HERMES 149, 2021/2, 144–156
DOI 10.25162/HERMES-2021-0013

OTTA WENSKUS

Basic Astronomy

Concerning Sappho F 34, F 96 and F 168 B Voigt, the Homeric Hymn to Hermes, and Pindar's fourth Isthmian Ode*

ABSTRACT: We as Classical scholars need to (re)learn what most of our nineteenth and early twentieth century colleagues used to know about e. g. the phases of the moon. If we do not we may totally miss essential points of some texts, or fail to understand the nature of problems pointed out by former generations, as in the case of the Homeric Hymn to Hermes. We also ought to go further than our predecessors: knowing some basic facts about the heavenly bodies, e. g. about the visibility of the planet Venus, can make us see some Greek poems in a (to us, at least) new light.
Keywords: moon, Venus, popular astronomy, unK-unKs, similes, Sappho, Homeric Hymns, Pindar

There is a strange discrepancy between the importance the study of time structure in ancient literature has assumed during the last decades and the growing neglect of the study of what I am going to call, for want of a better term, popular astronomy[1]. Let us take a recent volume which, or so one would suppose, ought to cover the subject of time reckoning, viz.: "Time in Ancient Greek Literature"[2], and consult the index: "astronomy", "calendar", "month", "moon", "sun", "stars": nothing.[3] This is peculiar, disturbing even, if we stop to consider that the stellar phases, the phases of the moon, the solstices, and, at least from the 5th century B. C. onwards, the equinoxes were essential not only for the measurement, but also for the very perception, of time in antiquity. The Greeks (and

* I have read earlier versions of this paper in Bologna (2016) and Florence (2017). Special thanks to CAMILLO NERI (Bologna), GUIDO BASTIANINI (Florence), and MARIA CANNATÀ FERA (Messina).

1 Astronomy was, in Greece at least, never popular in the sense that most Greeks actively observed the stars, but see below, and they certainly all observed the phases of the moon.

2 Ed. I. DE JONG / R. NÜNLIST, Leiden/Boston 2007

3 Granted, the editors favour a narratological approach, but they seem to be unable to see the *histoire* for the *récit*. This also goes for most of their contributors. There are some exceptions: apart from the excellent contribution covering Flavius Josephus (see below), there is the lively and informative one penned by J. J. KLOOSTER, Apollonius of Rhodes, 63–80, but she too would have benefited from a basic knowledge of Greek astronomy, particularly on 64: "We may thus calculate that the journey takes one sailing season, that is, from spring to autumn." There is no need whatsoever to labouriously count the days to arrive at this conclusion: Apollonius tells us in so many words that the Argonauts arrived in Colchis in autumn, v.2, 1098, for which see A. REHM, Episemasiai, RE Suppl. 7 (1940), col.175–197, particularly 183 f., and my Time in Greek epic, in: CH. REITZ (ed.), Epische Bauformen (forthcoming). Calendars are ably discussed, in the volume edited by DE JONG and NÜNLIST, by J. W. VAN HENTEN / L. HUITINK, Josephus, pp. 213–230.

the Romans when they imitated the Greeks) also considered the visible risings and settings of some of the fixed stars to be important. I am not saying they always actually observed them (they obviously could not when it was too cloudy), but every Greek knew what approximate date was meant when somebody mentioned the rising of Sirius (also known as the Dog Star) or of Arcturus, or the setting of the Pleiades.[4] Even Greeks who did not actively observe the stars, i. e. most Greeks, would never write e. g. **when the Pleiades and Arcturus rose in the morning*, knowing that the Pleiades could be observed (by early risers, that is) to rise just before dawn in the last days of spring, and Arcturus in early autumn. Things can get tricky, however, when a Greek imagines what constellations might be visible at any given time: they did not always bother to think things through either, and the Romans in particular tend to make mistakes when it comes to the stars, the most prominent example being Julius Caesar.[5] Some of them seem glaring to those who are versed in astronomy (or even to those who, like me, like to observe and identify the stars), but are not even noticed by most classical scholars. If they are noticed, the explanations given are often wrong, and this is perfectly understandable: the interpretation of stellar phases is full of pitfalls, and I strongly suggest to everybody who has not made a thorough study of them to consult one of our astronomically competent colleagues.[6] It is usually not enough to briefly consult my Astronomische Zeitangaben or DARYN LEHOUX's Astronomy, Weather, and Calendars in the Ancient world.[7] But there are some facts every classical scholar ought to know and which do not require a lot of expertise. They concern the phases of the moon and the visibility of the planet Venus, and those are facts whose ignorance precludes an adequate interpretation of the texts in question.

4 See my Astronomische Zeitangaben von Homer bis Theophrast, Stuttgart 1990, passim.

5 See my Columellas Bauernkalender zwischen Mündlichkeit und Schriftlichkeit, in: W. KULLMANN / J. ALTHOFF / M. ASPER, Gattungen wissenschaftlicher Literatur in der Antike, Tübingen 1998, 253–262, particularly 257–258.

6 For one of the many possible pitfalls, cf. my note 22. See also the impressive list of elementary mistakes identified by L. BRAUN, Der Dichter und die Sterne, WüJBb 24 (2000), 207–220, and my Vergil, Dante und der halo effect. Zu Aeneis 2,9; 4, 81; 8, 59, und Inferno 7, 98–99, in: WüJBb (forthcoming).

7 Astronomy, Weather, and Calendars in the Ancient World. Parapegmata and Related Texts in Classical and Near-Eastern Societies, Cambridge 2007, a work which owes somewhat more to mine than the author lets on. See my review in AAW 65 (2012), 67–77. An example of a usually brilliant editor who just glanced at my work and then "corrected" me is J. JOUANNA in the Introduction of his Hippocrate, Épidemies V et VII, Paris 2003, p. LXX n. 97. Had JOUANNA bothered to check the cross reference I gave in my discussion of Epidemics II/IV/VI (p. 106, n. 321), he would have seen that there are, in the botanical works of Theophrastus, some clear cases of the use of preposition + name of the Pleiades where, contrary to JOUANNA's assumption, only the morning setting (end of october) can be meant, not the morning rising (mid may); see my p. 161 s. His hasty consultation of my book in combination with a certain overconfidence thus leads JOUANNA to mistranslate expressions of this type every single time they occur, which has serious consequences considering the importance of the seasons in all the books of the Hippocratic Epidemics.- My conclusion that Ar. HA 5, 542b 10 ss. too refers to the morning setting has recently been confirmed, with new arguments, by K. EPSTEIN in her eccellent commentary: Aristoteles Historia animalium V, Berlin/Boston 2019, 281 s.

Sappho, F 34, 96, and 168 B Voigt

Let us start with the phases of the moon and the effects said phases have for the visibility of the stars. Consider what we would see on a cloudless night unless light pollution makes this impossible.[8] When the sun is still above the horizon no fixed stars are visible. Once it is about six degrees below the horizon stars start appearing all over the sky except in the immediate vicinity of most of the horizon, particularly the western horizon, while the eastern horizon is already dark enough for very bright stars to become visible quite early. If around this time the moon rises at the beginning of her third quarter, the phenomenon occurs which Sappho describes in her F 34:

ἄστερες μὲν ἀμφὶ κάλαν σελάνναν
ἄψ ἀπυκρύπτοισι φάεννον εἶδος
ὄπποτα πλήθοισα μάλιστα λάμπηι
γᾶν.

The stars around the beautiful moon
Hide their radiant form again
Whenever in (all?) her fullness
She shines over the earth.

As the question mark shows, I am not quite sure what to make of μάλιστα. Is it a true superlative, or does it just mean that the moon is particularly full, or that it shines particularly brightly?[9] One thing, however, is sure: Sappho cannot possibly mean the exact fraction of a second when the moon is perfectly full from a modern anstronomer's point of view. The explanation for the phases of the moon does not seem to have been

8 I am simplifying: the following is all we need to know to understand the texts in question. To those looking for something more scientific I recommend H. T. REICHE, Fail-safe stellar datings: forgotten phases, in: TAPhA 119 (1989), 37–53, and MATTHEW ROBINSON, Ardua et astra: On the calculation of the dates of the rising and setting of stars, Classical Philology 104 (2009), 354–375. However, I must point out that ROBINSON's otherwise excellent article contains at least one serious mistake, on p. 358: "there are some stars, such as Arcturus, that are always visible". How can Arcturus be always visible when we can observe it rising and setting, as Hesiod did? What ROBINSON probably meant to say was that some stars are always visible (the circumpolar ones) and others, like Arcturus, are visible every night though not always all the night. The (rare) Greek technical term for those stars is ἀμφιφανής because during a certain period in autumn we can observe Arcturus both setting after sunset and rising before sunrise (and so could the Greeks, albeit for a slightly different period). Apart from that, I like to think ROBINSON might have profited considerably from my Astronomische Zeitangaben (see my n. 4). – I have exercized some caritas interpretativa in the case of ROBINSON but cannot do the same for the poet Shelley, The Question, v. 10 f.: "Daisies, those pearled Arcturi of the earth / the constellation flower that never sets". This would not only have been wrong in Ancient Greece but is also wrong in modern southern Britain and extremely peculiar in Shelley's context as he is imagining a scene in spring: and the evening rising of Arcturus was from Hesiod onwards a sign of early spring (Erga 564–570), as it is in Sara Teasdale's Arcturus in Autumn, who, however, makes a different mistake in assuming that Arcturus is leaving us in autumn: he is, but only for a few hours! Granted, a person wishing to observe Arcturus in november will have to be a somewhat early riser…

9 Most scholars think μάλιστα refers to the participle, but A. BAGORDO may be right: he translates "sooft er als Vollmond am meisten erhellt": Sappho, Düsseldorf 2009

discovered before the fifth century B. C.,[10] and the exact moment when the moon is truly full can occur when the moon is under the horizon and, therefore, unobservable. To someone who observes the moon without a telescope, it seems to be full for at least two nights running, usually more. If we keep this in mind, the meaning of v. 2 is far easier to understand although it seems to have eluded all modern students of Sappho I have consulted. I hereby propose the following explanation: the stars hide their bright faces again (ἄψ), at least those close to the moon, *after a very brief moment of visibility*. The communis opinio of those scholars who do not choose to leave out ἄψ altogether[11] seems to be that it refers to the cycles of the moon's phases, in the sense that this is what happens every month.[12] But this is not what Sappho wrote, as ἄψ immediately precedes ἀπυκρύπτοισιν. That the traditional interpretation of this verse is thus seriously flawed has been pointed out by EKATERINI TZAMALI,[13] but she lacked the astronomical expertise to hit upon a better solution and translates ἄψ "hinweg", rather unsatisfactorily, which is why her very valid criticism has been disregarded.

I suggest the following context for this fragment: a group of lovely girls arrives and is admired by all onlookers, but only for a very short time – until, that is, an even more beautiful one appears. This explanation probably excludes the possibility that said paragon of beauty is the leader of the choir. It is compatible with the theory that we are dealing with the fragment of an epithalamion, but this does not change the fact that the epithalamion theory is based on mere speculation, as Camillo Neri is quite right to insist.[14] I even hesitated to mention the possibility of this scenario because this very mention might lead us to be blind to possible alternatives. I suspect that at least some scholars who like to see epithalamia even when the evidence is not so much inconclusive as nonexistent do so because it is so easy to imagine a Greek wedding[15]. Of course I too would like to learn more about the performance of Sappho's poems in general and this one in particular, but this has yet to happen, so we are left with the text without much of a context. But then this text is extremely interesting, not least because the simile is quite different from the one in the somewhat more substantial F 96, 6–9:

10 See G. WÖHRLE, Wer entdeckte die Quelle des Mondlichts?, in: Hermes 123 (1995), 244–247

11 As do e. g. P. KUHLMANN, Sappho. Die größeren Fragmente des 1. Buches, Dettelbach 2003, who explains the etymology of ἄψ on p. 106 but does not translate it, and D. J. RAYOR / A. LARDINOIS, Sappho, Cambridge 2014.

12 See particularly V. DI BENEDETTO, Saffo, Poesie, Milan 1987, whose translation of F 34 on p. 39 is perfectly correct but who wrongly claims, p 21, "si intravede, imperniato sul "di nuovo", un sistema che dalla ritmicità cadenzata della natura va fino al culto e alla poesia." This may very well hold true for the rest of the poem, but not for v.2 of our fragment. In fact ἄψ often has the meaning that something has been done in vain or might just as well not have happened at all, as in Iliad 1, 60.

13 Syntax und Stil bei Sappho, Dettelbach 1996, p. 199.

14 C. NERI, Saffo. Poesie, frammenti e testimonianze, Ariccia 2017, p. 309.

15 A point well made by H. PARKER, Sappho Schoolmistress, in: TAPhA 123 (1993), 309–351, esp. 337.

Νῦν δὲ Λύδαισιν ἐμπρέπεται γυναι-
κέσσιν ὡς ποτ' ἀελίω
δύντος ἀ βροδοδάκτυλος σελάννα[16]
πάντα περρέξοισ' ἄστρα.

Now she stands out among the women of Lydia
As when (just) after sunset
The rosy-fingered moon
Surpasses all stars.

In F 96, the unnamed woman surpasses all the women of Lydia, not just a group of girls, as the moon surpasses all the stars, not just those in her immediate vicinity. Thus the phenomena are more generalized in F 96, but they are more dramatic in F 34: in F 96 the Lydian women and the Lydian stars are outshone but still visible, while the stars and the girls of F 34 are totally lost from view. There is no contradiction between the two similes: they just mention two different aspects of the same phenomenon.[17] In fact, I think F 34 helps us to understand why Sappho calls the moon ῥοδοδάκτυλος in F 96: the rising moon of F 34 has the same effect, albeit on a smaller scale, dawn has (or Dawn, the goddes this epitheton is usually applied to): causing the stars near the eastern horizon to fade after a brief moment of visibility.[18] I repeat: this explanation of F 34 is compatible with, but not evidence for, a wedding scenario (at a wedding, onlookers, at least female onlookers, tend to concentrate on the bride), and I also repeat: we should resist the temptation to count F 34 among the epithalamia without further evidence.

A nuptial context has also been suggested[19] in the case F 168 B:

Δέδυκε μὲν ἀ σελάννα
καὶ Πληιάδες· μέσαι δὲ
νύκτες, πάρα δ' ἐρχετ' ὥρα·
ἐγὼ δὲ μόνα κατεύδω.

First, a cautious translation: the translation I would use in an official edition of Sappho's poems:

16 σελάννα is a conjecture by W. SCHUBART, Neue Bruchstücke der Sappho und des Alkaios, in: Sitzungsberichte der königl. Preußischen Akad. d. Wiss, phil.-hist. Klasse, 1902, 195–209, p. 200, for the unmetrical μήνα.

17 While Iliad 8, 555–559 is quite different, although it is Eustathius' commentary on 555 to which we owe F 34. In the Iliadic text, both the moon and the stars are clearly visible, and the shepherd rejoices (probably less for merely aesthetic reasons than because the moon makes life less dangerous for him and his flock than a moonless, if starry, night would). See also my Astronomische Zeitangaben (as in n. 4) p. 37 and n. 100.

18 This explanation neatly dovetails with the explanation given by e. g. A. BROGER, Das Epitheton bei Sappho und Alkaios. Eine sprachwissenschaftliche Untersuchung, Innsbruck 1996, 84: "Der unmittelbar nach Sonnenuntergang (ἀελίω δύντος) erscheinende Mond strahlt (ἐμπρέπεται) rötlich am Sternenhimmel." In fact, the rising full moon looks reddish (at least sometimes) for the same reason the eastern horizon tends to do in the morning. There is an almost perfect parallelism of the two phenomena, and Sappho exploits this.

19 The hypothesis that 168 B was a "carme di congedo" was advanced by L. E. ROSSI, Letteratura greca, Florence 1995, 160, a suggestion which G. T. TEDESCHI called a "felice intuizione": Rito e poesia: il Notturno di Saffo (Fr. 168 B V.), in: Atene e Roma, N. S. 4 (2010), 145–165.

The moon has set
And the Pleiades: it is the middle of
The night. Time passes.
But I sleep alone.

In 1990, I proposed a different, far more adventurous translation[20] of the first three verses, which had been suggested to me by DAVID PINGREE, and I still think this is the right one. The English equivalent would be:

The moon has set
Together with the Pleiades: it is the middle of
the night. Spring passes.

I am not going to repeat what I wrote in 1990, but want to add the following observations: I realize that PINGREE's interpretation, while convincing, is not certain. If I had to take an educated guess, I would say that the probability of PINGREE's interpretation being right is about 70 %. That sounds promising, but of course it means that the probability of PINGREE being wrong is 30 %, which is inacceptably high for an "official" translation in view of the fact that the more conservative translation and interpretation (the moon and the Pleiades have set, possibly but not necessarily at the same time, and quite possibly well after true midnight local time, which means it is winter or early spring) is not only acceptable, but also compatible with Pingree's. And then there is the considerable danger of overinterpretation: some optimistic scholars might deduce that Sappho must have been influenced by Near eastern calendarical astronomy.[21] This fragment has been overinterpreted enough as it is, even by astronomers: MANFRED CUNTZ, LEVENT GURDEMIR, and MARTIN GEORGE[22] even went so far as to conclude that "Sappho also needs to be placed in a broader context, as an early example of "a woman in astronomy".

20 As in my note 4, p. 55 s.: Der Mond ist untergegangen / und mit ihm die Plejaden: es ist mitten / in der Nacht. Der Frühling vergeht.

21 This is a distinct possibility, as I wrote in 1990, p. 56, but by no means a foregone conclusion.

22 Seasonal Dating of Sappho's "Midnight Poem" revisited, in: Journal of Astronomical History and Heritage, 19/1 (2016), 18–24, particularly p. 22. As for the dates calculated by CUNTZ/GURDEMIR/GEORGE, the last possible date (6 april) is only approximate, and the first possible date is far too late because CUNTZ/GURDEMIR/GEORGE assume, wrongly, that Sappho used μέσαι νύκτες in the sense of "true midnight local time" and even used a technical time-keeping device. As the authors admit, there is no evidence the Greeks used such a device before the 4th century B. C., and as all Homeric scholars agree that, in the many cases the sun is said to be in the middle of the sky, a period of several hours is meant, the same is certainly the case for expressions like μέσαι νύκτες. See my Time in Greek epic (forthcoming), and Mehr zur Astronomie in den homerischen Epen (forthcoming). By the way: the authors do not specify whether the dates they calculated are gregorian or julian ones, but astronomers tend to use julian dates, and I too had, with the help of DAVID PINGREE, calculated 6 april to be the approximate julian date for the evening setting of the brightest of the Pleiades, η Tauri = Alcyone in the year 600 B. C. The gregorian date would be 31 march. By the way, the Pleiades, while striking, are not particularly bright, contrary to what R. SCHLESIER all too boldly affirms in Sappho bei Nacht, in: A. CHANIOTIS (Hg), La nuit. Imaginaire et réalités nocturnes dans le monde gréco-romain (Entretiens Hardt 64), Vandœuvres 2018, p. 91–121: "Die Nacht ist hier, nach dem Untergang des Mondes und sogar der Plejaden, des besonders hellen Siebengestirns, wirklich dunkel." The Pleiades do not measurably contribute to the overall brightness of the night, except perhaps metaphorical-

The Homeric Hymn to Hermes

Knowledge about the phases of the moon and, in this case, their relation to the risings and settings of this luminary, is even more important in the case of the homeric Hymn to Hermes, vv 18s.:

> ἑσπέριος βοῦς κλέψεν ἑκηβόλου Ἀπόλλωνος
> τετράδι τῇ προτέρῃ τῇ μιν τέκε πότνια Μαῖα

and 97–99:

> ὀρφναίη δ' ἐπίκουρος ἐπαύετο δαιμονίη νύξ,
> ἡ πλείων, τάχα δ' ὄρθρος ἐγίνετο δημιοεργός,
> ἣ δὲ νέον σκοπιὴν προσεβήσατο δῖα Σελήνη.

MARTIN WEST, one of the few Greek scholars of his generation who studied Greek popular astronomy, and who is often quoted as the authority on Hesiod's calendar par excellence[23] translates vv. 18 s.

> in the evening he stole the cattle of far-shooting Apollo – on the fourth of the month, the day the lady Maia bore him[24],

and vv. 97–99:

> His ally, the dark divine night, was coming to an end, the greater part, and soon it would be lightening and arousing people to work; the lady Moon had just reached her height,

Those are good translations, but in this case the poet (or compilator or interpolator) seems to have made a mistake, unless we presume that Selene (the lady Moon) does not behave like the empirical moon would but like a goddess who can do as she pleases.[25]

ly speaking, not only because they are really rather faint but also because when they set other stars rise and vice versa.

23 As ROBINSON (as in note 8) points out, p. 355 note 7, the dates calculated by WEST rely on premises which are no longer accepted, probably even on premises which were no longer accepted when WEST wrote his commentary on Works and Days. The calculations of ALEXANDER JONES I used in 1990 (when they were state of the art) are also off in some cases but somewhat less so.

24 Homeric Hymns, Homeric Apocrypha, Lives of Homer. Edited and translated by MARTIN L. WEST, Cambridge, Mass./London 2003.

25 But did the contemporaries or near contemporaries of this Hymn's author think she could? Heraclitus probably did not; if the Erinyes would "find out" if the sun overstepped his boundaries they probably would not let the moon get away with rising when she was not supposed to (see DK 22 B 94). The date of the hymn to Hermes is controversial; while it is true that "there does not seem to be any compelling reason to date the hymn later than c.500 B.C." (N. RICHARDSON, Three Homeric Hymns. To Apollo, Hermes, and Aphrodite, Cambridge 2010, p. 24), the reasons for a higher date are not totally compelling either. A. VERGADOS, The Homeric Hymn to Hermes, Introduction, Text, and Commentary, Berlin/Boston 2013, 130–147, favours the second half of the sixth century but keeps and open mind, as should we. The arguments for a hellenistic date advanced by J.-M. SCHENCK ZU SCHWEINSBERG, Der pseudohomerische Hermes-Hymnus, Heidelberg 2016, are far from compelling, particularly the linguistic ones of pp. 34–39, as only highly formulaic texts can owe any true archaic colouring to *Formeltechnik*. The archaisms of the highly original Hymn to Hermes thus point to a date well before the hellenistic age.

The empirical moon is not only not visible but not even above the horizon between midnight and sunrise so early in her first quarter, and it must be early in her first quarter because only a few hours have elapsed since the evening of the fourth day of the month which began, as months in Greece did, when the crescent of the new month became visible, which occurs almost always in the evening. And what are we to make of v. 141, which WEST translates "for the rest of the night, while the moon's fair light shone down on him"? Is the translation of *παννύχιος* = "for the rest of the night" a bit forced, perhaps? NICHOLAS RICHARDSON's "in the dead of the night" is probably better but presupposes that the poet or interpolator made an even bigger astronomical mistake.[26] Now, I do not assume for a moment that WEST was not aware of the fact that the moon gets its light from the sun, but could it be that he has not paused to consider that this implies something everybody (including those who did not know where the moon gets its light from) knew before street lighting became normal? Consider the following. We all know that the moon gets her light from the sun and that the moon has phases, and many of us realise that the phases are the result of the relative positions of the sun and the moon. But it obviously does not occur to most of us that this means that the crescent of the moon in her first quarter (actually this expression is redundant because the crescent, i. e. the waxing moon, *is* by definition the moon in her first quarter) usually becomes visible in the western sky and, being close to the sun from a geocentric point of view, always, with no exceptions whatsoever for the latitudes which comprise the Mediterranean, sets well before midnight, while the full moon rises at dusk in the east and sets at dawn,[27] and the waning moon in her fourth quarter (I am being redundant again for the purpose of clarity) rises shortly before dawn and may or may not be visible during the following hours, depending on atmospheric conditions and the moon's latitude, which is also subject to change.

LUDWIG RADERMACHER[28] knew this, but as he thought, rightly or wrongly, that this was common knowledge, and could not possibly have foreseen that 70 years later the causal nexus between the phases and the risings and settings of the moon would be an "unk-unk" or "unknown unknown"[29] to almost all philologists, his commentary is succinct; basically he just says that there is a problem, and quotes K. KUIPER, De discrepantiis hymni homerici in Mercurium[30], whose grasp of the problem and elegant Latin are admirable indeed, but then he wrote this article more than a century ago. RICHARDSON may be aware of the problem when he writes in his commentary[31] on 99–102 "Selene rises conveniently in time to illuminate his killing of the cattle and all that follows this", while RENÉ NÜNLIST[32] obviously is not, writing as he does "The Hymn to Hermes is narrated not merely in strictly chronological order, but rather with the

26 Three Homeric Hymns. To Apollo, Hermes, and Aphrodite, Cambridge 2010.
27 As she is shown to do on the eastern pediment of the Parthenon, for instance.
28 Der homerische Hermeshymnus, Wien 1931.
29 Meaning something a given person does not only not know, but is not even aware of not knowing.
30 Mnemosyne 38 (1910), 1–50, see particularly p. 13.
31 See my note 25.
32 The Homeric Hymns, in: Time in Ancient Greek Literature (as in note 2), 53–62, particularly p. 57.

exactness of a protocol." ATHANASSIOS VERGADOS[33] realizes that RADERMACHER saw a problem but thinks, wrongly, it can be resolved by pointing out that "the moon may sometimes rise later in the night." Sometimes? Actually quite often, but never in its first quarter. As for SCHENCK, she does not even see that the problem of v. 97–99 concerns the phases of the moon.[34] So, what has happened? Simply put: essential knowledge has been gradually lost by the students of this hymn, but, fortunately, not unretrievably so.

As for the Hymn to Hermes, we are left with three mutually exclusive solutions:

a) The poet wants to say that the moon doesn't behave as she usually does.
b) The poet has made a mistake.
c) Some compilator or interpolator has made a mistake.

I do not know which explanation is the right one. Actually solution b) is not nearly as improbable as it sounds. Take e. g. Shakespeare's Midsummer Night's Dream. At the very beginning Theseus says that "four happy days bring in / another moon", and while we might just explain away the full moon of acts II to IV by saying it is part of the dream there remains the fact that Lysander tells Helena, towards the end of I, 1, that he and Hermia intend to flee "tomorrow night, when Phoebe doth behold / her silver visage, in the watery glass". Not only would Phoebe not have much of a face to behold four days before the new moon – a thin sliver at a pinch – but said sliver would rise too shortly before dawn for Lysander's purpose. Both the poet of the Hymn to Hermes and Shakespeare needed the full or at least gibbous moon to illuminate the proceedings,[35] but why does Hermes have to be born on the fourth day of the month? Was this an element of some (perhaps local) tradition? It is absent from the "Days" part of Hesiod's (or pseudo-Hesiod's) Work and Days, but that doesn't mean much. And how about Shakespeare's Theseus? Did he think the first day of the synodic lunar month would be a good one to get married on, and if so, why?[36] The commentaries I have consulted are no help.[37] Of course this confusion does not imply that Shakespeare did not know about the causal nexus (or at the very least the correlation) between the phases of the

33 The Homeric Hymn to Hermes, Introduction, Text and Commentary, Berlin/Boston 2013.

34 See her p. 155 (as in my note 25). Her lack of familiarity with astronomy is even more obvious on p. 93 n. 188, according to which it takes the sun a full solar year to pass through "about" one twelfth of the ecliptic. For "solar year", read "zodiacal month", and omit "about".

35 As do countless other authors. Diana Wynne Jones, one of the best writers of Young Adult Fantasy, writes in her "dictionary" The Tough Guide to Fantasyland, Penguin 1996, s. v. Zodiac, that in Fantasyland the moon is often full or gibbous for months on end. Like all of Jones' statements in this brilliant parody, this is of course an exaggeration, but one well based on fact.

36 Pindar and Apollonios of Rhodes seem to have favoured the full moon, unlike the author of the "Days" who recommends the fourth day of the month, 782–784; see J. M. BREMER, Full moon and marriage in Apollonios' Argonautica, CQ 37 (1987), 423–426. By the way, if Hermes was conceived on his parents' wedding night and this night was the fourth of the month, this would account for Hermes beeing born on the fourth of the month exactly ten lunar months later (note that lunar months are shorter than "our" months and that pregnancies of ten lunar months were considered normal). As regards Apollonius, the preference for a full moon is easily explained: unless the weather is really bad you could party (and get home from the party in comparative safety) from dusk till dawn!

37 F. REITEMEIER, A Midsummer Night's Dream, Bochum 2005, in her otherwise helpful analysis of the play's time structure (p. 49–51), remarks "Der Mond, der von verschiedenen Personen im Stück immer

moon and its risings and settings. Alexandre Dumas père was certainly aware that the beginning of december does not immediately precede the end of august, and yet look at the last chapters of his Three Musketeers. In fact, the time structure of the novel is full of contradictions – although Dumas commences his narrative "with the exactness of a protocol" by stating that D'Artagnan arrived in Meung "on the first Monday of the month of April, 1625".

Pindar, Isthmian 4

While I do not know which of the three solutions to the problem of the Hymn to Hermes is the right one, I think I can offer an explanation, one which was not felt to be necessary a hundred years ago, for the simile of the morning star in the second strophe of Pindar's fourth Isthmian ode, v. 24: Ἀοσφόρος θαητὸς ὡς ἄστροις ἐν ἄλλοις, "strikingly resplendent[38] as the morning star among the other heavenly bodies." Now, unlike AURELIO PRIVITERA[39], I do not believe Pindar was aware of the fact that the Morning Star and the Evening Star are the same heavenly body, even if we decide to believe Diogenes Laertius 9, 23 who in his turn shows commendable prudence saying that Parmenides *seems* (my italics) to have been the first to have realized that the morning star and the evening star are identical, using the extremely cautious construction of δοκεῖ + inifinitive (28 A 1, 16). But Iliad 22, 317–321 is certainly relevant, as is PRIVITERA's observation *Pindaro sostituisce Lucífero ad Espero*. But why does he? As I wrote in 1990, this is one of the passages in which Achilles is presented as fated to die soon.[40] The fourth Isthmian being a victory ode, Pindar wants to make sure there are no negative connotations at all: even if the evening star was not necessarily seen as a bringer of doom, by comparing the warlike Melissos to the evening star Pindar's audience would probably have been reminded of the Iliadic precedent: the combination evening star plus Achilles as a warrior so late in the Iliad certainly means both that Achilles is a bringer of death and that he himself is doomed to die young[41]. My considerations would apply even if Pindar and his audience were aware of the fact that the morning star is the same as the evening star – for a given value of "same": this is not only a, but literally the, textbook example for the

wieder angesprochen und angerufen wird, dient dabei als Symbol für die Fremdartigkeit und Wandlungsfähigkeit der Nacht", which is quite true but does not take any account of the inherent contradictions.

38 R. NÜNLIST's rendering of θαητός with "wunderbar" seems rather lacklustre, as does his commentary "eine eigentümliche Gestirnsvergleichung": Poetologische Bildersprache in der frühgriechischen Dichtung, Leipzig 1998, p. 166.

39 Pindaro, Istmiche[5], a cura di G. A. PRIVITERA, Milan 2005

40 Astronomische Zeitangaben (as in note 44), p. 34 s.; for the death of Achilles in the Iliad see also V. DI BENEDETTO, Nel laboratorio di Omero[2], Turin 1998, p. 298–311, who, however, does not mention 22, 317–321.

41 On Pindar and Homer see e. g. M. CANNATÀ FERA, Pindaro interprete di Omero in <<Pyth.>> 3, 81–2, in: Giornale Italiano di Filologia 38 (1986), 85–88; F. J. NISETICH, Pindar and Homer, Baltimore/London 1989; V. DI BENEDETTO, Pindaro, Pae. 7b, 11–14, RFIC 119 (1991), 164–174, reprinted in Il richiamo del testo II, Pisa 2007, 897–908, and F. FERRARI, La fonte del cipresso bianco, Turin 2007, 91–95.

difference between intension and extension: the concepts "morning star"and "evening star" are coextensive, as both of them refer to the planet Venus, but not cointensive as they are not interchangeable: we could not say *the morning star shines brightly in the dusk.[42]

But what does the simile of the morning star mean in the context of Isthmian 4? First of all, it is of course one of the many similes and metaphors which have to do with light. They abound in Greek poetry in general and in Pindar's poems in particular, and the fourth Isthmian is a very good case in point[43]. But if SILVAIN BOCKSBERGER[44] writes "Vénus est le troisième objet le plus brillant du ciel après le soleil et la lune, ce qui la rend très facile à observer après le coucher du soleil ou avant son lever", the first part is misleading and the second part an undue generalisation. In fact, in a given night Venus can be either completely invisible because she is too close to the sun and/or to the horizon, or she can be visible **either** in the evening **or** in the morning, and only very, very rarely, when the sky is exceptionally clear and Venus is much farther north or south of the ecliptic than usual, can she be seen both in the evening and in the morning but is then very faint and difficult to observe, and hardly ever without a good pair of binoculars. Consider the following: Venus is closer to the sun than Earth is and revolves around the Sun, which means that the angle formed by Venus and the Sun with Earth at the apex must always be notably inferior to 180°. In fact, the maximum angular distance Sun – Venus is about 48°, i. e. Venus is always close to the sun from our point of view (incidentally, this is even truer of Mercury, which is why this planet is hardly ever visible at all). So even when Venus is not in conjunction with the Sun she is by no means always easy to see without a telescope and more often than not completely invisible in the morning. For example, Venus as the morning star was visible from about 16 january 2014 to 30 september 2014 but became first totally invisible, then visible again, but only as the evening star, and then totally invisible again before returning to the morning sky on 24 august 2015, which means that *for almost eleven months there was no morning star*. Once we realize this, the morning star simile in Isthmian 4 makes far more sense. The laudandus, Melissos of Thebes, belonged to the Cleonymid family which had suffered terrible losses, whether on the battlefield or, as BOCKSBERGER thinks[45], because, having sided with the Persians, some of them were executed by the Spartans. But now the family's glory is restored again! The morning star is like spring after winter (another of the chief metaphors of Isthmian 4, see particularly v.18): we know from experience it will not always be spring but tend to feel as if it would never pass or even that things can only keep getting better. When Pindar is using the morning star simile, he is certainly not saying, as BOCKSBERGER claims he does[46], that thanks to Melissos' Isthmian victory his family "ne pourra plus tomber dans l'obscurité." That would not only be contrary to all

42 Even though this would be a nice blank verse.

43 See e. g. PRIVITERA (see my note 39), p. 58.

44 À la gloire des Cleonymides. Les deux poèmes de Pindare pour Mélissos de Thèbes: la 3e et la 4e Isthmique, QUUC 120 (2009), pp. 95–120, particularly p. 104 note 1.

45 P. 104 n .60. BOCKSBERGER may very well be right, but Pindar's text would make sense either way.

46 P. 104 n. 60.

experience but also totally alien to Pindar's mentality. He does not say so here, but the Cleonymidai are just as ἐπάμεροι (to quote the end of Pythian 8) as all other men, but right now they enjoy (to quote from the same passage) αἴγλα διόσδοτος. The simile of the morning star is even more significant if we assume that Pindar, unlike the Babylonians and of course unlike the Greek astronomers of the Hellenistic age, did not know that the periods of visibility of this seemingly erratic (hence the word "planet") heavenly body can be predicted. To him, the splendour of the morning star is nothing we can take for granted, so he suggests to make the most of it and celebrate[47].

We can be more succinct in discussing Nemean 2, 16–18:

ἔστι δ' ἐοικός
ὀρειᾶν γε Πελειάδων
μὴ τηλόθεν Ὠαρίωνα νεῖσθαι.

When writing Astronomische Zeitangaben I did not yet pause to ask myself why Pindar would mention Orion and the Pleiades in a victory ode, but then my focus was on calendarical astronomy, something Pindar does not seem to be concerned with in this particular passage.[48] When writing the present article I briefly toyed with the idea that Pindar is implying, not only that seven Nemean victories (cf. the allegedly seven Pleiades) are a notable achievement, but also that an Olympian victory (Orion) is bound to follow. However, MARIA CANNATÀ FERA tactfully pointed out to me a) that Timodemus' family had been successful, not only at the Nemean games, but on other occasions at well and that it was therefore unlikely that Pindar would have wanted to single out the Nemean games for his comparison, and b) that ANDRÉ HURST had already[49] ventured the opinion that "il va de soi que la première phrase indique que les victoires de Timodèmos sont aussi inévitables que la mécanique céleste." While the use of the expression "mécanique céleste" is anachronistic applied to an author who flourished long before Eudoxos, I think Hurst has a point. But I also think we can go further than he did: as the precession of the equinoxes had not been discovered yet, the Greeks thought all the fixed stars always set and rose at the exact same dates of the solar year. As we have already seen that this does not apply to the morning star, we can assert with some confidence that Pindar shows far more optimism regarding the further career of Timodemus than regarding those of the Cleonymid family. But it is the Cleonymids he honours with the more beautiful simile.

47 We probably should not go further and assume that Pindar intends to compare Melissos' lesser victories to the period when the morning star is visible but not conspicuous. Chances are that Pindar, like most people, only recognised the morning star when it was bright. It seems almost incredible but H. BOEKE, The value of Victory in Pindar's Odes. Gnomai, Cosmology and the Role of the Poet, Leiden/Boston 2007 does not seem to be interested in Pindaric astronomy at all. She does mention Orion five times, but never the constellation, only the mighty warrior of Isthmian 4, in spite of the importance of the constellation in Nemean 2, 16–18.

48 Astronomische Zeitangaben (see note 4), 55.

49 Aspects du temps chez Pindare, in: A. HURST (Hg.), Pindare (Entretiens Hardt 31), Vandœuvres 1984, 155–197, see particularly 192 n. 27.

A final consideration: there is so much we would want to know about Sappho, Pindar, and the other Greek poets. Not only will we never know the exact nature of Sappho's relationship with her female friends: we cannot even imagine how her food tasted to her, or how her dress felt to her touch. We do not know whether the sparrows of fragment 1 were actually sparrows, or if the chervil of fragment 96 was actually chervil, and if it was, whether it smelled and tasted like the delicate herb of that name used in French cuisine. The very landscape of Greece has changed almost beyond recognition, and I am not only speaking of soil erosion or the proliferation of holiday resorts, but about the macroscopic flora: the monkey puzzle trees, the agave plants, the prickly pears, the citrus trees, and almost all the ornamental plants whose perfumes have become so characteristic of Greece, particularly at nighttime, but were totally unknown to Sappho. Whenever we want to imagine a classical Greek landscape, some serious mental editing is required. But if we overcome our diffidence towards naked eye astronomy and make just a little effort, we can see, not exactly but almost, what Sappho saw when she watched the moon rise, or Pindar when he saw the Morning Star.

OTTA WENSKUS
Institut für Sprachen und Literaturen, Universität Innsbruck, Langer Weg 11, 6020 Innsbruck