

Vivre, produire et échanger : reflets méditerranéens

Mélanges offerts à Bernard Liou

Textes rassemblés par Lucien Rivet et Martine Sciallano



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Old and new evidence on the contents of Haltern 70 amphoras

Jaap van der Werff*

The first volume of *Saldvie*, a periodical edited by the Antiquities Department of the University of Zaragoza, contains a brief contribution by M.P. Galve and P.A. Paracuellos (Galve and Paracuellos 2000). The authors bring before the public an amphora found in *Caesaraugusta*/Zaragoza, apparently with other ceramic material dated to the reign of Claudius (A.D. 41-54). The interesting feature that caused the amphora to escape the usual oblivion is the presence of an inscription painted in black ink on the neck. The authors restore the inscription as follows :

Muria / annorum duorum / Licinius Rfl(os) (fig. 1)

The word *muria* obviously orients the expert reader towards salted and processed fish. Exactly what *muria* was is unclear, but R.E. Curtis (Curtis 1991, p. 14) takes it to be “the solution resulting from salting fish”. In principle there’s nothing strange about reading the word *muria* on an amphora. In fact, the gazetteer established by U. Ehmgig includes as many as 27 instances (Ehmgig 1997, p. 18). As was to be expected, several of these were encountered on Dressel 7-11 amphoras, the general category of fish sauce amphoras to which Galve and Paracuellos attribute the Zaragoza vessel. However, this attribution is mistaken. The dimensions and details of shape (handles, body, toe – the rim is missing) all unmistakably point to a different amphora type : Haltern 70. The Haltern 70s are held to have carried wine or grape-related products from the Lower Guadalquivir region. Kiln sites bearing witness to the production of Haltern 70 amphoras are quite rare. A few of these have recently been identified in the area between – roughly –

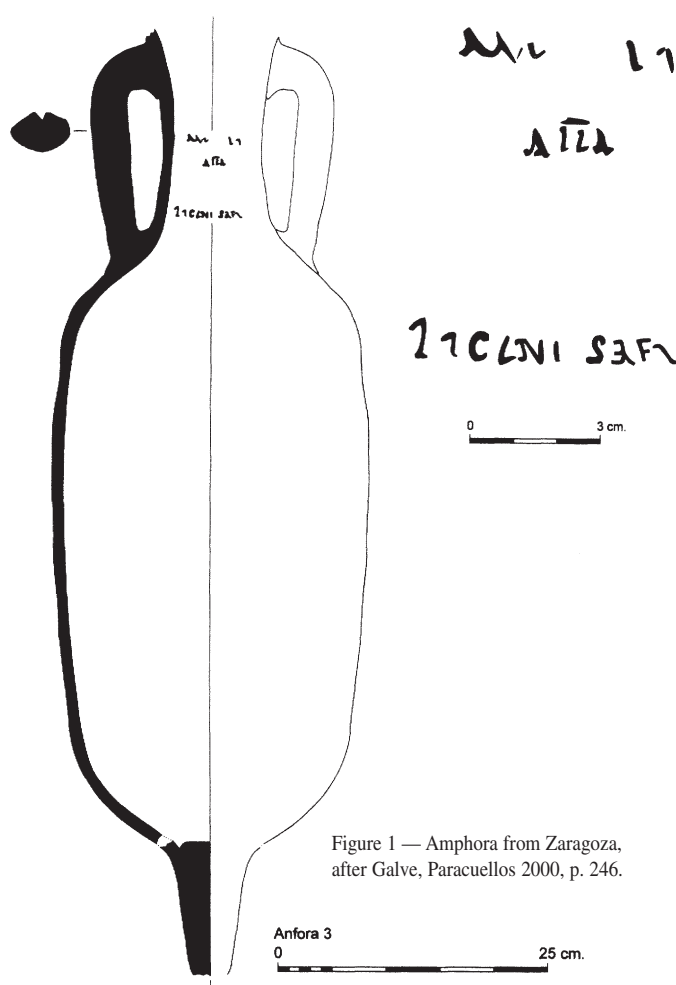


Figure 1 — Amphora from Zaragoza, after Galve, Paracuellos 2000, p. 246.

Cadiz and Sevilla¹. According to our current knowledge, though, the majority of kiln sites should lie between Sevilla and Cordoba.

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I would like to thank André Tchernia (Aix-en-Provence) and Elizabeth Lyding Will (Amherst, Mass.) for comments and help in various ways. The latter also corrected my English text. The author nevertheless wishes to be held responsible for any error in language or content that may remain.

¹ García Vargas 1998, p. 98-99 ; Carreras Monfort 2000a, p. 92 ; 2000b, p. 420, 422-423 ; Étienne, Mayet 2000, p. 88.

As for contents, painted inscriptions recurrently mention wine- (or grape-)related products. The following list, though published and discussed in 1984 (Van der Werff 1984, p. 379-380) still epitomizes the matter.

- Amiens : *sapa / aucto (L)icinio*.
- Gulf of Fos, Anse Saint-Gervais : *defr(utum) / excell(ens)*.
- Mainz : *oliva nig(ra) / ex defr(uto) / penuar(ia) / excell(ens) / C.Rutili [--]icis*.
- Mainz : *[oliva nigra] / ex defru(to) / excel(lens) / penua(ria) / name illegible*.
- Port-Vendres II shipwreck : *defr(utum) / excel(lens) / Q. Vritti Revocati* ; two more fragments beginning in the same way.
- Soissons : *oliva nig(ra) / ex de(fruto) / pen(uaria) / [-- ?] / M. Grassi Servandionis*.
- Windisch : *oliva / nigr(a) ex defr(uto)*.
- A Haltern 70 from the shipwreck Sud Lavezzi 2 contained olives².

Defrutum and *sapa* in the above texts are condiments made from reduced grape must. It is the rate of reduction (normally obtained by ebullition) that differentiates the two. The question as to their precise nature is much-debated from 1977. A. J. Parker and J. Price consider it as a “non-alcoholic, sweet, viscous substance, which would normally bear no resemblance to wine” (Parker, Price 1981, p. 223 ; Sealey 1985, p. 62-64). The opposite view, first articulated in J. André’s comments on Pliny’s Natural History, book 14, 80, and for which I have been a spokesman since 1984, deems it a sweet wine which the French call *vin cuit*³. However, recent experiments carried out by Hervé Durand and André Tchernia at the winery of Mas Les Tourelles and based upon Columella’s descriptions⁴, have convinced me that the *vin cuit* theory is inadequate. As Mr Tchernia wrote me (and I am obliged to him for his permission to repeat his words in print) :

« *On sait très bien ce qu’est le defrutum aussitôt après sa réduction par ébullition : du jus de raisin concentré, ni gras, ni alcoolisé, avec de la lie en suspension, mais qui se dépose après quelque temps, très sucré (...)* Si on le met en récipient fermé, il ne se passe rien, et il se conserve assez longtemps ».

In 1984 the paramount problem appeared to be whether the degree of sugar in *defrutum* would be too high to allow fermentation. It didn’t occur to me at the time that I should have asked a different question : will fermentation recommence when the ebullition has killed the moulds ? The answer is that it probably needs some adulteration to do so eventually. There is, however, no evidence whatsoever to show that the Romans were interested in having it ferment, let alone in turning it into a wine (although we can’t rule out the possibility that they did occasionally). Another argument that I failed to value properly in 1984 is the fact that there is no ancient text to confirm that *defrutum* actually was a wine the Romans drank. In fact, ancient writers time and again refer to *defrutum* as useful in wine-making, preserving, cookery, and apiculture, and appreciated mostly as a sweetener – not even the remotest allusion in Horace, Martial or Petronius to *defrutum* as a proper drink. Lastly, the well-known rescript from the Digest shows that the nature of *defrutum* didn’t really puzzle ancient lawyers :

« *If some-one has bequeathed wine, this shall include whatever took origin from a vine and has lived on as a wine. But if it has been turned into mulsum, it will not fall strictly speaking under the designation of wine, unless the paterfamilias strongly felt that it did so (...)* What about (wine for) preserving? I think this will not be included, unless the testate had a different view. Oenomeli, that is a very sweet wine, undeniably will. And so will passum, save to opposite views on the part of the testate. Defrutum shall not be included, as it rather took the place of a condiment » (translation JHvdW)⁵.

Ulpianus, the author of the rescript, deals here with the liquids that are likely to be found in a cellar, along with the wine reserves. He apparently felt that some of the grape-related products, though processed in a special way, can only be classified as regular wines (*oenomeli, passum*), whereas others in this category rather qualify as kitchen requisites (*mulsum*), and that ebullition, by precluding fermentation, definitely makes *defrutum* become a stranger to the wine family⁶.

The painted inscriptions from Mainz, Soissons, and Windisch indicate that at least part of the Haltern 70s carried olives preserved in *defrutum*. Unfortunately, we have no way as yet to distinguish the proportion of Haltern 70s

2 Liou 1982, p. 444, n. 18 ; Liou, Domergue 1990, p. 29. Carreras Monfort 2000a, p. 95 claims that Haltern 70s from the shipwrecks of Port-Vendres II and Punta de la Nao contained grape seeds. However, the claim is not sustained by the relevant publications : there’s no mention of such seeds in Colls a.o. 1977, and the amphora published by Chic García 1980 is most certainly not Haltern 70.

3 B. Liou in Colls a.o. 1977, p. 86-91 ; Van der Werff 1984, p. 379-381 ; Étienne, Mayet 2000, p. 93-97.

4 Columella, *R.R.* 12, 19-21. Tchernia 1998 ; Tchernia, Brun 1999, p. 110-115.

5 *Dig.* 33, 6, 9 : *si quis uinum legauerit, omne continetur, quod ex uinea natum uinum permansit. sed si mulsum sit factum, uini appellatione non continebitur proprie, nisi forte pater familias etiam de hoc sensit (...)* quid conditum ? nec hoc puto, nisi alia mens testantis fuit. *oenomeli plane id est dulcissimum uinum continebitur : et passum, nisi contraria sit mens, continebitur : defrutum non continebitur, quod potius conditurae loco fuit.* The rescript differentiates between *mulsum* and *oenomeli* ; I surmise that the difference corresponds to what will be called honeyed wine and honey-wine respectively (see below).

6 As early as 1977 A. Tchernia pointed out that « *le defrutum pouvait être considéré plus comme un assaisonnement, un condiment, que comme un vin à proprement parler* » (B. Liou, in Colls a.o. 1977, p. 89, n. 222). While dismissing the idea, Liou argued that Ulpianus really meant to say something like : « *defrutum, in so far as the testate thought of it as a condiment, shall not be included* ». This interpretation is based on an error that Th. Mommsen avoided in his edition of the Digest : *quod potius conditurae locum (for loco) fit (for fuit)*. Moreover, if Liou’s interpretation were correct, Ulpianus would probably have chosen a wording similar to the ones he used a few lines earlier, like *nisi forte pater familias etiam de hoc sensit, or nisi alia mens testantis fuit*. I fail to see why Étienne, Mayet 2000, p. 96 restore the accursed part of the sentence in a way that would neither have pleased Mommsen nor Liou : *quod potius conditurae locus fuit*.

carrying just *defrutum* or olives kept in *defrutum*. Olive-stones aren't really rare in the Roman fort of Velsen I, the Netherlands (c. AD 15-30), where the Haltern 70s are the only packing material likely to have shipped them. The site of Velsen I enjoys excellent conservation conditions, but fine-sieving hasn't been carried out there (not any more than in Oberaden) on a regular basis⁷, and the samples collected there may well represent a series of chance hits.

In view of the above, the word *muria* painted on a Haltern 70 amphora, if not downright impossible, is still highly improbable. C. Carreras Monfort (Carreras Monfort 2000b, p. 421) cites an instance from London. On closer examination, however, we learn that the sherd from London, found in Pudding Lane/Lower Thames Street in 1981, was initially published by error as Camulodunum 185A (i.e. Haltern 70). Subsequent discovery of sherds from the same vessel has made it clear that it is a Dressel 2-4 from *Baetica*⁸. In the same article, Carreras Monfort claims that « *en el ejemplar (i.e. Haltern 70 - JvdW) de Broch of Gurness se incluyen productos marinos* »⁹. Here too negligence has crept in. From the original publication it is quite clear that there was not a Haltern 70 amphora in the Broch of Gurness excavation : there were just two sherds, evidently too small to preserve traces of any product, the marine products being explicitly – albeit wrongly – associated with the amphora type in general¹⁰.

Accordingly, recent allegations to the effect that some Haltern 70 amphoras carried “marine products” are groundless. There is indeed an alternative restoration for the painted inscription from Zaragoza that avoids the fish connotation alien to Haltern 70s. Quite recently, M. Beltrán Lloris published the upper part of an unquestionable Haltern 70 amphora from Celsa (near Zaragoza). On the neck there is a

painted inscription of which the author quotes two lines : *mul[sum] ve[tus] and [Sa]turni(ni) Cet[--]*¹¹. That is : old *mulsum* traded by a certain *Saturninus Cet[hegus]* – or whatever the man's *cognomen* was. *Mulsum*, as we know it from the ancient written sources¹² is either a honey-wine or honeyed wine. The distinction is not a sophistry, since the two ways of making *mulsum* fit in with the different terms. The easiest way to achieve honeyed wine is to dissolve honey in wine – preferably in old or choice wine¹³. This mixture can be made wherever wine and honey are available, even in a region which had no wine production of its own, and I see no particular reason for it to be put in transport amphoras, let alone in Haltern 70 amphoras in the Lower Guadalquivir region – a region that had all the requirements needed to make a proper *mulsum*.

The elaborate way is described with unusual care by the 4th-century agronomist Palladius :

« *Take must (made) from the larger and first-rate grapes, twenty days after it has come out of the vat (...) and mix it (...) with a fifth part of the best un-skimmed honey, while stirring firmly with a reed whisk. Then you shall put it away for forty days, or even better fifty days, in such a way that you cover it with clean linen, whereby the foaming concoction will easily breathe. So after fifty days you shall take off with clean hands whatever will be floating on top of it. Lock it up in a receptacle carefully (closing it) with (a) plaster (stopper), and leave it to aging. However, it is better if you pour it in smaller and pitched vessels when the following spring has come and close the latter carefully with gypsum and store the vessels in a sandy and cold cellar and submerge some part of them with river sand or just in the soil. This can last for ages, provided that you proceed in a careful way* » (translation JHvdW)¹⁴.

7 Velsen I : from information kindly made available by J.P. Pals (University of Amsterdam), I gather that olive-stones occur in numbers varying from 7 to 338 in most of the Roman period samples. Oberaden : Kučan 1992, p. 244, 259.

8 Hassall, Tomlin 1982, p. 417, nr 61, who erroneously equate Camulodunum 185A and Dressel 7-11. Sealey 1985, 64. *RIB II* 2492, 29. Hassall and Tomlin, Sealey and the authors of *RIB II* agree that the reading *muria* on the sherd from London is by no means certain.

9 Carreras Monfort 2000b, p. 421 ; cf. 2000a, p. 95.

10 Hedges 1987, p. 82, 178, fig. 2.106, p. 183, 285, 287, 311. Fitzpatrick 1989, p. 24-26.

11 Beltrán Lloris 1998, p. 86-87, nr 5. It is very unfortunate that the inscription is not illustrated by a drawing or a photograph, especially since the author manages to read the names of a fictitious pair of consuls on the neck of another Haltern 70 amphora (l.c., 72, nr 10).

12 *ThLL* 8, 1936-1966, 1579-1580 ; *RE* 16, 1933, 513-514 (A. Hug) ; Mrozek 1972 ; André 1981, p. 166 ; Aguilera Martín, Garcés Estallo 1997. The earliest mention of *mulsum* on an amphora known to date is a graffito *nu(?) mul(sum)* (ligature of n and u) on an early Lamboglia 2 amphora, which ended up in a tomb at Adria in the middle of the 2nd century B.C. (Tonio 2000, p. 137-140). Since the graffito was scratched after firing, the *mulsum* could well point to a reuse of the jar. Aguilera Martín and Garcés Estallo 1997 publish a puzzling graffito *ante cocturam* on the handle of a jug, which they restore as follows : *congium / maiori(?) / mulso*. The reading, leave alone the interpretation, is frustrated by the disparity of the illustrations accompanying the find : of the three renderings (l.c., photo 1 and fig. 2) none are really identical. Notwithstanding this, the reading proposed by the authors makes no sense. A different solution has crossed my mind : *congium ; nu(merum) ol(l)ar[um] mulsua[riarum] --*, in which at least the last two lines make sense from a potter's point of view, inasmuch as he declares that he had produced so and so many jars of the *mulsum* type – that is : the *lagoenae* in which Columella recommends to store the *mulsum* (see below, note 14). I own that this restoration seems far-fetched, but in the present state of documentation even the reading *mulctra* (milking pail, see Hilgers 1969, p. 237) is worth considering.

13 Hor., *Sat.* 2, 4, 24-27 : *falernum*. Pliny, *N.H.* 14, 75 : *apamenum* and *praetutium*. Mart., 4, 13, 4 : *massicum*. According to Dioscorides 5, 8 the best *mulsum* is made from old wine and fresh honey.

14 Palladius, *Op. agr.* 11, 17 : *De ynomelli : Mustum de maioribus et egregiis uitibus post uiginti dies quam leuatam fuerit ex lacu, quantum uolueris sumis et ei mellis non despumati optimi quintam partem, prius tritam fortiter donec albescat, admisceas et [ex] canna radicata uehementer agitas. mouebis autem sic per dies quadraginta continuos, uel, quod est melius, quinquaginta, ita ut, cum moueris, mundo linteo tegas, per quod facile confectio aestuabunda suspiret. post dies ergo quinquaginta munda manu pugas quodcumque supernabit. in uasculo gypso diligenter includis et ad uetustatem reseruas. melius tamen, si in minora et picata uascula proximo vere transfundas et gypsata diligenter operias et in terrena et frigida cella recondas uel harenis fluuiialibus uel eodem solo uascula ex aliqua parte summergeas. hoc nulla uitiatu aetate, si tamen diligenter effeceris. A short version of the same procedure in Columella, *R.R.*, 12, 41 : *conicies in urnam musti mellis optimi pondo X, et diligenter permixtum recondes in lagoena, eamque protinus gypsabis, iubebisque in tabulato poni* (« You will put ten pounds of the best honey into an *urna* of must and, after carefully mixing them together, you will store the must in a flagon and immediately seal it up with plaster and order it to be placed in a loft » translation E.S. Foster and E. Heffner, Loeb Classical Library).*

Evidently Palladius and Columella were thinking in terms of genuine winemaking in fully equipped vineyards. In Palladius' recipe the production of *mulsum* started twenty days after pressing the grapes, that is towards the end of fermentation which will be extended by adding the honey. In fact, Palladius' recommendations imply an unusually prolonged vinification : from october to the next spring. The whole procedure generated, barring misfortune (given Palladius' reiterated warnings), a sweet wine liable to stand aging. It is probably not by chance that the painted inscriptions on the Haltern 70s from Celsa and Zaragoza (if restored correctly in the latter case) claim that the *mulsum* was old (*vetus*) or at least 2 years old (*annorum duorum*). H. Dressel recorded a painted inscription on an amphora from northern Italy (Dressel's *forma* 6, not to be mistaken for what we now call Dressel 6B) filled with *mul(sum)* in october of the year AD 36 and submitted to aging : *Sex. Papinio / et Plautio co(n)s(ulibus) / mul(sum) fact(um) kal. (or non. or id.) nov(embribus) / (amphora) summissa in vetusta(tem) (CIL XV 4582)*. In this case the vintner disregarded the seventy days subsequently recommended by Palladius, but his jottings bear witness to due caution.

The important thing from an archaeologist's point of view is that this elaborate way of making *mulsum* presupposes consumption abroad, and for that reason long-distance transport in amphoras. Long-distance transport goes together with trade, and it is to trade - more precisely to the merchant - that the third line of the inscription from Zaragoza refers. Instead of the puzzling reading proposed by Galve and Paracuellos (see above), the third line gives the *nomen gentile* and *cognomen* in the genitive case of a Roman citizen : *Licini S[- -]*. For the *cognomen*, *Saffidiani*] (Kajanto 1965, p. 154), though admittedly rare, appears to fit in best with the ink traces. Names of Roman citizens written in the genitive case are not infrequently found on Haltern 70s : for instance *C. Rutili Hicis*, *Q. Vritti Revocati*, *M. Grassi Servandionis* (see above), *Saturnini Cet[hegi ?]* from Celsa (see above), as well as *M. Valeri Euphemi* from Pompei (Manacorda 1977, p.130), *P. Cremi* from Port-la-Nautique (Liou 1993, p. 135), and *M]utilior[um]* from Xanten (Van der Werff 1990). I can think of no compelling reason to argue against the current opinion that these names represent the traders (*mercatores*, *negotiatores*) of the merchandise held by the amphoras.

Bernard Liou was the first scholar to suggest that the Haltern 70s contained wine¹⁵. The *vin cuit* thesis now being dismissed, the final proof took some 25 years to betray itself. The painted inscriptions from Celsa and Zaragoza (if restored correctly) leave little room for doubt and the wine they mention distinguishes itself in more than one way. In a letter to his friend Septimius Clarus, Pliny the Younger blames the former for not showing up at a dinner :

« *It was all laid out, one lettuce each, three snails, two eggs, wheat-cake, and wine with honey chilled with snow (you will reckon this too please, and as an expensive item, seeing that it disappears in the dish), besides olives, beetroots, gherkins, onions, and any number of similar delicacies* » (translation B. Radice, Loeb Classical Library)¹⁶.

The inventory obviously points to a *gustatio*, the first course of a meal. In Petronius' *Banquet Trimalchio* marks the end of the *gustatio* by offering a second round of *mulsum* (Petr., *Cena* 34, 1). It follows then, that *mulsum* was consumed as an appetizer. Not surprisingly the *gustatio* was also called *promulsis*, and the tray on which it was served a *promulsidare* (André 1981, p. 166 ; Hilgers 1969, p. 264). It is also known that *mulsum* was given in public and private charity (Mrozek 1972), and we may safely infer that the generous spenders preferred the plain type of *mulsum*.

Defrutum and *mulsum* – it is perhaps not by mere chance that the contents known for sure should occur in Ulpianus' list of odds and ends in a regular wine reserve. Since a high content of sugar seems to make up the connecting element in the items listed, we should perhaps not be surprised to find one day the word *passum* written on a Haltern 70 amphora. Admittedly, unlike Crete, Cilicia and Africa the province of Baetica is not included in Pliny's list of *passum* producing regions *par excellence*¹⁷, but I trust that a region renowned for its raisin wine (I am evidently referring to the Jerez) will not let us down in this matter. In the meantime – not all of us may be prepared to wait another 25 years – it seems safe to redefine the matter at stake in the following way : the Haltern 70s seem to have been used for the transport of a sweet, non-alcoholic condiment (*defrutum*, *sapa*), for olives preserved in *defrutum*, for sweet wines like *mulsum* (and possibly *passum*), and perhaps also for wine *tout court*¹⁸.

15 Liou 1975, p. 574, n. 11 : « *J'espère démontrer prochainement (...) que le type Haltern 70 servait à transporter du vin de Bétique* ».

16 Pliny, *Ep.* 1, 15, 2 : *Paratae erant lactucae singulae, cochlae ternae, oua bina, halica cum mulso et niue (nam hanc quoque computabis, immo hanc in primis quae perit in ferculo), oliuae betacei cucurbitae bulbi, alia mille non minus lauta*.

17 Pliny, *N.H.* 14, 81. Elizabeth Lyding Will kindly drew my attention to *passum*, a sweet wine made from raisins (Columella, *R.R.* 12, 27 ; Pliny, *N.H.* 14, 81-82 ; Palladius, *Op.agr.* 11, 19 ; see also André 1981, p. 163 ; Rauh, Will 2002).

18 This definition was moulded after Panella 2001, p. 205 : « *La Haltern 70 appare utilizzata per il trasporto di vino cotto (defrutum, sapa), ma anche di olive conservate nel defrutum e forse di vino tout court* ».

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