

'Greek' and 'Roman' in Latin Medical Texts

*Studies in Cultural Change and Exchange
in Ancient Medicine*

Edited by

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BRILL

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Contents

Preface ix

Introduction 1
Brigitte Maire

PART 1

The Physician 5

- 1 Greek and Roman Patients under Galen's Gaze: A Doctor at the Crossroads of Two Cultures 7
Véronique Boudon-Millot
- 2 "Memorial" Strategies of Court Physicians in the Imperial Period 25
Sébastien Barbara
- 3 The Identity, Legal Status and Origin of the Roman Army's Medical Staff in the Imperial Age 43
Pascal Bader

PART 2

Medical Practice and Theory 61

- 4 Pneumatism in Seneca: An Example of Interaction between Physics and Medicine 63
Frédéric Le Blay
- 5 References to Medical Authors in Non-Medical Latin Literature 77
Innocenzo Mazzini
- 6 At the Crossroads of Greek and Roman Medicine: The Contribution of Latin Papyri
1. Medical Texts; 2. Iatromagical Papyri 92
Marie-Hélène Marganne and Magali de Haro Sanchez

PART 3

Anatomy and Pathology 117

- 7 **Calcidius, Witness to Greek Medical Theories: Eye Anatomy and Pathology** 119

Béatrice Bakhouche

- 8 **Physical Pain in Celsus' *On Medicine*** 137

Aurélien Gautherie

PART 4

Pharmacology and Magic 155

- 9 **The Pharmacological Treatise *Περὶ εὐφορβίου* of Juba II, King of Mauretania** 157

Antoine Pietrobelli

- 10 **"As a Matter of Fact, This is Not Difficult to Understand!": The Addresses to the Reader in Greek and Latin Pharmacological Poetry** 183

Svetlana Hautala

- 11 **Magical Formulas in Pliny's *Natural History*: Origins, Sources, Parallels** 201

Patricia Gaillard-Seux

- 12 **On Analgesic and Narcotic Plants: Pliny and His Greek Sources, the History of a Complex Graft** 224

Valérie Bonet

- 13 **Collyrium Names Attested on Stone Tablets: The Example of the Helvetian Corpus** 240

Muriel Pardon-Labonnelie

PART 5

- Language and Establishment of the Text** 257
- 14 The Meaning and Etymology of the Adjective *Apiosus*** 259
Vincenzo Ortoleva
- 15 The Latin and Greek Tradition of the *Corpus Oribasianum*** 289
Serena Buzzi and Federico Messina
- 16 Galen of Pergamum: A Witness of Scribonius Largus' Œuvre** 315
Alessia Guardasole
- 17 Greek Medicine in Scribonius Largus' *Compositiones*** 330
Sergio Sconocchia
- 18 The Ancient Latin Commentary on the Hippocratic *Aphorisms*
on the Threshold of the Twelfth Century** 350
Manuel E. Vázquez Buján
- 19 On Terminological Variation in the Late Latin Translation of the
Hippocratic *Aphorisms*** 368
Gerd V.M. Haverling
- 20 From Cassius Felix to *Tereoperica*: New Considerations on Indirect
Tradition** 383
Laura López Figueroa
- 21 The Author of Book 10 of the *Mulomedicina Chironis* and Its Greek and
Latin Sources** 402
Valérie Gitton Ripoll
- Indices**
- Index Locorum** 421
- Inscriptions** 440
- Papyrus and Ostraca** 441
- Manuscripts** 442
- General Index** 444

PART 5

Language and Establishment of the Text



The Meaning and Etymology of the Adjective *Apiosus*

Vincenzo Ortoleva

Abstract

The author discusses the etymology and meaning of the adjective *apiosus*, which occurs in Pelagon. 405 (*ad equum appiosum*) and 406; Chiron 17, 257, 260, 276, 278, 279–280, 333, 986; Veg. *Mulom.* 1.25.2, 2.2, 2.5.1, 2.9.3, 2.10, 2.11.1, 2.97.4 (all Vegetius' passages depend on the *Mulomedicina Chironis*) and in Greek transliteration in *Hipp. Cant.* 81 (tit.) (ἀπιώσσου). The *equus apiosus* has staring eyes, pokes his head into the manger, cannot stand, and falls down if he tries to walk; sometimes he turns round and round as if pushing a millstone. The etymology of the word has previously been explained in terms of the curative or magical properties of the *apium* (“celery”) (Ihm and Fischer), or of the sting of the *apis* (“bee”) (Gourevitch) or a mistaken derivation from the Greek with confusion between *σεληνίτης*—which should mean *lunaticus*, “epileptic,” but is not attested in this sense—and *σελινίτης* (from *σέλινον* = *apium*, “celery”) (Magnani). In reality things are different. The word *apiosus* comes from *apium agreste*, or *rusticum* or *risus*, a poisonous plant which may be identified with *Oenanthe crocata* L. or *Conium maculatum* L. The term *apiosus* originally indicated an animal—in particular a donkey—which had eaten a large quantity of hemlock (*Conium maculatum* L.), a plant with intoxicating qualities—it is significantly named *imbriága moléntis* in some Sardinian dialects. Later the word *apiosus* came by analogy to designate an animal suffering from the disease now called *Ryegrass staggers*, caused by an endophytic fungus of the perennial ryegrass. An appendix on the gloss *appiosus μετέωρος* in the *Hermeneumata Celtis* (12.972) closes the study.

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※ Translated by John Justin Rizzo, subsequently revised by Jon Wilcox. I am greatly indebted to Dr. John Blundell of *Thesaurus linguae Latinae* in Munich for the careful revision he so generously offered.

The serpent will die, and the poisonous deceitful plant will die.¹



1 Occurrences of the Term *apiosus*

Criticism has more than once focused on the exact meaning of the adjective *apiosus* and, even more so, on its etymology up until very recently, as we will see. The term is found almost exclusively in the Latin treatises on veterinary medicine:

1. Ad equum appiosum. Primum omnium loco tenebroso stet et mollibus cibis recreandus et hac potione sanandus: apii uiridis fasciculum tritum, mellis – IIII, nasturci triti cyath. II, haec simul cum uino faucibus infundito; quae si parum profuerit ista potio, caput aduratur; unctionibus calidis perungatur, quas ad robur ostendimus. Collyrio sane oculos inungito (Pelagon. 405).

deest in E; a faucibus infundito incipit Bo || quae Bo: que R quod Sarchiani Ihm || profuerit ista potio R: fuerit ista post Bo || caput R: capud Bo || perungatur R: -guatur Bo || quas R: quod Bo || inungito R: -guito Bo.

To cure an *apiosus* horse: first of all, the animal must stay in a dark place, eat soft food, and be treated with the following potion: take a bunch of crushed green celery, four ounces of honey, and two *cyathi* of ground nasturtium and administer them orally together with wine; however, if this potion proves to have little effect, cauterise the head and apply the same warm ointments which we referred to regarding tetanus. Also, moisten its eyes with a *collyrium*.²

2. Potio ad appiosum. Primum de temporibus sanguis detrahendus est, deinde potio haec adhibenda: semen api, spicae nardi, petroselini Macedonici, lactucae semen, papaueris semen cum aqua mulsa permixta omnia dabis diebus quinque caputque eius pellicula oleo madefacta cooperies. Certissima ac manifestissima potio (Pelagon. 406).

deest in E || appiosum R: apiosos Bo || primum R: -mo Bo || detrahendus R: emittendus Bo || spicae R: -ca Bo || papaueris semen om. Bo || mulsa

¹ Verg. *Ecl.* 4.24–25: *occidet et serpens, et fallax herba ueneni / occidet.*

² All translations from Greek and Latin are mine.

R: multa Bo || permixta Bo: -mista R || omnia R: omia Bo || caputque R: capudque Bo || cooperies R: cop- Bo || ac Bo: om. R || manifestissima Bo: manifesta R.

Potion for an *apiosus* horse. First, blood should be taken from the temples. Then the following potion should be given: take celery, nard seeds, parsley, lettuce, and poppy seeds; mix them with water and honey and administer the preparation for five days. Also, cover its head with an animal skin damp with oil. It is an unailing and very reliable potion.

3. Similiter de ipsis uenis dextra sinistra mitti debet et his qui infra scripti sunt: *apioso, insano, cardiaco, caduco, frenetico, distentiosis, sideraticio, rabioso* (Chiron 17).

Likewise, blood should always be taken from the left and right veins, even in sick animals of the following kinds: *apiosi*, those suffering from insanity, ailments of the stomach, epilepsy, frenzy, those suffering from *distentio*, paralysis, and rabies.

4. Quod si in una parte cerebri haec corruptio uenit et inundauerit, ex eadem parte doloris grauatus amens fit *apiosus*. Ex qua grauedine in illam partem corporis girat tanquam post molam. Vnde nec uidet, cerebro enim uisus in oculis pascitur et in corde sensus. Inde haec omnes ualitudines, quae e cerebro oriuntur, nec uident nec sanae mentis sunt (Chiron 257).

If this disease goes into one part of the brain and spreads there, the animal, suffering pain in that part, and crazed, becomes *apiosus*, and because of the pressure in that part of the body starts to spin around in circles as if pushing a millstone. As a result, it cannot even see, for the brain supplies sight to the eyes and judgement to the heart. Therefore those who suffer from these diseases that originate from the brain do not see and are not sane.

5. Haec similis ratio toracis si *apioso* contingerit, rabiosum facit (Chiron 260).

apioso Oder: a opioso BM [a] opioso Niedermann.

If a similar malady of the chest strikes an *apiosus* animal, the animal will become rabid.

6. Ex hac re [*scil. distensione*] fiunt *apiosi, insani, rabiosi, frenetici, cardiaci*. Horum autem omnium cura capitis prima est (Chiron 276).

Because of this condition [*distensio* or *distentio* is a disease that might affect the animal's brain] animals become *apiosi*, insane, rabid, frenzied,

and suffer from stomach ailments. For all these cases, the first thing to treat is the head.

7. Potionem dabis [*scil.* equo distensioso] eam quam apioso (Chiron 278).

apioso *ego*: opioso *M Oder Niedermann* opiosi *B*.

Give the horse suffering from *distensio* the same potion that is administered to the *apiosus* horse.

8. Si quod iumentum apiosum fuerit, signa demonstrant haec: in praesepio incumbit, oculos tensos habebit et auriculis dimicat, et non multum uidet et oculi eius lacrimabuntur, et girat tanquam post molas. Hic erit apiosus. 280 Sed si in rabiem conuersus fuerit, sic intelligis. Subito hinniet tanquam sanus, et morsu appetit aut parem suum aut hominem, aut praeseptum perrodet aut ilia sibi morsicis comedet. Sic eum curabis, tanquam apiosum. Loco tenebroso eum includes, ordeum ne dederis, et mollibus cibariis iuuabis. Magis tamen apium uiridem prius, quantum uolueris, ei da. Sanguinem de temporibus detrahe uel de ceruice quod satis fuerit (Chiron 279–280).

279 apiosum *ego ex Veg. Mulom. 2.10*: opiosum *M B? Oder Niedermann*; *sed de apioso in indice libri III (§ 114) BM* || apiosus *ego*: opiosus *BM Oder Niedermann* || 280 sanus *BM*: insanus *Önnerfors (1993: 199, n. 93) sed cf. Veg. Mulom. 2.11.1* || apiosum *ego ex Veg. Mulom. 2.11.1*: opiosum *BM Oder Niedermann*.

If an animal is *apiosus*, it will show these symptoms: it will be bent over the manger, have its eyes wide open and shake its ears; it will not see well and its eyes will shed tears; also, it will spin around as if pushing a millstone. This is an *apiosus* horse. If, however, that condition turns into rabies, you will understand it from the following signs: the animal suddenly will neigh much like a healthy horse and try to bite either another animal or a man, or constantly gnaw at the manger, or bite its own flanks. Treat it in the same way as the *apiosus* horse: enclose it in a dark place; do not give it barley but help it with soft foods. Above all, however, give it as much fresh celery as you wish. Let blood from the temples or the neck as needed.

9. Et si sanum non fuerit, ures ei [*scil.* caduco] caput similiter ut apioso; cura tamen ei caput frequenter (Chiron 333).

But if it continues to feel unwell, cauterise its head [that of the epileptic animal] in a similar way to that of the *apiosus*; but treat its head frequently.

10. Si quod iumentum apiosum erit, sic eum intelligis. Caput suum in praesepium inpellit, oculi non palpebrant, extensi sunt, subito spasmus patiuntur. Et cum illum a loco suo petere uoles, si non illum tenueris, cadet. Sic eum curabis. Si se sustinere potuerit, sanguinem emittito et caput illi foueto et iactato. Vbi iactaueris, tunc pelliculam nigram inuolues. Postero potionabis iumentum. Cariota, semen apii, semen lactucae, semen nasturcii, butirum de mulsa decoques et sic potionabis (Chiron 986).

You will realise that an animal is *apiosus* by the following signs: it beats its head on the manger, it does not blink its eyes, which remain wide open and suffer from sudden contractions. Also, if you want to pick it up, it will fall to the ground if you do not hold it. The treatment is as follows: if the animal can stand up, bleed it, apply a poultice on its head, and lay it down. After having laid it down, wrap it in a black hide. Then give the animal a potion: prepare a decoction in honeyed water of dates, celery seeds, lettuce seeds, cress seeds, and butter and administer it as a potion.

11. Cefalargicis autem, apiosis, insanis, cardiacis, caducis, freneticis, distenticis, sideraticis, rabiosis praecipitur de uenis auricularum sanguinem demere (Veg. *Mulom.* 1.25.2 [~ Chiron 17]).

However, when treating animals suffering from headaches, *apiosi*, the insane, those with stomach ailments, the epileptic, frenzied, those suffering from *distentio*, paralysis, and rabies, it is recommended to take blood from the veins of the ears.

12. Ceterum cum noxius sanguis membranam cerebri ex una parte pertuderit et eandem dolore nimio coeperit praegravare, efficitur animal apiosum, cuius et mens hebetatur et uisus. Nam cerebri incolumitas et oculos pascit et sensus. In qua passione, quia una pars capitis praegravatur, tanquam ad molam uadit in gyrum (Veg. *Mulom.* 2.2 [~ Chiron 257]).

When, however, the harmful blood pierces a membrane of the brain on one side and starts to press on it causing great pain, the animal becomes *apiosus* and its mind and sight both become dark. A healthy condition of the brain feeds both the sight and the judgement; so with this kind of disease, as one part of the head is heavy, the animal turns around as if pushing a millstone.

13. Quodsi apiosum similis passio thoracis inuenerit, facit continuo rabiosum (Veg. *Mulom.* 2.5.1 [~ Chiron 260]).

And if a similar disease of the chest affects an *apiosus* animal, it will immediately make it rabid.

14. Quae passio [*scil. distentio*] ceterarum ualetudinum et fons probatur et mater: nisi enim inter initia curaueris caput, ut animal dormiat competenter, fiunt apiosi, insani, rabiosi, frenetici, cardiaci (Veg. *Mulom.* 2.9.3 [~ Chiron 276]).

It has been proven that this disease [the *distentio*] is the source and origin of other diseases; if you do not treat the head as soon as symptoms are first perceived so that the animal can sleep comfortably, the animal will become *apiosus*, insane, rabid, frenzied and will suffer from stomach ailments.

15. Si quod iumentum apiosum fuerit, in praesepio incumbit, oculos tensos habebit, micabit auriculis, uisus caliginem patietur et gyrat in circulo tanquam ad molas (Veg. *Mulom.* 2.10 [~ Chiron 279]).

If an animal is *apiosus*, it will bend over the manger, have its eyes wide open, shake its ears, suffer from blurred vision, and turn in circles as if it is pushing a millstone.

16. quem [*scil. equum rabiosum*] sicut apiosum curabis (Veg. *Mulom.* 2.11.1 [~ Chiron 280]).

and it [a rabid horse] is given the same treatment as an *apiosus*.

17. Si autem passio perdurauerit, caput ei [*scil. equo caduco*] ures, ut apioso fieri consuevit (Veg. *Mulom.* 2.97.4 [~ Chiron 333]).

If the disease persists, however, apply the cautery to its head [that of the epileptic animal] as is done with the *apiosus*.

18. Περὶ μανίας, λύσσης, ληθάργου, σκοτωματικῆς, ἀπιώσσου, ἐπιλήπτου, ἀτιθάσσου καὶ πρὸς τὸ ἡμίονον παῦσαι λακτίζοντα (*Hipp. Cant.* 81 [tit.]).

Regarding madness, rabies, the animal suffering from lethargy and vertigo, the *apiosus*, the epileptic, the rabid, and to prevent the mule from kicking.

It can therefore be said, especially when we look at Chiron 257 (see n° 4 above), 279 (see n° 8 above) and 986 (see n° 10 above), that the main symptoms of the *apiosus* horse were a dazed condition, wide-open eyes, difficulty in walking (if the animal tried to move it often fell), and, at times, the continuous turning around in circles as if it were pushing a millstone. It is also significant that this condition is sometimes treated with other mental disorders of animals such as those listed in Chiron 17 (see n° 3 above): *apioso, insano, cardiaco, caduco, frenetico, distentiosis, sideraticio, rabioso*. However, a more precise identification of this disease will be offered later.

2 The *Status Quaestionis*: Ihm, Fischer, Gourevitch, and Magnani

In order to properly understand the arguments of various scholars, a short *status quaestionis* of the etymology under consideration may now be presented, keeping in mind that chapter 29 of Pelagonius' *Ars ueterinaria*—where there are two references to *equus apiosus* in §§ 405 (see n° 1 above) and 406 (see n° 2 above)—has the following title:

XXVIII. De rabie uel de cursu lunae uel de insania equi uel de paralytico.

deest in Bo || XXVIII R: XXVIII E || uel de cursu lunae R: *om. E* || insaniae qui (*scil. insania equi*) E *necnon R in indice: insania R.*³

On anger or *cursus lunae* or insanity of the horse or the paralysed horse.

In 1892, Max Ihm, commenting on Pelagon. 405, expressed himself in the following manner:

It is uncertain if the horses are labelled *apiosi* (from *apium*, “celery”) because the potion that is said to heal them contains *apium* (405 “celery stalks,” 406 “celery seeds”) or because it was believed that there was something sacred and mysterious in *apium* (note the Greek proverbial expression “It needs celery”). With reference to the alternative reading *opiosus*, it must be rejected. . . . When the *cursus lunae* is mentioned in the chapter title, i.e. epilepsy (note also Iuuenius 1.446: “madness is associated with the moon’s phases”; 3.359: “the phase of the moon is haunting my son through the devil’s intervention”; Ps.-Apul. *Herb.* 10: “for the epileptics who suffer due to the phases of the moon”), it seems to me quite probable that *lunatici* have to be understood as *apiosi* horses and that the expression, because of an evident error, is derived from the Greek *σελινίτης* (*σεληνίτης*).⁴

3 Valérie Gitton-Ripoll (in press) has recently focused on the title of the chapter and in particular on the expression *de cursu lunae*.

4 Ihm (1892: 191–192): “Equi apiosi dicti ab apio utrum ea de causa quod potio qua sanari dicuntur apium contineat (405 *apii uiridis fasciculum*, 406 *semen api*), an quod in apio sacri arcanique quiddam inesse credebatur (cf. illud prouerbii instar *σελίνου δεῖται*), incertum. . . . Spernenda autem uidetur lectio altera *opiosus*. In lemmate capitis cum mentio fiat *cursus lunae* h. e. lunaticae passionis (cf. Iuuenius 1.446 *lunae cursum comitata insania mentis*; 3.359 *cursus lunae natum mihi daemonis arte torquet*. Ps.-Apul. *Herb.* 10 [9.1 cod. B] *ad lunaticos qui cursum lunae patiuntur*), *apiosos* intellegendos esse *lunaticos* manifestoque errore uocem ex Graeco *σελινίτης* (*σεληνίτης*) translata esse mihi quidem probabile uisum est.”

The commentary by Klaus-Dietrich Fischer from 1980 draws quite heavily on Ihm's observations, departing from him only in its treatment of the variant *opiosus*:

According to Ihm, the alternative reading *opiosus* was to be discarded; I am, however, doubtful. A similar alternation can be found in *apopanax* / *opopanax*, *apobalsamum* / *opobalsamum*.⁵

Fischer also agrees with Ihm that the mention of the *cursus lunae* in the title derives from an error of iotacism in a supposed Greek source.⁶

In 1993, the problem of the etymology of *apiosus* was taken up once again, this time by Danielle Gourevitch, who proposed a derivation of the adjective from *apis* ("bee"), based on the occurrences in the *Mulomedicina Chironis* (and Vegetius) which describe the way the afflicted animal continuously turns in a circle.⁷ The *apiosus* would therefore be the horse bitten by a bee, an insect which, as Gourevitch points out, was alleged by the ancients to be dangerous to horses.⁸

The latest research on the term *apiosus*, however, was done by Massimo Magnani in 2008. Magnani, after spending some time elaborating on the theories of past scholars, arrives at his own theory, the main purpose of which is to reverse the thesis put forward by Ihm. Magnani asserts that the term *apiosus* derives from a misinterpretation of the Greek ἵππος σεληνίτης—"lunatic horse," that is, one suffering from epilepsy, which, on account of iotacism, became

5 Fischer (1980: 135): "lectio altera *opiosus* (cf. Chiron 278–280) spermenda uisa est Ihmio, ego dubius sum; similis uariatio *apopanax* / *opopanax*, *apobalsamum* / *opobalsamum*." The fact that the variant *opiosus*—found in the manuscript tradition of Chiron 260, 278, 279, 280 (see above)—was (rightly) rejected by Ihm is reported without comment in the index of Oder (1901: 326, s.u. *apiosus*): "Ihmius ad Pelag. 405 *opiosus* tamquam futtilem lectionem omnino reprobatur."

6 Fischer (1980: 135–136): "in lemmate capitis cum mentio fiat *cursus lunae* id est lunaticae passionis, . . . *apiosus* esse lunaticos manifestoque errore uocem ex Graeco σεληνίτης (falso σεληνίτης a Σελήνη) translatum [*sic*] esse Ihmio (cui assentior) probabile uisum est."

7 Gourevitch (1993: 261): "Ainsi il semble bien 1° que déjà dans la tradition vétérinaire antique, οἷστρος et *apis* se soient partagé les troupeaux; 2° qu'*apiosus* soit directement dérivé d'*apis*, sans passer par l'intermédiaire d'*apium*; 3° que la présence d'une des nombreuses herbes aux abeilles, l'ache (*apium*) dans le traitement de l'*apiosus* ne résulte que d'un jeu de mots inconscient et tardif."

8 The author cites Arist. *HA* 9.40.626a.22 and Plin. *Nat.* 11.60. Gourevitch also says that it was Io's persecution by the gadfly which gave her the idea for the derivation from *apis*; she refers to Aesch. *Supp.* 17–18, 307, 524–599 and Aesch. *Pr.* 589, 674–675, 681, 877–886.

ἵππος σελινίτης and so was translated into Latin as *equus apiosus*, primarily due to σέλινον (“celery”) being an ingredient in most remedies.⁹

A few words should be devoted to the theories briefly stated above before we elaborate our own views. We shall return shortly to the connection between *apiosus* and *apium* (“celery”), taken as a given by Ihm and confirmed—however hesitantly—by Fischer, but first let us consider Gourevitch’s hypothesis. The fact that Gourevitch’s claim is highly questionable has already been deftly exposed by Magnani, who has identified more than one point lacking in sufficient proof. Among his objections, the most important undoubtedly stems from the fact that the entries previously mentioned never once make reference to insect bites. The cause, instead, seems to be internal: the affected organ is the brain. An example of this can be found in Chiron 257 (see n° 4 above): *Quod si in una parte cerebri haec corruptio uenit et inundauerit, ex eadem parte doloris grauatus amens fit apiosus* (“If this disease goes into one part of the brain and spreads there, the animal, suffering pain in that part, and crazed, becomes *apiosus*”) and in the same paragraph: *Inde haec omnes ualitudines, quae e cerebro oriuntur*. The *apiosus* is in fact a horse suffering from a mental illness, although the illness itself has characteristics distinct from others of a similar kind: consider for example, Chiron 276 (see n° 6 above): *Ex hac re [i.e. from the *distensio* or *distentio*, another disease that might affect the animal’s brain] fiunt apiosi, insani, rabiosi, frenetici, cardiaci. Horum autem omnium cura capitis prima est*. All of which raises some questions: what would be the connection between a horse stung by a bee and those that were *insani, rabiosi, frenetici, and cardiaci*? And also, how would the staring, walking with difficulty, and slamming of the head against the manger be explained? Would all this be caused by the sting of a bee? The only explanation would be the similarity in their behaviour: the *apiosus* horse would behave—at least with regard to the turning in circles—in

9 Magnani (2008: 285–286): “Nelle fonti greche di Pelagonio i sintomi sopra descritti potevano ben essere ricondotti all’influsso diretto della luna, causa riconosciuta di attacchi epilettici e molti altri disturbi anche per l’uomo . . . L’ἵππος σεληνίτης ο σεληνίτης (*equus lunaticus*), per effetto dello iotacismo, potrebbe essersi confuso con l’omofono σελινίτης (< σέλινον), anche e soprattutto per la presenza del σέλινον nelle pozioni curative. Una volta reso quest’ultimo con *apium*, la neoformazione *apiosus* diveniva quasi obbligatoria” (“In the Greek sources of Pelagonius, the above symptoms could well be traced to the direct influence of the moon, a known cause of seizures and many other conditions in man as well . . . The ἵππος σεληνίτης or σεληνίτης (*equus lunaticus*) could perhaps have been confused through iotacism with the homophone σελινίτης [< σέλινον], and especially because of the presence of σέλινον in the healing potions. Once it (σέλινον) was translated with *apium*, the newly formed word *apiosus* became almost obligatory”). Magnani had already put forward his thesis in Bompadre/Magnani/Cinotti (2008: 7).

a similar manner to one stung by a bee as the summariser of Gourevitch's article in *L'Année philologique* appears to have understood.¹⁰ However, Gourevitch herself, in a letter to me dated October 22, 2010, personally confirmed that in her opinion the *equus apiosus* has physically been stung by a bee. In light of such a statement, Gourevitch's explanation has to be completely discarded.

Let us now turn to the thesis presented by Ihm, specifically with regard to the title of chapter 29 of Pelagonius. This title was accepted by Fischer and used by Magnani to offer a precise explanation of the term *apiosus*: the pairing of *apiosus* with *σελινίτης*. Ihm's theory, without question, serves to restore the term *apiosus* to its proper context of *insania* albeit through *cursus lunae* or epilepsy. It has to overcome, however, some very serious obstacles. First, to my knowledge, there is no evidence for *σεληνίτης* meaning "epileptic," or indeed referring to any other disease. In addition, the adjective is most often referred to the noun λίθος. By contrast, *σεληνιακός* in the sense of "epileptic" is attested in Alex. Trall. 1.563, but there appear to be no occurrences of *σεληνιακός* derived from *σέλινον* "celery"¹¹ and the only three known occurrences of the adjective *σελινίτης* (*Geop.* 8, ext. 1 and 8.16; *Dsc.* 5.64) are all related to wine flavoured with *σέλινον*. Also worth noting is that in the Greek translation of Pelagonius *apiosus* is never translated;¹² in fact, the only kind of translation of the adjective known to us is itself a transliteration: see the title, quoted above (n° 18), of § 81 of the *Hippiatrica Cantabrigiensia*. Moreover, the very words *uel de cursu lunae* are absent in cod. *E*, which is more authoritative than *R*.¹³ What is more, no description of epileptic horses is found in the chapter in question. Now Magnani would explain this by saying that epileptic and *apiosus* are the same thing, and that the reason why there is no mention of *cursus lunae* in the chapter heading is that §§ 405–406 are missing from *E*.¹⁴ However,

10 *L'Année philologique* (1994) 65, 8816: "Employé comme adjectif ou comme nom en médecine vétérinaire, le terme *apiosus* désigne un cheval pris de vertige, fou. Les essais d'étymologie proposés jusqu'ici n'étant pas convaincants, on propose une nouvelle hypothèse: ce terme pourrait être un dérivé d'*apis* 'abeille', le cheval dit '*apiosus*' étant désigné comme piqué par une abeille."

11 The adjective *σεληνιακός* is translated as *lunaticus* in the Latin version of Alexander of Tralles (I thank Professor David Langslow for this information). In Georg. Pachym. *Quadr.* 2.2 τὴν σεληνιακὴν is of course equivalent to τὴν σεληνιακὴν.

12 *Hipp. Ber.* 101.9 and 101.10 (the precepts are part of the chapter περὶ μανίας καὶ λύσσης ["about madness and rabies"]).

13 On the manuscript tradition of Pelagonius see Ortoleva (1998).

14 But how should we interpret the allusion to *cursus lunae* in the title of *R*, considering the fact that no remedies for epileptic horses are reported in the chapter? Perhaps that statement refers to a treatment for epilepsy once found in the chapter but not extant in surviving witnesses. Whoever wrote the chapter title may also have confused the *apiosus* horse with

a simple comparison of the descriptions of an epileptic and *apiosus* horse reveals that they are two very different things although it is said in Chiron 330 that the epileptic horse also turns round and round as if pushing a millstone. In this connection see Chiron 331:

Quodcunque iumentum caducum fuerit, sic eum intelligis. Saepius cadet diurnum ter uel quater. Aliquando cum ceciderit, subito contremescit toto corpore, et saliuae per os eius multae effluent. Postmodum porrectus pro mortuo iacebit, non post multum subsurget et pabulum appetere quaerit.

If an animal is epileptic, you will observe the following tell-tale signs: it will often fall to the ground (three or four times a day). Sometimes, after it has collapsed, its body will immediately start trembling and a lot of saliva will come out of its mouth. Afterwards it will remain stretched out on the ground as if dead, but after a short time it will rise and try to reach the fodder.¹⁵

Also, how can the occurrences in the *Mulomedicina Chironis* be explained? Could all of them come from Pelagonius? But this is very unlikely, because all such cases of dependence of Pelagonius on the *Mulomedicina Chironis* would have to be proved. Or did both Pelagonius and the author of the *Mulomedicina Chironis* possibly make either direct or indirect references to *apiosus* from a lost Greek translation? Any such references would also have to be proved in a convincing way, especially given the marked difference between the two texts regarding the description of remedies. Hence, this hypothesis as well can be ruled out without hesitation.

3 *Equus apiosus*, “Capostorno” and “Grass Staggers”

As all the theories presented above have been shown to be incorrect or unverifiable one must start again from the beginning. In fact, in cases like this the

the epileptic one, or perhaps wanted to add the reference to the latter because any mention of mental illness would be incomplete without it, although there is no reference to any treatment for epilepsy among the remedies that follow. Certainly its absence from *E* (though, as mentioned above, this manuscript does not transmit §§ 405–406) sheds doubt on the original presence of the words *uel de cursu lunae* in the chapter title.

15 See also Chiron 333 (n° 9 above), where we are told to apply the cautery to the epileptic horse's head *similiter ut* [or *et*] *apioso*. The author was therefore well aware that there were two different diseases.

first step one should take is obviously to pick up a dictionary. By performing this very simple act, however, one is made aware of a very important piece of information surprisingly overlooked by scholars who have previously dealt with this problem. Here is what one finds in the *Vocabolario degli Accademici della Crusca*, fifth impression, *Glossario* [A–B], Florence, 1867, s.u. *apioso* and *appioso*:

Detto de' Cavalli quando sono affetti da quella malattia di cervello, che oggi chiamasi Capostorno. Dal lat. *apiosus*. Libr. Masc. *F. R. 30*: Quando il sangue non riempie li pannicoli del cervello . . . fassi l'animale apioso (Veg. *Mulom.* 2.2) e 33: Se neuno giumento ee appioso . . . , girasi come fusse alla macina (Veg. *Mulom.* 2.10).

Said of horses affected by the disease of the brain today referred to as *capostorno*. From lat. *apiosus*. Libr. Masc. *F. R. 30*: When the blood does not fill the meninges of the brain . . . the animal becomes *apioso* (Veg. *Mulom.* 2.2) and 33: If an animal is *appioso* . . . , it turns in circles as if it were at the millstone (Veg. *Mulom.* 2.10).

The text quoted in the *Vocabolario della Crusca* is a vernacular translation of Vegetius' *Digesta artis mulomedicinalis* of the fourteenth century, transmitted in cod. Florence, Biblioteca Medicea Laurenziana, *Redi* 120, parchment, fifteenth century. Further instances of the term *ap(p)iosus* are found in other vernacular translations of Vegetius—e.g. that of Giovanni Brancati dating from the fifteenth century—and texts on farriery that have Vegetius as a direct or indirect source—e.g. the fourteenth century work by Dino Dini.¹⁶ However, what is *capostorno* otherwise referred to as *capogatto*? It is a rather old-fashioned term—and even more obsolete is *capogatto*—, which designates an equine disease characterised by dizziness and vertigo. What follows is the detailed description from the famous work of Carlo Ruini (1530–1598), *Dell'anatomia [sic] et dell'infermità del cavallo*, first published in Bologna in 1598:¹⁷

Il capostorno del cavallo è intiera offesa della fantasia nella sua operazione; la quale gli offusca talmente i sensi, che gli leva quasi tutta la cognizione, e gli fa restar balordi e quasi insensati. . . Si conosce che il

16 On Dino Dini and the vernacular translations of Vegetius see Ortoleva (1996: 143–185). For the text of the translation of Brancati see Aprile (2001).

17 Ruini (1598: 2.59) (2.2.13) (I have updated the orthography).

cavallo tiene sempre il capo aggravato, e pesante, chino a terra, e nella stalla dentro alla mangiatoia, con la vista offuscata, con gli occhi oscuri, e gonfii, e sta come addormentato, e privo di lume, ed è pigro, tardo, e stupido; e col petto, o con la testa s'appoggia, e urta forte; e nel crescere del male, batte del capo ne i muri, e va intorno intorno; nell'andare camina sempre inanti, finché urta ne i muri, o in altra cosa, che intoppa; pigramente, e malamente movendosi.

Capostorno is a general condition which affects the mental faculties of the horse; an illness which dulls the senses so much that all knowledge disappears. It renders the animal confused and almost senseless . . . Well-known is the fact that the horse always keeps its head hung heavy, drooping to the ground, and that it stays in the stable inside the manger with its vision blurred and its eyes dark and swollen. The animal seems to be asleep and without sight; it is lazy, slow and stupid. It rests upon its breast or head, and bumps against things with force; and as the pain it feels increases, it beats its head against the walls of the stable. It goes around in circles, walking until it bumps into walls or any other obstacle, lazily and clumsily moving about.

It is also important to note that linking *apiosus* to vertigo is not a new approach even in Latin lexicography, since Henry Nettleship in 1889 had already explained Vegetius' *ap(p)iosus* as "afflicted with giddiness."¹⁸

Now that we have crossed the English Channel, a further step has to be taken: we shall compare the description of *capostorno* to the one of a disease known as *grass staggers*. Once again we turn to an old description of the illness, since in these cases we must place ourselves in the past and try as far as possible to see "with the eyes of the ancients." Let us consider the article *Grass Staggers* published in *The British Farmer's Magazine* in 1861:¹⁹

Where the faulty feeding still continues, and no treatment is attempted, matters gradually become worse. The unsteady gait is often visible in the fore as well as in the hind limbs. . . . The animal pokes his nose into a corner, and if possible, rests it for support on the manger or rail of a gate, or any other convenient object. . . . In bad cases the sickness is so great that the horse cannot stand, and down he goes, lying on his side with his

18 Nettleship (1889: 248): "Appiosus, afflicted with giddiness; of animals: Veget. Vet. 1.25.2; 3.10; 3.11.1."

19 "Grass Staggers" (1861: 237).

head drawn back, his lower lips pendulous, and his eyes almost insensitive to the light . . .; his eyes are wild and staring. . . . Sometimes he will turn round and round before he falls, and lies stunned sick and groaning before he recovers or attempts to rise.

Therefore, *equus apiosus* = *capostorno* = *grass staggers*; there seems to be no doubt about this connection and I am certainly not the first to say so. Thus, neither bees nor iotacism have anything to do with the matter. This example highlights the fact that it is impossible to solve such problems without connecting the descriptions of the ancients with the reality of the situation while at the same time having the widest possible view of the literature on the subject. As for the meaning of the term, I think I have given enough answers.

4 The *apium rusticum* (or *agreste*) and the Etymology of *apiosus*

It is now time to consider the second question that naturally arises: why did the Romans call a horse suffering from grass staggers *apiosus*?

Apiosus comes from *apium* (“celery”). At this point I see no other possible explanation. Since *apium* refers to a plant, if a sick animal is called *apiosus*, this can only mean that its disease was correlated—whether figuratively or literally will be determined shortly—with the ingestion of *apium*. This, as previously mentioned, had already been correctly pointed out by Ihm. But how could a horse fall ill by eating celery, especially when *apium* itself had always been prescribed—along with other ingredients—to treat the *apiosus* in addition to many other diseases? Ihm, followed by Fischer, was uncertain about whether to attribute the name precisely to the fact that celery was among the ingredients in the healing potions or to some supposed sacred or mysterious property of the plant. That such a theory cannot be convincing, however, has already been clearly stated by the scholar who proposed it. The answer to our question should instead be sought in the fact that the Latin word *apium* does not only mean celery. It is enough to look at the lexicon of Jacques André:²⁰ in addition to the more common identifications with “celery” and “parsley,” various others are recorded. Among these, of particular interest is the relationship André observes between a special type of *apium*—known as *rusticum* or *agreste* in Latin, σέλινον ἄγιον in Greek—and *Ranunculus sceleratus* L. or *Ranunculus sardous* Crantz. The herbarium of Pseudo-Apuleius and the so-called Latin Dioscorides are the sources most relevant to these identifications:

20 André (1985: 20–21). See also Stirling (1995: 68–70).

[Herba scelerata] Nomina herbae. A Graecis dicitur botracion, alii †choras, alii chloropis, alii Nilion, alii stalticen, alii cloropin, alii ioselinon, alii catas-talticen, alii †pheution, alii lycopnum, Siculi selinon agrion, Aegyptii senecon, Romani apium rusticum, alii herba scelerata, alii apiuris. Nascitur locis humidis et aquosis. Si quis homo eam ieiunus gustauerit, ridendo exanimatur, est enim caustica (Ps.-Apul. *Herb.* 8.11–17).

Names of the grass. It is called *botrachion* by the Greeks; others call it †*choras*, others *chloropis*. Others *Nilion*, others *staltice*, others *chloropis*, others *hyoselinon*, others *catasaltice*, others †*pheution*, others *lycopnus*. The Sicilians call it *selinon agrion*, the Egyptians *senecon*, the Romans *apium rusticum*, others *herba scelerata*, others *apiuris*. It grows in damp and watery terrain. If a man tastes it on an empty stomach, he will die laughing, as it is caustic.

De uotraciu. Botraciu, quem multi apiu risu uocant, multe sunt illi[s] species. . . . Locis aquosis nascitur. Est alterum genus agrestis, uirga longa habens, folia multis locis incisa, qui multum in Sardinia nascitur, quem apiu agreste dicunt, cui uirtus est uiscida (Dsc. 2.161).

About *botracion*. *Botracion*, which many call wild smallage, has many species. . . . It grows in watery terrain. There is another variety with a long stem and very jagged leaves, which grows abundantly in Sardinia. It is known as *apium agreste* and has the characteristic of being an irritant.²¹

21 See also Dsc. 2.175.1: βατράχιον· οἱ δὲ σέλινον ἄγριον καλοῦσι. τούτου πλείονά ἐστιν εἶδη. . . . φύεται δὲ παρὰ ρεῖθροις. ἔστι δὲ καὶ ἕτερον εἶδος χνωθέστερον καὶ μακροκαυλότερον, ἐντομάς ἔχον πλείους τῶν φύλλων, πλείστον ἐν Σαρδονίᾳ γεννώμενον, δριμύτατον, ὃ δὴ καὶ σέλινον ἄγριον καλοῦσι (“Buttercup: some call it wild celery; there are many varieties of it. . . . It grows along rivers. There is also another variety which grows mainly in Sardinia with a longer stem and serrated leaves, fuzzier, very irritating, which is also called wild celery”); Dsc. 2.175 RV: σέλινον ἄγριον· οἱ δὲ βατράκιον, οἱ δὲ γελωτοποιός, οἱ δὲ μεθύουσα, οἱ δὲ Σαρδόνιον, οἱ δὲ ἀμέθυστον, οἱ δὲ ὑσέλινον, οἱ δὲ ἵπποσέλινον, Αἰγύπτιοι μεθύου, Ῥωμαῖοι ἄπιουμ, οἱ δὲ ἄπιου<μ> ἱρσοῦ<τουμ>, οἱ δὲ αὐριμετέλλουμ, Θούσκοι ἄπιου<μ> ράνινου<μ>. σέλινον ἄγριον ἕτερον· οἱ δὲ φρώνιον, οἱ δὲ ἀκιδωτόν, οἱ δὲ βατράκιον, Ῥωμαῖοι ἄπιου<μ> φλάου<ουμ> (“Wild celery: it is also called ranunculus, plant which makes one smile, plant which makes one drunk, *sardonion*, *amethystos*, porcine celery, horse parsley; the Egyptians call it μεθύου; the Romans *apium*, *apium hirsutum*, *aurimetellum*; the Etruscans *apium raninum*. The other wild celery: some call it toad parsley, pointed parsley, ranunculus, the Romans *apium flauum*). Finally, with regard to medieval Latin, see *MLW* s.u. *apiaster* 2.745.8–11 and s.u. *apium* 1.748.19–22 (*apium agreste*) and 748.56–61 (*apium rusticum*).

Ranunculus sceleratus—in English known as “cursed buttercup,” in Italian *ranunculo di palude*—and *Ranunculus sardous*—in English “celery-leaved buttercup,” in Italian *ranuncolo sardo*—belong to the *Ranunculaceae* family, common in moist places along the Italian peninsula. A key feature of the plant is that its leaves are somewhat similar to those of celery or parsley but highly toxic. An important reference to a toxic plant similar in appearance to celery, from which the Iberians used to make a poison, can also be found in Strabo (3.4.18):

Ἰβηρικὸν δὲ καὶ τὸ ἐν ἔθει [εἶναι] παρατίθεσθαι τοξικὸν ὃ συντιθέασιν ἐκ βοτάνης σελίνῳ προσομοίας ἄπονον, ὥστ' ἔχειν ἐν ἐτοίμῳ πρὸς τὰ ἀβούλητα.

It is also an Iberian custom to keep in store a poison that does not cause pain and which is extracted from a plant similar to celery, so as to have it handy in extreme cases.

Another important point to consider is that *apium rusticum* was also known in Latin as *herba Sardoia* or *Sardonian* because it was thought to have originated in Sardinia and as *apium risus*—in Italian *appiariso*—because, if ingested, it would contort the facial muscles in such a way as to make it seem that the patients were laughing hence the expression “sardonic smile.”²² There are many ancient sources relating the *herba Sardoia* to *apium*.²³ In Greek, two of them are particularly significant:

πλὴν δὲ ἢ βοτάνης μιᾶς καθαρεύει καὶ ἀπὸ φαρμάκων ἢ νήσος [*scil.* ἢ Σαρδῶ] ὅσα ἐργάζεται θάνατον· ἢ πόα δὲ ἢ ὀλέθριος σελίνῳ μὲν ἔστιν ἐμπερήσ, τοῖς φαγοῦσι δὲ γελῶσιν ἐπιγίνεσθαι τὴν τελευτὴν λέγουσιν (Paus. 10.17.13).

The island of Sardinia has no poisonous plants that cause death, except for one grass. This fatal grass is similar to celery, but it is said that those who eat it die laughing.

22 Compare Sol. 4.4: *herba Sardonian, quae in defluuiis fontaneis prouenit iusto largius. Ea si edulio fuerit nescientibus, nervos contrahit, diducit rictu ora, ut qui mortem oppetunt intereant facie ridentium* (“Sardonian grass, which grows in abundance at the source of springs. If it is swallowed unconsciously, it makes the muscles contract and opens the jaws so that the victims perish with a smile on their faces”).

23 I am indebted to a very detailed article by G. Paulis (1993: 26–31) which drew my attention to many of them.

Σιληνός δὲ ἐν δ' τῶν περὶ Συρακούσας [FGrH 175.5] λάχανον εἶναι παρὰ Σαρδονίοις ἡδύ, σελίνῳ ἐμφερές, οὗ τοὺς γευσαμένους τὰς τε σιαγόνας <σεσηρῆναι> καὶ τὰς σάρκας αὐτῶν ἀποδάκνειν (Paus. Gr. s.u. Σαρδόνιος γέλως [= Phot. Lex. s.u. = Suid. σ 124 A.]).

In the fourth book of the *History of Syracuse*, Silenus talks of a kind of sweet vegetable similar to celery that can be found in Sardinia; those eating it grind their jaws and bite their own flesh.

In both testimonies it is said that Sardonian grass is σελίνῳ ἐμφερές, “like celery.”²⁴ In Latin as well, in two passages of Servius—one with explicit reference to Sallust—and in other later authors including Isidore of Seville²⁵ this

24 Compare also Philox. fr. 591 Theodoridis (*apud* Zenob. Ath. p. 356 Miller): λέγουσι δέ, ὅτι ἐν Σαρδόνι γίγνεται βοτάνη σελίνῳ παραπλησία, ἣν οἱ προσενεγκάμενοι δοκοῦσι μὲν γελᾶν, σπασμῷ δὲ ἀποθνήσκουσι (“It is said that a plant very similar to celery grows in Sardinia: whoever eats it seems to laugh but instead dies in the midst of contractions”); *Schol. Hom. Od.* 20.302 (*Schol. uet.*): ἔνιοι δὲ γίνεσθαι λέγουσιν ἐν Σαρδοῖ τῇ νήσῳ σέλινον τοιοῦτον, ὃ τοὺς φαγόντας ξένους μετὰ σπασμοῦ σεσηρότας ἀπόλλυσθαι ποιεῖ (“Some say that on the island of Sardinia there is a special type of celery that kills the foreigners who eat it by giving them contractions and putting a grin on their faces”); *Schol. in Plat. (Schol. uet.) R.* 337a: ἡκουσα δέ, φησὶν ὁ Ταρραῖος, ἐγχωρίων λεγόντων ὅτι ἐν Σαρδόνι γίγνιτο βοτάνη σελίνῳ παραπλησίος, ἣς οἱ γευσάμενοι δοκοῦσι μὲν γέλῳ, σπασμῷ δὲ ἀποθνήσκουσιν (“I once heard—says Lucillus of Tharra—some local people saying that a plant very similar to celery grows in Sardinia: whoever tastes it seems to die laughing but does so with facial contractions”); Tzetz. *Schol. in Hes. Op.* 59 (p. 83 Gaisford): Σαρδῶ τις ἔστι νήσος Ἰβηροτρόφος, / ἐν ἣ βοτάνη φθαρτικὴ γῆς ἐκτρέχει, / σελινοειδῆς, Σαρδάνη καλουμένη. / βεβρωμένη δὲ τοῖς ἀπείροις αὐτίκα / σπασμούς τε ποιεῖ, καὶ γελῶτων ἐμφάσεις, / καὶ πότμος εὐθύς, καὶ γελάσιμος μόρος (“There is an island, Sardinia, nourisher of the Iberians, / on which a poisonous grass similar to celery / sprouts from the earth, called *sardane*. / If someone unknowingly eats it, it soon after / makes contractions and creates the impression of a smile, / and this is followed by an immediate death and a ridiculous end”); Tzetz. *Schol. in Lycophr. Alex.* 796: ἐν ἣ νήσῳ Σαρδοῖ βοτάνη γίγνεται ὁμοία σελίνῳ ἣς οἱ γευόμενοι σπασμῷ κατεχόμενοι ἀκουσίως γελῶσι καὶ οὕτως τελευτῶσι (“On the island of Sardinia there grows a plant similar to celery: those who taste it, soon in the throes of contractions, laugh without intending to and, in this way, die”).

25 Philarg. *Verg. Ecl.* 4.41: *Sardonía herba apio similis iuxta ripas nascitur in Sardinia insula, quam si quis manducauerit, risu moritur* (“Sardonian grass, similar to celery, grows in humid areas on the island of Sardinia: whoever eats it, dies laughing”) ~ *Schol. Verg. Bern. Ecl.* 4.41: *Sardonía herba similis apio iuxta riuos nascitur in Sardinia insula, quam si quis manducauerit, risu moritur* (“Sardonian grass, similar to celery, grows next to streams on the island of Sardinia: whoever eats it, dies laughing”); Isid. *Orig.* 14.6.40: *Venenum quoque ibi [scil. in Sardinia] non nascitur, nisi herba per scriptores plurimos et poetas memorata,*

grass is said to resemble celery or wild celery (*apiastrum*). The following are the testimonies from Servius:

‘et fallax herba ueneni’ non cicutam dicit, quae omnibus nota est, sed illam Sardoam, quae apiastri similis homines decipit (Seru. *Ecl.* 4.24).

With the words “deceptive and poisonous grass” Virgil is not referring to the hemlock, which is known to all, but to Sardinian grass which, similar to the *apiastrum*, is deceptive to people.

in Sardinia enim nascitur quaedam herba, ut Sallustius dicit [*Hist.* fr. 2.10], apiastri similis. Haec comesa ora hominum rictus dolore contrahit et quasi ridentes interimit, unde uulgo Σαρδόνιος γέλως (Seru. *Ecl.* 7.41).

In Sardinia, in fact, a plant grows that, as Sallust says, is similar to the *apiastrum*. This, if ingested, contorts people’s faces, making them open their mouths because of the pain, and kills them while they are laughing, as it were; hence, the origin of the term “sardonic smile.”

In addition to these testimonies there is a very interesting one from Pliny mentioning an *apiastrum uenenatum* found in Sardinia:

Apiastrum Hyginus quidem melissop<h>yl<l>um appellat, sed in confessa damnatione est uenenatum in Sardinia. Contextenda enim sunt omnia ex eodem nomine apud Graecos pendentia (Plin. *Nat.* 20.116).

It is true that Hyginus calls lemon balm *apiastrum*, but there is no doubt that this plant is labelled as poisonous in Sardinia. All those things that the Greeks group under the same name should in fact be put together.

To conclude, of great value for this analysis is the following epigram from the *Anthologia Palatina* about a certain Sophocles who died laughing εἴδατι Σαρδῶνι σελίνοιο:

apiastro similis, quae hominibus rictus contrahit et quasi ridentes interimit (“Also, nothing poisonous grows there [in Sardinia], except the plant, mentioned by many writers and poets, similar to wild celery, that makes people contract the openness of the mouth, and kills them while they are laughing, as it were”); *Schol. Iuu.* 1.158 (2) (ed. Grazzini [2011]): *Aconita herba est uenenifera apio similis quae gustata stupore nimio occidit* (“Aconite is a poisonous herb similar to *apium* which, if ingested, renders one senseless and kills.”) See also the statements in Dioscorides quoted in n. 21.

Ἐνθάδ' ἐγὼ Σοφοκλῆς στυγερόν δόμον Ἄϊδος ἔσβην
κάμμορος, εἶδατι Σαρδῶω σελίνοιο γελάσκων (AP 7.621.1–2).

I, Sophocles, wretch, came in the deadly home of Hades
laughing because of having eaten Sardinian celery.²⁶

Therefore, for the purpose of this study, it is essential to have established: first, that the *apium rusticum* or *agreste* or *apium risus* or *herba Sardoia* in Latin—σέλινον ἄγριον or Σαρδόνιον in Greek—was a toxic plant, and second, that this plant owed some of its names to its similarity to celery.

5 Possible Identifications of the *apium rusticum* or *agreste*

Unlike André, who identified *apium rusticum* or *agreste* with *Ranunculus sceleratus* L. or *Ranunculus sardous* Crantz, Giulio Paulis had, probably correctly, identified it with *Oenanthe crocata* L., “hemlock water dropwort.”²⁷ Paulis based his opinion on two facts: first, that *Ranunculus sceleratus* L. and *Ranunculus sardous* Crantz are not confined to Sardinia, but widespread in Europe, and, second, that *Oenanthe crocata* L., which is very similar to celery and highly poisonous, may cause contractions of the levator muscles of the jaw.²⁸ Recent research done in Italy has confirmed such a connection through the use of chemical analysis.²⁹

However, it is best not to put too much faith in these identifications. In the ancient world and beyond, especially in everyday practice, the names of

26 Finally we should consider Eust. *Comm. ad Hom. Od.* 20.302 (2.238 Stallbaum) (drawing of course on earlier sources), who says simply: ἕτεροι δὲ φασιν, ἐν Σαρδοῖ νήσῳ ἐπέκεινα Σικελίας τῆ καὶ Σαρδόνι σέλινον φύεσθαι, οὐ τοὺς ἐμπαρόντας ξένους μετὰ σπασμοῦ ἄλλυσθαι σεσηρότας, ὡς εἶναι σαρδόνιον ἢ σαρδάνιον γέλωτα τὸν μετὰ ὀδύνης (“Others say that on the island of Sardinia, beyond Sicily, celery grows: foreigners who ingest it die with contractions, gnashing their teeth. This is why the sardonic or sardanic laugh is that which is mixed with pain”).

27 Paulis (1993: 31–38).

28 Also very interesting for our purposes are certain names in the Sardinian dialects of *Ranunculus sceleratus* (*appiu búrdu*) and above all of *Oenanthe crocata* (*áppiu arèste*; *áppiu búrdu* and *isáppiu*, derived, according to Paulis [1993: 35–36], from a form *risáppiu*, connected to *apium risus*), which clearly demonstrate how the concept of the existence of a poisonous *apium* has survived to this day. See Paulis (1993: 34–36), who also mentions names related to celery by which *Ranunculus sceleratus* is known in other languages.

29 Appendino *et al.* (2009).

poisonous plants similar to celery could well overlap. Paulis³⁰ also believes, again probably correctly, that the name μεθύουσα (“that which makes drunk”), which is found in Pseudo-Dioscorides, and the indication in Silenus that the plant was ἡδύ (“sweet”), would suggest the hemlock (*Conium maculatum* L.), whose stem is edible and sweet-tasting but which has intoxicating properties if ingested in large quantities.³¹ One should note, however, that like *Apium graveolens* L. (“celery”), other plants, such as *Oenanthe crocata* L., *Conium maculatum* L. and *Aethusa cynapium* L. (another poisonous plant, also known as “fool’s parsley” or “fool’s cicely”) are also part of the *Apiaceae* or *Umbelliferae* family and can be easily confused with each other—as in fact happens—by nonexperts.³² The possible identification of the *apium rusticum* with hemlock (*Conium maculatum* L.) is a matter of extreme importance, to which we shall return shortly.

6 Causes of the Grass Staggers According to Modern Analysis, and Donkeys Eating Hemlock

Now, however, our attention must turn once more to the *capostorno*, or rather to the disease which—as previously seen—the British call *grass staggers*, and the French *vertigo du cheval*. The disease has been described, but nothing has been said about its cause. Once again, let us turn the clock as far back as

30 See Paulis (1992: 149) and Paulis (1993: 38).

31 See Lucr. 5.899-900 and Plin. *Nat.* 25.151: *Semen habet noxium; caulis autem et uiridis estur a plerisque et in patinis* (“It has a poisonous seed, but the stem is eaten by many both raw and cooked in a pan”). The fact that hemlock is edible is also found in Luigi Anguillara (d. 1570) (1561: 273): “li germi novi della volgar Cicuta, come mi è stato affermato a Pesaro, quando escono nella primavera fuor della terra, sono mangiate col pane da’ fanciulli; della qual cosa mi sono meravigliato grandemente” (“as was brought to my attention in Pesaro, the new buds of common hemlock, upon sprouting from the earth in the spring, are eaten with bread by children, a sight at which I marvelled greatly”). Camarda (1984: 150; then followed by Paulis [1993: 151]) very significantly comments: “i fusti giovani, mondati della parte più esterna, sono mangiati crudi. Hanno un sapore dolciastro, come ho constatato personalmente, ma quando se ne consuma in quantità notevole provocano inebriamento” (“the young stems, trimmed of the outermost part, are eaten raw. They have a slightly sweet taste, as I have learned at first-hand, but when they are consumed in large quantities cause a sense of euphoria”). See also Camarda/Cadeddu/Larese/Ruiu (1986: 115): “lo stelo . . . si mangia, ma provoca se ingerito in quantità senso di euforia e inebriamento” (“the stem . . . is edible, but if ingested in excess, causes a sense of euphoria and intoxication”).

32 On confusion between *Oenanthe crocata* and *Conium maculatum* in Sardinia, see Camarda (1989–1990: 175) and especially Paulis (1993: 37).

possible and browse the interesting article by William Dick, professor of veterinary medicine in Edinburgh, which appeared in 1859 in a Scottish review of agriculture:³³

It occurred most commonly among horses going at grass in low wet pastures, where the grass was coarse and rank; and it was also supposed to arise from their eating a plant possessing, it was believed, poisonous quality called nagwort, or staggerwort (*Senecio jacobaea*), or some other poisonous herb, which grows most abundantly in the summer and autumn.

Senecio jacobaea Mill., in English commonly *ragwort* and in Italian *Senecione di S. Giacomo* or *erba colderina*, is a plant poisonous to humans and animals, and if consumed in large quantities can cause irreversible cirrhosis of the liver.³⁴ This could all begin to make sense.

But there is more. Let us dwell on what Ignazio Camarda goes on to say about hemlock after he has noted, as mentioned above, that its stalk is edible but intoxicating if ingested in large quantities:³⁵

Il somaro pare che [ne] sia molto ghiotto (*su molente s'imbricat comente unu omine che sinche vivet una cuppa 'e vinu*), ma s'inebria come un uomo che si è scolato un barile di vino! Ciò è in accordo con il nome di *imbriaga molentis* con cui viene indicata questa specie a Tortolì (Cossu).

The donkey seems to be very fond of it, . . . but it gets as inebriated as a man who has drained a cask of wine! This observation agrees with the

33 Dick (1857–1859: 468).

34 See, for example, Swick (1981) and Passemard (2012). There is a significant literary reference in the epistolary novel by Stephen Fry (1994: esp. 175 and 244–245), which tells of a mare which had been mistakenly diagnosed as poisoned by *Senecio jacobaea* and instead turned out only to have been drinking whisky. Magnani (2008: 285), for his part, took up the idea that the symptoms of the *apiosus* horse could be attributed to the ingestion of an excessive quantity of St. John's wort (*Hypericum perforatum* L.), but unfortunately did not follow through with this important idea. See also Bompadre/Magnani/Cinotti (2008: 7).

35 Camarda (1986: 115–116). This information was repeated by Paulis (1992: 151). In a letter dated April 30, 2011 Camarda also kindly informed me that “it is actually true that in Sarule, a little town in Central Sardinia (not in Tortolì [as stated in Camarda/Cadeddu/Larese/Ruiu (1986)]), it [*Conium maculatum* L.] is called *imbriaga molentis* (i.e. “donkey drunk-maker”) because after the feast the donkey rolls about apparently giggling as if drunk.”

name *imbriaga molentis*, by which this species is referred to in Tortoli (Cossu).³⁶

The fact that donkeys eat hemlock is found in older sources too. A very interesting account is that of the veterinarian Giovan Battista Trutta who, in his treatise *Novello giardino della prattica et esperienza*, first published in Naples in 1699, wrote as follows (1.3.84):³⁷

Mangiando li somari con altri animali la cicuta, con la semenza dell'usquiamo [*sic*] di quella specie rossa, in poco tempo li vedrete andare balordi, e storditi di testa a guisa d'ubbriachi, ciò cagionato dalla fumosità di detta erba, che li conturba lo stomaco, con mandare li vapori alla testa.

When donkeys eat hemlock with other animals, along with the seed of the red species of henbane, you will shortly see them going around in a stupor and stunned like drunkards, this being caused by the gassiness of the herb, which disturbs their stomachs and sends vapours to the head.³⁸

36 A similar name of the hemlock is the Sicilian *addurmisciscecchi* (“donkey sleep-inducer”), see Piccitto (1977: 61).

37 Trutta (1699); the description of the disease is followed by the treatment. The Naples edition of 1785 is cited because at the time when I ordered the book (June 3, 2011) the copy of the first edition of 1699 held by the Biblioteca Nazionale in Naples (coll. XLIV 4–5) was not available for consultation as the section in which it is kept was closed. However, I thank the staff for their kind assistance.

38 On donkeys eating hemlock see again Anguillara (1561: 273): “ancora nell’Abruzzo al castello chiamato Goriano, gli asini la mangiano senza uno minimo nocumento” (“even in Abruzzi in the castle called Goriano [today Goriano Sicoli], donkeys eat it without any harm”). However, Pietro Antonio Michiel (1510–1576), citing Anguillara in his *Cinque libri di piante* (ms. *Marc. it.*, cl. II, 26–30 [= 4860–4864], Michiel [1940: 472]), significantly adds: “pur diventano stupidi” (“but they become fools”). See also de Toni (1910: 640). Michiel’s addition depends on the commentary on Dioscorides by Pier Andrea Mattioli (1501–1578); the following lines are from the Latin version (Mattioli [1554: 482]): “Caeterum in Italia constat cicutam non adeo exitialem esse. Eam in Hetruria si asini depascantur, profundissimo somno, et torpore capiuntur, ita ut non tantum stupidi, sed plane mortui uideantur. Id quod aliquando rusticos huius rei ignaros fefellit: nam dum asinis, quos mortuos credebant, pellem ad usum detraherent, accidit mirum, quod in medio fere operis asini experrecti sunt, non sine magno excoriantum terrore, atque ingenti spectantium risu” (“But in Italy the hemlock does not seem to be so poisonous; in Tuscany, if donkeys eat it, they enter into such a deep sleep and torpor as to appear not only stunned but also dead. And this fact once deceived farmers who were ignorant of

Also important is what Julius Caesar Scaliger says in his *Exotericæ exercitationes* of 1557:³⁹

Asellos uidimus multum oscitantes, deinde in anfractuosos gyros circumactos concidere.

We saw donkeys yawning a lot and then going round in circles and collapsing.

Thus, a donkey which had eaten a large amount of *apium rusticum* would become dazed and drunk, and sometimes turning around: in a word, that donkey would become *apiosus*. In my opinion, there is nothing more to say at this point on the etymology of *apiosus*. One can only wonder where all of the erroneous interpretations have come from.

All that needs to be added is that nowadays the most common name for the disease, which also affects cattle and sheep, is *Ryegrass Staggers*, as it seems to be triggered by the ingestion of ryegrass. It has become apparent that endophytic fungi, which produce a toxin very harmful to animals, can nest in the cells of such a plant. This evidence has been discovered only thanks to recent research conducted in New Zealand.⁴⁰ Therefore it should be stressed that the true causes of the disease of the *equus apiosus* have been known for only a few years: toxins of certain fungi.

7 Causes of the Grass Staggers According to the Ancients

When looking back at the past, a question arises: why in the Latin texts on veterinary medicine is there no mention of the ingestion of poisonous plants?⁴¹ Instead, *apiosus* is treated as a disease of the brain and is associated with other diseases related in some way to *insania*. An explanation must be found in the

such effects. While they were skinning the donkeys which they believed were dead, a miracle happened: when the work was about half done, the donkeys woke up, much to the alarm of those doing the skinning and to the considerable amusement of onlookers”).

39 Scaliger (1557: 210^v; *Exerc.* 152).

40 On this subject see, for example, Cao/Koulman/Johnson/Lane/Rasmussen (2008); Kemp/Bourke/Wheatley (2007).

41 It was precisely this fact which made Magnani (2008: 285) abandon the hypothesis regarding the ingestion of St. John's wort.

fact that, while modern studies, especially in the English-speaking world, rely heavily on a connection between food and disease, for the ancients the relationship between horses suffering from the grass staggers and donkeys drunk from eating too much *apium rusticum*, and therefore called *apiosi*, was established only by similarity. The *apiosus* animal showed symptoms similar to the donkey that had ingested large amounts of hemlock, but of course could not be identified with it since its disease was far more serious and certainly not temporary—after all, as previously seen, the real causes of the grass staggers are different. For these reasons, the ancients developed the idea that the disease was an internal affliction of the brain. In this regard the description of Ruini⁴² can be taken as an example but similar descriptions can also be found in almost all nineteenth century Italian treatises on veterinary medicine which I have so far consulted.⁴³

È cagionata questa infirmità da materia mista, nella quale perlopiù la frigidità soprabonda, accompagnata alle volte con umori ventosi, o sia nel cervello istesso, o in tutto il corpo, o nelle membra, che hanno col cervello comunicanza.

This malady is caused by mixed material, in which cold generally predominates, accompanied at times by windy humours, whether in the brain itself or throughout the body with which the brain communicates.

8 An Adjective Akin to *apiosus*: *elleborosus*

A further note is needed on the adjectival form *apiosus*. As J.N. Adams⁴⁴ has very clearly demonstrated, in medical and veterinary language adjectives ending in *-osus* are derived from nouns indicating either the disease or the part of the body affected by disease. Examples are *bulimosus* (“suffering from bulimia”), *coriaginosus* (“suffering from *coriago* [unidentified disease]”), *farciminosus* (“suffering from farcy”), *ozaenosus* (“suffering from *ozaena* [a not well identified disease]”), *suspiriosus* (“suffering from troubled breathing”), or *suffraginosus* (“suffering from inflammation of the hock, spavined”), *gambosus* (“suffering at the hock”), and *lienosus* (“affected by a disorder of the spleen”).

42 Ruini (1598: 2.60).

43 See for example Crepetti (1830: 4–7) and Bucellati (1844: 8–9). Also worthy of consideration is what Trutta says in the passage quoted above.

44 Adams (1995: 338–339).

Apiosus would therefore at first appear to be an exception to this rule since it derives from the noun (*apium*) which designates the substance ingested by the animal.

Gourevitch rightly observed, in a brief note published in 1994/5,⁴⁵ that there is another adjective closely akin to *apiosus*: *elleborosus*, although, as we have seen, she later abandoned the idea. This word is found twice in Plautus:

senex hic elleborosust certe (*Most.* 952)
this old man is definitely *elleborosus*

quaeso, sanus es? elleborosus sum (*Rud.* 1006).
are you yourself? I am *elleborosus*.

In both cases *elleborosus* seems to mean more or less “crazy.” As was well known in antiquity and later too, the hellebore, in itself a toxic plant, was used to treat madness.⁴⁶ Plautus himself says:

elleborum hisce hominibus opus est (*Pseud.* 1185).
these men need hellebore.

However, as has already been noted, and this is what is most interesting, *elleborosus* would literally mean “full of hellebore,”⁴⁷ just as *uinosus* means “drunk,” “drunkard,” two adjectives linked by Friedrich Marx.⁴⁸ It should also be noted that in Greek the verb ἐλλεβοριᾶω seems to mean not only “to treat someone with hellebore,”⁴⁹ but also “to be crazy,” as in a fragment of the comic poet Callias, where it is said that a madman “was in need of hellebore” or, perhaps better, “he was being treated with hellebore”:

ἐκ δὲ τοῦ ἐλλεβόρου καὶ ἐλλεβοριᾶν, τὸ ἐλλεβόρου δεῖσθαι, ὡς Καλλίας φησὶν
(Call. fr. 28 K. = 35 K.-A.), καὶ ἐλλεβορίζειν (Phot. ε 640 Theod. [= *Etym.*

45 Gourevitch (1994–1995: 153).

46 On the hellebore in ancient times see the detailed commentary by Girard (1986).

47 See for example O’Brien-Moore (1924: 52, n. 5): “Helleborosus should mean ‘full of hellebore’, but in Plautus it seems to mean ‘needing it’”. Ernout too (1949: 39) gives what is, in my opinion, a not very good explanation of the term “qui a besoin d’ellébore.”

48 Marx (1928: 184).

49 This is the main meaning of ἐλλεβορίζω and it seems to be the meaning of ἐλλεβοριᾶω in [Hp.] *Epist.* 20 (9.386 L.): Εἰσήχθη μὲν οὖν, ᾧ Δημόκριτε, ὡς μεμνηνότεα ἐλλεβοριῶν, οὐ καταμαντευσάμενος ὅστις ποτ’ εἶης (“So I was called to administer hellebore to you, Democritus, as to a madman, not guessing what kind of person you were”) (cf. *DGE* s.u.).

M. 331.29; Suid. ε 770; *Schol. Ald. Aristoph. Vesp.* Koster 1489d; Ps.-Zonar. ε Tittmann 692.7]).

from “hellebore” are derived both ἔλλεβοριάω “to be in need of hellebore,” as Callias says, and ἔλλεβορίζω.

Of equal interest is the verb ὑοσκαμάω—also attested in the language of Attic comedy—which, in view of the fact that the ingestion of henbane could lead to delirium, ends up meaning simply “to be crazy”:

Ἵοσκαμάων· μεμηνέναι, παραπαίειν. Φερεκράτης Κοριαννοῦ· ὑοσκαμάῳς ἀνήρ γέρων (Pherecr. fr. 72 K. = 78 K.-A.) (Phot. p. 619.8 Porson [= *Etym. M.* 777.18; Suid. υ 123]).

“to be mad, beside oneself.” Pherecrates in the *Corianno* says: “you’ve become crazy in your old age.”⁵⁰

Parallels with *elleborosus* and *uinosus* also appear to be significant in that they confirm once again that *apiosus* did not originally designate the animal suffering from grass staggers, but merely indicated that the animal had gorged on *apium* (*rusticum* or *agreste*).

9 The Occurrence in the “Hermeneumata Celtis”: *apiosus* μετέωρος

I would like to make one final note to conclude with. At the beginning of this work it was said that the term *apiosus* is found “almost” exclusively in veterinary texts. An instance of the adjective is in fact also found in the bilingual glossary known as *Hermeneumata Celtis* (12.972): *apiosus* μετέωρος. This new occurrence had not previously been known to those who have dealt with this question, and it was by chance that I myself became aware of it on hearing

50 Compare also Hesych. υ 209: ὑοσκαμάῳς· μαίνη, ἀπὸ τῆς πόας (“you are crazy”: ‘you are out of yourself’, from the name of the plant”). I thank my friend Ferruccio Conti Bizzarro for having drawn my attention to the fragments of the two comic poets—compare also Conti Bizzarro (1988–1989: 283), who conveniently cites passages in which henbane is associated with madness—and for all the help which he generously provided. Imperio (1998: 250) should also be consulted, where the meanings of the two verbs are rightly distinguished from each other.

a talk given by Rolando Ferri on the third of September 2009 in Lyon at the Ninth International Conference on Vulgar and Late Latin. Ferri was inclined to believe, though with a measure of doubt, that μετέωρος meant “undigested” or “inflated,” “swollen.”⁵¹ But he was wrong. If we in fact return for a moment to the symptoms displayed by the *apiosus* horse, we realise that the adjective μετέωρος refers not so much to the body as to the mind. In this connection see this passage of Plutarch where the term has the meaning of “uncertain,” “confused”:

οὕτω σοι διασέσεισμαι καὶ γέγονα μετέωρος ὑπὸ Στωικῶν ἀνδρῶν (Plu. *De comm. not. adu. Stoic.* 1059a).

I have been so shaken and confused by certain Stoics.

Above all consider the following examples, in which the noun μετεωρισμός seems to mean a genuine mental disorder:

καὶ ῥίπτασμον τοῦ σώματος διὰ τὴν ἔνδον ταραχὴν καὶ μετεωρισμὸν γνώμης (Hp. *Acut. (Spur.)* 7.39 [2.424 L.]).

both a shaking of the body due to internal disruption and a disturbance of the intellect.

στάσεις δὲ καὶ μετεωρισμοὺς ψυχῆς (Vett. Val. 7.6).

blackouts and disturbances of the mind.

μετεωρισμὸς τῆς κεφαλῆς (Oribas. *Ecl.* 46.2).

dizziness.

Does the gloss of the *Hermeneumata Celtis* indicate that the adjective *apiosus* could also be attributed metaphorically to human beings? Maybe.⁵² It is more certain that the glossator thought that the word could be applied to a subject in a state of mental confusion. I think that at this point the question of *apiosus* can be considered definitively resolved.

51 I thank R. Ferri for having generously sent me a copy of his contribution before being printed in the Proceedings. See now Ferri (2012: 760).

52 As we have seen, human beings have also eaten the stalk of the hemlock for a long time (see n. 31 above).

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