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ΟΙΝΟΛΟΓΙΚΑ

On Wine and Vineous Liquors in Classical Antiquity

[A complementary study to "On Maturation and Decay", Appendix I of:
Apostolos L. Pierris, Mystery and Philosophy,
Vol. I of "The Emergence of Reason from the Spirit of Mystery. An Inquiry into the Origin and Nature of Ancient Greek Rationality"]

With regard to the various types of wine products, as defined by the different degrees of condensation achieved, we revert to Pliny's determinations. [Cf. A. L. Pierris, *Religion and Mystery*, (vol. I of "The Emergence of Reason from the Spirit of Mystery. An Inquiry into the Origin and Nature of Ancient Greek Rationality", 2006), pp. 398 – 9, and Appendix I "On Maturation and Decay". - Pliny, e.g. XIV, 9 (11), 80, explaining the various dulcia (sweet wines) that are produced by the cooking of the must, calls sapa the heavy liquid that remains when must has been boiled down to one third of its initial quantity, while defrutum is the result of the process when it is carried through only to half the original volume. He further identifies siraeum with the Greek $\xi\psi\eta\mu\alpha$ and the latin sapa]. - As we do with the account of Palladius (running parallel to Isidorus with a difference in the etymology of defrutum), De Agricultura XI (October) 18: nunc defrutum, cavoenum, sapam conficies. cum omnia uno genere conficiantur ex musto, modus his et virtutem mutabit et nomina. nam defrutum a deferrendo dictum, ubi ad spissitudinem fortiter despumarevit, effectum est. cavoenum, cum tertia perdita duae partes remanserint. sapa, ubi ad tertias redacta descenderit; quam tamen meliorem facient cydonia simul cocta, et igni supposita ligna ficulnea. I am puzzled at the apparent contradiction with what was quoted elsewhere on sapa; moreover "to thicken itself out forcefully by despumation", "to strongly digest, work down and defoam itself to a dense substance" may connote maximal rather than middle condensation; yet it more appropriately would refer to the abundant expumation at the initial stages of the heating rather than to the later and final actual "boiling".

Columella, the great technical authority on agriculture reverses the nomination of the musteous products. Thus, talking about ways to preserve for a longer time the must, he explains in *de Re Rustica*, XII, 19: quidam *partem quartam* eius musti, quod in vasa plumbea (itself causing slight adulteration or medication of the must) conjecerunt, nonnulli *tertiam decoquunt*. Nec dubium, quin ad *dimidium* si quis excoxerit, *meliorem sapam* facturus sit, eoque usibus utiliorem, adeo quidem, *ut etiam vice defruti*, *sapa*, *mustum quod est ex veteribus vineis*, *condire posit*. And in XII, 21: mustum quam dulcissimi saporis decoquatur *ad tertias*, et decoctum, sicut supra dixi, *defrutum* vocatur. And in XII, 20 he contemplates an even bigger reduction of the volume of the must in boiling, (if the product of the pressing is weak), below that of the two thirds that gives the normative defrutum (according to him), this being a liquor reduced to the one third of its initial volume (cf. also XX: "cum deinde ad tertias subsederit coctura, subtrahe ignem et plumbeum subinde agitabis, ut defrutum et medicamenta coeant"; and "... item ad tertias decocti defruti..."): deinde si natura tenue mustum erat, cum ad tertiam partem fuerit decoctum, ignis

subtrahendus est, et fornax protinus acqua refrigeranda. quod etiam si fecerimus, nihilominus defrutum infra tertiam partem vasis considit. Sed id quamvis aliquid detrimenti habeat, prodest tamen; nam quanto plus decoquitur (si modo non est adustum) melius and spissius fit.

For Columella it is defrutum that eminently helps as chief condiment of wines. He elaborately describes its decoction (XII, Chapters 19 - 21). Among the separate rooms in the storehouses of an estate he mentions: torculariam, cellam vinariam, defrutariam, etc. (I, 6). There were vasa defrutaria (XII, 19), not "saparia"; the boiling vessel was also called defrutarium (ibid.). In II, 21 he speaks of defrutum quoque facere et defrutare vinum licet (sc. in feasts and festal days, according to the pontifical injunctions); defrutare vinum clearly is to employ defrutum as medicament or condiment in wine fermentation. In the same sense is the word to be understood in Cato, de Re Rustica, 24. It is significant that the verb utilized, even antiquely, to signify wine-adulteration or tampering by cooked musts is derived from defrutum. According to Columella, sapa can be used instead of defrutum as condiment of must coming from old wines; the sense must be that with such potent vintage less powerful, milder medication is needed. Thus, e.g., after having explained that the wine which can be made unadulteratedly and last perennially is the perfectest (the αὐτίτης οἶνος of the Greeks), he adds (XII, 19): caeterum, cum aut regionis vitio, aut novellarum vinearum mustum laborabit etc. The must selected for wine-medication has to come preferably from particular varieties of vine, or, if not, from the best available vines and especially from those oldest and in driest environment; as he continues: eligenda erit pars vineae, si est facultas, Amineae, si minus, quam bellissimi vini, quaeque erit et vetustissima et minime uliginosa.-

Pliny speaking of wine medicaments mentions the musteous kind, though not in any emphatic way, (XIV, 19 (24), 120 – 1), but he treats the subject in a manifestly cavalier fashion, obviously detesting wine adulteration of any kind, and relishing the excellence of pure and self-sustainable wine: nec non et ex ipso musto fiunt medicamina. decoquitur ut dulcescat portione virium, nec durare ultra annuum spatium tale proditur. aliquibus in locis *decocunt ad sapas musta, infusisque iis ferociam frangunt*. Clearly Pliny here mentions the use of sapa as a strong agent to break the ferocity of strong wines and mollify agreeably their robustness. [Thus, analogously, raw resina has a more vehement action, and thus is used contrarily to irritate weak and lean wines; while again: e diverso *crapula* (i.e. decocted resina) compesci feritatem nimiam, frangique virus; aut, ubi *pigra* lenitas torpeat, virus addi (an additional, very natural, function of the cooked medicament), etc. ... utilitas

discernitur hoc modo: pugnacibus mustis crapulae plus inditur, lenibus parcius. XIV, 20 (25), 124 – 5.

The real, besides the nominal, difference here as between Pliny and Columella stems from their respective and diverse viewpoint. The latter considers the necessities and possibilities of the local estate vintage, the requirements of any given producer of wine regarding its amelioration; he is concerned in most cases with an ordinary stock and needs powerful means in attenting to keep it sound and improve it. On the other hand Pliny envisages the best crops internationally and, with the connoisseur's refinement of taste and attitude, finds that some excellent but wild, inconquerable liquid requires stronger and fuller treatment to tame and mellow it down for its own perfection. – However, we are stuck with the initial problem: for Columella still reverses Pliny's appellations in the case pf sapa and defrutum. And I opt for Pliny. Although a simple assumption, borne out by our *Columella*, would solve the crux: he uses the term defrutum senso latiore all decoctions produced by the boiling of fresh must to a high degree of condensation – above half of the original volume of must remaining in the end of the process.

Consistent in his reversal of appellations Pliny seems to imply defrutum to be more winish and sapa more congealed: cf. e.g. XIV, 21 (27) §135: numquam implenda (sc. dolia), et quod supersit passo aut defruto perunguendum admixto croco pistave iri cum sapa. And in XVIII 31 (74) §318 he defines the proper time for defrutum coquendi (obviously the same with the production of the unmentioned sapa). Defrutum is also mentioned as a basis for the taking of imula, XIX, 5 (29) §91; as also for being medicinized by lupines, XXII, 25 (74) §155: et alio genere tosti (sc. lupini) vel in defruto poti vel ex melle sumpti. Clearly defrutum was more easily "drinkable" and more winish than sapa. Which latter was on the contrary more of a φάρμακον in itself, being the stronger substance, although it could be still be said to be "drunk"; v. Plinius, XXIII (30): usus (sc. sapae) contra cantharidas, buprestim, pinorum erucas, quas pityocampas vocant, salamandras, et contra mordentia venenata. secundas partusque emortuos trahit, cum bulbis potum. Fabianus auctor est venenum esse si quis jejunus a balineis id bibat. (Cf. XXIII, (33)). Sapa was a preservative for fruits like sorbs or pears (Cato, de re rustica, 7, 4; 143, 3; Varro, de re rustica, I, 59, 3; Palladius II, 15, 5; Pliny, XV 21 (23) §85). Sapa appears generally as a medicinal basis, not the defrutum; v. Pliny, XX 20 (81) §213; and XXII 13 (15) §32; §33. Fulvius Lippinus fed his snails in the important vivarium he constructed sapa et farre, among other fattening foods; Pliny, IX 56 (82) §174. I have already referred to the passage where sapa is mentioned as a strong medicament and conditor breaking wine's excessive ferocity (Pliny, XIV 19 (24) §121).

The Plinian combination of passum with defrutum appears enlarged in Plautus, *Pseudolus*, 740 sqq.:

Quid, si opust ut dulce promat indidem, ecquid habet? – Rogas? Murrinam, passum, defrutum, *mella*, *mel* quojusmodi.

That the italicized is the correct reading is clear from the evidence of the vetustissimus palimpsest A (whose reading is: MEILAMMELQUOIUSMODI) in conjunction with Plinius' quotation [but for the which one might read me(i)lam(m)el (sweet applewine) or even meilim(m)el (from $\mu\epsilon\iota\lambda(\sigma\sigma\omega)$] in XIV 13 (15) §93: Scaevolam quoque et L. Aelium et Ateium Capitonem in eadem sententia fuisse video [namely that – Plautus' at least – murrina was a sweet rather than an aromatic wine. The anithesis relies on the view Plinius XIV 9 (11) §80: vinum omne dulce minus odoratum; quo tenuius, eo odaratius. Which is exactly what the Aristotelian Problemata, Γ , 873a1 tell us: ἔτι δὲ ὁ μὲν γλυκὺς ἄνοδμος, ὁ δὲ αὐστηρὸς οὕ. Although the subtle wine is not exactly the austere one. But perhaps Pliny wanted to render the standard Greek opposition between the γλυκύς and the αὐστηρός wine], quoniam in Pseudulo sit:

Quod si opus est, ut dulce promat indidem, equid habet? – Rogas? Murrinam, passum, defrutum, *mella* ------

quibus apparet non inter vina modo murrinam, sed inter dulcia quoque nominatum. Pliny simply stops at *mella* as honey which follows is not to the point, being not drinkable in the way an even thick winish stuff is. This ancient practice in quotations is notorious and causes much frustration and error in the moderns.

Mella might be what Columella (*de agricultura*, XII, 11) describes it to be, but I think it rather low; some kind however of aqua mulsa or hydromel will do (cf. e.g. Plinius, XIV 17 (20) §113.

Murrina was a precious potion, exquisitely sweet; indeed, it was called vέκταρ in Greek. [Festus, s.v. Murrina: genus potionis quae graece dicitur nectar; hanc mulieres vocabant muriolam, quidam murratum vinum; quidam id dici putant ex uvae genere murrinae nomine (which was used in its preparation, not as extracted from it, evidently). Maybe the Lydian nectar is meant, of which Ariston speaks apud Athenaeus, II, 38F: καλῶς οὖν Ἀρίστων ὁ Κεῖός φησιν ἥδιστον ποτὸν εἶναι τὸν ἄμα μὲν γλυκύτητος, ἄμα δ΄ εὐ<ω>δίας κοινωνοῦντα. διὸ καὶ τὸ καλούμενον νέκταρ κατασκευάζειν τινὰςπερὶ τὸν Λυδίας Ὅλυμπον οἶνον καὶ κηρία συγκιρνάντας εἰς ταυτὰ καὶ τῶν ἀνθῶν <τὰ> (add. Wilamowitz) εὐωδέστατα (Desrousseaux and Astruc, for the manuscript εὐώδη). It is very well conceivable that suchlike might be the temperament of the finest μελιχρός. Chaereas (apud Athenaeus I, 32B) ἐν Βαβυλῶνι οἶνόν φησι γενέσθαι, τὸν καλούμενον νέκταρ.] It (or a worthy kind of

it), under the appellation *murrata potio*, was religiously employed (even at later times, particularly by the Aediles at the *pulvinaria*) while its being offered to the dead was prohibited by the XII Tables (Festus s.v.). It was a kind of wine (in the more natural, broader sense and not in that according to which Pliny opposes dulcia to vina) in whose preparation myrrh was involved either as berry or as wood – but not as unguent. Plinius XIV 16 (19) §107: aromatiten [we find in the Glossaria an entry: ἀρωματεῖον, murina. Is it pro: ἀρωματίτης, murrina? Or is it some preparation or unguent-cist?] quoque invenio factitatum non unguentorum compositione [not of course that such procedure was nonexistent or unpopular. To the contrary, we have the weighty testimony of Aristotle, Parva Naturalia, De sensu, 443b26sqq.: αἱ δὲ καθ' αύτὰς ήδεῖαι τῶν ὀσμῶν εἰσιν, οἷον αἱ τῶν ἀνθῶν. οὐδὲν γὰο μᾶλλον οὐδ' ἦττον πρὸς τὴν τροφὴν παρακαλοῦσιν, οὐδὲ συμβάλλονται πρὸς ἐπιθυμίαν οὐδέν, άλλα τουναντίον μαλλον. άληθες γαο όπεο Ευριπίδην σκώπτων εἶπεν Στράττις (Fr. 47, PCG vol. VII p.645) "ὅταν φακῆν ἕψητε, μὴ 'πιχεῖν μύρον". οἱ δὲ νῦν μειγνύντες εἰς τὰ πόματα τὰς τοιαύτας δυνάμεις βιάζονται τῆ συνηθεία τὴν ήδονήν, ἕως ἄν ἐκ δυ' αἰσθήσεων γένηται τὸ ἡδὺ ὡς ἄν καὶ ἀπὸ μιᾶς], primo ex murra, ut diximus, mox et nardo Celtico, calamo, bitumine, offis in mustum aut dulce vinum deiectis etc.

In his energetic negation of "unguentation" Pliny is contradicted by Pollux, VI, 17: ἦν δέ τις καὶ μυφίνης οἶνος (murrina), μύρω κεκραμένος. And by Aelianus, Varia Historia, XII, 36 sub fin.: μύφω γὰφ οἶνον μιγνύντες οὕτως ἔπινον καὶ ὑπεφηγάγοντο τὴν τοιαύτην κφάσιν. καὶ ἐκαλεῖτο ὁ οἶνος Μυρρινίτης. μέμνηται δὲ αὐτοῦ Φιλιππίδης ὁ τῆς κωμωδίας ποιητής (Fr. Inc. XVII, vol. IV p.478 Meineke). The correct form, as Meineke observes, was μυφίνης as in Pollux. Cf. Diphilus, Απολιποῦσα, Fr. I.10, vol. III p. 381M (apud Athenaeus, IV p. 132 C) and Posidippus Fr. Inc. VIII, vol. IV p. 526M = Fr. 36, PCG vol. VII, p.579 (apud Athenaeus, I p. 32 B), who condemns its costly quality:

διψηρὸς ἄτοπος ὁ μυρίνης ὁ τίμιος.

It was out of use then. Still, I shall allow the Roman to be better informed in Latin "Archaeology" – on the which the Greeks in general rarely paid any serious or sustained attention. Besides Pollux adds an embarrassingly general divergent significational ascription: οἱ δὲ τὸν γλυκὺν οὕτως (sc. μυρίνην) οἴονται κεκλῆσθαι. We obviously are on uncertainer ground here, which I promptly quit.

"Ut diximus", in Pliny supra, refers to XIV, 11 (15) 92: lautissima apud priscos vina errant *murrae odere* condita, ut apparet in Plauti fibula, quae *Persa* inscribitur, quamquam in ea et calamum addi jubet. In Plautus' *Persa* I, 3, 7 sqq. (88 sqq.) Pliny must have read a different text, probably. But although aromatic, this wine was also

singularly sweet, as we have attested, despite the generally holding inverse relationship between these two qualities; for we have here to do with artificial spicing and not natural, autogenous odorousness. Sweetness came to it by the boiling of the must, as is detailed by Columella, *de agricultura*, XII, 20, 5. (This agrees with the preparations enjoined in *Persa*, *loc. cit.*, though the word is missing from our received text). –

Nonius Marcellus in his (XVIII) De generibus ciborum vel potionum gives important but corrupt information drawing from Varro. Thus (551.7 sqq.): Murrina. potio confecta. Varro Anthropopoli (40): "non modo vinum dare, sed etiam, ut Plautus ait (Pseudolus, 741) 'murrinam, passum, defritum (sic)' "; the distinction, Plinian as well, rests on the unfermented nature of the sweet potions resulting from the cooking of the must. But when we read next: "Varrro De vita Populi Romani lib. I: 'tu autem murrina; loram dicebant in vindemia cum expressissent acinis mustum et folliculos in dolium coniecissent' " – one is tempted to assume a lacuna before loram; for there cannot be any connection between the rich murrina and the weak, thin lora (cf. Varro, De re rustica, I, 54, 3; Cato, De re rustica, 25). For although one of the three kinds of lora mentioned by Pliny XIV, 10 (12), 86 – the one the Greeks utilized as their δευτερίας οἶνος – does fulfill the requirement of a rather concentrated, sweetish potion given the way of its production; still it could not bear any significant resemblance to what bore the name of the potion of the gods: non possunt iure dici vina quae Graeci deuteria appellant, Cato et nos loram, macerates aqua vinaceis, sed tamen inter vina operaria numerantur. tria eorum genera: decima parte aquae addita quam musti expressa sit et ita nocte ac die madefactis vinaceis rursusque prelo subiectis; alterum, quo modo Graeci factitavere, tertia parte eius quod expressum sit addita aquae expressoque decocto ad terias partes. tertium est faecibus vini expressum, quod faecatum Cato appellat (v. Cato, De re rustica, 153). [A more complex process for the first type is given by Columella, De agricultura, XII, 40]. –

But the same problem which seems to postulate the lacuna in the passage above, reappears in 551.14 sqq.: LORA, confectae potionis genus, grandaevis aptum. Varro *De vita Populi Romani* Lib. I: "antiquae mulieres maiores natu bibebant loram aut sapam aut defretum aut passum; quam murrinam quidem Plautum appellare putant (referring to the Aldine reading but for the better attested *quidem* for the last clause; Lindsay has: quidem Pl. a. *solet*, naively postulating an archetypal fictitious *polet*.) The text as it stands, and with the required semi-colon after *passum*, signifies *loram*, the entry-word, as the reference of *quam*. (Popma, and I independently, had thought of *quam <loram> murrinam* etc. but it is unnecessary). The explained difficulty in the preposterous identification again tempts one to assume a lacuna before *quam*. —

However the problem reappears once more, and desperate. 551.25 sqq.: moriolam. Varro De vita Populi Romani I: 'vino addito loram, passum vocare coeperent; muriolam nominabant quom (L.Mueller, certainly correct, pro quod; the ancient editions had cum) ex uvis expressum erat passum et ad folliculos reiculos et vinacia adiiciebant' (Iunius, pro ea dicebant) sapam (aquam in older editions e.g. in Varro's Bipontina p. 240 (Popma)). The first piece of information can be made meaningful only on the supposition (unmentioned in lora's Varronian explanation supra or in his de Re Rust., but possibly invokable from elsewhere in the Varronian work quoted from) that lora was already sweet either in the defrutum or the passum way – in which case its strengthening by real vine made it approach real passum. The former possibility has been testified by Pliny above, the latter seems to be envisaged by Varro if muriola is the same thing with moriola as is to be assumed. In any case, muriola, says he, was produced from raisin husks infused by sapa (interesting combination of the two roads to sweetness) and then treating the resulting juice either towards wine proper or cooked dulcium (less probable in view of the preexistence of sapa). –

Now murriola was, according to Festus, the evidently ὑποκοριστικόν name women gave to the glorious Murrina. Thus, unless Varro flatly contradicted Festus by dissociating completely murrina from mur(r)iola, the Varronian Murrina must have proceeded from grape-skins basically, whatever the further process was: which makes it a kind of special lora indeed, thus obviating the need for lacunae in the two previous passages. – Still, in view of Pliny's and Festus' testimonies, I shall not lessen the august prestige of nectar-like murrina by ascribing to it so low an origin. Probably, such sophisticated, and no doubt sweetest, lorae as indicated by Varro, would be mere substitutes of the noble original. Certainly, in any case, they were really distinct: Aulus Gelliu,s Noces Aticae, X, 23 2: bibere autem solitas (the women in Rome and Latium) ferunt loream (another form of loram), passum, murrianam (in order of increased value) et quae id genus sapiant potu dulcia (and not real wine). –

Defrutum is, it appears, for Plautus a winish liquid – but there is no mention of *sapa* in his extant writings. Both are mentioned by Cato in his concise and authoritative *de Re Rustica*, and they are clearly distinguished in their function, albeit without any specific proportion of evaporation and conglutinization ascribed to them – exactly as one should expect from an antique and, I say, more Hellenic attitude. Defrutum of the exquisitiest available quality (de musto *lixivo* coctum) is used as one of the chief condiments of good wine (*de R.R.* 23). One thirtieth part of defruti veteris is further used in the production of helvolum-vinum (24). And, in general, all musteous medication of reputable wines is done by defrutum, as the very verb

indicating the process signifes: quidquid vini defrutabis, partem tricesimam defruti addito. On the contrary, *sapa* is used in the preparation of an inferior wine of rather inhibited fermentation, meant for slave and servant consumption during the winter, hardly keeping up to the next solstice, and in whose mixture vinegar is added in equal quantity with the sapa (104): vinum familiae per hiemen qui utatur. Musti Q. X in dolium indito, aceti acris Q. II eodem infundito, sapae Q. II, aquae dulcis Q. L. Haec rude misceto ter in die dies quinque continuos. eo addito aquae marinae veteris sextarios LXIIII et operculum in dolium inponito et oblinito post dies X. Hoc vinum durabit tibi usque ad solstitium. siquid superfuerit post solstitium, acetum acerrimum et pulcherimum erit. The liquid signified by sapa must have been a potent substance indeed to govern the activity of an equal quantity of strong vinegar, and to excite the must's power over and above such prefermentative dilution in water. The same condensed efficacity is implied in Cato's prescription for the remedying of a sharp wine by the use of flour from vetch with sapa (109): de ervo farinam facito libras IIII et vini cyathos IIII conspargito sapa. postea facito laterculos. sinito conbibant noctem et diem. postea conmisceto cum eo vino in dolio et oblinito <post> dies LX. id vinum erit lene et suave et bono colore et bene oderatum. The preparation applied in coating the brime of wine jars is described in 107: quo labra doliorum circumlinas, ut bene odorata sint et nequid viti in vinum accedat. sapae congios VI quam optimae infundito in ahereum aut in plumbeum et iris aridae contusae heminam et sertam Campanicam P. V bene odoratam una cum ivi contundas quam minutissime, per cribrum cernas, et una cum sapa coquas sarmentis et levi flamma. conmoveto, videto ne aduras. usque coquito, dum dimidium excoquas. A slow fire is required as sapa has already undergone seething and boiling and further cooking; thus one must be particularly careful with this substance that has much suffered already lest it be burnt and scorched thereby destroying flavour and odour. And why should one take the thinner liquid and then thick it down to its half, as there was no need of decoction at all as such according to what we have learnt from Pliny (XIV, §135), and in any case much less heating would be needed should the purpose be of a finer commixture of the grinded molecules with the liquid? Evidently a more congealed material is recommended than the densest boiled-must production, which thus must be sapa.

In all probability, then, for Cato, *defrutum* was more *drinkable* and *noble*, while sapa *heavier* and *stronger* stuff.¹

¹ In §7 grapes are recommended to be preserved in *sapa*, as in grape-pulp, in must or in *lora* (the inferior wine we have noticed – obviously the sweety type). And sapa is also the preservative for sorbs and pears. A thick and deeply sweet liquid is evidently implied.

Virgilius mentions the process of boiling the must, without giving any special name to it, in *Georgica* I, 295-6, in a winter² night by the materfamilia:

Aut dulcis musti Volcano decoquit humorem, et foliis undam trepidi despumat aheni.

But in IV, 264 sqq., in detailing the measures to be taken with ailing bees, he specifies:

Hic jam galbaneos suadebo incendere odores, mellaque arundineis inferre canalibus, ultro hortantem, et fessas ad pabula nota vocantem. Proderit et tunsum gallae admiscere saporem, aventisque rosas, aut igni pinguia multo defruta, vel psythia passos de vite racemos, cecropiumque thymum et grave olentia centaurea.

Honey is to be infused in which all these condiments have been mixed. There is no doubt both from the expression *igni pinguia multo defruta*, and from the meaning requirement of a medicament of honey, that *defrutum* here is a pretty thick and condensed substance.

This is more serious than Varro's reversed order in the proportions of condensation. But it gives also a valuable clue to the solution of our difficulties. For it emerges that a major factor in the distinction between the two decoctions was the general and intrinsic quality of the liquids. Thus *defrutum*, being the nobler word, signified also the more drinkable, and exquisite, potion; whereas *sapa*, of a lowerly sound and formation, was appropriated to the less potionable substance; and it kept, so to speak, a rustic roughness, as against the smoother skin of defrutum. Thus nicely to the Virgilian passage is balanced Ovid, *Fasti* IV 779-8:

² Not quite winterly of course, as it is done upon vintage, mostly in October. Unless he means by mustum, vinum; or by $humor\ musti$. Both unlikely and vain. For, particularly as to the former, sweetness is an essential quality of must as is observed by $Quintilian\ VIII$, 2, 10. Cf. the Aristotelian $\Pi\rho\rho\beta\lambda\eta\mu\alpha\tau\alpha$, 23, 925 b16: τοῦ γλεύκους ὄντος φύσει ἡδέος. And against both, Virgil, both ponderous on the one hand and deeply accurate and exact on the other, means every word he writes. The watery liquid is de-cooked and extracted from the juice by evaporation thus concentrating its substance (Servius $ad\ loc$) tells us: bene autem ait $decoquit\ humorem$, id est, $rem\ superfluam$; sicut supra (112) posuit: luxuriem segetum tenera depascit in herba). The foam is skimmed with leaves from the $violently\ boiling\ must$ which makes the $copper\ vase$ to quiver; the transaction taking place, further, in the night. All these are precise features of must-cooking as reported by the writers treating of these subjects. (Only a $lead\ vessel$ was recommended in later times (v. Columella), as its $condimental\ quality\ was\ regularly\ observed$ in its effects. Cato enjoins the use of either of the two metals. Given Virgil's exactitude, we can unhesitatingly deduce that in his time copper was still the acknowledged better quality for the boiling vessel).

tum licet, apposita veluti cratere camella, lac niveum potes, *purpureamque sapam*.

The ritual of the Palilia or Parilia is described, this agrarian festival for the purification and protection of Pastorality – of herbs and flocks, cattle and shepherd, of animals and people involved in Shepherdry and of its necessary environment – as well as for the nativity of the City - both activities, the pastoral and the civic, constituting a human interference in the physical order of things, and thus requiring an appeasement offered to the Power of the Wild Nature for such encroachments upon the open and pure Countryside and the disruption of its natural life, as well as an invocation for the blessing of this extension of human life by the potent rustic Deity. A potion mixed from milk and sapa in a wooden, rough vessel (for camella v. Petronius 135 (bis), 64 sub fin., 137) and offered to Pales in field-rites of agrarian simplicity is revealing. The deep purple hue of sapa is so, too. The mixture is called Burranica potio by Festus s.v. Burranica potio appellatur lacte commixtum sapa: a ruso colore, quem burrum vocant. (And s.v. burrum dicebant antiqui quod nunc dicimus rusum; unde rustici burram appellant buculam, quae rostrum habet rusum; pari modo rubens cibo ac potione ex prandio burrus appellatur). Rusum is here used generically, in the broad acceptation of which Favorinus speaks and complains, apud Aulus Gellius II, 26, 4 sqq; (5): quippe qui 'rusus' color a rubore quidem appellatus est, sed cum aliter rubeat ignis, aliter sanguis, aliter ostrum, aliter crocum, <aliter aurum>, has singulas rusi varietates Latina oratio singulis propriisque vocabulis non demonstrat omniaque ista significant una 'ruboris' appellatione, cum ex ipsis rebus vocabula colorum mutuatur et 'igneum' aliquid dicit et 'flammeum' et 'sanguineum' et 'croceum' et 'ostrinum' et 'aureum'. 'Russus' enim color et 'ruber' nihil a vocabulo 'rusi' differunt (the vulgate lectio pro the mss. dicuntur) neque proprietates eius omnes declarant, ξανθός autem et ἐρυθρός et πυρρός et κιρρός et φοῖνιξ habere quasdam distantias coloris rusi videntur vel augentes eum vel remittentes vel mixta quadam specie temperantes. (In the sequel Fronto tries to indicate the wealth of the Latin tongue in this respect in a rather biased way yet not without some success).

We see the field of *redness*, as expressed in corresponding Greek: it extends from the *bright fair to the deep purple*. *Burrus* belonged no doubt to it; a more precise determination of its hue is given by Servius ad Virgilius, *Aeneas*, II, 469 where he observes on Pyrrhus: A colore comae dictus: qui latine *byrrus* dicitur: He was called, that is, Πύρρος from the Greek $\pi\nu\rho\rho\delta\varsigma$, which is equivalent to the lattin *byrrus* or *burrus* (the later form is the best; it exists also in *Quintiliam* I, 4, 15 in the discussion of letters and their pronounciation). And similarly the *LatinoGraecae glosses* s.v. Burrum; $\xi\alpha\nu\theta\delta\nu$, $\pi\nu\rho\rho\delta\nu$. And s.v. Barus; burrus, $\pi\nu\rho\rho\delta\varsigma$. We should imagine a hue between

the flavish fair and the rosy, the common denomination of the bright yellowish and the light reddish of fire: something of an ochre; which is precisely what one gets from the mixture of milk with a preparation which has been produced by must protractedly and repeatedly boiled and purified and condensed to approximately the one third of its initial quantity. This preparation is the modern Greek $\pi \epsilon \tau \iota \mu \epsilon \zeta \iota$. Such therefore must also sapa have been.

To conclude then. Defrutum was more delicate, whereas sapa was tasting somehow rough and rustic. Principally the difference was due to the more careful and relatively less insistent cooking of the must for the former potion (the precariousness of its preservation over a year is implied by Cato's call for defrutum veterum) as opposed to the commoner, harder, persistent and perhaps repeated boiling of the latter. Initially, I believe, there was not so much a question of thickness and congelation of the resulting liquid, as of its character as determined by and from the quality of the vintage and the mode of production. But as it was more easy to keep longer what was produced with less care by more decoction, the rustic dulcium tended to be the more condensed. Stil, and as I have explained from the spirit of Greek antiquity, there was no rigorously settled mathematical proportion to govern these activities; it simply depended on the experience and knowledge of the producer in handling a given must with its specific qualities in a particular year either the more elaborate or the cruder way. Today, the women in Greece who know how to prepare πετιμέζι (boiling of must, with ashes as condimental purgative, defoaming, cooling, draining, and repeated boiling) are unaware of any proportion to be kept in the final reduction of the initial quantity of must. Given a method of production, it is a question of judgment how far the process will continue in any particular case. The expert who knows what to do, will also know where to lead and when to stop – and his produce will last.

We meet with something analogous in the case of *lora*. This is the $\delta \varepsilon \nu \tau \varepsilon \rho i \alpha \zeta$ of the Greeks, its essential inferior character consisting in its coming from a *second* treatment of what has been left over once the grapes have been done with, *calcatae* and *sub prelo*: it is a *second* rate wine. But very different methods are employed in its production as we have seen from Pliny (XIV, 10 (12), 86 – quoted and commented upon supra, p.4). The thin, sour wine of the first method; the rather thick bitter-sweet of the Greek way; and the opaque, astringent-sweet potion of the third; they have in common a definite quality of inferiority that their generation from sorts of refuse imparts onto them; this "substratival" dominant character being nonetheless modified along the directions suggested.

Similarly with sapa. Its chief feature being of a simple rusticity; which would be tuned either towards a light-sweet potion, of a bouquet somehow in between must and wine and more or less for immediate use; or to a heavy-weight, subbitersweet preserve liquid, of multiple and pretracted usefulness³. This sufficiently accounts for the possibility of the converse ascriptions we have been occupied with so extensively. But as the second application was more stable and characteristic (especially as the time went on and the bad quality of most first-hand wines rendered the $\delta \epsilon \nu \tau \epsilon \rho (\alpha \varsigma \ o v o \nu \varsigma)$, the vina operaria and the rustic drinkable dulcia more or less obsolete) Pliny was more to the real and natural point than Varro. Which will be confirmed by the etymological analysis to follow.

But before proceeding to it, beginning with the Plinian passage from which we began this wine inquiry, let there be noticed the equalizing entries in the *Glossae Graeco-Latinae*: thus in *Philoxenus* (LG) we find *Defrutum*: $\alpha \pi \delta \beta \rho \alpha \sigma \mu \alpha$, $\epsilon \psi \eta \mu \alpha$; and again: $\epsilon sapa$: $\epsilon \psi \eta \mu \alpha$; whereas in *Cyrillus* (GL) we meet only $\epsilon \sigma \tau \alpha \phi \iota \delta \iota \tau \eta c$ oivoς: $\epsilon sapa$. The *Onomasticon Latino-Graecum* has both equivalences of $\epsilon \psi \eta \mu \alpha$ with sapa and defrutum. Which was natural enough as there were no words in Greek to differentiate according to the later Latin separation, and probably no generally valid practices existed either, of more or less standardized must-concentration, this being

³ Thus particularly appropriate and as a gift, *Martialis* VII, 53, 6.

Answered in the LG by: Passum, σταφιδίτης (the correct reading, pro σταφυλίτης in Labbaeus)· γλυκύ (from the *Onomasticon* LG; on the γλυκύ and γλυκύς (οἶνος) cf. what I said elsewhere)· ἔψημα (from the *Excerpta*). The last, and the middle, equivalences are a mistake, mediated by the sweet quality of both passum and the boiled dulcia. Similarly the G-L gloss by itself would have to be considered inaccurate, although (unless we could simply correct *sapa* to *passum*) perhaps significant for our purpose at hand. Σταφιδίτης οἶνος is the one produced by first allowing the grapes to dry in the sun for several days – from σταφίς or *passa uva*. But it is a sweet wine – like the decocted musts. However, that the *Graeco-Latin* glossary could fall into this inadvertence would indicate that sapa could be more wine-like, in later times too, and thus of *lesser* condensation. But we shall see Hesychian authority clarifying the muddle of the bilingual glosses. For the meaning $\tau \dot{o}$ ἀπὸ $\tau \ddot{\eta} \zeta$ σταφίδος ἕψημα is given as one of the significations of σίραιον. Thus not passum itself, but a combination of the passum technique with subsequent boiling of the raisin-must, would be called σίραιον in one acceptation of the term; and in view of the general equivalence of σίραιον with ἕψημα (especially as that product was in truth ἕψημα as well) might be called actually, or taken inappropriately as named, ἕψημα.

⁵ That Charisius, *de Arte Grammatica*, I p. 34K = p. 38.24 Barwick gives, in a list of substantives used only in the singular, the equivalence *defrutum* $\xi\psi\eta\mu\alpha$, without any compensating mention elsewhere of sapa, means in the circumstances nothing more drastic than the general rendering of both Roman boiled musts as *cooked* liquids.

left free to gravitate towards the point of single optimal yet multiple *usefulness* and appropriateness, with individual variations in the application of the norm to particular types or particulars of exigencies – a state of affairs as consonant correspondingly with Roman formalism and Greek spirituality as one should expect – and as one expression signifying the result of decoction could do nicely justice to both Roman expressions with regard to their referendum.

Returning now to Pliny's siraeum and hepsema, a subject that I have also treated elsewhere. Pollux VI, 16: καὶ σίραιον δὲ ἐκάλουν τὸν ἐκ γλεύκους ἡψημένον γλυκὺν (sc. ἄοινον οἶνον so to speak). And so Photius s.v. Σίραιον τὸν ἑψημένον οἶνον καὶ γλυκύν. Regarding ἕψημα, Pollux VI, 17 has: καὶ μελίκρατον δέ, τὸ νῦν οἰνόμελι. ἦ που δὲ καὶ τὸ νῦν ἕψημα ὀνομαζόμενον, ὅπερ ἐστὶν οἶνος ἐξεψημένος εἰς γλυκύτητα. καὶ τοῦτ' ἄν τις οἴοιτο εἰρημένον ἐν τῆ τοῦ Πλάτωνος τοῦ κωμικοῦ Συμμαχία (= Fr. IV, vol. II p. 666 M = Fr. 163, PCG vol. VII, p.498):

τὸ δὲ ἕψημά σου

γευόμενος ἔλαθον ἐκροφήσας.

Does this imply that it was unusually thin and thus, in *tasting* it, he *drank* it all? It may well however be metaphorical, as has been supposed.

The notion that μελίκρατον could mean οἰνόμελι or ἕψημα is singular. I shall not expand on the matter, but only refer to Eustathius ad Odysseam, K, 519, p. 1668.22: Μελίκρατον γὰρ οἱ παλαιοὶ μίγμα φασὶ μέλιτος καὶ γάλατος ἐνταῦθα· οἱ μέντοι μεθ' Όμηρον μέχρι καὶ ἐς ἄρτι, κράμα μέλιτος καὶ ὕδατος τὸ μελίκρατον οἴδασι. On the other hand it is readily acceptable that certain wine-preparations would approach closely οἰνόμελι, just as the λώτινος οἶνος did; v. Polybius XII, 2, 7 (apud Athenaeus XV, p. 651F). – Hesychius gives s.v. ἔψημα· ὅπερ ἔνιοι σίραιον καλοῦσιν ἄλλοι γλυκύν (sc. οἶνον, pro γλυκύ, which also can be retained). Cf. s.v. γλυκίννας· διὰ γλυκέος οἴνου πλακοῦς, or more exactly Athenaus, XV 645F: γλυκίνας· ὁ διὰ γλυκέος καὶ ἐλαίου πλακοῦς παρὰ Κρησίν· ὥς φησιν Σέλευκος ἐν Γλώσσαις. S.v. σίραιον Hesychius explains: τὸ ἀπὸ τῆς σταφίδος ἔψημα· οἱ δὲ τὸ γλυκύ (i.e. τὸ ἕψημα from the must boiled down)· καὶ ἑψημένον οἶνον (or, τὸν γλυκὺν καὶ ἑψ. οἶνον). On the whole, I do not suppose that there was a substance called $\gamma \lambda \nu \kappa \dot{\nu}$ distinct from both $\xi \psi \eta \mu \alpha$ and $\gamma \lambda \nu \kappa \dot{\nu} \nu$ (sc. οἶνον). It must have been either the one or the other; and very likely and naturally and commonly the latter, in which case we must normally read and understand δ $\gamma\lambda\nu\kappa\dot{\nu}\varsigma$. (The neuter substantively appears also in Nicander, Alexipharmaca, 386). Cf. the epistle of Diocles to Antigonus, apud *Paulus Aegineta*, I, 100, 2 (p. 69.14-5 Heiberg): καὶ ἀναζέσας ἐν χυτοιδίω μετὰ γλυκέως ἢ έψήματος ἡμικοτυλίον etc. But of course the ἕψημα was γλυκύ, and so Galenus explains σίραιον as γλυκὺ ἕψημα [ex Comm. in Vesp. p. 501]

or even γλυκύ, ἔψημα. Plutarch, in his Aetia Physica, KZ΄ 918^E, refers to the γλυκύ, but in a desperate, probably corrupt, passage: διὰ τί τὸ γλεῦκος, ἂν ὑπὸ ψύχους περιέχηται τὸ ἀγγεῖον γλυκὸ διαμένει πολὸν χρόνον; πότερον ὅτι πέψις ἐστὶ τοῦ γλεύκους ή εἰς τὸ οἰνῶδες μεταβολή, κωλύει δὲ τὴν πέψιν ή ψυχρότης, ὑπὸ θερμοῦ γὰρ ἡ πέψις: ἢ τουναντίον, οἰκεῖός ἐστι τῆς σταφυλῆς χυμὸς ὁ γλυκύς, διὸ καὶ +πεπαίνεσθαι λέγεται τὸ γλυκὺ κιονώμενον+ (?) ἡ δὲ ψυχοότης οὐκ ἐῶσα διαπνεῖν ἀλλὰ συνέχουσα τὸ θερμόν, τὴν γλυκύτητα διατηρεῖ τοῦ γλεύκους. The sense requires either that the grape ripens when it becomes sweet; (we would expect then e.g. τοῦ γλυκέως κιρνωμένου); or that the sweet must and the γλυκύ itself is matured when boiled, cooked (ξψωμενον for κιονώμενον); or that τὸ γλυκύ, when mixed, acts as controller of fermentation or digestion, causes maturation ($\pi \epsilon \pi \alpha i \nu \epsilon i \nu$ pro $\pi \varepsilon \pi \alpha i \nu \varepsilon \sigma \theta \alpha i$). The third hypothesis is remote, unlikely and biased; the first less fitting overall and demands some major and difficult to be accounted for change. The second I prefer, reading: ἢ τουναντίον, οἰκεῖός ἐστι τῆς σταφυλῆς χυμὸς ὁ γλυκὺς <καὶ θερμός>, διὸ καὶ πεπαίνεσθαι λέγεται τὸ γλυκὺ έψωμένον: far from τὸ θερμόν being the external cause of fermentation (and thus transformation of must into wine) it is the natural quality of γλεῦκος together with sweetness; so that must when further *heated matures* further, condensing into the $\gamma \lambda \nu \kappa \dot{\nu}$ in itself.

The Hesychian gloss s.v. γλυκύ· μελιχοόν must be understood primarily in the reverse order; what was a very characteristic epitheton of wine in the archaic times, is the γλυκὺς οἶνος of the laters. Athenaeus (X p. 430A sqq.) speaking of the renowned Alcaeus' φιλοινία writes: κατὰ γὰο πᾶσαν ὥραν καὶ πᾶσαν περίστασιν πίνων ὁ ποιητὴς οὖτος εὑρίσκεται. χειμῶνος μέν, ἐν τούτοις· (Fr. 30 Diehl = 34 Bergk):

ὕει μὲν Ζεύς, ἐκ δ' ἀρανῶ (vel. ὀράνω) μέγας χειμών, πεπάγασιν δ' ὑδάτων ρόαι. κάββαλλε τὸν χειμῶν', ἐπὶ μὲν τιθεὶς πῦρ, ἐν δὲ κίρναις οἶνον ἀφειδέως μέλιχρον, αὐτὰρ ἀμφὶ κόρσα μάλθακον ἀμφι<βαλὼν> γνόφαλλον. ἔσος καὶ πορελθών (Fr. 97 Diehl = 45 Bergh

(Μελιηδής is also called by him in Fr. 100 Diehl = 47 Bergk, apud Athenaeus II, 38e: ἀπὸ τοῦ κατὰ μέθην δὲ καταστήματος καὶ ταύοω παρεικάζουσιν τὸν Διόνυσον, καὶ παρδάλει, διὰ τὸ πρὸς βίαν τρέπεσθαι τοὺς ἐξοινωθέντας. Ἀλκαῖος:

άλλοτε μὲν μελιάδεος, ἄλλοτε

δ' ὀξυτέρου τριβόλων ἀρυτήμενοι.

Wine moves in the area between the sweetness of honey and the sharpness of vinegar so to speak. Correctly Eusthathius, in *Odysseam*, p.1910.18: $\kappa\alpha\tau\dot{\alpha}$ γὰο τὴν Αλκαίου μοῦσαν ἄλλοτε μὲν μελιαδὴς ὁ οἶνος, ὁ δὴ ἔφη καὶ Όμηρος, ἄλλοτε δ' ὀξύτερος τριβόλων... ὅρα δὲ καὶ τὸ ὀξύτερος τριβόλων, δι' οὖ δηλοῦται ὡς ὁ λεγόμενος κοινῶς ὀξὺς οἶνος τῷ μελιηδεῖ ἀντιδιαστέλεται⁶). Μελιηδὴς is, of course, an almost standing epitheton of wine in Homer.

Μελιχοὸς οἶνος occurs also in Anacreon Fr. 58 Diehl = 32 Bergk = 110 Gentili apud Athenaeus XI, 475 f:

Ωινοχόει δ' ἀμφίπολος μελιχρὸν οἶνον, τοικύαθον κελέβην ἔχουσα.

The expression appears also in Comic Poetry: Teleclides in Πρυτάνεις Fr. II vol. II p. 368 Meineke = Fr. 27 PCG vol. VII, p.678, apud Athenaeus XI, 485f: Νίκανδρος δ' ὁ Θυατειρηνός (Fr.Gr.Hist. 343 F 15), κύλιξ φησί μείζων (sc. ἐστι ἡ λεπαστή), παρατιθέμενος Τηλεκλείδου ἐκ Πουτάνεων:

καὶ μελιχρὸν οἶνον ἕλκειν ἐξ ἡδύπνου λεπαστῆς, τυρίον ἐπεσθίοντα,

where we find something difficult to be achieved, but aftifically induced and particularly appreciated in Attica, namely the combination of fragrance and sweetness in wines. –

We discover also the expression in the Hippocratic corpus, Π ερὶ Π αθῶν, II 189 Littré = II 418 Kühn, where the μελιχοοὶ π αλαιοί are distinguished from the γ λνκέες not only because the common cooked musts do not ordinarily keep for long; for in II 193 L. = II 423 Kühn we read γ λυκὺς οἶνος καὶ μελιειδής (or perhaps we should read μ ελιηδής; in any case it is not a mere question of hue, but of nature and character: there can be little doubt that this is our μ ελιχοός) $\check{\alpha}$ μφω καὶ κομιστικοὶ καὶ διουοητικοὶ καὶ φλεγματώδεις. οἱ δὲ αὐστηροί etc. Μελιχοοί are then the thicker, more honey-like wines – οἱ πολὺ τὸ ἕψημα ἔχοντες; on the other hand γ λυκεῖς can be thin, λ επτοὶ οἶνοι, ν. Π ερὶ Δ ιαίτης B I, 224 L. = I 684 K. Thus the γ λυκεῖς include every grape product that by nature or n artifice has a sweet taste, whereas nελιχοοί are specifically rather dense, honey-taste potions – In n Γυναικείων n II 479 L. = II 696 K. οἴνφ nελιχοῷ must be read and not nελιχοόφ; for besides it being not a question of colour in general, we have the hue mentioned in the next word: κιροῷ. That it is alsο ὑδαρής does not imply essentially thinness but relates to

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 $^{^{6}}$ The Hippocratic Περὶ $\Delta\iota\alpha$ ίτης, B', I 685K = I 224L speaks of \dot{o} ξίναι or \dot{o} ξιναῖοι οἶνοι.

constitution. Besides, the expressions, each or the last one, may signify a different type. In any case honey-hued is not included in the triple or quadruple classification of the wines according to colour: λ ευκός – κιρφός – (ἐρυθρός) – μέλας.

Here we meet in Greek dress the two ways of producing sweet wine – potions observed supra. The cooking-way gave what antiquely they called, from $\gamma\lambda\epsilon\tilde{\nu}\kappa\varsigma$, $\gamma\lambda\epsilon\tilde{\nu}\xi\iota\nu$ and $\gamma\lambda\tilde{\nu}\xi\iota\nu$. Hesychius s.v. $\gamma\lambda\epsilon\tilde{\nu}\xi\iota\varsigma$ oἶνος (vel. οἴνου) ἕψημα. Eustathius, In Odysseam, p.1385.14: καὶ τὸ $\gamma\lambda\nu\dot{\nu}$ ἐκ τοῦ $\gamma\lambda\epsilon\tilde{\nu}\kappa\varsigma$. ὅθεν (sc. from $\gamma\lambda\epsilon\tilde{\nu}\kappa\varsigma$) καὶ $\gamma\lambda\epsilon\tilde{\nu}\xi\iota\varsigma$ κατὰ Παυσανίαν, οἶνος πολὺ ἕψημα ἔχων, ὁ νῦν, φησι, σίρινος· ὁ δ᾽ αὐτὸς καὶ σίραιον οὐδετέρως. - οἶνος πολὺ ἕψημα ἔχων is must which have been boiled down to a considerable condensation. For it is unpragmatic to construe it in general as normal fermented wine in which a lot of ἕψημα has been used as medicament; the identification with τὸ σίραιον οὐδετέρως refutes such an idea for the present case at any rate.

On the other hand, such condiments were indeed used in the preparation of wines, as we have seen e.g. from Pliny. More often they were used chiefly to improve poor wines by admixture - a quantity of sweet boiled wines being added to the inferior, for example sourish or acetish, stuff. The poured in improver was called π αράχυμα or π αρέγχυμα, and the pure wine, alien to such manipulations, and selfproduced, so to speak, freely was in all probability called αὐτίτης οἶνος, although other less likely explanations of the term were also current in later times. Thus in the Etymologicon Magnum, s.v., we read: αὐτίτης: ὁ χωρὶς παραχύματος οἶνος, οἶον έψήματος $\ddot{\eta}$ $\dot{\phi}$ ἐπιχώριος (according to Pollux, VI, 18) $\ddot{\eta}$ $\dot{\phi}$ ἀμιγής $\ddot{\eta}$, ώς ἔνιοι, $\dot{\phi}$ δευτερίας $\ddot{\eta}$ ό ἐπέτειος (as Galenus in his Lexicon Hippocraticum, s.vv. αὐτίτης – resolved as αὐτοετίτης – and περσύας). By ἀμιγής one understands the absence of the two kinds of additive interference to the natural process and product of mustfermentation, namely (a) the infusion of condiments, especially during that process, and (b) the impouring of other wines; mixture with water is not relevant here, and only secondarily can be connoted, by an extension of the stricter sense. Cf. Erotianus Δ 23 s.v. οἶνον αὐτίτην τὸν ἀπαράχυτον, and Athenaeus I, 27A: ὁ Οὐελίτερνος (sc. οἶνος) δὲ ἡδὺς πινόμενος, εὐστόμαχος ἴδιον δ' αὐτοῦ τὸ μὴ δοκεῖν ἀπαρέγχυτος εἶναι ἐμφαίνει γὰο ὡς ἐμμεμιγμένου αὐτῷ ἑτέρου. Galenus reserves ἀπαράχυτον for a narrower application signifying absence of mingling a small quantity of seawater for the fermentation. Thus X p. 832: λαμβάνειν δ' ἀπαραχύτους (sc. οἴνους) –οὕτω δὲ ὀνομάζουσιν οἶς οὐ μέμικται θάλασσα, μεγίστην βλάβην ἡγουμένους ἐφ΄ ὧν μέμικται γενήσεσθαι. οὐ μὴν οὐδὲ εἰώθασι τοῖς εὐγενέσιν οἴνοις, ὑπὲρ ὧν ὁ λόγος ἐστί, μιγνύναι τῆς θαλάσσης ἐν Λέσβω (this not being strictly accurate, at least in older times, as we have seen e.g. from Phanias. And, XIII p. 721: τὸν

ἀπαράχυτον οἶνον, τοῦτ' ἐστιν ῷ μὴ μέμικται θάλασσα. That this was one way of seasoning the wine we have already observed, and in fact Phanias (loc.cit. apud Athenaeus, I p. 37f) uses the word παρεγχεῖται to signify the pouring in of some seawater to γλεῦκος. – On the mixture of wines v. e.g. Theophrastus apud Athenaeus I, 32b; and on seasoning cf. idem. I, 32a. – The αὐτόκρατος Άριούσιος of Chios was (Athenaeus, I, 32f) in all probability such an αὐτίτης οἶνος. It was matured by itself without condiment or mixture.

As I noticed above, there is no indication in Greek of a mechanical tabulation of degrees in evaporation like the triple Roman division. Athenaeus I, 31e observes also: Τιμαχίδης δὲ ὁ Ρόδιος ὑπόχυτόν τινα οἶνον ἐν Ρόδω καλεῖ, παραπλήσιον τῷ γλυκεῖ. καὶ γλῦξις δ᾽ οἶνος καλεῖται ὁ τὸ ἕψημα ἔχων. (On the specific nature of ὑπόχυτος, I shall speculate below). Both appear in Phrynichus (*Fab. Inc.* XIII, vol. II p. 605 Meineke = Fr. 68 PCG vol. VII, p. 422) apud Diog. Laertius IV, 20: ἦν δὲ καὶ φιλοσοφοκλῆς (sc. Polemon) καὶ μάλιστα ἐν ἐκείνοις ὅπου κατὰ τὸν κωμικὸν (sc. Aristophanes, Fr. 958) τὰ ποιήματα αὐτῷ

κύων τις ἐδόκει συμποιεῖν Μολοττικός, καὶ ἔνθα ἦν (sc. Sophocles) κατὰ τὸν Φούνιχον οὐ γλύξις οὐδ' ὑπόχυτος ἀλλὰ πράμνιος.

(cf. Suidas s.v. ὑπόχυτος οἶνος where the verse is applied mistakenly to Polemo). Marvellously illustrates the Cratinian point Athenaeus in I, p. 30b-c: ἔστι δὲ οὖτος (sc. ὁ Ποάμνειος) γένος τι οἴνου· καὶ ἔστιν οὖτος οὔτε γλυκὺς οὔτε παχύς (as the condensed must-wines are), ἀλλ' αὐστηρὸς καὶ σκληρὸς καὶ δύναμιν ἔχων $\delta\iota\alpha\phi\epsilon\rho\sigma\sigma\alpha\nu$ (having such strength and robustness as to cause an erection, Aristophanes, Fr. 334, PCG vol. III 2, p. 188) οἵω Ἀριστοφάνης οὐχ ἥδεσθαι Άθηναίους φησι, λέγων «τὸν Ἀθηναίων δῆμον οὔτε ποιηταῖς ἥδεσθαι σκληροῖς καὶ ἀστεμφέσιν, οὔτε Ποαμνίοις σκληροῖσιν οἴνοις, συνάγουσι τὰς ὀφούς τε καὶ τὴν κοιλίαν ἀλλ' ἀνθοσμία καὶ πέπονι νεκταροσταγεῖ» (Aristophanes, Fr. 688, PCG vol. III 2 p.353). As Erotianus explains, ο, 45: οἶνος ἀνθοσμίας, ὁ εὐώδης καὶ ήδύς, ώς Άριστοφάνης ἐν Βατράχοις (v. 1150) καὶ ἐν Θεσμοφοριαζούσαις (in the second edition and version, cf. Fr. 334). Cf. Phrynichus, Praeparatio Sophistica, p. 37, 1. In Ranes, 1150, Aristophanes indeed contrasts the strong proper wine that can cause ebriety to the lighter ἀνθοσμίας: Διόνυσε, πίνεις οἶνον οὐκ ἀνθοσμίαν, meaning "you are talking nonsense, like a drunken man, you are intoxicated". In the same spirit Hesychius comments s.v. Γλῦξις· ὁ ἀνειμένος οἶνος καὶ ἄτονος (so splendidly Salmasius pro ἄγονος), δv ἔνιοι μὲν $\delta \pi \alpha \lambda \delta \sigma \tau \sigma \mu \sigma \nu$, οἱ δὲ $\gamma \lambda \epsilon \tilde{\nu} \xi \iota \nu$ (sc. καλοῦσι). The relaxed and enervated, "nerveless", qualities of dulcia, of the unfermented, as it were, wines, are emphasized – characteristics that made them alone suitable to the gravity

of old Roman matrons. We are reminded of the basic Hippocratic distinction ($\Pi \varepsilon \rho i \delta \iota \alpha i \tau \eta \varsigma \delta \xi \varepsilon \omega v$ II 288L = II 53K) between the $\gamma \lambda \nu \kappa \dot{\nu} \varsigma \delta i v \delta \varsigma$ and the $\delta \iota \nu \omega \delta \eta \varsigma \delta i v \delta \varsigma$, we may say between *honeyish wine* and *winish wine*. Whether and when we employ such a division or speak instead (occassionaly) with Pliny of *dulcia* versus *vina* is, after the foregoing explanations, a sheer stylistic matter.

Έψημα and σίφαιον must have been in Classical Greece pretty dense, thick, quasi-congealed liquids. The σίφαιον is mentioned among the seasonings or condiments by Antiphanes in *Leucadius* (Fr. I, vol. III p. 78 Meineke = Fr. 140 PCG vol. II, p. 388) apud Athenaeus II p. 68a (cf. Pollux VI, 66): ἀφτύματα ταῦτα καταλέγει Άντιφάνης.

ἀσταφίδος, ἁλῶν, σιραίου, σιλφίου, τυροῦ, θύμου, σησάμου, νίτρου (vel. λίτρου), κυμίνου, ροῦ, μέλιτος, ὀριγάνου, βοτανίων, ὄξους, ἐλαῶν, εἰς ἀβυρτάκην χλόης, καππάριδος, ἀιῶν, ταρίχους, καρδάμων, θρίων, ὀποῦ

– substances each with specific singular strength even in small quantities. Σίφαιον also appears in the very similar catalogue of ἡδύσματα given by Alexis in $\Lambda \epsilon \beta \eta \varsigma$ (Fr. II, vol. III p. 437 Meineke = Fr. 132 PCG, vol. II, p. 96) apud Athenaeus IV p. 170a; and in his similar list in $\Pi \alpha \nu \nu \nu \chi \iota \varsigma$ ἢ Έριθος (Fr. III vol. III p. 465 Meineke = Fr. 179, PCG vol.II, p. 124) apud Athenaeus IV, 170b. He also mentions it in $\Pi o \nu \eta \rho \alpha$ (Fr. II, vol. III p. 471 Meineke = Fr. 193 PCG, vol. II, p.131) apud Athenaeus IV p. 170c, where it is used in the preparation of a $\nu \epsilon \alpha \nu \iota \kappa \eta$ $\lambda \delta \tau \alpha \zeta$, a shining dish. By contrast, in another gourmet preparation from the same comedy Alexis qualifies the wine infused as white, $\lambda \epsilon \nu \kappa \delta \nu$ o $\delta \nu \delta \nu \delta \nu$ (Fr. 191.8, PCG vol. II, p.130). The heavy-sweet wines on the other hand were dark-hued, like nowadays the Porto or the Santorini Vinsanto.

In Aristophanes' *Vespae* 877 sq. the decent, sensible young man despairing at his father's democratic infatuation with trials and condemnations, prays, having instituted the appropriate new rite, to Apollo Agyieus:

παῦσόν τ' αὐτοῦ (sc. τοῦ πατρός) τουτὶ τὸ λίαν στρυφνὸν καὶ πρίνινον ἦθος ἀντὶ σιραίου μέλιτος μικρὸν τῷ θυμιδίῳ παραμίξας·

mingling a bit of honey instead of $\sigma(\alpha \omega)$ into his heartlet. But since $\sigma(\alpha \omega)$ belonged to the dulcia, there is a difficulty in accounting for the old man's "sour and tough" character. Reiske of course noticed this, felt the little stylistic awkwardness in the beginning of the second verse, saw the smoothness produced by the existence of an adjective before $\mu \dot{\epsilon} \lambda \iota \tau o c$ qualifying it, judged that one should thus read $\dot{\alpha} \nu \tau \iota \sigma \iota \rho \alpha \dot{\omega} v$ as one word, and deemed that he would read $\dot{\alpha} \nu \tau \iota \kappa \nu \rho \alpha \dot{\omega} v$, from $\dot{\alpha} \dot{\alpha} \dot{\nu} \tau \dot{\nu} \dot{\nu} \rho \dot{\alpha} \dot{\omega} v$, if he only knew of some renowned honey from that district. And wonderfully enough, there indeed was, not a honey, but a dulcium from Aigosthena,

not far from Anticyra on the northern coast of the Corinthian gulf (v. infra). Unnecessary, although ingenious, complications. The old man naturally, according to the habits of his age, is to be supposed as taking a lot of sweet, unwinish wines, and σίφαιον must have figured prominently among them. But as the scholiast observes ad loc. must boiled down is sweetened eminently indeed, but acquires a certain subbitter taste especially if it is cooked considerably: μη σίφαιον, ἀλλὰ μέλι παφαμίξας. σίφαιον δὲ τὸ έψημένον γλεῦκος, βραχὺ δ' ἔχον παράπικρον ὅταν καθεψηθῆ. Σίφαιον is something like the modern Greek πετιμέζι. Thus exquisitely βδελυκλέων asks that the poor old man should take in his breast a bit of unmitigated, satiating, thoroughly dulcinizing, eminently smoothening and unloosening sweetness represented by honey – the only capable of modifying his sour and tough manners.

The ἔψημα is also segregated even from the dulce wines in the Hippocratic Π ερὶ Δ ιαίτης B′ I 224 L. = I 685 Kühn, a winish substance rather than wine (but remember that even a general category of οἰνώδεις οἶνοι is recognized by Hippocrates v. supra). Its function is thus described there: ἕψημα θερμαίνει καὶ ὑγραίνει καὶ ὑπάγει. θερμαίνει μὲν ὅτι οἰνῶδες, ὑγραίνει δὲ ὅτι τρόφιμον, ὑπάγει δὲ ὅτι γλυκύ. A singular employment of its eminent nutriciousness we have learnt from Pliny above, regarding the worthy Roman who fed and fattened snails by this means; and also occurs in medicinal applications meant for a higher animal. – What is near it, what has more of it, is οἶνος (σίρινος, σίραιος, μελιχρός).

It is remarkable that Pliny's reference to σίφαιον - ἕψημα as a considerably condensed liquid squares with the Greek (classical) usage. I notice also that Aretaeus speaks of σίραιος έλληνικός sc. οἶνος (the σίφινος of Pausanias apud Eustathius above quoted. And Hippocrates speaks of σιφαῖος οἶνος, Γυναικείων πρῶτον II 479 L. = II 696 Kühn). Aretaeus, Ὁξέων Νούσων Θεραπευτικόν, A, 1 p. 194; 198; ed. Kühn; cf. also Χρονίων Παθῶν Θεραπευτικόν A p. 322 where we must certainly read σιραίω τῷ Κρητί, cf. p. 194 σίφαιον ἑλληνικόν ἢ Κρῆτα. There was also a passum Creticum (Plinius XX, 19 (79) §208; and in XIV, 9 (11) §81 where passum a Cretico Cilicium probatur etc. must be read with Ian-Mayhoff instead of Graeco (or Greco) of the mss.). The Greco-Latin gloss, if sound textually, σταφιδίτης οἶνος· sapa (p. 9 Labbeus), and especially Hesychius (pp. 9; 10), must not be used to identify the two potions despite the formal attraction of the supposition. Aretaeus means an ἕψημα from Cretic passum (further concentrated). The passum of Crete was particularly renowned, Martialis XIII, 106:

PASSUM

Gnossia Minoae genuit vindemia Cretae hoc tibi, quod mulsum pauperis esse solet,

(cf. XIII, 107 for *Mulsum Ganymedean*, the famous nectarean Falernian wine thickened by renowned Attic honey); Juvenalis XIV, 270 writes:

Qui gaudes *pingue* antiquae de litero Cretae *passum* et municipes Iovis advexisse lagenas -

(pingue, thick, dense, naturally, for, Columella, XII, 39, ex uvis passis in praelo compressis effluit et conditum vasculo mellis more servatur - much more if it was boiled afterwards as well). Cf. Polybius apud Athenaeus X, 440E affirming the similarity in taste of Roman πάσσον (passum) to Αἰγοσθενίτη γλυκεῖ καὶ τῷ Κοητικῷ.

We have further seen from Nonius that what he considers as sapa was later and in his time called *mellacium*. This last word reminds us of the μελιχρός and μελιηδής and (possibly) μελιειδής οἶνος.

Finally we resort to etymology. Σ ίραιον (which is written σ είραιον in Nicander Alexipharmaca, 153) belongs to the same meaning field with the group of words Σείριος (perhaps Σειρήν), σειριόεις, σειριόκαυτος, σειρίασις, σειριάω, σειράζω, σειριάζω. They principally signify exceptional, annihilating heat, scorching, but the insistent underlying implication is of drying up, consuming the watery ingredients, rendering arid. (That σ ειριάζω denotes rather sparkle or twinkle apud Theon Smyrnaeus, p. 146H relates to the astral employment of the root in Σείριος as Κύων, the Dog-Star, as the Sun and as Stars ($\pi\lambda\alpha\nu\tilde{\eta}$ τες καὶ ἀ $\pi\lambda\alpha\nu\tilde{\epsilon}$ ίς) in general, on each of which application there is ample documentation. That sparkling gives evidence in fact of the movement of fire that constitutes the stars as the fires of the firmament, cf. Eratosthenes, Catasterismi, 33). Thus these forms are connected with $\sigma \epsilon \iota \rho \alpha i \nu \omega$ which the Etymologicon Magnum s.v. (p. 710.22 sqq.) explains as ξηραίνω according to Orus, the Milesian grammarian: Σειραίνω σημαίνει τὸ ξηραίνω, ώς λέγει Ώρος ὁ Μιλήσιος παρὰ τὸν Σείριον τὸν ἀστέρα. Σείριος δὲ ὁ Κύων ἐστὶν ἀστὴρ καὶ εἴρηται παρὰ τὴν ζέσιν, ζέριος. Ἡ παρὰ τὸ ἐκκενοῦν ἡμᾶς ίδοῶσι οεομένους (sweating by reason of the excessive heat during the period of the Dog-Waves)· σειρεῖν γὰρ τὸ ἀποκενοῦν λέγεται. We can smell now our road to σίραιον through that $\zeta \dot{\varepsilon} \sigma \iota v$. But it is made more explicit by the final gloss in the passage quoted. (Which is repeated confusedly in the Etymologicon Gudianum, p. 497, 50 sqq.: Σείριος ὁ ἥλιος, οἱονεὶ τείριος, κατὰ τροπὴν τοῦ τ εἰς σ, ἐπειδή τείρει καὶ καταπονεῖ ἡμᾶς τῷ καύματι. Καὶ ὅτι ἀποσείει ἡμᾶς καὶ κενοῖ ἐκ τοῦ ίδρῶτος, οίονεὶ σείριος ὁ ἐκζέων ἡμᾶς καὶ θερμαίνων ταῖς ἀκτίσιν). Which gloss is fortunately confirmed by a $\chi \varrho \epsilon i \alpha$ in the Hippocratic $\Pi \epsilon \rho i \chi \nu \mu \tilde{\omega} \nu$ I 321L = I 127K: τοὺς μὲν οὖν χυμοὺς εἰδέναι ἐν ἦσιν ὤρησιν ἀνθέουσι, καὶ οἶα ἐν ἑκάστοισι νοσήματα ποιέουσι, καὶ οἷα ἐν ἑκάστῳ νουσήματι παθήματα. τὸ δὲ σὧμα τὸ ἄλλο

εἰς ὅ,τι μάλιστα νόσημα ἡ φύσις وέπει, οἶον τί σπλὴν ἐνοιδέων ποιέει. τούτων τι καὶ ἡ φύσις. σχεδόν τι καὶ χρώματα κακίω καὶ σώματα σειρεοῖ, καὶ εἴ τι ἄλλο, ταῦτα διαγεγυμνάσθω. Which expression Galen in his Commentary on the work (ed. Coraes, Πρακτικὰ ἀκαδημείας Ἀθηνῶν, p. 92.21-2) renders: ὡς τὰς τῶν χρωμάτων κακώσεις, τοῦ σώματος κένωσιν, καὶ τὰς ἄλλας διαθέσεις etc. This σειρεόω then (or σειρέω according to another variant identical with the form in the $Etym.\ M.^7$) means empty, $drain,\ dry\ up$. What is implicit in the main group becomes chief denotation here; and what was principal content there (heating, scorching, boiling) is here submerged.

But this connects to a third use of the same root meaning filtering, straining. E.g. in Paulus Aegineta, III, 26 (vol. I p. 134.5 sqq. Heiburg) we read: ...πάντα (medicinal substances) βαλὼν εἰς ἀγγεῖον ὑελοῦν (vel. ὑέλινον) ἔα βρέχεσθαι ἐπὶ ἡμέρας θ κινῶν δὶς τῆς ἡμέρας. ἐπὶ δὲ τῆς χρήσεως σειρῶν τὸ αὔταρκες (= filtering a sufficient quantity out of it) καὶ τούτω σπόγγον βρέχων ἀνάτοιβε τὰς τοίχας etc., with a view to giving them a bright golden tinge. The whole chapter, belonging to some corpus of Cleopatra's cosmetics, contains elaborate processes of hair-care. The high authority of Hesychius, further, confirms the antiquity of the use: s.v. $\Delta \iota \eta \theta \dot{\eta} \sigma \varepsilon \omega \zeta$ he explains $\sigma \varepsilon \iota \rho \dot{\omega} \sigma \varepsilon \omega \zeta$. $\Delta \iota \eta \theta \tilde{\omega}$ and $\delta \iota \upsilon \lambda \iota \zeta \omega$ mean percolate, strain through, filter; only the first word signifies the passing through some strainer or filter of whatever kind, while the latter denotes the removal of the sedimentary gross matter contained in the liquid. The sediment itself, accordingly, is referred to as $\sigma i \rho \omega \mu \alpha$ in *Aetius* I, 135, making, as it often is, light of the interchange between ι and ει. The Glossae GraecoLatinae, finally, have: σιρωτής (or σιρωτήρ?) οἴνου ἢ ἄλλου τινος ὑγροῦ· simissator. Whatever that curious simissator means, a σιρωτής must be a strainer – like the metallic ones that have survived from antiquity; the word has been transformed in modern Greek demotic to $\sigma ov \rho \omega \tau \eta \rho \iota$.

In older times sacks acted as filters, and suchlike normally was the impeccable $\tau \rho \dot{\nu} \gamma o \iota \pi o \varsigma$ (and the later $\dot{\nu} \lambda \iota \sigma \tau \dot{\eta} \rho$); cf. Pollux X, 75 (where in the fragment of Hipponax [Fr. 57 West = Fr. 59 Degani], $\tau \varrho \sigma \eta \ddot{\iota} \ddot{\iota} \sigma \varsigma$ or rather, better, $\tau \varrho \alpha \pi \dot{\eta} \ddot{\iota} \sigma \varsigma$, is the wine, either as being pressed out of the grapes or as suffering fermentative transformation; cf. Hesychius svv. $\tau \varrho \alpha \pi \epsilon \ddot{\iota} v$ $\lambda \eta v \sigma \pi \alpha \tau \epsilon \ddot{\iota} v$ and $\tau \varrho \alpha \pi \eta \tau \dot{\sigma} \varsigma$ $\dot{\sigma}$ $\dot{\sigma} \ddot{\iota} v \sigma \varsigma$. Hipponax' point is of course obscene, as West suspected. But instead of the dripping from a heavy-wine strainer suggesting vaginal secretion, as West surmised, the metaphor is more aptly applied to the dribbling of a tumescent phallus swelling with

⁷ In the Galenian lemma we have $\sigma v \rho \varepsilon \varepsilon \tilde{\iota}$ in Kühn and $\sigma v \dot{\rho} \dot{\rho} \varepsilon o \tilde{\iota}$ in Coraes. We must correct evidently to $\sigma \varepsilon \iota \rho \varepsilon \varepsilon \tilde{\iota}$ or, significantly, $\sigma \iota \rho \varepsilon \varepsilon \tilde{\iota}$.

lust before eruption. Read the verse as follows: στάζουσαν (pro the mss. στάζουσιν sc. ψωλήν) ώσπερεὶ τραπήϊον (vel τραπηϊου vel τρυγοίπιον pro mss. τροπήϊον vel τροποίϊον) σάκκος); I, 245; VI, 19; Phrynichus, *Ecloga*, 270 Rutherford = p. 303 Lobeck: ὑλιστήρ· τούγοιπον τοῦτο καλοῦσιν οἱ δοκίμως διαλεγόμενοι; and for classical usage Aristophanes, Pax 535; Plutus 1087. - Among scorching (and making arid), emptying (by drying up) and filtering through a strainer, the common denominator is deliquidation, removal or reduction of humours. This then is the rootmeaning of the entire field – and this fits nicely to the requirements of our $\sigma i \rho \alpha \iota \nu \nu$, which is a thickened, dewaterised, concentrated wine-product, freed from most of the watery ingredient through vaporization caused by slow boiling, and in view of the naturally rather excessive leeches and sediment contained in it, filtered before drink (like Eupolis' σακκίας οἶνος καὶ σακτός (Fr. Inc. CVII vol. II p. 574 Meineke = Fr. 476 PCG vol. V, p. 534), sc. ὁ διϋλισμένος (διὰ σάκκου) as Pollux VI, 18 explains. This was the purified wine meant to be kept for future use, and thus of a lasting quality. Thus I harmonize Hesychius' lemma s.v. σακτός, ὁ τεθησαυρισμένος, ὁ πολυχρόνιος καὶ ἤδη ἀποκείμενος). We see in σίραιον the root-sense, together with all its various meaning-appendages or growths. -

To conclude. $^{\prime}\!\!E\psi\eta\mu\alpha$ is the ultra qua non product of $^{\prime}\!\!\!\xi\psi\eta\sigma\iota\zeta$, its proper result. And sapa is the perfected concoction, the completely "digested" humour with the taste par excellence in singular condensation. No doubt, then, sapa is the $^{\prime}\!\!\!\!\xi\psi\eta\mu\alpha$, and thus the $\sigma\iota\rho\alpha\iota\sigma\nu$. Defrutum is a noble dulcium, enjoyment and the thing all-enjoyed. Thus sapa must correspond, in its chief and dominant kind, το the thicker liquid, as I have argued above.

The essential nature of $\gamma \lambda \epsilon \tilde{\nu} \kappa \sigma \zeta$ as of something immature, which requires the imposition of a further form in order to reach its perfection, is (as was to be expected in view of their organic foundation and tendency) nicely rendered and represented in Aristotelian apparatus and formulations, $Meteorologica \Delta$, 379.b10 sqq. Cf. especially b24 sqq.: $\dot{\alpha}\lambda\lambda$ ' $\ddot{\eta}$ $\gamma\epsilon$ $\dot{\alpha}\varrho\chi\dot{\eta}$ (of all "digestion", assimilation, assimilative incorporation) $\dot{\eta}$ èv $\alpha \dot{\upsilon}\tau\ddot{\varrho}$ θερμότης ἐστιν. τὸ δὲ τέλος τοῖς μὲν $\dot{\eta}$ φύσις ἐστί, φύσις δὲ $\dot{\eta}$ ν λ έγομεν $\dot{\omega}$ ς εἶδος καὶ οὐσίαν τοῖς δ΄ εἰς $\dot{\upsilon}$ ποκειμένην τινὰ μοφφὴν ($\dot{\upsilon}$ ποκειμένην with regard to the overall forma essentialis of the entity in question) τὸ τέλος ἐστὶ τῆς πέψεως, ὅταν τοιονδὶ γένηται καὶ τοσονδὶ τὸ ὑγρὸν $\ddot{\eta}$ $\dot{\sigma}$ πτώμενον $\ddot{\eta}$ έψόμενον $\ddot{\eta}$ σηπόμενον $\ddot{\eta}$ άλλως πως θερμαινόμενον τότε γὰρ χρήσιμον ἐστι καὶ πεπέφθαι φαμέν, $\ddot{\omega}$ σπερ τὸ γλεῦκος καὶ τὰ ἐν τοῖς φύμασι συνιστάμενα, ὅταν γένηται πῦον, καὶ τὸ δάκρυον, ὅταν γένηται λήμη. ὁμοίως δὲ καὶ τἆλλα.

συμβαίνει δὲ τοῦτο πάσχειν ἄπασιν ὅταν κρατηθῆ ἡ ὕλη καὶ ὑγρότης αὕτη γάρ ἐστιν ἡ ὁριζομένη ὑπὸ τῆς ἐν φύσει θερμότητος. ἕως γὰρ ἄν ἐνῆ ἐν αὐτῆ ὁ λόγος, φύσις τοῦτ' ἔστιν. διὸ καὶ ὑγιείας σημεῖα τὰ τοιαῦτα, καὶ οὖρα καὶ ὑποχωρήσεις καὶ ὅλως τὰ περιττώματα. καὶ λέγεται πεπέφθαι, ὅτι δηλοῖ κρατεῖν τὴν θερμότητα τὴν οἰκείαν τοῦ ἀορίστου. ἀνάγκη δὲ τὰ πεττόμενα παχύτερα καὶ θερμότερα εἶναι τοιοῦτον γὰρ ἀποτελεῖ τὸ θερμόν, εὐογκότερον καὶ παχύτερον καὶ ξηρότερον, etc. (Of course the proper subdivision of πέψις applicable to must fermentation is ἕψησις, ν. Meteorologica, Δ, 380b31: καὶ τὰ ὑγρὰ δὲ ἕψεσθαι λέγομεν, οἷον γάλα καὶ γλεῦκος, ὅταν ὁ ἐν τῷ ὑγρῷ χυμὸς εἰς εἶδος τι μεταβάλλη ὑπὸ τοῦ κύκλφ καὶ ἔξωθεν πυρὸς θερμαίνοντος (the environmental heat), etc.).

That γλεῦκος can be called new *wine* must not obscure the marked differences between wine proper (after full fermentation) and must (and the products of prevented or inhibited natural fermentation). Thus Aristotle, after having explained that liquids which do not fully vapourize and thicken by heat are of an essentially composite nature, mixed from the watery and some other principle (as earth or air), proceeds (Meteorologica Δ, 388a33 sqq.: ἀπορήσειε δ' ἄν τις περὶ οἴνου τῶν ὑγρῶν. τοῦτο γὰο καὶ ἐξατμισθείη ἄν (wine proper), καὶ παχύνεται, ὥσπερ ὁ νέος. αἴτιον δ' ὅτι οὔτε ἑνὶ εἴδει λέγεται ὁ οἶνος, καὶ ὅτι ἄλλος ἄλλως. ὁ γὰρ νέος μᾶλλον γῆς ἢ ό παλαιός. διὸ καὶ παχύνεται τῷ θερμῷ μάλιστα καὶ πήγνυται ἦττον ὑπὸ τοῦ ψυχροῦδι ἔχει γὰρ καὶ θερμὸν πολύ καὶ γῆς ὤσπερ ἐν Ἀρκαδία οὕτως ἀναξηραίνεται ὑπὸ τοῦ καπνοῦ ἐν τοῖς ἀσκοῖς ὥστε ξυόμενος πίνεσθαι. εἰ δὲ πᾶς (sc. οἶνος) ἰλὺν ἔχει (sediments), οὕτως ἑκατέρου ἔστιν (ἢ γῆς ἢ ὕδατος), ὡς ταύτης (sc. τῆς ἰλύος) ἔχει π λῆθος (the more leeches subsist, the more earthly the wine is). Another criterion of mixed constitution in liquids (as against the purely or eminently acquatic ones) is whether they thicken by both cold and heat. Thus Aristotle continues (388b8): ὅσα δὲ ὑπὸ ψυχροῦ παχύνεται, γῆς, ὅσα δ' ὑπ' ἀμφοῖν (sc. ψυχροῦ and θερμοῦ), κοινὰ πλειόνων (sc. ἀρχῶν, στοιχείων, principles), οἶον ἔλαιον καὶ μέλι καὶ ὁ γλυκὺς οἶνος. There is no need to be reminded that the boiled *dulcia* are, so to speak, more must than wine, and are consequently regularly opposed to wines, as we have observed from Hippocrates and Pliny. The same antithesis is forcefully expressed by Aristotle in Meteoroogica,. Δ , 387b9 sqq., in a discussion of the quality

⁸ Thus is naturally resolved the seeming discrepancy between 384a4: οἶνος γάο τις καὶ πήγνυται καὶ ἔψεται, οἷον τὸ γλεῦκος, and 385b1 sqq.: ἄπηκτα δὲ ὅσα μὴ ἔχει ὑγοότητα ὑδατώδη, μηδ᾽ ὕδατός ἐστιν, ἀλλὰ πλεῖον θερμοῦ καὶ γῆς, οἷον μέλι καὶ γλεῦκος (ὥσπερ ζέοντα γάρ ἐστι). It is clearly a question of more or less in the proportion of the mixture. Besides the context shows that in the latter passage the question is rather of freezing (πήγνυσθαι) by the action of cold, whereas in the former the point lies more into the making solid, thickening and stiffening (πήγνυσθαι) by heating.

θυμιατόν (fuming, fumigatory, capable of rendering incencious exhalation): οἶνος δ' ὁ μὲν γλυκὺς θυμιᾶται πίων γάρ, καὶ ταὐτὰ ποιεῖ τῷ ἐλαίῳ οὔτε γὰρ ὑπὸ ψύχους πήγνυται (but rather thickens), καίεταί τε. ἔστι δ' ὀνόματι οἶνος, ἔργ ϕ δ' οὖκ ἐστιν οὖ γὰρ οἰνώδης ὁ χυμός, διὸ καὶ οὖ μεθύσκει β. As Hippocrates distinguished, there are οἶνοι γλυκεῖς and οἶνοι οἰνώδεις. Γλεῦκος and γλυκύς are etymologically connected, we have seen, by the *Etymologicon Magnum*; and in any case it is of the essence of grape liquid to be sweet (as e.g. the Aristotelian Προβλήματα pointedly have: Κ 23, 925 b16: τοῦ γλεύκους ὄντος φύσει ἡδέος), being the putrefactory perfection and maturity of the vine juices: ripeness being intrinsically mellow.

There was, besides, a special use of $\gamma\lambda\epsilon\tilde{\nu}\kappa$ ος attested by the Glossographers. For the grapes when gathered and reposited become moistened and even extremely wet on their skins by their own juice. This is why they then taste sweetier than when taken directly from the vine (so in the Aristotelian $\Pi\rho$ οβλήματα K, 23, 925b14 sqq.: ἢ $\kappa\alpha\theta$ άπε φ $\kappa\alpha$ ὶ αἱ φ άγε φ τετ φ υγημέναι τῶν βοτ φ ύων γλυκύτε φ αί εἰσι τῶν ἀτ φ υγήτων; ὑπὸ γὰ φ τοῦ γλεύκους ὄντος φύσει ἡδέος αἱ μὲν τετ φ υγημέναι φ αγε φ ἄσπε φ ἐοίκασιν ἡδυσμέναι (ἀνάπλε φ γά φ εἰσι καὶ ἔξωθεν), αἱ δὲ τῶν βοτ φ 0 ἀνήδυντοι... ὥσπε φ αἱ φ αγε φ 0 οὖν ὅταν θλι φ θ φ 0, ἀναπίμπλαται ἀπὸ τῆς ἐντὸς γλυκύτητος καὶ ἔξωθεν δια φ αίνεται γλυκύτε φ 0 ὄντα (sc. τὰ μύ φ τα).

When a sufficient quantity of grapes are put together in a large vat, that process of moistening is intensified, and without any external action, by the sheer working of their own weight a liquid is trickled down marvelously sweet and exquisitely rich. Thus the Etymologicon Magnum, (234.8) s.v. Γλεῦκος· τὸ ἀπὸ τῆς ληνοῦ ἀπόσταγμα, αὐτομάτως καταρρέον ἀπὸ τῆς σταφυλῆς. ἔστι δὲ τοῦτο γλυκύτατον καὶ λιπαρώτατον. And so, verbatim, in the Lexicon 5 s.v. (Anecdota Graeca, Bekker, p. 227.19). Hesychius s.v. γλεῦκος· τὸ ἀπόσταγμα τῆς σταφυλῆς ποὶν πατηθῆ. So Suda, with ἀποστάλαγμα pro ἀπόσταγμα and Cyrillus' Lexicon with π οίν π ατηθῆναι pro π οίν π ατηθῆ. This wonderful must, and the wine coming from it, was called $\pi\rho \dot{\sigma}\tau\rho o\pi o\zeta$, $\ddot{\alpha}\tau\rho o\pi o\zeta$ or $\dot{\alpha}\pi \dot{\sigma}\tau\rho o\pi o\zeta$, all signifying absece of forced pressing and squeezing according to the grammarian Orus apud Etymologicon Magnum, s.v. ἄτραπος (p. 162.25): ὁ οἶνος· τραπεῖν γὰρ ἐστὶ τὸ πατῆσαι· ὅθεν καὶ τὸ πρὸ τοῦ πατηθηναι γινόμενον ἀπόσταγμα τῆς σταφυλης ἄτραπος οἶνος καὶ ἀπότροπος λέγεται. οὕτως Ω ρος. A previous source and an antecedent testimony, is given by the Etymologicon Gudianum s.v. ἀπότροπος οἶνος (p. 69.42 sqq.) τραπεῖν γάρ ἐστιν αὐτὸ τὸ πατῆσαι. ὅθεν καὶ τὸ πρὸ τοῦ πατηθῆναι γινόμενον ἀπόσταγμα τῆς

This again assimilates γλυκύς and γλεῦκος since (Fr. 211 p. 1516a39): τὸ γλεῦκος ἥκιστα μεθύσκει. The two are identical, cf. Προβλήματα, ΚΒ΄ 12. 931a18; 16.

σταφυλῆς ἀπότοσπος οἶνος λέγεται. οὕτως Ἐπαφρόδιτος ἐν ὑπομνήσει Ἀσπίδος Ησιόδον (v. 301, v. infra). Hesychius testifies and explains s.v. πρότροπος οἶνος τις τοῦ γλεύκους τὸ πρόρυμα (there is no compelling reason to change to πρόχυμα with v.d. Linden or πρόρευμα with Heinsius; although Linden's proposal squares with Geoponica VI, 16: πρὶν θλιβῆναι τοὺς βότρυας τὸ ἐξ αὐτῶν αὐτομάτως ἀποστάζον γλεῦκος, ὃ πρόχυμα τινες καλοῦσι). And so Moeris: πρότροπος οἶνος ὁ πρὸ τοῦ πατηθῆναι τὴν σταφυλὴν ρεύσας. And Pollux VI, 16: καὶ πρότροπος δ᾽ ἦν τις οἶνος, ὁ πρὶν ἀποθλίβεσθαι ἐκρυείς. Οἶνος in the sence both of must and of the ensuing proper wine, νέος and παλαιὸς οἶνος.

Besides this sense, πρότροπος signified also a kind of wine, says Hesychius, not necessarily connected with that proto-must we must assume. And indeed we find in Athenaeus mention of a Lesbian sweet wine, called precisely πρότροπος; Ι, 30Β: ὅτι Μιτυληναῖοι τὸν πας' αὐτοῖς γλυκὺν οἶνον, πρόδρομον καλοῦσιν ἄλλοι δὲ πρότροπον. And in II, 45E, where (after condemning previous wine drinking in advance) the correct hygienic procedure before eating is circumscribed – temperate and judicious gymnastics, baths, moderate water drinking, to predispose advantageously our frame and alleviate the influence of the wine to follow – or ἐὰν δέ τις ἡμῶν τοῦτο (sc. inbibing enough of water) δυσκόλως ποιῆ γλυκὺν ὑδαρῆ θερμον προλαμβανέτω, μάλιστα δὲ τὸν καλούμενον πρότροπον, τὸν γλυκὺν Λέσβιον (Wilamowitz athetised the Lesbian as a gloss – unnecessarily), ὄντα εὐστόμαχον. As to its mode of preparation Pliny mentions one, but if austerum is sound in the characterization of the wine produced thus, it cannot be that of the Lesbian sweet. Plinius XIV, 9 (11), §85: e dulci genere est et melitetes (i.e. μελιτήτης); distat a mulso, quod fit e musto, cum quinque congiis austeri musti congio mellis et salis cyatho subfervefactis. Austerum sed inter haec genera poni debet et protropum; ita appellatur a quibusdam mustum sponte defluens antequam calcentur uvae. hoc protinus diffusum in lagonis suis defervere passi, postea in sole XL diebus torrent aestatis secutae ipso canis ortu. This is Ian-Mayhoff's interpunction; previously austerum was taken with the preceding sentence: it should perhaps be deleted. But it coud be of an austere sweetness, congenial somehow to the taste of pomegranate, only more mellowed down - distinct thus from the aforementioned Lesbian. One is thinking of the Santorinian Vinsanto. (Plinius mentions in XIV, 7(9) §75, in a list of renowned wines, protropo Cnidio, which should be read with comma in between, as he does not give any hint that he connects his protropus with any specific locality). Columella in XII, 27 describes the production of dulce vinum from must coming from grapes treaded down but not pressurized mechanically: Vinum dulce sic facere oportet. Uvas legito, in sole per triduum expangito, quarto die meridiano tempore calidas

uvas proculcato, *mustum lixivum*, hoc est, antequam prelo pressum sit, quod in lacum musti fluxevit tollito: cum deferbuerit, in sextarios quinquaginta irim bene pinsitam nec plus unciae pondere addito, vinum a fecibus eliquatum diffundito. Hoc vinum erit suave, firmum, corpore salubre. We are in the local producers' farm and learn practical recipes for wines imitating and substituting the exquisite and profligate potions of old or the luxurious international varieties of the later times.

I turn back to the wine-τοσπαί. And Hesychius has, in agreement and amplification to the information from the Etymologicon Magnum supra, s.v. τοαπέουσι πατοῦσιν ἐπὶ τῆ ληνῷ. And s.v. τοαπεῖν ληνοπατῆσαι. The corrupt Hesychian gloss: θοεφθῆναι: τοαφῆναι πατῆσαι, is the confused combination of two entries one in, one out of place: (1) θοεφθῆναι: τοαφῆναι (from τοέφω) and (2) τοεφθῆναι: τοαπῆναι: πατῆσαι (from τοέπω), this one of the discussed group. Consonantly to these determinations, wine proper, and not the special kind above mentioned, was called distinctively τραπητός. So Hesychius s.v. τοαπητός ὁ οἶνος. And s.v. τοαπητός ὁ οἶνος λέγεται τραπητός. This has nothing to do with τοαπίας and ἐντοοπίας οι ἐκτοοπίας οἶνος, second rate wines, in which the second fermentation from wine to vinegar has commenced and progressed. (Cf. Hesychius, s.vv.; s. v. τοοπίας οἶνος, μεταβεβληκώς καὶ ἔκλυτος; Pollux I, 248; VI, 17; Suda; Moeris). V. Photius and Suda Lexica s.v. τοοπίας οἶνος: ὁ τετοαμμένος καὶ ἐξεστηκώς. Ἀριστοφάνης Δαιταλεῦσιν (Fr. 223 Blaydes = 13 Dindorf = Fr. 219 PCG vol. III 2 p.132)

ταχύ νυν πέτου καὶ μὴ (μοι Elmsley) τροπίαν οἶνον φέρε.

This set in of the second process was also signified in all probability by the $\delta\iota\kappa\alpha\mu\pi\iota\alpha\varsigma$ οἶνος (δὶς $\kappa\alpha\mu\theta$ είς so to speak) of Hesychius s.v. $\delta\iota\kappa\alpha\mu\pi\iota\alpha\varsigma$ οἶνος ὁ δύο $\tau\rho\sigma\pi\dot{\alpha}\varsigma$ ὑπομείνας, who has suffered two processes of change, two turns one to proper wine, the other to vinegar.

Indeed τραπέω in the sense of tread grapes is Homeric; *Odyssey* H, 125¹⁰. On which *Eustathius* opportunely comments (1574.2 sqq.): τὸ δὲ τραπέουσιν, ἀντὶ τοῦ πατοῦσιν. ὅθεν φασὶ καὶ τραπηταί, οἱ πατοῦντες τὰς σταφυλάς¹¹. γίνεται δὲ παρὰ τὸ τρέπειν ἡ λέξις, ἐπεὶ πατουμένη τρέπεται εἰς ἄλλο τι ἡ σταφυλή, εἰς οἶνον γάρ, τρεπομένη ἀπὸ πηκτοῦ εἰς ρυτόν, from the fleshy moisture of the grape to the liquid juice of the must, and then to the exhilarating fluidity of the wine. Thus Hesychius

 $^{^{11}}$ And Hesychius s.v. πατηταί οἱ τραπηταί (with reversed explanatory flow).

s.v. τραπέοντο· ἐπατοῦντο, παρὰ τὸ τροπὴν λαμβάνειν τὸν βότρυν πατηθέντα. The Homeric imitation in the Hesiodic *Scutum* does comprise ἐτράπεον in our sense (301). That Ananias (Fr. 5.4 Diehl, apud Athenaeus VII, 282B) has:

δέλφακος δ', ὅταν τραπέωσι καὶ πατέωσι, ἐσθίειν

need not cause any anxiety, as it did to some *docti* of Casaubon (Commentaria *ad loc.*) who would correct to τουγέωσι (τρυγῶσι) καὶ πατέωσι. (Thus Dalecampius verted: Uvas post vindemiam cum calcaverint). For $\tau \rho \alpha \pi \epsilon \tilde{\imath} v$ signifies the squeezing of the grapes by calcation rather than treading and trumpling as such and in itself. And so $\tau \rho o \pi \epsilon i o v$ could be (part of) some mechanism or appliance through which the pressing was effected or improved. Thus I believe we must reed $\tau \rho o \pi \epsilon \tilde{\iota} o \nu$ instead of $\tau o \pi \epsilon \tilde{\iota} o \nu$ in Lexicon 5 (Anecdota Graeca, Bekker, p. 308.18 sqq.) s.v. τροπεῖον τι ἐστι καὶ τριπτῆρες... οί¹² δὲ τροπεῖον θύραν εἶναί φασι τὴν ἐπιβαλλομένην ταῖς σταφυλαῖς, ὤστε ἐξηθῆσαι τὸν οἶνον. Θύραι, if sound, is in the sense of tabula *oblonga*, cf. in Herodotus II, 96; VIII, 31 – just as σανίς signifies door, the fold(s) of the door and plank, board, panel, in short a long, broadich but relatively thin piece of wood in the form of a low parallelepiped, just what the modern-greek acceptation of the word is. For έξηθῆσαι (cf. ἐκ-θλίβω) cf. δι-ηθῆσαι. As ἐξηθέω means filter out (v. the Aristotelian *Problemata* ΛH, 5, 967a13 sqg.: $\mathring{\eta}$ διότι $\mathring{\upsilon}\pi\mathring{o}$ μεν τοῦ μετρίου πόνου τὸ θερμὸν (sc. ἐν τῷ σώματι) ἐκκάεται καὶ ἐπιπολάζει, ὑπὸ δὲ τῶν πολλῶν ἐξηθεῖται μετὰ τοῦ ίδρῶτος καὶ τοῦ πνεύματος, ἀραιουμένου τοῦ σώματος ἐν τῷ πονεῖν), the τροπεῖον must have been instrumental in exercising pressure for the grape juice to be strained through some purificatory filter – and thus a sack. And this is precisely what we find in Hipponax (Fr. 53 Diehl = 57 Bergk = 59 Degani) apud Pollux X, 75 (a passage and fragment I have already quoted and utilized above): he speaks of the various straining appurtenances of the ancients for wine-filtering, cf. VI, 19): Ίππώναξ δὲ φησιν:

στάζουσαν ώσπερεὶ τροπήϊον σάκκος (vel σάκος)¹³

¹² Before οί there may be a lacuna giving another interpretation of the word in question, as everything that proceeds relates to τριπτῆρες.

¹³ It is lexicographically attested that σάκος is the Attic form, whereas σάκκος is the κοινή-form, which may have originated in this case from a dialectical Doric prototype. Thus Phrynichus, Eclogae, 229 (Rutherford) = 225 (Fischer) = p. 257 Lobeck, says: σάκκος Δωριεῖς διὰ τῶν δύο κκ, οἱ δὲ ἀττικοὶ δι᾽ ἑνός; while Moeris s.v.: σάκος ἀττικοὶ, σάκκος διὰ δύο κκ Ελληνες; and Thomas Magister Oνομάτων Αττικῶν Ἐκλογή, s.v. σάκος ἀττικοὶ δι᾽ ένὸς κ. Ἑλληνες δὲ διὰ δύο. Photius Lexicon s.v. professes the atticicity of σάκος, while Suda confirms it by referring to Aristophanes, Lysistrata, 1211: σάκους ἔχων καὶ κωρύκους, where indeed the manuscript tradition unanimously gives the required form. (The ctitical Bentley uncritically changed it to σάκκους, and some of the subjectivistic philologists followed him). Eustathius ascribes the correct view to Aelius Dionysius: in Iliadem N, p. 940.16 sqq.: Ἰστέον δὲ ὅτι

οὐ μόνον τὸ πολεμικὸν σκεῦος (sc. the shield), ἀλλὰ καὶ ὁ κοινὸς λεγόμενος σάκκος δι' ένὸς κάππα προεφέρετο παρ' Άθηναίοις, καθὰ φησὶν Αἴλιος Διονύσιος. ὅθεν καὶ σακεύειν, φησί, τὸ ύλίζειν, ώς Ήρόδοτος. «Χρήμαθ' ύποσακιζόμενος», καὶ «ύποσακίζειν τῆς όδοῦ» τὸ προκόπτειν καὶ ύφαιρεῖσθαι· τοῦτο δὲ ἴσως καὶ ἀπὸ τοῦ κατὰ μικρὸν ἐκκενουμένου σάκου (clearly, a strainer-sack). The Herodotean reference must be to IV, 23; the Schythians use as chief food the products from a tree fruit: τοῦτο ἐπεὰν γένηται πέπον, σακκέουσι ἱματίοισι, ἀπορρέει δὲ ἀπ' αὐτοῦ παχὺ καὶ μέλαν etc. They filter it through cloths. Σακκέουσι is the mss. reading (with σακκέοισιν in R and V, slightly thus attested, which anyway does not point in another direction). But Aelius Dionysius read σακεύουσι; and so Suda s.v. σακεύουσι τὸ ὑλίζουσι πας Ἡροδότω. And similarly Photius. These testimonies are not simply to be repelled on the ground that Herodotus wrote Ionic and not Attic; for the influence of the Athenian splendor in the 5th century B.C. was such as to affect the language of writers and poets, whatever their dialectal basis was. This is indispensable in correctly appreciating the literary productions of that century, wheresoever they came from. (The text of older writers was also somehow Attically normalized - especially those on whose remains considerable Athenian activity was generously expended, as, for example, in the known cases of Homer and the Orphic Corpus). Besides, the greater affinity of the Ionian and the Attic between themselves than to any other dialect; and the notion that the double kappa form was originally Doric (though of this some ground of scepticism will be adduced in a moment); both of these considerations also tend to unnervate the objection. Nevertheless, in view of the unanimous mss. tradition, I prefer to view σακκέουσι as the ancient vulgate reading preserving the wide, and not necessarily or mainly Attic, tradition of the classical text, with σακεύουσι the corrective conjectural intrusion of an Alexandrine overcritic, which has passed into the text of some "purified" learned edition used by Aelius Dionysius. But to confess my judicious prejudice: I am inclined with ample reason to be rather suspicious of what proceeds from the overatticizing zeal of the second century A.D. Renaissance. The linguistic purists tend always and in all ages to be foolest.

I shall end this digression by a brief examination of the Aristophanic and comic usage. I mentioned the σάκους of Lysistrata supra. In Ecclesiazousae, 502, both the mss. tradition entire and the scholiast have σάκου (which is also postulated by the meter). In Acharnenses, 745, σάκκου is the correct reading (metrically, too, required), attested by R (and B, C; contra, σάκου A teste Blaydes); but a Megarian is speaking. While in 822, where an Athenian sycophant goes into his habitual πολυπραγμοσύνη, σάκου must be read (with most mss. and according to metre; though R has σάκκου). As the scholiast observes: σάκος νῦν δι' ἑνὸς κ' ἀνωτέρω δὲ (obviously in <math>v. 745) διὰ δύο.

[I cannot but entertain the possibility that the Phrynichian subtely of a Doric dialectal basis for σάκκος may derive from this very discrepancy in *Acharnenses*. The rather dull acuteness and false delicacy of the puristic grammarians and philologists is nowhere better exhibited than in such dim clevernesses. If this be so, and the Acharnensian distinction was the sole foundation for Phrynichus dictum, then we must cautiously reject it. For Aristophanes might have jested at the Megarian's rusticity and block-heaviness, in pronouncing roughly and crowingly σάκ-κος].

The reputed Attic use is also observed in Fr. 305 Dindorf = 333 Blaydes = 343 PCG vol. III,2 p.193, apud Pollux X, 152: ἐπὶ τοῦ αὐτοῦ (sc. θυλακίου vel. βαλαντίου) δὲ καὶ σακίον (no doubt ὑποκοριστικόν of σάκος) ὅταν φῆ ἐν Θεσμοφοριαζούσαις (β΄, the second presentation evidently as it does not occur in the extant text of the comedy):

σακίον, ἐν οἶσπερ τἀργύριον ταμιεύεται

(so the mss., though metrically could be either κ or $\kappa\kappa$. The singular $\sigma\alpha\kappa$ iov can be defended in a couple of ways, as against the plural $o\tilde{i}\sigma\pi\epsilon\varrho$, but a possible correction to $\sigma\alpha\kappa$ iwv has been thought of by Blaydes and Kaibel).

From Menander we have Δ εισιδαίμων Fr. IV.4 (vol. IV p. 103 Meineke) apud Porphyrius, *De Abstimentia*, IV, 15 (p. 253.6 sqq. Nauck):

_____ τοὺς πόδας καὶ τὴν γαστέρα οἰδοῦσιν, ἔλαβον σακίον, εἶτ' εἰς τὴν όδὸν ἐκάθισαν αὐτοὺς ἐπὶ κόπρου etc.

The Mss., teste Nauck, have σακκίον (corrected to σακίον by Porson and Meineke) but the apparently corrupt tradition, precaviously, selectively and defectively reported, respecting this work is well noted (v. Nauck, in his edition, *Praefatio* pp. XIII-XIV). Metrically, both forms are admissible. If σακκίον is to be retained, it may well be an instance of the adulteration of classical Attic towards the emergence of Hellenistic κοινή. The step is consolidated in the next generation, some four decades later, in the manuscriptly testified and metrically required σακκόπηρα of *Apollodorus Carystius* in his *Amphiaraos* Vol. IV p. 440 Meineke = Fr. 1 PCG vol. II, p 487, apud *Pollux* X, 161: σακκοπήφαν δὲ (sc. ἔστιν εύφεῖν), ὡς εἴθισται τοῖς ἰδιώταις λέγειν, ἐν Ἀπολλοδώρου τοῦ Καρυστίου Ἀμφιαράφ:

_____ ἐμβαλόντες, ὧ πονηوὲ σύ, εἰς σακκοπήραν αὐτὸν ἐπιθήσουσί που ἐφ' ὑποζύγιον.

The word, moreover, was demotic and vulgar. (The ordinary expression would be σάγματα ὑποζυγίων, as Pollux observes just before in this passage citing Theopompus FrGrHist 115 F 58).

That Demosthenes speaks of τὰνδοάποδα οἱ σακχυφάνται (kind of sackclothe weavers, from σάκκος and ὑφαίνω, with the second κ aspirated because of the υ-aspiration), Contra Olympiodorum, §12 (p. 1171), appears to have entertained some sort of singularity and notoriety: ν. Pollux VII, 191: σακχυφάντας δὲ Δημοσθένης εἴρηκε ἐν τῷ κατ᾽ Ὁλυμπιοδώρου. καὶ σάκκον μὲν καὶ σακκίον ἡ κωμωδία^(*), Ὑπερίδης δὲ ἐν τῷ ὑπὲρ Μίκας (Fr. 125 Blass-Jensen) ἔφη «ἐμισθώσατο τυλυφάντας»· Σοφοκλῆς δ᾽ ἔφη (Fr. 415^c Dindorf = Fr. 468 Radt) «λινορραφῆ τυλεῖα» (thus the corrupt κλινοραφής τυλία to be corrected from X, 39), Εὔπολις δὲ Κόλαξι (Fr. XXI vol. II p. 496 Meineke = Fr. 170 PCG vol. V, p. 389) «κεκρύφαλλοί τε καὶ τύλη», Ἀντιφάνης δὲ ἐν Φάωνι (vol. III p. 124 Meineke = Fr. 213 PCG vol.II, p. 438) «στρώματα,/ κλίνας, τύλας». - Cf. Pollux, X 39-40; where one observew that what was not strictly Attic(**) – τύλη instead of τυλεῖον οτ, better, κνέφαλλον (οτ κνέφαλον) – but Ionic (for Pollux loc. cit. says: καὶ τύλη δὲ παρ᾽ Εὐπόλιδι ἔστιν ἰάζοντι (= imitating the Ionian dialect) ἐν τοῖς Κόλαξιν), becomes the vulgate so to speak and common usage beginning already with the time of Middle Comedy: ἐν δὲ Αντιφάνους Φάωνι κατὰ τὴν κοινὴν χρῆσιν ἔστιν εύρεῖν τὰς τύλας etc.

Τύλος in classical Attic was any knob-like protuberance; τυλεῖα sorts of cushions; perhaps τύλη, in special use, as an artifice by which one could carry weight by raising it on the shoulders (the chief appurtenance being of a knotty appearance); Aristotle Fr. 63 Rose = Diogenes Laertius IX, 53, where the story is given of Protagoras inventing it. Probably the word got currency in Attic, in a specific employment, as a result of this particular invention of an Ionian. Connectedly, (τύλος and) τύλα was the callous hardness that thereby developed on the weight-carriers' shoulders or the callous shoulder itself; v. sch. ad Aristophanes, Acharnenses, 860; Suda s.v. τύλα; Hesychius s.v. τύλα; Pollux VII, 133. Suda s. v. aptly explains the phaenomenon as νενεκρωμένη σάρξ. It

could be significant that the classical passages that contain the word in this special sense have the Doric form $\tau \dot{\nu} \lambda \alpha$. Aristophanes, Acharnenses, 860; 954. The Boeotian speaks in both cases. Cf. Telecleides Fab. Inc. Fr. XVIII, vol. II p. 377Meineke = Fr. 53 PCG vol. VII, p. 688, apud Scholia ad Aristophanes, Acharnenses, 860 a. The origin of this use might have been Doric, as that of calling $\tau \dot{\nu} \lambda \eta$ cushions and mattresses Ionic. For as the latter was also Lesbian (being Sapphic according to Pollux X, 40), so the former is appropriated to Atticity by Aelius Dionysius apud Eustathius in Odysseam, A, p. 1390.54 sqq.: Αἴλιος δὲ Διονύσιος παρασημειούμενός τινα ὅπως κατὰ γένη προφέρονται, φησὶν οὕτω: ... ἔτι θηλυκῶς καὶ ἡ τύλη, τὸ φύμα τὸ ἐπὶ τοῦ αὐχένος... δῆλον δὲ ὅτι Ἀττικῆς ταῦτα πάντα. ἐπεὶ καὶ Ἀττικαῖς λέξεσιν ὁ ρηθεὶς Διονύσιος ἐπεξέρχεται.

As the Attic κνέφαλον or τυλεῖον became the common τύλη, so concomitantly it would appear, the Attic τύλη was changed to a vulgate τύλος. For Suda s.v. τύλα καὶ τύλος ἀρσενικῶς (referring to the Aristophanean and Telecleidean passages he comments only on τύλα, not τύλη), after giving the explanation: τοῦ ἄμου τὸ τετυλωμένον καὶ πεπιλημένον τῆς σαρκός, ὁποῖον πολλάκις ἐπὶ τοῦ ἄμου γίνεται τοῖς ἀχθοφόροις ἐκ τοῦ βαστάζειν τι συνεχῶς, he adds, together with the classical passages, a *Polybian* χρῆσις: τῆς πέτρας αὐτοῖς δυσχρηστίαν παρεχούσης διὰ τὸ δεῖν τρῆμα ποιεῖν ἐν αὐτῆ, τοῖς τύλοις κρατοῦσι τὴν σύριγγα τὴν προσαγομένην, bearing it on their rough shoulders.

But $\tau\dot{\nu}\lambda\sigma\zeta$, on the other hand, as a callus or any protruding, thickened development on the human skin, was eminently pure and Attic, Xenophon, *Memorabilia* I, 2, 54. The comic use of $\tau\dot{\nu}\lambda\alpha$ got probably then its point from its signifying the shoulders, either because of the callouses developed there by habitually carrying weights, or by reason of the manly hill-like protuberance that is formed there as a raising connecting the extremities of the shoulders with the neck (though these have certainly more to do with the liberal athletic exercises in gymnastics than with a labourer's work). That comic use became then, Polybius shows, a $\lambda\sigma\gamma\dot{\alpha}$ $\chi\rho\dot{\eta}\sigma\iota\zeta$, part of the erudite language. –

As examples of the Koine τύλη, meaning also mattress, one may cite Ammianus *Epigramma* XIX (Jacobs vol. III p. 96 = Reiske II p. 388) and Artemidorus *Oneirocriticon* V, 8 (where κνάφαλα also appears as the *filling*) referred to by Suda also s.v. τύλη· ή στρωμνή (latiore sensu), οἶον etc. By contrast the erudite Aelianus, *De Natura Animalium*, II, 11 (p. 40 Hercher) repeats, no doubt purposefully, Antiphanes (v. supra): χαμαιζήλων κλινῶν στιβάδες ἐν τῆ ψάμμω τοῦ θεάτρου τεθεῖσαι, εἶτα ἐδέξαντο τυλεῖα καὶ ἐπὶ τούτοις στρωμνήν ποικίλην etc., thus distinguishing stricto sensu mattresses etc. from cushions and pillows. But see in a moment the classical antecedent of the broadening of sense: a cushion can be large enough to be a mattress. –

Κνέφαλον (with one or two λ , or κνάφαλλον or γνάφαλλον (v. Hesychius s.v. γνάφαλλον) – according to the famed variation of κνάπτω, κναφεῖον / γνάπτω, γναφεῖον – and γνόφαλλον in Lesbian Aeolic (Alcaeus 90 Diehl = 34 Bergk)) was wool torn off in carding or fulling cloth for use as stuffing in cushions, pillows, mattresses. By grammatical homonymity, the container took up the word for the contained, as Herodianus explains, Π ερὶ μονήρους Λ έξεως, p. 39.15 = II p. 944.23 Lenz, τύλη, ὅπερ σύνηθες Αττικοῖς κνέφαλλον καλεῖν, ὁμωνύμως τῷ περιεχομένω τὴν περιέχουσαν. Αριστοφάνης Αμφιάρεω (Fr. 27 Blaydes = 84 Dindorf = Fr. 18 PCG vol. III, 2, p. 42; cf. for the second verse analytically Pollux X, 40; and cf. Sophocles, Fr. 468 Radt, λινορραφῆ τυλεῖα):

καὶ νὴ Δ ι' ἐκ τοῦ δωματίου γε νῷν φέρε κνέφαλλον ἄμα καὶ προσκεφάλαιον τῶν λ ινῶν.

Here κνέφαλλον is a large cushion doing for a/or mattress, whereas προσκεφάλαιον the pillow.

For cushions in general cf. Eupolis, $\Pi \delta \lambda \epsilon \iota \zeta$ XXXVI vol.II p. 520 Meineke = Fr. 218.3 PCG vol. V, p. 425, apud Pollux X, 192. –

For the use of κνέφαλλον for the contents themselves of a cushion, for flocks, v. Plato Πείσανδρος IV vol. II p. 650 Meineke = Fr. 104 PCG vol. VII, p. 476 (apud Herodianus Περὶ Μονήρ. λέξ. loc.cit.); and Theopompus in Πανταλέων II vol. II p. 809Meineke = Fr. 46 PCG vol. VII, p. 730, apud Pollux X.41: εὶ δὲ καὶ τὸ κνέφαλλον μὴ ἐπὶ τοῦ τυλείου τις ἀκούειν βούλοιτο, ὤσπεφ ἡ πολλὴ χρῆσις (i.e. ἡ Ϫττική of course) ἔχει, ἀλλὶ ἐπὶ τοῦ ἐμβαλλομένου πληρώματος, ὃ γνάφαλον καλοῦσι, προσχρῆσεται τῷ ρηθέντι ἐν Παντελέοντι Θεοπόμπου, εὶ καὶ ἀμφισβητεῖται τὸ δρᾶμα. προειπὼν γὰρ ὁ ποιητὴς «ἀνητιῶν <τὸ> δέρμα τοῦ θηρός» ἐπήγαγε «ράψας ὅλον σάξαι κνεφάλ(λ)ων (οr κνεφάλ(λ)ων)» - adopting Bentley's simple and righteous solution of the problems posed by the transmission of the text, especially the "ρ. ὅλον κνέφαλον σάξαι γνεφάλω», which is an obvious tampering caused by a misunderstanding of Pollux' meaning above. What Pollux says was the word for the stuffing occurs in Lucianus, Judicium Vocalium, 4 (sch. γνάφαλα δὲ τὰ ἀποξύσματα). But it is of course another form of the very same word. In the latter usage it signified the stuffing: thus Glossae GraecoLatinae, s.v. γνάφαλον tomentum, and s.v. κνάφαλον tomentum. The Glossae LatinoGraecae, s.v. tomentum· κνάφαλλον. The Onomasticon has the equivalence γνάφαλον tomentum. Correspondingly τύλη = culcita appears bothways in the Glosses.-

To return to the Demosthenic σακχυφάνται. It need not testify the more, the more unique and maybe ad hoc coined it was, the commoner vogue of σάκκος; for σαχυφάνται is κακόηχον and vulgar. And even if it did bespeak the incipient prevalence of that form with the double κκ, it would unreproachfully accord to the general character of the 4th century B.C. as period of softer and freeer (more naturalistic and more expressive) classicism – the link (as I still hesitate to call it a transition-era) between high classicism and hellenisticity. – As to the meaning of the word, there were those in antiquity who interpreted it in a peculiar and specific way matching the singularity of the form. At the very end of his work, Pollux observes (X, 192): ὅταν Δημοσθένης εἴπη σακχυφάντας, τοὺς πλέκοντας ταῖς γυναιξὶ τοὺς κεκρυφάλους ἀκούουσιν(***). This appears in the midst of a recension of equipments of various kinds (implements and appliances and accoutrements).

- (°) He means that the *words* were *demotic and comic*, not the particular form with the two κκ. Pollux, according to the manuscript tradition, utilized both forms, but those with one κ appear uniformly in quotations except for X, 186 (σάκος σπάρτινος); while he writes κκ when speaking ex propria persona. Naturally enough: For although he emphasized correctness and propriety, he was no puristic foul. Contrary to the false Atticism which condemned de facto most of the classical attic glory itself by means of a pharisaic narrow (say Lysianising) norm, he utilized all major literary production though occasionally condemning prestigious authentications. The decisive terms of such attitude are δόκιμον-άδόκιμον (tested and enrolled, that is, as proven by authoritative testimonies); not attic nonattic.
- (**) So Moeris (p. 201.20 Bekker): κνέφαλον Άττικοί, τύλη Έλληνες. Any cushion or pillow. And Phrynichus imperatively, Ecloga, (145 Fischer = 151 Rutherford = p. 173 Lobeck): τύλην εἰ καὶ εὕροις που, σὺ κνέφαλον λέγε. And Thomas Magister Ecloga, s.v. κνέφαλον Άττικοὶ λέγουσιν, οὐ γνέφαλον ἔστι δὲ ἡ τύλη (which was standard in Κοινή). The glossographical prince has s.v. κνέφαλον τύλη. ἥν δὲ ἡμεῖς τύλην (in the wider and more proper sense, any protuberance, esp. of the skin), Άτικοὶ τύλον (vel τυλεῖον; pro ms. τυλίον). καὶ πῖλος καὶ προσκεφάλαιον ἡ (? pro ἢ) τύλη. Consonantly, the "technical" prince, Herodianus, v. supra.
- (***) The view is adopted by the Scholia *ad loc.* (vol. VI p. 340 ed. Dobson; omitted accidentally it appears in Müller's Didotiana): σακχυφάνται οἱ πλέκοντες ταῖς γυναιξὶ τοὺς κεκουφάλους, the

to keep to the manuscripts, or, perhaps, we may read, with Dobreus, Meineke and Bekker $\tau\rho\sigma\eta\tilde{\imath}ov$, in this case taken substantively, while in the former, as in the text, adjectivelly. (T $\rho\sigma\eta\tilde{\imath}ov$ is Ionic for $\tau\rho\sigma\tilde{\imath}ov$, natural for Hipponax). At any rate, Hipponax refers to a filtering ρ (or belonging with) a ρ equipment. What was that which dripped and trickled like a wine-press sack is not very difficult to surmise: a tumescent virilium crying in the agonies of pleasure just before or after the fiery explosion, or in the frustrated expectation of the divine consummation; there is an exquisite Stratonian epigram on this latter condemnation.

Varro envisages the possibility that the Latin *trapetes* or *trapetum* or *trapetus* (olive-mill)¹⁴ may be Greek (τραπῆτες, τραπητόν, τραπητός): *de Lingua Latina* V, 138: trapetes molae oleaviae; vocant *trapetes* a *terendo*, nisi graecum est. The Latin derivation is evidently imaginary; the Greek obviously correct. Another Latin etymology (*Scholia* in Virgilius *loc.cit.*) is forced and besides not quite apposite: nominativus *trapetum*. trapeta autem sunt saxa a *trahendo* dicta, quibus frangitur oliva. (The significative element is not that they may be drawn or pushed, but that they squeeze the olive). Τροπεῖον and τραπῆτις or τραπητός(ν) is the same word in different but similar applications, wine and olive oil pressing respectively.

women's sacklike, dense hair nets, those latter called κ0οκυφάντους (from κ0οκύς, flock of wool). If so, we have more surely to do with a (Demosthenian or borrowed) case of word coinage.

Venit hiems, teritur Sicyionia bacca trapetis

(maybe a reminiscence, on the part of the erudite καὶ κυοιολεκτοῦντος poet, of trapetum from tero. A reverse tacit allusion would be finer. Probably there were those who propagated or liked the fictive derivation). The Glossae LatinoGraecae have trapetum, ἐλαιῶν μύλος· ἐλαιουογεῖον (by extension of the meaning) and similarly we find in the GraecoLatinae Glossae ἐλαιοτοιβεῖον· trapetum, and μύλος ἐλαιῶν· trapetum. And so Isidorus, Etymologiarum, XX, 14, 12: trapetum mola olivarum. Servius ad Vergilii loc. has more specifically: trapetis autem, molis mobilibus olivavibus. et declinatur trapetum sicut templum. Terentianus:

Quos super insidens trapetos signa gyris temperat.

Quod metrum aptum est olivam teentibus. The olive pressing apparatus that is called *trapetum* is fully described by Cato, *de Re Rustica*, 20, cf. 22; 18. Cf. Varro, *de Re Rustica*, I, 55, 5. V. Columella XII, 52, 6 for various appliances used in extracting oil. Trapetum is distinguished there from *molae:* oleo autem conficiendo *molae utiliores* sunt *quam trapetum*; *trapetum* quam *canalis et solea*. That would bring us even closer to the wine-pressing $\tau \rho o \pi \epsilon \tilde{\iota} o v$. Plinius XV, 6 (6), 23 distinguishes a preliminary breaking of the olives by the trapetum from the proper press: protinus *prelo* subicerentur solidae – ita enim amurca exprimitur; mox *trapetis fractae premerentur iterum* ... quod vero *post molam* primum expressum est, flos (sc. vocatur et est, the flower of olive oil). This would equate again *trapetum with mola*; the flower of oil could not include *amurca*.

¹⁴ V. Virgilius *Georgica* II, 519:

Another word to signify that exquisite must that dripped from the self-squeezed grapes, was, according to Hesychius s.v. $\pi\rho\delta ov\rho ov$ τὸ ἀπόσταγμα τῆς σταφυλῆς πρὶν πατηθῆ, from πρὸ and ὀρούω (ὀρέομαι, ὄρνυ-μι, ὀρίνω, ὁρμάω), that which comes down before the main dart, rush.

Now whether $\gamma\lambda\epsilon\tilde{\nu}\kappa\sigma\zeta$ is to be understood in the peculiar, glossematic sense above evidenced, or in the normal signification of must, it can only refer to the grape juice either *before or during* fermentation. This will carry us to about 9 (or at most, say, 40) days after the *vindemia*. ¹⁵ .

¹⁵ A difficulty is apparently presented by Πράξεις Ἀποστόλων ΙΙ, 13. On the *Pentecost*, the Apostles, inspired by the Holy Ghost, speak fluently in the diverse languages of Man. People were stunned and wondered at the enormity. Some scientifists (enlightened and rationalistic) of the day διαχλευάζοντες ἔλεγον ὅτι γλεύκους μεμεστωμένοι εἰσίν. Το whom Petrus replied (§15): οὐ γὰο ώς ὑμεῖς ύπολαμβάνετε οὖτοι μεθύουσιν, ἔστιν γὰο ὤοα τοίτη τῆς ἡμέοας. - It cannot of course be a question of proper must. But grape juice was preserved artificially through the whole year. So Cato, de Re Rustica, 120: mustum si voles totum annum habere, in amphoram mustum indito et corticem oppicato, demittito in piscinam (to inhibit the process of fermentation), post dies XXX eximito, totum annum mustum erit. The same injunction is given by Columella De Re Rustica, XII, 29, only he advises the amphorae to be totally submerged into water for 40 days. This product was called $\dot{\alpha} \epsilon i \gamma \lambda \epsilon \nu \kappa \sigma \zeta$ by the Greeks. So Plinius XIV 9 (11), 83: medium inter dulcia vinumque est quod Graeci aigleucos vocant, hoc est semper mustum. id evenit cura, quoniam fervere prohibetur - sic appellant musti in vina transitum -; ergo mergunt e lacu protinus aqua cados, donec bruma transeat et consuetudo fiat algendi. - Plutarchus in Aetia Physica κζ΄, 918 E-F examines διὰ τί τὸ γλεῦκος, ἂν ὑπὸ ψύχους περιέχηται τὸ ἀγγεῖον, γλυκὺ διαμένει πολὺν χρόνον. – The various dulcia produced by decoction of must, might also in an extended sense be appellated γλεῦκος. – Still the question remains why the author of Acta should use this word instead of ožvoc, which one would ordinarily and normally expect. However loosened their (wine and must) distinction might have become in the Greek vulgate of Palaestine at the time of Jesus, we must account by something more than this hypothesis for the particular choice. I suggest the reason is that as must, being sweet and unfermented, is less intoxicating than full-blown wine (v. supra), it is consequently apter, when taken in plenitude (notice the μεμεστωμένοι γλεύκους, full to the brim, so to speak, satiated), to be considered the cause of an unexpected effervescence and ebullition in people, of an insightful exuberance rather than a torporous dullness and a sickening distemper – the unavoidable results of a filling oneself with wine.