Did Trimalchio Have a Cuckoo-clock?
A Comment on Petron. Sat. 26.9

By Erik Magnusson
Göteborg University

In Petronius’ Satyricon 26.9 (the beginning of the part called Cena Trimalchionis), Agamemnon’s slave tells his master and friends about a certain Trimalchio, who is to arrange a dinner which they could attend. Describing this Trimalchio, a very rich freedman, he mentions that he has a water-clock with a trumpeter who announces the time in his dining-room. I find this passage rather peculiar, an opinion apparently shared by many, since a lacuna appears in several editions. The passage in the text reads as follows:

Petron. Sat. 26.9 Trimalchio, lautissimus homo <* horologium in triclinio et bucinatorum habet subornatum, ut subinde sciat quantum de vita perdiderit.

In some translations into English, French, German, Italian and Swedish, this passage has been rendered in a relatively similar manner:

“Trimalchio, the very paragon of elegance, has got a clock and trumpeter all complete in his dining-room, so that he can always know exactly how much longer he has got to live” (Lowe 1905)

“Mais c’est chez Trimalcion, un homme tout à fait chic; il a une horloge dans sa salle à manger, et un sonneur de cor engagé tout exprès, pour savoir à toute heure quelle portion il a perdue de sa vie” (Ernout 1950)

“Trimalchio, ein ganz feudalher Mann … eine Uhr hat er im Speisesaal und einen Trompeter in Aufmachung, damit er wieder weiss, wieviel er von seinem Leben eingebüsst hat” (Müller & Ehlers 1965)

“Da Trimalcione! Un uomo richissimo che nel triclinio ha piazzato un orologio e un trombettiere per sapere di ora in ora quanta vita ha perduto” (Chiara 1969)

“Trimalchio, en väldigt elegant herre … han har en klocka och en speciell trumpet-blåsare i matsalen för att han alltid genast skall få veta hur mycket av hans liv som har gått” (Plaza 1996)

Horologium is some kind of water-clock (as a sun-dial would not be operable indoors) and bucinatorum subornatum has been regarded as some sort of dressed-up slave who, with his trumpet, announces the time.

As we can see a lacuna has been inserted, first suggested by Strelitz (1879)\(^2\) and accepted by, for instance, Smith (1975) and Müller (1995).\(^3\) Strelitz claims that the missing part of the text should consist of a further explanation indicating that Trimalchio indeed is the host of the current dinner (“haec verba non integra esse sed post Trimalchio lautissimus homo intercisdie quaedam suspicor, quibus apud Trimalchionem cenam fore servus dixerit; tum demum verba horologium in triclinio etq. continuare poterat.”). Since editors who have accepted the lacuna do not explain why, one must suppose that they also have accepted Strelitz’s motivation of the lacuna.

Other editors (e.g. Friedländer 1891, Maiuri 1945, Ernout 1950 and Öberg 1999) neglect Strelitz’s suggested lacuna, obviously not considering the passage to be very problematic.\(^4\)

The question is whether the slave’s brief remark necessarily would have to specify who is to host the dinner; by starting the sentence with “Trimalchio”, it is already quite clear (cf. Ernout 1950: “Mais c’est chez Trimalcion...”). Smith (1975), who accepts the lacuna, suggests that “the slave’s brief indication of his (Trimalchio’s) extravagance is enough to arouse the eagerness of Encolpius and his friends. Encolpius himself is sometimes made to show a naïve vulgarity in his reactions...” However, in my view a possible lacuna would consist of a more elaborate description of Trimalchio’s bombastic personality as a further explanation of the expression lautissimus homo.

But I would also like to suggest another solution to the problem, which involves less interference in the text than the suggested lacuna:

Trimalchio, lautissimus homo, horologium in triclinio [et] bucinator habet subornatum ...

“Trimalchio, a very elegant man, has got a water-clock equipped with a trumpeter in his dining-room...”

An advanced water-clock, equipped with a trumpeter, would indeed be sufficient as a description of the elegant Trimalchio, and Strelitz’s motivation of his lacuna is not valid enough to bring about an interference of this magnitude.

In the manuscripts the accusative ending was usually expressed with a line above the e indicating a nasal sound. This line could be an error made during hundreds of years of copying. This error could in itself have caused the incorrect et, since the two objects horologium and bucinatorem subornatum would have needed a conjunction to separate them. Hence, a misinterpreted nasal


\(^3\) Smith, M. S. (ed.), Petronii cena Trimalchionis, 1975, London (= Smith); Müller, K. (ed.), Petronius Satyricon Reliquiae, 1995 (Teubner), Stuttgart and Leipzig (also the edition used for citations from the Satyricon if nothing else is mentioned).

sound in the first place perhaps brought the mistake further, and created the *et* as we see it in the text (for different reasons *et* has been deleted in e.g. Petron. *Sat.* 38.8, 90.6, 111.6, 127.2).

The lacuna is, however, not the only problem in the understanding of the text. The traditional interpretation of 26.9 gives us an unusual example of *subornatus*, without an ablative complement. This would be the only example in Petronius, who otherwise always has such a complement (*suborno* used three more times in *Sat.* 21.2 <8>Ultimo cenaedus supervenit myrtea subornatus gausapa cinguloque succinctus <8>; 36.2 ... leporemque in medio pinnis subornatum ...; 40.5 ... fasciis cruralibus alligatus et alicula subornatus polymita ...). As we can see in these examples, the prevailing sense of *suborno* tends to be "equipped with", matching the suggested conjecture in 26.9. Also the structure of the sentence (especially 36.2 with the accusative followed by the adverbial, the ablative complement and the participle) seems to be in harmony with the current passage. To interpret the use of *subornatum* in 26.9 as absolute not only clashes with the linguistic usage of the author, but also leaves the meaning, if not indistinct, at any rate a bit odd.

Certainly, it is not appropriate, despite the difficulty of interpreting *subornatus*, to reject earlier interpretations; to have a dressed-up trumpeter whose only task was to announce the time must have been rather startling and therefore suitable for Trimalchio. Lowe (pp. 3–4) remarks that "in order to announce the hour, slaves were kept to watch the clocks. ... The stupid and vain-glorious Trimalchio kept a bucinator to tell the time".

In the current passage, on the other hand, it is possible to take the water-clock, equipped with a trumpeter (probably a non-human one),5 as a technically advanced decoration. Perhaps the trumpeter was placed inside the clock in order to come out every hour and acknowledge the time with a trumpet-blow generated by water power. Trimalchio is indeed, as Lowe writes, a vain-glorious person, and thus an unusual technical refinement would be more suitable than a trumpeter of human nature.

It is quite apparent that, no matter how one chooses to interpret the text, the thing described in 26.9 must be some form of water-clock. In order to proceed with the investigation it is important to make clear of how time was measured in antiquity.6

The earliest method measuring time was to observe the sun and its movement. By attaching a vertical stick on a disc it was possible to measure time by looking at the position of the shadow. In the beginning this primitive use of

5 Later in the text we encounter another trumpeter (74.1–2 *Haec dicente eo gallus gallinaceus cantavit, ... 'non sine causa' inquit [seil. Trimalchio] 'hic bucinus signum dedit.'), *Bucinus* is probably a vulgarized form of *bucinum* (trumpet-blow), but it can also stand for the person producing the blow, namely the trumpeter (Lowe p.157). Obviously Trimalchio refers to the cock as a *bucinum*.

clocks was related to astronomical studies, but relatively early the sun-dial tended to become more common. As this technique demands daylight and preferably bright weather, other methods, capable of circumventing these problems, were developed.

The water-clock, or clepsydra, first appeared some time before 1500 B.C. in Egypt and Babylonia, and was still used until recently. The earliest water-clocks were simple in their construction and usually consisted of only one vessel with a scale on the inside. The vessel was of out-flow type, permitting the water level to decrease after it had been filled up. In ancient Greece such clocks were commonly used during legal proceedings in order to divide the time equally between the defence and the prosecution (clepsydra=water thief). The problem with the out-flow clepsydra is that the hours are not constant. For example, 2 litres of water do not need twice as long as 1 litre to disappear from the vessel, since the speed of the flow diminishes with the decreasing water quantity. Thus, it is only suitable for measuring a limited period of time due to lack of regularity.

A modified form of the clepsydra was the so-called in-flow clepsydra, with which Vitruvius credits the 3rd century B.C. Alexandrinian Ctesibius. The problem with the non-constant water flow is here prevented with an over-flow vent. Instead of just using one vessel, water is poured from a larger source down into a vessel equipped with this particular vent. The vessel also has an out-flow leading to another vessel where the water level can be measured.

The basis of the construction of water-clocks made by Ctesibius later spread to the Middle East, where the technique was to be developed, eventually becoming the leading force in this area. Charlemagne, for example, received in 807 A.D. a complicated water-clock designed by Arabian engineers. There are also water-clocks of similar construction from the early Middle Ages in China and India, perhaps under Hellenistic influence. It is at least clear that these technical inventions were developed under mutual influence between the East and the West; ideas spread out from Babylonia to the Greek world, to the East and vice versa. Moreover, it is important to mention that the difficulties concerning the construction of water-clocks consisted mainly of trying to make the clocks keep the time and not to equip them with technical details.

Owing a device for measuring time was not unusual in the early Empire. A sun-dial, for example, was generally rather uncomplicated and not especially expensive; hence it could not have been such a symbol of status to have a clock alone.

Affluent men, however, seem to have kept certain slaves commissioned to stand next to their master’s clock and acknowledge every even hour (cf. e.g. Juv. 10.215f. Clamore opus est, ut sentiat auris / quem dicat venisse puer, quot nuntiet horas; Plin. Epist. 3.1.8 Ubi hora balinei nuntiata est (est autem hieme nona, aestate octava), in sole, si caret vento, ambulat nudus; Mart. Epigr. 8.67, 1ff. Horas quinque puer nondum tibi nuntiat, et tu / iam conviva mi-
hi, Caeciliane, venis / cum modo distulerint raucae vadimonia quartae / et Floralicias lasset harena feras.). These three quotations underline the use of slaves (pueri) acknowledging time for the master. In Juvenal, this “time slave” was most probably also assigned to report visitors. In Trimalchio’s case, however, some sort of doorkeeper and magpie seem to have taken care of reporting visitors in his stead (Petron. Sat. 28.9 super limen autem cavea pendebat aurea, in qua pica varia intrantes salutabat).

In Juvenal, the slave perhaps had access to a sun-dial in the yard according to which he cried out the time. It is of importance, however, to make clear that Juvenal describes an elderly man with reduced hearing, which indicates that reporting visitors might have been an event specific for this occasion. Moreover, no “time slave” tends to be using a trumpet, which indeed plays a major part in the 26.9 statement. Announcing the time with a trumpet was normally a military phenomenon, for instance when relieving the guards or as a wake-up signal. Perhaps Trimalchio’s trumpeter was dressed in some kind of military uniform, merely to make the entire time-acknowledging scene more magnificent than anywhere else and thereby accentuate his master’s conceited personality. However, as I have mentioned earlier, I find the possibility of a mechanical clock even more suitable for the smug Trimalchio.

It seems reasonable to assume that Trimalchio had some sort of water-clock in his dining-room. The question is how technically advanced it could have been and whether it is conceivable that the trumpeter actually constituted a mechanical detail, as in modern cuckoo-clocks. A mechanical device of that kind could have been constructed along the same lines as a water-organ (such an instrument is, by the way, mentioned in Petron. Sat. 36.7 ... ut putares essedarium hydraele cantante pugnare ...).7 The technique of constructing a water-organ is described in Vitruvius (10.8), who also tells us about the construction of a mechanical water-clock (Vitruv. 9.8.5 Namque aequaliter per id cavum influentes aqua sublevat scaphium inversum, quod ab artificibus phellos sive tympanum dicitur. In quo conlocata est regula, versatile tympanum. Denticulis aequalibus sunt perfecta, qui denticuli, alius alium impellentes, versiones modicas faciunt et motiones. Item aliae regulae aliaque tympana, ad eundem modum dentata, una motione coacta, versando faciunt effectus variantesque motionum, quibus moventur sigilla, vertuntur metae, calculi aut ova proiciuntur, bucinæ canunt, reliquaque parerga).

Many of Vitruvius’s descriptions of technical devices and constructions (besides the clock and the organ, the catapult and fireextinguisher etc.) descend from the Greek inventor Ctesibius who, during his time in Alexandria in the 3rd century B.C., was the first to understand the significance of atmos-

7 In 1992 during an excavation in Dion in the vicinity of Mount Olympus in Greece, a water-organ of this kind was found, probably from the second century B.C. (Patermalis, D., Dion: site archéologique et musée, 1997, pp. 83–86. Athens [transl. from Modern Greek to French by Saulnier, J-M]).
pheric pressure (pneumatics). According to this principle, a mechanical trumpeter could be made to play. When it comes to the mobility of the trumpeter, some sort of cogwheels driven by the waterpower could have taken care of this, just as Vitruvius describes. The image of Trimalchio’s water-clock being a primitive cuckoo-clock suddenly becomes clearer. This technique could not have been unknown to people in Petronius’ time, wherefore the mechanical possibility alone should not be a problem.

If one chooses to interpret the description given by Agamemnon’s slave in 26.9 in the suggested manner, it is essential to judge how well this harmonizes with Trimalchio’s financial situation, his likings and interests. During the dinner it is constantly emphasized how wealthy Trimalchio is. It almost seems hard to find words to describe all his assets (e.g. 37.6 *Ipse nescit quid habeat, adeo saplputus est; 37.8 Argentum in ostiarii illius cella plus iacet quam quisquam in fortunis habet; 37.9 Familia vero babae babae, non mehercles puto decumam partem esse, quae dominum suum noverit; 38.1 lacte gallinaceum, si quaesieris, inventes*). We can also, besides his unlimited wealth, see an example of his enormous supply of slaves, which in itself speaks against a mechanical water-clock. The clock, however, was surely designed not for a labour-saving purpose, but in order to demonstrate that nothing is impossible for Trimalchio. If he could squeeze milk from a chicken, he would also be able to make a clock strike automatically.

Trimalchio, the freedman, the boastful upstart: one might wonder what his intentions are with the dinner. He is obviously keen on striking arrangements indirectly celebrating his very person. There are examples of this in the way the food is arranged during the dinner (e.g. 36.3 *Notavimus etiam circa angulos repositiorii Marsyas quattuor, ex quorum utriculis garum piperatum currembat super piscis, qui quasi in euripo natabant; 49.10–50.1 Nec mora, ex plagis ponderis inclinatione crescentibus tomacula cum botulis effusa sunt, plausum post hoc inautomat familia dedit et ‘Gaio feliciter’ conclamavit*, and also in the entertainment presented to the guests, which sometimes consists of technical devices (e.g. 60.1–4 *Nec diu mirari licuit tam elegantis strophas; nam repente lacunaria sonare coeperunt totumque triclinium intremuit. consenatus ego eussurrexi et timui, ne per tectum petauristarii aliquis descendet. nec minus reliqui convivae mirantes erexere vultus, expectantes quid novi de caelo nuntiaretur. ecce autem diductis lacunaribus subito circulus ingenis de cupa videlicet granda excussus demittitur, cuius per totum orbum coronae aurae cum alabastris unguenti pendebant; 60.6 Omnes enim placentae omniaque poma etiam minima vexatione contacta coeperunt effundere cromum, et usque ad os molestus umor accidere*). Here we can read about incredibly magnificent scenes during the dinner, which really are quite unnecessary.

---

*Toomer, G.J., “Cesibius”, The Oxford Classical Dictionary, 1996, p. 412. However, it has been maintained that water-clocks with signalling devices became common in the 3rd century and that one was already designed by Plato with compressed air to blow a whistle or flute: Strandh, S., “Machines”, 1979, p. 170f, Gothenburg & London.
and merely give expression to bragging. Since Trimalchio tends to make something extra of every event, a human trumpeter in Sat. 26.9 would not be very appropriate.

Another interesting detail is the similarity between Trimalchio and Nero, whose love for technical devices is described by Suetonius (e.g. Suet. Nero 30.3 Nullam vestem bis induit. Quadringenis in punctum serertilis aecam lusit. Piscatus est rete aurato et purpura coccoque funibus nexit; 31.2 ... cenciones laqueatae tabulis eburneus versatilibus, ut flores, fistulatis, ut uguenta desuper spargerentur; praecipua cenationum rotonda, quae perpetuo diebus ac noctibus vice mundi circumcaggeret; 34.2 ... lacunaria, quae noctu super dormientem laxata machina deciderent, paravit).

Nero seems to have the same interest in gold and valuables as Trimalchio, while a kind of apathy when it comes to spending money can be discerned as well. Both of them are so wealthy that they hardly know what to do with everything. The description of the dining-room also matches with Trimalchio, perhaps indicating that the author, Petronius, has been influenced by Nero's palace. Petronius was, according to one theory, a person at the very court of Nero responsible for taste and finess, arbiter elegantiae. In this capacity, it is reasonable to believe that he should have been aware of the emperor's technical devices and could have used his knowledge when writing the Satyricon.

By supplying Trimalchio with technical toys, Petronius perhaps made him emerge almost as an emperor for the readers of his time. Devices of this kind were strictly associated with the elite in the empire. To bring the matter further and inquire whether in fact Trimalchio is a caricature of Nero lies outside the limits of this investigation, but is indeed an interesting thought. Vitruvius describes, besides the aforementioned in-flow clepsydra, also two other clocks, the anaphoric (9.8.8–9) and the zodiac (9.8.10–15). My intention is not to proceed with the construction of these and the dissimilarities between them, but to underline that they both combine astronomical details with time-keeping. On one occasion during the dinner, astronomy/astrology plays a major part (Petron. Sat. 35.2 Rotundum enim repositorium duodecim habebat signa in orbe disposita, super quae proprium convenientemque materiae structura impostuerat cibum.). These symbols turn out to be the signs for the twelve constellations, and the suitable food is, for instance, African figs above the Leo, beef above the Taurus etc. Trimalchio later returns to the sense of each constellation concerning the personality and looks of the persons born in a certain constellation. His speech is rather amusing and a bit sarcastic towards his guests (e.g. 39.6 Laudamus urbanitatem mathematici ...). Trimalchio's apparent interest in astrology could have been combined with an inter-

---

10 Trimalchio as a caricature of Nero is discussed in e.g. Rankin, H.D., *Petronius the artist*, 1971, p. 4f, Haag, who also speculates whether Petronius was forced to commit suicide because of the Satyricon.
est in clocks as well. Moreover, he tells the lately arrived guest Habinnas that he wants his grave adorned with a clock (71.11 Horologium in medio, ut quisquis horas inspiciet, velit nolit, nomen meum legat). It seems that Trimalchio wants a clock in order to accentuate the most important part of the tombstone, namely his own name.

The Satyricon by Petronius is indeed a text filled with problems and variations in the interpretation of the text, due to the many unusual Greek and vulgar Latin expressions and to the relatively uncertain evidence provided by the only two manuscripts, upon which the passage discussed here relies. Another problem is the lack of comments on the text in the remaining Roman literature. The environment where the story is set is also a bit unusual. Obviously the risk of interpreting incorrectly is substantial.

I believe, therefore, that the suggested interpretation of Sat. 26.9 should be carefully considered as an alternative to the traditional one. The linguistic changes are not very remarkable, especially when compared to Strelitz’s lacuna, which is a rather revolutionary interference. In my view many scholars, whether they have accepted the lacuna or not, have overlooked the real problem in Sat. 26.9. We do not need a lacuna to make clear that Trimalchio is the host of the dinner, and the problem lies instead, as I see it, in the description of Trimalchio. It is quite odd that this smug Trimalchio, whose wealth and inflated personality are constantly mentioned later in the text, is granted only the short epithet “lautissimus homo” (this is also the first time he is mentioned, which makes the description seem slightly trite). A lacuna, if justified, should then develop that part. However, the mechanical trumpeter, brought forth by my conjecture, solves the problem better and is in greater harmony with the rest of the story reflecting the boastfulness of Trimalchio. This possibility is also strengthened by the fact that Petronius most probably in some way had connection with Nero who, like Trimalchio, was keen on striking arrangements.

Göteborg University
Department of Classical Studies
Box 200
SE-405 30 Göteborg
Sweden

11 H = codicis Parisiensis lat. 7989 olim Traguriensis ea pars quae cenum Trimalchionis continet, scriptus anno 1423 (Codex Traguriensis); found in 1650 in Trau, Dalmatia. L = Codex Leidensis Scaligeranus 61. scriptus anno 1571.