The Meaning of λειπογνώμων

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RELIGIOUS CALENDARS often contain rare words whose meaning is uncertain. The adjective λειπογνώμων occurs four times in the surviving fragments of the calendar of Athenian public sacrifices drawn up by Nikomachos and his fellow *anagrapheis* in the years 403/2–400/399 B.C.,[1] but in literature it appears only later (references *infra*). It applies to animals, and although its meaning is not really obvious, it has escaped comment. I hope to show that the Athenian calendar contains the clue to its meaning.

The present study was begun in connection with a projected full edition of the fragments of several Attic sacrificial calendars. The word is singled out for publication here because of its interest quite apart from cult, and because it may be well to have discussion now. The main conclusion is, I believe, positive, but many words are related, possibly more than I have found.

Here, first, are the occurrences of λειπογνώμων in the Athenian calendar. In alternate years, on 15 Hekatombaion, the Old Attic *trittys* of the Leukotainioi are to receive an οἶς λειπογνώμων. The animal costs four drachmas and is offered to no deity in particular. Also in the same alternate years, on 16 Hekatombaion, the day of the Synoikia, the Old Attic *phyle* of the Geleontes are to sactifice two βόε λειπογνώμωνε to Zeus Phratrios and Athena Phratria. The oxen cost fifty drachmas together.[2] Elsewhere in the calendar, in some month the rubric for which is now missing, an οἶς λειπογνώμων is offered, evidently to Apollo, on the seventh, but no price is preserved.[3]

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[1] Text of the largest fragment, Agora inv. 6244 I 727, in J. H. Oliver, "Greek Inscriptions," *Hesperia* 4 (1935) 5–32; F. Sokolowski, *Lois sacrées des cités grecques, Supplément* (Paris 1962) no. 10A [hereafter cited as SOKOLOWSKI, *LSS*]. Oliver republishes *IG* I² 843 and *IG* II² 1357 as part of the law code; text also in Sokolowski, *Lois sacrées des cités grecques* (Paris 1969) no.17A–C [hereafter SOKOLOWSKI, *LSG*]. S. Dow, "Greek Inscriptions," *Hesperia* 10 (1941) 31–37, adds six new Agora fragments (text also in J. J. E. Hondius, *SEG* X 348); he identifies *IG* I² 844–45 and *Hesperia* 3 (1934) 46 no.34 as belonging to the code. In his Supplément Sokolowski republishes the last-named inscription as no.10B. The author wishes to thank Professor Sterling Dow for his generous help and encouragement.

[2] Sokolowski, *LSS* no.10A, lines 31–58; the sheep in lines 37–38, the oxen in lines 50–51.

[3] Sokolowski, *LSG* no.17C, lines 7–10.

Finally, S. Dow has restored [λ]ειπ[ογνώμων] in a fragment which he has shown lists sacrifices to be performed in the other alternate years, at the Kronia on 12 Hekatombaion. Here neither victim nor price is preserved.[4]

Clearly λειπογνώμων was a technical term of animal husbandry. Infrequent perhaps in everyday speech, and certainly rare in literature, it provoked comment from scholiasts and lexicographers. Since the word occurs mostly in discussions of its meaning, it will be convenient to note first the only other independent uses of it which seem to have survived. In Lucian, *Lexiphanes* 6, a would-be poet whose specialty is odd and obscure words describes a sumptuous banquet at which one of the delicacies consumed was a βοὸς λειπογνώμονος κωλῆ, 'the thigh-bone of an ox which was λειπογνώμων'. From the text itself we learn only that a λειπογνώμων ox was edible—or at least that Lexiphanes thought so! We cannot be sure that Lucian did not intend the phrase as a malapropism of some sort.

The other appearance of the word is less certain. In a sacrificial calendar from Isthmos, Kos (*s*. III. *a*.) F. Sokolowski restores in line 11 οἶς λ[ειπογνώμων].[5] Since the surface of the stone has been severely damaged, little can be determined about the occasion, but one can note that the other victims, as restored by Sokolowski, include ἀ[μνόν] (line 8), ἀμ[ν]ά (line 9), and οἶς, with no adjective preserved (line 9).

Although there seem to survive no other independent uses of λειπογνώμων, its roots furnish important evidence for its meaning. The first part of the word presents no problem: in compounds λειπο-/λιπο- often means simply 'lacking', as many examples in LSJ attest.[6] The active meaning, 'leaving' or 'abandoning', is not relevant here.

The second part of the word obviously comes from the noun γνώμων, one of whose general meanings is 'index' or 'guide'. LSJ list the meaning 'index' among more specific meanings, *s.v.* γνώμων II.5. The word could denote more narrowly a carpenter's square or the pointer of a sundial (II.1, 2a), and it is interesting that Lucian uses γνώμων in the latter sense at *Lexiphanes* 4. As applied to animals, the

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[4] Unrestored text: Dow, *op.cit.* (*supra* n.1) 35, fr. F line 66. A new text of all the fragments is in preparation.

[5] Sokolowski, *LSG* no.169 B II (=J. von Prott, *Leges Graecorum sacrae* I [Leipzig 1896] no. 11B; not restored there).

[6] Both spellings are attested in inscriptions: *cf.* LSJ *s.v.* λειπανδρία.

word γνώμων is stated by LSJ to denote a tooth which showed an animal's age, an index tooth or mark (II.6). The definition implies that a λειπογνώμων animal showed by its lack of certain teeth that it was of a certain age.

Although neither uses the word λειπογνώμων, Xenophon and Aristotle provide important evidence about the γνώμονες. In *De Equitatu* 3.1–2 Xenophon advises the prospective horseman to be certain that the mount which he buys has γνώμονες. Otherwise, he says, the horse will not perform well and will be hard to dispose of. Here the γνώμονες clearly guarantee that the animal is not too old. Aristotle, in *Historia Animalium* (576a6–15, b13–20; 577a19–b4), is more explicit: the teeth called γνώμονες belong to the first or milk dentition of the horse, the mule and the ass. When these animals reached maturity, they were said no longer to possess their γνῶμα or 'mark', a collective term for all the γνώμονες. We have no ancient evidence about the rôle of γνώμονες in telling the age of sheep and oxen, but if the term λειπογνώμων was used similarly of all domestic animals, one would conclude that certain milk teeth of the sheep and ox were called γνώμονες and that when all these were lost the animal was considered full-grown, or λειπογνώμων. Aristotle in fact uses the phrase τὸ γνῶμα λιπεῖν to describe the dropping of the last index teeth (577b4).

One other piece of independent evidence may be adduced. Aristophanes of Byzantion in his discussion of λειπογνώμων[7] quoted two iambic trimeters from unknown authors which confirm that the γνῶμα was a sign of youth:

νέα δ' ἔτ' ἐστίν· οὐχ ὁρᾶις; καὶ γνῶμ' ἔχει.

⟨τὸ⟩ γνῶμα γοῦν βέβληκεν ὡς οὐσ' ἐπτέτης.

The νέα of the first verse cannot be identified; as for the second, the only animal which loses its first teeth as late as seven years seems to be *homo sapiens*. The second verse, and perhaps the first as well, is a comic reference to a young girl. One should note also that the verb βάλλω denotes the 'casting' of teeth, as in Aristotle and elsewhere. The author of this line was using humorously the correct veterinary language.

If we turn now from primary evidence to the second-hand reporting of lexicographers and scholiasts, their conclusions will not seem

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[7] Περὶ ὀνομασίας ἡλικιῶν fr.2 Nauck (Eustath. *Od.* p.1404).

surprising. The ancient testimonia were first assembled by A. Nauck in *Aristophanis Grammatici fragmenta* (Halle 1848) 99–101; all references given *infra* are cited there.

In his Περὶ ὀνομαcίαc ἡλικιῶν Aristophanes concluded that λειπογνώ-μων meant the same thing as τέλειοc (fr.2 Nauck). He asserted that an Attic δωδεκῆιc λειπογνώμων involved full-grown sacrificial victims, presumably twelve in number, and he also stated (incorrectly: *supra*, p.327) that γνώμων and γνῶμα were synonyms.

In his ᾿Αττικαὶ λέξειc (*FGrHist* 334 F 23a) Aristophanes' contemporary Istros gave a similar definition of λειπογνώμων, and most later lexicographers defined the word in essentially the same way. Such later testimonia may well be derived from Aristophanes of Byzantion; in any case they need not be discussed here in detail.

Let us look back now at the Athenian calendar, which has not been used as evidence in any surviving ancient discussion of λειπογνώμων. Only here are the prices of λειπογνώμονεc preserved: four drachmas for a sheep and 25 for an ox. A problem arises, since full-grown victims always cost substantially more: at least 12 drachmas for a sheep in the Athenian calendar and at least 90 for an ox in the calendar of the Marathonian Tetrapolis (*med. s.* IV *a.*).[8] Prices seem to have varied with the size and quality of the victim, but it would be ridiculous to assert that the Athenians sacrificed animals so old or so inferior that they had only one-fourth of their normal market value. It appears, therefore, that the λειπογνώμονεc of the Athenian calendar, far from being full-grown, were young.

In the Koan inscription cited above there appears also the entry Θεῶν Μα | [τρὶ οἷc κυέοcα] τελέα.[9] Here too is evidence which suggests that λειπογνώμων and τέλειοc meant different things. In the fragments

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[8] In Sokolowski, *LSS* no.10A, for example, sheep cost 12 drachmas in lines 60, 62, 79 and 80 (the animal is restored in the last two lines). No other price of an ox is preserved in the fragments of the Athenian calendar, but *cf.* the Marathonian calendar, *IG* II² 1358 (=Prott [*supra* n.5] no.26), line B6 and *passim* for a 90-drachma ox; in line B8 an ox costs more than 100 drachmas (the stone is damaged).

The first fragment discovered containing the word λειπογνώμων was that now known as *IG* II² 1357b (see n.1), which has no price preserved. Both E. Ziebarth (in the first edition, *AthMitt* 23 [1898] 24–25 no.1) and L. Ziehen (*Leges Graecorum sacrae* II [Leipzig 1906] no.16a) refer to the definition given by Aristophanes of Byzantion.

[9] Sokolowski, *LSG* no.169 B I (=Prott [*supra* n.5] no.11A), lines 6–7. Prott places a question mark after the restoration.

of the Athenian calendar the two adjectives do not occur in the same context, but the phrase ἱερὸν τέλειον was employed in at least one list of sacrifices.[10]

In order to explain λειπογνώμων, it will be necessary first to set forth a few veterinary facts.[11] The teeth of the sheep and the ox develop in exactly the same way. Most important in telling the age are the eight incisors at the front of the lower jaw; the upper jaw has here an elastic pad. At birth all these eight teeth are visible through the gum, but generally only a few of their edges have erupted. After four weeks all the milk teeth are well developed. At 12 to 18 months, the central pair of incisors is replaced by a pair of larger permanent teeth. The second pair of incisors, the next tooth outward on either side, is replaced at 18 to 27 months, the third pair six to nine months later, and the last, outermost pair at three to four years.

The Roman *bidens hostia* was so named because two, and only two, larger incisors had appeared at the front of its mouth; it made excellent eating.[12] No exactly equivalent Greek term seems to have survived in a sacrificial calendar, but it is significant that horses were described as ἄβολοι ('not having thrown off teeth'), πρωτοβόλοι ('having cast off the first teeth'), δευτεροβόλοι, and so forth until they were παντιβόλοι (LSJ *s.vv.*). Surely the teeth referred to are the γνώμονες, the incisors lost in regular stages. A *lex sacra* of Keos (*s.* III *a.*) contains this prescription: θύειν δὲ τὸμ μὲμ βοῦν βεβληκότα, τὴν δὲ οἶν βεβληκυῖαν· | ἂν δέ τι καὶ ὑαμινὸν θύηι, μὴ πρεσβύτερον ἐνιαυσίου καὶ ἐγμ[ή] | νου.[13] The age of a pig cannot be told from its incisors as can that of an ox or sheep.[14] If one can assume that the animals βεβληκότες are to be about the same age as the pig, then they must have thrown off only the first pair of incisors: they must be *bidentes*. Taken by itself, however, the phrase οἶς or βοῦς βεβληκώς would suggest an animal which had thrown off all its γνώμονες. If the compilers of this calendar were concerned that the sheep and ox not be too old, they should have specified that they wanted πρωτοβόλους. It seems preferable to take

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[10] Sokolowski, *LSS* no.10B, lines 5, 8.

[11] Facts about teeth have been culled from A. Nehring, "Über *bidens hostia*," *NJbb* 147 (1893) 64–68, and Professor Sir George T. Brown, *Dentition as Indicative of the Age of the Animals of the Farm* (London 1960) 46–49.

[12] Nehring, *op.cit.* (*supra* n.11) 67–68.

[13] Sokolowski, *LSG* no.98 (= Ziehen [*supra* n.8] no.94; *IG* XII.5 647), lines 7–9.

[14] Nehring, *op.cit.* (*supra* n.11) 67 and n.8; *cf.* Ziehen, *op.cit.* (*supra* n.8) 232.

βεβληκώc as denoting a full-grown animal, one which no longer has any milk incisors. Aristotle says that when a horse or mule is βεβ-ληκώc, it no longer has a γνῶμα (*HA* 576b15–16).[15]

If we now look again at the adjective λειπογνώμων with these biological and philological data in mind, further suggestions can be made about its meaning. There are three distinct periods when a sheep or ox can be described, strictly or loosely, as lacking γνώμονεc. When it is fully mature, it obviously has none. Speaking somewhat more carelessly, one might call λειπογνώμων an animal which had cast off one or more pairs of incisors but not all of them, but the arguments given above against such an interpretation of βεβληκώc hold here as well, and one would expect a two-year-old sheep or ox to command a better price than the λειπογνώμονεc of the Athenian calendar. But there is a third possibility. During its first few weeks of life the animal lacks the use of many of its milk teeth; just after birth it appears to be almost toothless. Such animals could well have been called λειπογνώμονεc and would have had prices like those in the Athenian calendar. This would be the youngest age-group of sheep and oxen. If this interpretation is correct, the Athenian *phylobasileis* feasted on a special but very economical delicacy.[16]

If λειπογνώμονεc were new-born, the word was likely to be misunderstood by those who had no occasion to employ it in everyday life. It may indeed have been ambiguous even in fifth-century Athens. A synonym was ἀπογνώμων (Pollux 1.182, *Suda s.v.* ἀβολήτωρ), and it is interesting that as early as the fifth century B.C. a similar adjective, ἀφῆλιξ, could refer to two different age-groups. The comic poet Phrynichos used it of young women, while Kratinos and Pherekrates applied it to older people (Pollux 2.17). In the second century the grammarian Phrynichos (᾽Εκλογή 64) advised those who wished to speak correct Attic Greek to use ἀφῆλιξ of old people rather than of those who had not yet reached legal age. The ambiguity seems to

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[15] J. Taillardat, *Les images d'Aristophane* (Paris 1965) 38, connects the word παράβολοc, by which Bdelykleon describes Philokleon at Ar. *Vesp.* 192, with such words as παρακμάζω. Philokleon, who is also called πονηρόc and who has just failed in his Odyssean escape plan, evidently thinks he has been accused of being too old to make a good meal. See also the edition of D. MacDowell (Oxford 1971) *ad loc.* This is more evidence that in the fifth century other words than λειπογνώμων were used of full-grown animals.

[16] Professor W. M. Calder III, who has saved me from several errors, notes that no occurrence of λειπογνώμων is demonstrably feminine and that young males are often slaughtered while females are kept to be bred and produce milk.

have persisted for centuries, and this may have been the case with λειπογνώμων as well. Compare also the discussion of the adjective ἀπόδρομος in Aristophanes, Περὶ ὀνομασίας ἡλικιῶν fr.1 Nauck.

No ancient scholar seems to have realized the ambiguity of λειπογνώμων, but there is some evidence of a tradition that the youngest animals did not yet possess γνώμονες. In I. Bekker, *Anecdota Graeca* 1.322, *s.v.* ἄβολος, appears this entry: οὐδέπω ἔχων τι ἐπὶ τῶν ὀδόντων γνώρισμα. The *Suda s.v.* ἀβολήτωρ and the scholiast on Plato, *Leges* 834c use the phrase οὐδέπω γνώμονα ἔχων in defining ἄβολος. Yet an animal ἄβολος should be one which has not yet begun to cast off its milk teeth, not one which has not yet grown its γνώμονες. This could be nothing more than a simple error, but possibly the meaning of ἄβολος changed in ancient times. One examined a horse's teeth to determine whether it was ἄβολος, πρωτοβόλος, or at some later stage of development. In Aristotle the noun βόλος denotes the casting of teeth (*HA* 576b13). Much later, in a comic dialogue of Hierokles (*Facetiae* 37), the phrases καταμαθόντος τὸν βόλον and τοὺς ὀδόντας καταμανθάνεις appear in succession and seem to mean the same thing (*cf.* LSJ *s.v.* βόλος). When someone said that he was looking at the βόλος of a horse, he now meant simply the horse's set of teeth.

If this was so, ἄβολος, in turn, could have taken on the new meaning ἄνευ βόλου, *i.e.* ἄνευ ὀδόντων, in place of its old meaning, οὐ βεβληκώς. Animals ἄβολοι in this new sense were also precisely λειπογνώμονες in the sense in which the Athenians seem originally to have used the word. It is at least possible that ἄβολος in its new sense replaced the ambiguous λειπογνώμων to describe the youngest sheep and oxen. Yet one should emphasize that the new definition of λειπογνώμων proposed above in no way depends on the confused testimony of scholiasts and lexicographers.

If λειπογνώμων was indeed ambiguous from very early times, and if it came more and more to denote a mature animal and even, in casual slang, an aging animal or man (*Suda s.v.* ἀβολήτωρ, schol. *ad* Pl. *Leg.* 834c), then the readers of Lucian's *Lexiphanes* may well have reacted much as we would on hearing that someone had dined on "the hindquarter of an edentulous ox."[17] As A. M. Harmon notes, "a conspicuous feature of Lucian's parody of Lexiphanes is the use of words no longer generally employed in the old sense but in a new and very

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[17] A. M. Harmon's translation in the Loeb ed. vol. 5 p.303.

different one, so that double meanings result."[18] *Λειπογνώμων* seems to have been precisely such a word, meaning either οὐδέπω γνώμονας ἔχων or γνώμονας ἤδη βεβληκώς.

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[18] Harmon, *op.cit.* (*supra* n.17) in his introduction, p.291.