful operation, Caesar in fact allowed his

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<sup>39</sup> We may note in confirmation that when the remarkable story crops up next time, it is recounted by the elder Pliny (*N.H.* 8,xvi,3-4); since elks had, by that time, been seen by Romans (cf. eg. Calpurnius Siculus, *Ecl.* 7:59f.: *vidi genus omne ferarum, / hic niveos lepores et non sine cornibus apros, / hic raram silvis etiam, quibus editur, alcen*), Pliny disengaged the incredible, physical details from the elk and attached them to another animal, the *achlis*, which has remained mythical to this day. In Pliny's account, the elk itself is only remarkable by the length of its ears and neck, which is in itself a perfectly correct observation — although we may take this to mean that Pliny had seen an elk cow, never a bull.

troops to resume their winter rest (*rursus in hiberna legiones reduxit*). If, as is nowadays generally considered to be the case, Caesar wrote down his account of each year's campaigns in the winter after their completion,<sup>40</sup> observations made during the operations during this spring and late summer would be closer to Caesar's mind than those of earlier years, and therefore fall naturally into his narrative of the geography of Germany.

## 6. Conclusion

We may now sum up this effort to defend Caesar's credibility as a naturalist. Having sided with those authorities who rejected the interpolation theory, we have attempted to find a factual background to Caesar's description of the life and death of the elk; we have thus posited that he did know a Greek story, prevalent in his day but surviving to us only in the probably slightly younger version of Diodorus Siculus, describing the nature of the elephant, an animal that Caesar did know, which made him disbelieve the story. Furthermore, we propose that, while leading his troops into a lightning attack on Nervian territory early in the year 53 and while conducting the subsequent campaigns that summer, Caesar made observations that put this story in a completely new perspective: its details were only incredible because they were attributed to the elephant; in Germany there did exist an animal that left tracks fully in conformity with the well-known story, tracks that Caesar had himself observed during his short forays into the lands of the German tribes.

Admittedly, this theory contains a number of imponderables, since we have no way of confirming what Caesar did or did not see on the German border; but it offers, at the very least, a possible elucidation of a passage that has for a long time presented a rather unsightly blemish in Caesar's narrative. As we have seen, the solutions hitherto chosen by classical scholars have been either to dismiss this section of the text as an interpolation, or to maintain that Caesar only followed more or less established practice in attributing curious qualities to little-known places and their inhabitants. Both solutions have their weaknesses, as the interpolation theory, thanks to the opposition by BECKMANN and BARWICK, no longer holds water; the alternative

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<sup>40</sup> This theory was first propounded by EBERT 1909; it is fundamental to BARWICK's discussions (1938, 1942), and was approved by HAGENDAHL (1649); OGILVIE 1982 gives it precedence in his article on Caesar.

solution does not satisfactorily explain why Caesar should have applied the traditional story of the elephant to a completely new animal without even referring to the tradition itself. In this paper, we have instead tried a third way, by attempting to reconcile the apparently impossible details of Caesar's story with known and observed habits of the elk itself.

It is not our desire to rob future students and teachers of Caesar of a legitimate laugh in the middle of their labours; we hope instead that this study will persuade them instead to reflect on the many varying facts of nature and learning that scholarly readers must take into account before they deliver a judgment on the text they are reading.

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