

On the Roman Documentation concerning Shipping in Bulk*

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According to a "primitivist" conception of administration, Rome has conquered, explored and administered, in the last two centuries of the republican age, an empire by virtue of an ancient patriarchal wisdom, thanks also to the scarce use of written documents, for the overwhelming oral mentality. This point of view has now changed and it is considered, if not completely false, at least far from reality.¹ In fact, the documents of daily life are increasingly demonstrating the use of fairly complex and sophisticated practices to achieve results today sometimes achieved in other ways.

The use of writing and the systematic use of documents were essential to develop an immense territory and increase trade. In addition, the spread of writing can be based, more than has previously been assumed, on contact with Hellenistic civilization.² Romans used many different kinds of lists, such as various social and privileged orders, 'registers' of tribes and centurions, creditors and debtors of the *aerarium*, subjects exempted from tax, or the beneficiaries from the sales of public wheat. In addition, other accounts ranked the beneficiaries of lots from the *coloniae*, the public domains and water disbursements. Moreover, even in ancient times, land maps, geographical maps or 'passports'³ were essential.⁴ Documentation was especially important in the strict world of business, especially in maritime dealings and in the port environment.⁵ In these ambiances, written documentation lent support an oral tradition and made useful, indeed indispensable, the use of writing. Scripts were sometimes personally traced on containers or by an intermediary on the same casings, since many of the rich financiers of private affairs were frequently illiterate,⁶ as sometimes were the sailors executing the maritime transports.

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¹ Nicolet, C. 'A la recherche des archives oubliées : une contribution à l'histoire de la bureaucratie romaine', in S. Demougin (ed.) *La mémoire perdue* (Paris: Publications de la Sorbonne 30, 1994), pp. X-XI.

² On the gap between Romans and Greeks, cf. Russo, L.V. *La rivoluzione dimenticata. Il pensiero scientifico greco e la scienza moderna* (Milano: Feltrinelli, 1996).

³ Purpura, G. "Passaporti" romani' Atti dell'VIII Convegno Nazionale di Egittologia e Papirologia, Torino, 12 aprile 2003', *Aegyptus. Rivista Italiana di Egittologia e Papirologia*, 82, 1-2, 2002 (but 2005), pp. 131-155..

⁴ Nicolet, C. *A la recherche des archives oubliées*, pp. XI-XII. About the absence of nautical maps, cfr. Arnaud, P. *Les routes de la navigation antique. Itinéraires en Méditerranée*, ed. Errance, Paris, 2005, pp. 46 ss.

⁵ Purpura, G. 'Scritture sull'acqua. Testimonianze storiche ed archeologiche di traffici marittimi di libri e documenti, X Rassegna di Archeologia subacquea di Giardini Naxos, 28 ottobre 1995', *Annali Univ. Palermo (AUPA)*, XLIV, 1996, pp. 361 - 382.

⁶ Cfr. for example. *Tab. Pomp.* 13 (= *TPSulp.* 78 r), where it is declared that the guarantor, present at the act, was illiterate (...*coram ipso, quod is litteras nesciret*...). Purpura, G. 'Tabulae Pompeianae 13 e 34: due documenti relativi al prestito marittimo', *Atti della Accademia di Scienze Lettere e Arti di Palermo*, ser. V, II, 1981-82, II, pp. 449 - 474. =

Concerning the public practice of law, the rooted oral mentality involved the persistence of a secondary evaluation of documents, and the well-established habit of reading them aloud and quoting them by heart, therefore roughly.⁷ However, in the context of commercial and maritime activities this was obviously not permissible any more.⁸

P. Bingen 77 constitutes a quite detailed fragment of a register from a large port in the 2nd century AD, relating to the docking in two days of eleven ships, some with goods of multiple merchants, in a stopover, perhaps Alexandria. The recent recognition of the document reveals that it contains precise and technical indications regarding the place of departure of a grain ship of as much as 22500 *artabae* coming from Ostia. In addition, it indicates the cargo transported, the type of ship, the size, the duration of the journey, the designation of the boat, the owner, the commander, the ship's personnel, the individual on whose behalf the cargo was transported and perhaps, even the clarification of the dock for the unloading of the various docked boats.⁹ The latter demonstrates, beyond all uncertainty, the widespread use of writing, not just on the bureaucratic practices of a port's personnel, but certainly in all the economic transactions between sailors and merchants. From these affairs, rich documentation has survived in papyri and wax tablets, especially in private archives, such as the Puteolan archive of the *Sulpicii*, but also in individual records of daily life, the object of that economic traffic, on which inscriptions were frequently traced, and sometimes were poorly understood or neglected. This work aims to pay special attention to these sorts of documents, particularly those relating to bulk transport.

Focusing on bulk transport provides an opportunity to look at some legal issues relating to the return of cargo to different merchants (*vectores*).¹⁰ Such transportation involved the dispatching of a single batch of goods and avoided the repeated loading and unloading of numerous goods with

Atti del XVII Congresso Intern. di Papirologia, Napoli, 1984, pp. 1245 – 1266. A different interpretation of that act can be seen in Wolf, J.G. 'Aus dem neuen pompeianischen Urkundenfund: Der Seefrachtvertrag des Menelaos', *Freiburger Universitätsblätter*, 65, 1979, pp. 33 ss.; Ankum, H. 'Tabula Pompeiana 13: Ein Seefrachtvertrag oder ein Seedarlehen?', *IVRA*, 29, 1978 (ma 1981), pp. 156-173; Gofas, D.C. 'Ancore une fois sur la *Tabula Pompeiana* 13', *Symposion*, 1993, Köln-Weimar-Wien, 1994, pp. 260 ss.; with the contribution of Thür, G. 'Die Aestimationabrede im Seefrachtvertrag', *Symposion*, 1993, pp. 267-271; Jakab, E. 'Vectura pro mutua: Überlegungen zu TP 13 und Ulp. D. 19, 2, 15, 61', *ZSS*, 117, 2000, pp. 244-273 and the referred letter.

⁷ Purpura, G. *Diritto, papiri e scrittura*, II ed. riveduta ed ampliata (Torino: Giappichelli, 1999), pp. 90 ss.

⁸ Cavallo, G. 'Gli usi della scrittura nel mondo romano', in *Princeps urbium. Cultura e vita sociale dell'Italia romana*, (Milano: Libri Scheiwiller - Credito Italiano, 1991), pp. 239 e 244.

⁹ Heilporn, P. 'Registre de navires marchands', in Melaerts, H. (ed.) *Papyri in hon. Johannis Bingen octogenarii (P.Bingen)* (Leuven: Peeters, 2000), pp. 339-359; *praecipue* p. 344; Drexhage, H.-J. & Ruffing, K. 'P.Bingen 77 und der Handel zwischen Asia Minor und Aegypten', *Festschr. E. Schwertheim zum 65. Geburtstag*, (Asia Minor Studien 65) Bonn: , 2008, pp. 153-165.

¹⁰ *Cfr.* D. 19, 2, 31 (*Alf. 5 Dig. a Paulo Epit.*) and the letter quoted in Purpura, G. 'Il χειρέμβολον e il caso di Saufeio: responsabilità e documentazione nel trasporto marittimo romano', *AUPA*, LVII, 2014, pp. 138 ss., on the important text about bulk transport from the end of the Roman Republic.

different destinations.¹¹ It is also clear that bulk transport, in addition to avoiding such a nuisance and allowing great speed of loading and unloading, could have offered a significant reduction in the size of the vessel and the use of a few large suitable containers,¹² such as *pithoi* or *dolia*. These were more advantageous than the numerous individual amphorae or other separate containers, identified through pozzolan stoppers for wine amphorae, but also with clay or lead seals for baskets and sacks of various goods.¹³ Wooden and lead labels were used for *garum* or other – large vessels for the transport of products *eiusdem generis* of various merchants, who entrusted to a single ship their goods with different destinations, provided for by the route that the large ship was to follow.¹⁴

That practice was closely related to the business model adopted in different eras. However, only in Roman imperial navigation, or rather at the end of the Republican age and at the beginning of the Empire, it seems that trading ships with large quantities of heterogeneous merchandise from different merchants embarked not only on direct routes, but also with numerous port stops and possible frequent ‘load breaks’. Although large cargoes, such as those around 420-400 BC recently traced to Alonnessos with over 4,200 amphorae and other wares¹⁵ were already operating during the classical Greek age, it seems that only from the 2nd century BC onwards did, these large ships, become common and were used with even heterogeneous loads, both for direct and segmented

¹¹ Attests the practice of transporting on a single ship of various goods of different merchants, eg. D. 14, 2, 2: *Cum in eadem nave varia mercium genera complures mercatores coegissent praetereaue multi vectores servi liberique in ea navigarent...*, o D. 14, 1, 1, 3: *Magistri autem imponuntur locandis navibus vel ad merces vel vectoribus conducendis...*

¹² In the Galata Museum of the Sea of Genoa is referred to as 1956, as the date of the birth of the modern *container*. Cfr. *il Corriere della sera*, La Lettura, 421, 22 dic. 2019, p. 51.

¹³ It is indeed about the little-studied commercial lead labels. Rostowzew, M. *Catalogue des plombs de l'antiquité, du Moyen Age et des temps modernes conservés au Département des médailles et antiques de la Bibliothèque nationale*, (Paris: Rolin et feuardent, 1900), pp. 7 ss.; Lafaye, G. ‘*Tessera*’, in DS, V, Paris 1919, p. 132; Salinas, A. ‘*Piombi antichi siciliani. Primo articolo*’, in *Annali dell’Istituto di Corrispondenza Archeologica* 38, Palermo 1971 [breve notizia in Id., *Rassegna Archeologica Siciliana*, 2, settembre 1871 (estratto dalla Rivista Sicula)]; Id., ‘*Descrizione di una raccolta di antichi piombi siciliani detti mercantili*’, *Annali dell’Istituto di Corrispondenza Archeologica* 36, Roma, 1864; Pace, B. *Arte e civiltà della Sicilia Antica*, I, (Sicily: Società anonima editrice Dante Alighieri, 1958), 418-420; Rocco, B. ‘*Nuovi piombi mercantili dalla Sicilia greca*’, *Sicilia Archeologica*, 4, 1971, 27, 36. It has been attested that a commercial lead label with the image of a boar in the *recto* and a *kantharos* in the *verso* might had countersigned the merchandise of Verres exported in franchise, like in the case of other governor, Q. Giunio Bleso, proconsul of Africa in 22–23 AD. Manganaro, G. ‘*La Sicilia da Sesto Pompeo a Diocleziano*’, *ANRW*, II.11, I, Berlin–NewYork 1988, 40 nt. 194; Purpura, G. ‘*Attività marittime e rinvenimenti archeologici nella Sicilia romana*’, in *Atti del Convegno ‘La marittimità in Sicilia*’, Napoli 1997, pp. 67 ss. = *Studi romanistici in tema di diritto commerciale marittimo*, Soveria Mannelli 1996, pp. 328 ss. On the use of other containers, like barrels, cfr. Marlière, E. & Torres Costa, J. ‘*Transport et stockage des denrées dans l’Afrique romaine: le rôle de l’outre et du tonneau*’, *In Africa et in Hispania, Études sur huile africaine*, (Barcelona: Instrumenta, 2007), pp. 85-106.

¹⁴ The wreck of Annaba (Algeria), contained ‘African’ amphorae with lead strips wrapped around the loops, indicating a provenance of the contents from various *officinae*. Lequément, R. ‘*Étiquettes de plomb sur des amphores d’Afrique*’, *MEFRA* 87, 2, 1975, pp. 667 ss., assumed that these workshops were African industries for the processing of fish. A lead label from a plant for the preparation of the *garum* a S. Vito Lo Capo (Trapani) in Oliveri, F. ‘*Commercial label*’, Burgersdijk, D.; Calis, R.; Kelder, J.; Sofroniew, A.; Tusa, S.; van Beek, R. *Sicily and Sea*, (Amsterdam: Allard Pierson Museum, 2015), p. 96.

¹⁵ Hadjidaki, E. ‘*Underwater Excavations of a Late Fifth Century Merchant Ship at Alonnesos, Greece: the 1991-1993 Seasons*’, *BCH*, 1996, II, pp. 561-593.

routes.¹⁶ Some examples would be such shipwrecked vessels as the *Albenga*, with an estimated load of between 500 and 600 tons consisting of 11.500 to 13.000 Dressel 1B wine amphorae and sacks of hazelnuts and wheat, the *Spargi* from around 110 BC, about 35m long and 8/10m wide, or the *Madrague de Giens*, from 75-60 BC, with a load of 375/400 tons, and 6.000-7.000 amphorae.

Indeed, that fact has been somewhat controversial, since according to some historians of ancient navigation, such as Jean Rougé¹⁷ or Lionel Casson,¹⁸ Roman imperial navigation took place mainly on direct and fast routes.¹⁹ Later in the Middle Ages, scholars suggest that transport and slow itinerant trade, in port cabotage crossings (*tramping*), was prevalent or associated at least with direct routes.²⁰ The excavation data of the wreck of the *Cala Culip IV* have allowed us to differentiate between the main ports of the Mediterranean, where mainly large hulls using direct routes docked, and secondary ports, where smaller boats that sailed from the main ports were conveyed, and engaged in itinerant redistribution sailings.²¹ According to Xavier Nieto: “Quand il s’agit de bateaux de grande taille, avec une capacité de plus de 7.000 amphores, comme dans le cas de Spargi ou de la Madrague de Giens, il nous paraît fort improbable qu’une telle opération de réorganisation ait pu être envisagée pour seulement livrer quelques douzaines ou même centaines d’amphores. En outre, il est douteux qu’elle eût pu être rentable, tant à cause de l’allongement considérable de la durée du voyage qu’elle aurait occasionnée que par le coût de la main-d’oeuvre qu’elle aurait réclamée”.²² He concludes “Aussi pensons-nous plutôt que ces embarcations de transport en gros avaient à acheminer des cargaisons homogènes depuis la région productrice jusqu’au port principal par une route directe”.

The transfer of particularly bulky goods, that were not easy to remove from the ship, such as whole *dolia* and marble blocks seems rather unlikely, reason why these needs to be associated to direct routes. The arrangement on board of the loaded goods certainly required imposing a loading-

¹⁶ Similar to them is, according to P. Heilporn, *Registre de navires*, pp. 352 ss., the size of the ship from Ostia in P.Bingen 77, l. 10.

¹⁷ Rougé, J. ‘Tempête et littérature dans quelques textes chrétiens’, *Oikouménè. Studi paleocristiani in onore del Concilio Ecumenico Vaticano II*, (Catania: Università di Catania, 1964), pp. 61-75.

¹⁸ Casson, L. *Ships and Seamanship in the Ancient World*, (Princeton: Princeton University Press, 1971), pp. 270 ss.

¹⁹ McCormick, R. ‘Origin of the European economy: communications and commerce. A.D. 300-900’, (Cambridge: Cambridge University Press, 2001), pp. 103 ss.; C. Beltrame. *Archeologia marittima del Mediterraneo. Navi, merci e porti dall’antichità all’età moderna*, (Roma: Carocci), 2012, p. 174.

²⁰ Pryor, J.H. *Geography, Technology, and War: Studies in the Maritime History of the Mediterranean, 649-1571*, (Cambridge: Cambridge University Press, 1987), pp. 25 ss.; *Id.*, ‘The voyage of Rutilius Namatianus: From Rome to Gaul in 417 C.E.’, *Mediterranean Historical Review*, 4, 1989, pp. 271-280; Duncan-Jones, R. *Structure and Scale in the Roman Economy*, (Cambridge: Cambridge University Press, 1990), pp. 7 ss.; Reynolds, P. *Trade in the Western Mediterranean, AD 400-700: The Ceramic Evidence*, (Oxford: Oxford University Press, 1995), pp. 131 ss.; Horden, P. & Purcell, N. *The Corrupting Sea: A Study of Mediterranean History*, (Oxford: Wiley-Blackwell, 2000); Arnaud, *Les routes de la navigation antique*, p. 6.

²¹ Nieto, X. *Le commerce de cabotage et de redistribution, La navigation dans l’Antiquité*, (Aix-en-Provence: Édisud, 1997), pp. 152 ss.

²² Nieto, *Le commerce de cabotage*, p. 154.

unloading sequence which in some cases appears to follow a strict order (i.e. certain goods could not be removed before others) and therefore incompatible with a redistributive model.²³ The cases of the wrecks the *Cabrera III* or the *Sud Perduto 2*²⁴ show that transport in bulk, even in fungible amphorae, with undifferentiated products, all of the same type and quality, reopens the possibility of itinerant routes even for large ships. The latter will make possible to perform differentiated deliveries at multiple stops on journeys previously planned or also sometimes temporarily re-routing from the destination to take advantage of the news about the opening of a favorable market.

It has recently been proved that, due to nautical reasons, a clear contrast between direct routes and cabotage does not exist, and that even with direct navigation; these routes were necessarily subject to interrupted sailing in some areas and at certain times of the year.²⁵ It seems to me that only without 'load breaks', with bulk deliveries, would it have been possible to benefit from any intermediate commercial stopovers. Indeed, even small boats, frequently engaged in operations which were intended as 'cabotage' (i.e. sailing from cape to cape, from gulf to gulf),²⁶ could carry out long-distance trade, without exclusively engaging in local trade, and their role does not seem to have been simply limited to mere redistribution. It then seems possible to conclude: "c'est sans doute la combinaison des deux pratiques au sein des mêmes routes qui a constitué la norme".²⁷

The slowness of most of the trips as documented in P.Bingen 77, compared to the actual times of sailing of small *akatoi* (*actuaría*) -units engaged in commercial transport of short and middle-range distances and mixed propulsion- has been convincingly explained by resorting to temporary stopovers for weather reasons.²⁸ However, it could also be justified on seafaring on small and middle-range routes, associated with an unexpected itinerant trade, not always declared and imposed by a segmented navigation, which also involved large ships.²⁹

²³ Beltrame, *Archeologia marittima del Mediterraneo*, p. 176.

²⁴ Nieto, *Le commerce de cabotage*, p. 154; Arnaud, *Les routes de la navigation.*, p. 112. The cargo of the Augustan *Sud Perduto 2* wreck was attributed on the basis of the inscriptions to three different vectors, that of Port-Vendres II, a small boat sunk between 41/2 and 50 AD, instead of at least nine different shippers; Bernard, H. 'Nouvelles épaves hispaniques de Corse: *Sud Perduto 2* (Bonifacio) et Marina di Fiori (Porto Vecchio)', *Comercio, redistribution y fondeaderos. La navegación a vela en el Mediterraneo. Actas V Jornadas de Arqueología Subacuática, Gandia 2006* (Valencia: Universitat de València, 2007), pp. 461-471; Colls, D. & Etienne, R. *et al.*, 'L'épave Port-Vendres II et le commerce de la Bétique a l'époque de Claude', *Archaeonautique*, I, Paris, 1977, p. 139; Arnaud, P. 'Ancient sailing-routes and trade patterns: the impact of human factors', in Robinson, D. & Wilson, A. (eds.) *Maritime Archaeology and Ancient Trade in the Mediterranean* (Oxford: Oxford Centre for Maritime Archaeology, Monographs, 2012), p. 72.

²⁵ Arnaud, *Les routes de la navigation antique*, pp. 5 ss.; 97 ss.; 123 ss.; 231 ss.

²⁶ Arnaud, *Ancient sailing-routes and trade patterns*, p. 60.

²⁷ Arnaud, *Les routes de la navigation antique*, p. 118 ss.

²⁸ Heilporn, *Registre de navires*, p. 342.

²⁹ Arnaud, *Les routes de la navigation antique*, pp. 107 ss.

Recently, a number of wooden fragments marked referring to one of the customs stations of the *Quadragesima Galliarum*³⁰ have been discovered at Marseille's port, bearing the infrequent epigraphic mention of the staff in charge of perceiving this *portorium* (*portitores*). The latter has suggested that interprovincial traffic transited through a limited number of ports equipped with an infrastructure able to ensure the perception of customs rights, to certify the customs clearance of the goods transported at exclusive sites under conditions of authorization for the commercialization and redistribution within the relevant tax area.³¹ In these conditions, there would have been little interest in long-distance trade, and direct binary routes would be imposed by disembarking merchandise only at specific customs stations, thus avoiding the extension of sailing times and related bureaucratic requirements.

However, the long list of ports, provided in the §.9, ll. 22-26 of the *Monumentum Ephesinum* of 9th July 62 A.D, demonstrates how detailed was the location of the coastal areas of the Roman province of Asia, where the customs offices were located, of which we even know the size of the different *stationes*.³² In addition to the §. 16, ll. 40 – 42 indicated that in the absence of contractors *in loco*, the reception of the *professio* was provided for the highest magistrate office of the nearest city. Numerous local communities maintained, with the permission and under the control of Rome, the privileges of tax gathering that they had before the Roman domination, further expanding the already detailed tax list where it would have been possible to dock and pay the duty, even for large ships. It does not seem that there was any real issue with taxes, caused by an alleged shortage of port stations of customs in the coastal areas of Asia, or either in other areas of the empire, since it was possible to pay the tax at the nearest city. That provides the image of a unified Mediterranean, increasingly inclined not to suffer any kind of hindrance in merchant exchanges, even over long distances.

However, according to Bresson,³³ when docking in the Greek cities during Roman times, any merchandise to be sold would have been unloaded, and the relevant import rights would have to be paid again on what remained unsold and had to be loaded again. This nuisance could be avoided by exhibiting a sample for a limited period at a place where sale by samples was practised

³⁰ France, J. & Hesnard, A. 'Une *statio* inédite du Quarantième des Gaules et les opérations commerciales dans le port romain de Marseille (place Jules-Verne)', *JRA*, 8, 1995, pp. 78-93; France, J. *Quadragesima Galliarum: l'organisation douanière des provinces alpestres, gauloises et germaniques de l'Empire romain : 1er siècle avant J.-C.-3er siècle après J.-C.* (Rome: École française de Rome, 2001).

³¹ Arnaud, *Les routes de la navigation antique*, cit., p. 115; *Id.*, *Ancient sailing-routes and trade patterns*, p. 64.

³² *Monumentum Ephesinum* §. 30 ll. 71 – 72; Merola G.D. *Autonomia locale governo imperiale. Fiscalità e amministrazione nelle province asiatiche*, (Bari: edipuglia, 2001), pp. 209 ss.; Purpura, G. 'La provincia romana d'Asia, i publicani e l'epigrafe di Efeso (*Monumentum Ephesinum*)', *IVRA, Rivista Internazionale di Diritto Romano e Antico*, Catania, 53, 2002 (pubbl. 2005), pp. 188 ss.

³³ Bresson, A. *L'économie de la Grèce des cités, II, Les espaces de l'échange*, (Paris: Armande Colin, 2008), pp. 101-105; Arnaud, *Ancient sailing-routes and trade patterns*, p. 65.

(δείγμα). That would have saved the need of unloading and loading the cargo, it would have increased the sales by sample, but above all, it would have concentrated these samples in some ports open to foreigners and other of the numerous docks destined for local redistribution.

Thus, boats of a certain size could freely dock, due to the presence of custom stations, where it was deemed more appropriate and accessible, to trade with low quality goods transported in bulk in the hold that had become increasingly suitable. However, it is necessary to explain how this had become possible without any ‘load break’, waste of time and manpower – all plausible economic objections that have been put forward. It can be justified by the use of sample jars (δείγματα), little amphorae, little sacks, small sealed flasks – where this became more and more feasible – both for solids and for liquids.

The practice of late-Republican bulk transportation is incontrovertibly witnessed in the following well-known text:

D. 19, 2, 31 (*Alf. 5 Dig. a Paulo Epit.*):

In navem Saufeii cum complures frumentum confuderant, Saufeius uni ex his frumentum reddiderat de communi et navis perierat: quaesitum est, an ceteri pro sua parte frumenti cum nauta agere possunt oneris aversi actione. Respondit rerum locatarum duo genera esse, ut aut idem redderetur (sicuti cum vestimenta fulloni curanda locarentur) aut eiusdem generis redderetur (veluti cum argentum pusulatum fabro daretur, ut vasa fierent, aut aurum, ut anuli): ex superiore causa rem domini manere, ex posteriore in creditum iri. Idem iuris esse in deposito: nam si quis pecuniam numeratam ita deposuisset, ut neque clusam neque obsignatam traderet, sed adnumeraret, nihil alius eum debere apud quem deposita esset, nisi tantundem pecuniae solveret. Secundum quae videri triticum factum Saufeii et recte datum. Quod si separatim tabulis aut heronibus aut in alia cupa clusum uniuscuiusque triticum fuisset, ita ut internosci posset quid cuiusque esset, non potuisse nos permutationem facere, sed tum posse eum cuius fuisset triticum quod nauta solvisset vindicare. Et ideo se improbare actiones oneris aversi: quia sive eius generis essent merces, quae nautae traderentur, ut continuo eius fierent et mercator in creditum iret, non videretur onus esse aversum, quippe quod nautae fuisset: sive eadem res, quae tradita esset, reddi deberet, furti esse actionem

locatori et ideo supervacuum esse iudicium oneris aversi. Sed si ita datum esset, ut in simili re solvi possit, conductorem culpam dumtaxat debere (nam in re, quae utriusque causa contraheretur, culpam deberi) neque omnimodo culpam esse, quod uni reddidisset ex frumento, quoniam alicui primum reddere eum necesse fuisset, tametsi meliorem eius condicionem faceret quam ceterorum.

[Several people had poured their grain together into Saufeius' ship; Saufeius had returned his grain to one of them, and his ship had then foundered. Can the others sue the shipowner for their share of the grain through an action for the pilfering of cargo? He [Servius] responded that objects are leased in two ways: either that the same object be returned, as when clothes are entrusted to the care of a fuller, or that an object of the same kind be returned, as when beaten silver is given to a craftsman to make vessels or gold to make rings. In the former case, the thing remains its owner's; in the latter, a loan is made. The rule is the same for a deposit: If someone deposited a specific amount of money in such a way that he does not hand it over enclosed in a box or under seal, but counts it out, the depositee owes nothing except to pay an equivalent amount. Accordingly, the wheat is construed as becoming Saufeius's and as being validly handed over. But if each person's wheat had been separately enclosed within partitions or baskets or in a different vat, so that each person's could be distinguished, we cannot make an interchange and the person to whom the wheat belonged can bring a *vindicatio* to recover what the shipowner paid. And so [Servius said that] he rejected the actions for pilfering of cargo, since if, on the one hand, the goods were of the same type and were handed over to the shipowner in order that they become his immediately, and the merchant [in this way] made a loan, then the cargo is evidently not being pilfered since it belonged to the shipowner; but if, on the other hand, the same thing that was handed over is to be returned, the lessor [of the shipowner's services] has an action for theft, and so the action for pilfering of cargo is superfluous. But if the grain had been handed over such that it could be repaid in kind, the contractor [the shipowner] is

liable to the extent of his fault, since one is liable for fault in a matter contracted for both parties' benefit; but it is scarcely fault that he returned some grain to only one person, since he had to return it to somebody first, even though he thereby advantaged this person more than the others.].³⁴

The text is among the most controversial of the Digest's fragments, but today's scholarship is inclined to acknowledge its substantial genuineness.³⁵ Following a wheat transport in bulk, embarked by several merchants on Saufeius' ship, he had taken a certain amount of the common grain during one stopover, returning it to one of the merchants.³⁶ Later, the ship perished with all the cargo and therefore the other (*ceteri*) merchants asked Alfenus for an opinion to file an act for the "diminution of the load". The latter was excluded in the jurist's response, referring to a fundamental distinction used by Roman lawyers to frame the contract for the transport of goods within the lease. The jurist indicates: *in duo genera rerum locatarum*, that is, when the *nauta* had been forced to return precisely the same goods transported (*idem*) or when, on the other hand, he had committed to returning only as many products of the same kind (*eiusdem generis*).

In the first case, the merchandise was transported following the marking of the goods when loading them for its exact identification on the return (χειρέμβολον).³⁷ This identification was made

³⁴ Watson, A. *The Digest of Justinian*, vol.2. (Pennsylvania: Pennsylvania University Press, 1998), pp. 109-110.

³⁵ Albanese, B. 'Per la storia del *creditum*', *AUPA*, 32, 1971, pp. 88 ss.; De Marco, N. 'L'*Actio oneris aversi*. Appunti su di un equivoco ricostruttivo', *Labeo* 49, 2003, pp. 143 ss.; Fiori, R. *La definizione della locatio conductio. Giurisprudenza romana e tradizione romanistica*, (Napoli: Jovene, 1999), 68 ss.; just partly by Cardilli, R. *L'obbligazione di praestare e la responsabilità contrattuale in diritto romano (II sec. a.C. - II sec. d.C.)*, (Milano: Giuffrè, 1995), pp. 271 ss.; on the text, recently, see Longo, S. *Emptio venditio et locatio conductio familiaritatem aliquam inter se habere videntur. Le fattispecie gaiane oggetto di dibattito giurisprudenziale*, (Torino: Giappichelli, 2019), pp. 226 ss.; *praecipue*, p. 229 e s.; Varvaro accepts the authenticity of the text, and takes it into consideration in the framework of the history of the category of the *res quae pondere numero mensura constant* (Varvaro, M. *Per la storia del certum. Alle radici della categoria delle cose fungibili*, (Torino: Giappichelli, 2008), pp. 118 ss.; 37 ss.).

³⁶ De Marco, *L'Actio oneris aversi*, p. 141 nt. 4 thinks that the belief that the rather close time chain between the start of the unloading operations and the loss of the postulated ship is likely to be true as indicated in De Santis, E. 'Interpretazione del fr. 31 D. 19.2 (*Alfenus libro V digestorum a Paulo epitomatorum*)', *SDHI* 11, 1945, 94, based on the tight relation of the syntactical form *reddiderat de communi et navis perierat*, and therefore upon arrival at the destination the unloading had begun with the return of the goods to one of the merchants, which would have been immediately followed by the loss of the ship. Cf. also, Benke, N. 'Zum Eigentumswerb des Unternehmers bei der *locatio conductio irregularis*', *ZSS*, 104, 1987, p. 194 nt. 118. For the port itself, or rather the continuation of the journey to other ports, see Cardilli, *L'obbligazione di praestare*, p. 271 nt. 104. The request relating to 'de-routing the cargo' proposed in the text instead suggests that the transport committed to Saufeio did not have a single destination for all shippers (doubts De Marco, *L'actio oneris aversi*, p. 141 nt. 2); Albanese, B. 'Per la storia del *creditum*', *AUPA*, 32, 1971, p. 89 doubts that the restitution could have been done before departure.

³⁷ About the χειρέμβολον and the confrontation of the diverse theories on the topic, *cfr.* Purpura, Il χειρέμβολον e il caso di Saufeio, pp. 127-152; *praecipue*, pp. 133 ss.; concerning some seals from Pisa, *cfr.* Firmati, M. 'Sigilli di mercatores per doli dal porto di Pisa', *Instrumenta Inscripta*, V, *Signacula ex aere. Aspetti epigrafici, archeologici, giuridici, prosopografici, collezionistici*, *Atti del Convegno Internazionale, Verona, 20-21 sett. 2012*, (Roma: scienze e lettere, 2014), pp. 383-391; and about a *signaculum* for Dressel 20 amphorae, *cfr.* Berni Millet, P. & Gorostidi Pi, D. C. 'Iulius Valerianus et C. Iulius Iulianus: mercatores del aceite bético en un *signaculum* de plomo para ánforas Dressel 20', *JRA*, 26, 2013, pp. 167-190 e, in general, Mayer i Olivé, M. 'Opercula, los tapones de ánfora: un indicador

both in the interest of the merchant, in order to have the identical goods returned, while remaining their owner and bearing the consequent risk in the case of loss (*casum sensit dominus*).³⁸ However, above all this practice was performed in the interest of the *nauta*, who loaded the cargo, and was therefore exempted from bearing the risk of transportation, not becoming owner of the merchandise.

In the second case, concerning bulk transport, if a *mutatio dominii* occurs, then the *nauta* would hold an *in creditum iri* of the object of the *locatio*, then being that the *nauta* has to deliver a different thing of the same features (*eiusdem generis*), due to the indestructibility of the *genus* also in the case of *vis maior*.³⁹ In that situation, the merchant ended up having to bear the risk and therefore in the case of the bulk transport on the ship of Saufeius, a merchant who had repossessed his share of wheat should, according to the text, consider himself lucky and Saufeius, in returning of the first batch of wheat, was without fault or any responsibility. But, why were the other merchants (*ceteri*) induced to ask Alfenus for an opinion about taking action rather than the “diminution of the load”? These merchants remained creditors of the *nauta*, following the *mutatio dominii* resulting from bulk transport.

It is clear that, when Alfenus proposed the *quaestio* for the merchants loading the goods in bulk, also the distinction of goods in *duo genera rerum locatarum* could have allowed to except the *mutatio dominii* and the risk beared by Saufeius, that on its turn had already precluded.⁴⁰ In that sense, the explanation proposed by Ménager⁴¹ was that the entire ship had been used for transport in bulk by several merchant for a common shipping in bulk cannot be accepted. Indeed, it would have made no sense to recall the *mutatio dominii* and the risk beared by the *nauta*, responsible only for the good conditions of the boat available. The common wheat would in fact remain the property of

económico controvertido’, *Instrumenta inscripta latina, II, Akten des 2. Internationalen Kolloquiums, Klagenfurt, 5-8 maggio 2005*, pp. 223-239.

³⁸ The assumption of the risk by the merchants at the time of Alfenus, but also of Justinian, is attested also in Sen., *De ben.* 7.10.2: ... *nullam excusationem (maiores) receperunt* ... e in I. 3.14.2: *Et is quidem qui mutuum accepit, si quolibet fortuito casu quod accepit amiserit, veluti incendio ruina naufragio aut latronum hostiumve incursum, nihilo minus obligatus permanet. ‘Is quidem qui mutuum accepit’* does not refer to the recipient of the *pecunia traiecticia*, or to one *nauta* – carrier in bulk, *sine recepto*, after Alfenus.

³⁹ “Dalla *locatio* di cose generiche derivava una responsabilità illimitata in caso di mancata consegna, come fin troppo chiaramente si evince dal testo in questione”, De Robertis, F.M. ‘D. 19.2.31 e il regime dei trasporti marittimi nell’ultima età repubblicana’, *SDHI*, 31, 1965, p. 101 nt. 35; 107 nt. 78; Cardilli, L’obbligazione di *praestare*, pp. 263 s.; Purpura, Il χειρέμβολον e il caso di Saufeio, p. 141.

⁴⁰ Concerning the lack of imputation to the *nauta* cfr. De Robertis, D. 19.2.31 e il regime dei trasporti marittimi, 104 nt. 53: «...è certo che per il *naufragium*, anche nell’ipotesi più radicale di contratto garantito mediante *receptum*, soccorreva, fin dall’età di Labeone, apposita eccezione liberatoria: e siamo solo a qualche lustro di distanza da Alfeno Varo». Fiori, *La definizione della locatio conductio*, p. 76 hypothesizes that the plots have envisaged a legal reconstruction of the case that was not accepted in the response, and requested a criminal action similar to the theft act precisely because they believed they were the owners of the wheat. «Se così fosse, potremmo immaginare che al contrario Alfeno, ritenendo che non vi fosse alcuna comunione tra i mercanti e che la proprietà del grano fosse passata a Saufeio, abbia risposto che non c’è stata alcuna *aversio*».

⁴¹ Ménager, L.R. ‘*Naulum et receptum rem salvam fore*. Contribution a l’étude de la responsabilité contractuelle dans les transports maritimes, en droit romain’, *RHD*, 38, 1960, p. 182.

the merchant and instead, Alfenus declares that, *secundum quae videri, triticum factum Saufeii et recte datum*. Of which *aversio* could Saufeius have been suspected of if the merchants had leased the ship in full autonomy? The only option is to assume a *locatio ad onus vehendum*, implying a planned route, necessary as a principle,⁴² under the command of Saufeius. He then would have involved a real purchase of the property in bulk by the *conductor*, and not a mere availability of the abstract shares owned by each of the merchants loading cargo, as it would have been normal,⁴³ with the aim of fulfilling the *opus*.

It seems that following the increase in trade, risks, and the recognition of the edictal clause relating to *receptum* -which is already believed to have been in operation by the end of the 2nd cent BC-⁴⁴ the merchants owners of goods identified by a χειρέμβολον, could transfer to the *navicularius* the risk for the transport of goods just identified by the *genus*. That would have operated following the payment of a higher freight, including the *receptum*, and would correspond to the risk that the carriers of goods belonging to multiple vectors (*ad onus vehendum*), were forced to assume due to the *mutatio dominii*. This inevitably increased the freight of the transport of goods identified and guaranteed by *receptum*, to which advantageously and frequently the merchants had as a resource due to the increasing risks resulting of piracy in the 2nd century BC. The introduction of the *receptum* allowed equating, from the point of view of the risk transferred to the *navicularius*, the regime of the goods *signatae* with *receptum* to those transported in bulk, which would be less costly to ship. This advantage could result in a more frequent use of this sort of transport, which in fact increased during the 1st century BC.⁴⁵ Thus the carrier, both of goods with *receptum* and in bulk, was now considerably burdened by the not indifferent risks arising from the *vis maior*, that situation might have pushed the praetor to mitigate this responsibility by accepting, only a few years away

⁴² D. 19, 2, 31: ...*quoniam alicui primum reddere eum necesse fuisset* ...

⁴³ The hypothesis proposed is that of a *locatio irregularis*. Fiori, *La definizione della locatio conductio*, p. 80: “la giurisprudenza tardo-repubblicana non escludeva il ricorrere di una *locatio conductio* anche in quei negozi in cui si realizzava un trasferimento di proprietà”. Amirante, L. *Ricerche in tema di locazione*, (Milan: Bullettino dell'Istituto di Diritto Romano "Vittorio Scialoja", 1958), pp. 59 ss., indicates “che il responso non distingue due tipi di locazione, ma soltanto *duo genera* di *res locatae*. Sicché, l'eventuale passaggio del dominio è soltanto ‘una conseguenza della qualità della cosa consegnata’ e non implica in alcun modo una distinzione nell'ambito del *locatum-conductum*”.

⁴⁴ Cfr. the lucid summary of the issue in De Robertis, F.M. ‘*Receptum nautarum*’, *Ann. Univ. Bari* 13, 1953, pp. 5 ss. and the reconstruction of Menager, *Naulum And receptum rem salvam fore*, pp. 177 ss. *praecipue*, pp. 197 and s. According to traditional opinion the *receptum* would have been created by the Pretore to increase the responsibility of the *nauta* against merchants *vectores*; for De Robertis, *Receptum nautarum*, pp. 32 ss.; 41 ss., on the other hand, to lighten it, since the *nauta* would have been responsible only for the goods for which the *receptum* had been paid (Rougé, J. *Recherches sur l'organisation du commerce maritime en Méditerranée sous l'Empire romain*, (Paris: S.E.V.P.E.N., 1966), p. 384. But according to the pre-existing rules of the lease the *res signatae*, without wanting to match the *receptum*, these could have continued to be transported at the risk of the merchant *vector*, though certainly at that time the *nauta* were less interested in carrying for the lack of perception of the revenue of the *receptum* and, above all, as these required ‘a load break’. According to J.A. Gonzalez Romanillos, ‘Observaciones sobre la responsabilidad en el *receptum nautarum*’. *Sem. Complutenses of Roman Law*, 2004, XVI, pp. 277 ss. the *receptum* was designed to cover only cases of theft and damage concerning the embarked goods.

⁴⁵ Purpura Il χειρέμβολον e il caso di Saufeio, pp. 143 ss.

from Alfenus Varus, the *exceptio* considered fair by Labeo concerning the radical hypothesis of a contract guaranteed by *receptum*.⁴⁶

That explanation allows us to imply the previous exclusion in bulk transport of the unlimited responsibility that would be due for the automatic application of the principles governing the handing of things identified in the *genus*. The *nauta* carrying out the *receptum* and assumed the obligation of *salvas merces in portum perducere*, perceiving a high freight, could have been exempted from the risks of shipwreck and piracy. However, that would not have exempted from the risks under the *casus minores* (*incendium, iactus mercium, ictus fulminis, mortes servorum, latronum hostiumve incursus, fugae servorum, ruina, rapinae, tumultus, animalium casus mortisque, etc.*), which would have also justified the *receptum*.⁴⁷ It seems logical to believe that, even before the *exceptio labeoniana*, for the *navicularii* who did not perceive high freights, it had been recognized this subjective responsibility only for *culpa* in all ordinary cases of *locatio conductio* employed in transport. That would have fitted well with a consolidated maritime practice imposed due to the eventual disappearance of the ship with the entire cargo and crew. In addition, in the case of a bulk transport interrupted by *vis piratarum* or *naufragium* it would not have been possible to blame Saufeius for nothing that implied a violation of the regular liability for *diligentia*.

For this reason, no other resource remained for the *ceteri* than to try to employ- by using the expression taken from the request to Alfenus as reported in the text of the Digest⁴⁸ a desperate attempt to reiterate the breach of contract for the expected “distraction of the load”.⁴⁹ The

⁴⁶ D. 4.9.3.1 (Ulp. 14 *ad ed.*): *Labeo scribit, si quid shipwreck aut per vim piratarum perierit, not they iniquum Exceptionem ei from*; De Robertis, *Receptum nautarum*, p. 85, 102; F.M. De Robertis, ‘Ancora sul *receptum nautarum*’, *RDN*, 24, 1958, pp. 256 ss.; De Robertis, *D. 19.2.31 e il regime dei trasporti marittimi*, p. 106; Cardilli, *L’obbligazione di praestare*, p. 264.

⁴⁷ De Robertis, *Receptum nautarum*, p. 86 e nt. 4.

⁴⁸ Purpura, *Il χερρέμβολον e il caso di Saufeio*, pp. 139-140; non just the atechanical expression that appears in this text as *actio oneris aversi*, but also the words of the text which refer to a *confusio* (*frumentum confunderunt*) or to a *communio* (*reddere de communi*) among the *complures*, what does not constitute an interpolation or which are neither an interpolation nor an impropriety of language of Alfenus (De Santis, *Interpretazione del fr. 31 D. 19.2*, pp. 98 ss.; L. De Sarlo, *I Digesta di Alfenus Varo*, Milan 1939, p. 57; A. Metro, ‘Locazione e acquisto della proprietà: la c.d. *locatio-conductio ‘irregularis’*’, *SCDR* 7, 1995, pp. 210 ss.), but inaccuracies of the *complures* (A. Wilinski, ‘D. 19.2.31 und die Haftung des Schiffers im altrömischen Seetransport’, *Annales Univ. Mariae Curie-Sklodowska*, 7, 1960, pp. 353 ss.; De Robertis, *D. 19.2.31 e il regime dei trasporti marittimi*, p. 100 nt. 33; Cardilli, *L’obbligazione di praestare*, p. 271 nt. 102; Fiori, *La definizione della locatio conductio*, 76.).

⁴⁹ Therefore, not in the translated and technical sense of the term *aversio*, that is, for ‘load subtraction’, but in its main and technical significance, for having followed an unsuitable route for the entrusted transport, that favored only one of the merchants.. Opinions that have contested the field on the mysterious *Actio oneris aversi*, according to A. Biscardi (NNDI, I, 267, *s.v.*), are substantially reduced to three (since the thesis that it was an special *actio furti*, recognized by the *ius civile*, is now abandoned): a) the *actio oneris aversi* was a contractual action similar to the *actio locati*, as such fall early into desuetude later generalization and development of this one (P. Huvelin, *Études d’histoire du droit commercial romain*, Paris 1929, 115 ss.); b) the *actio oneris aversi* it was nothing but the *actio locati* in its experibility to the case of *oneris aversio* (G. Beseler, *Aequitas*, ZSS 45, 1925, 467); c) the *actio oneris aversi* was identifiable with the *actio furti adversus nautas*, which is a pretorian action (S. Solazzi, ‘Appunti di diritto romano marittimo: L’*actio oneris aversi*’, in *RDN* 2, 1936, 268 ss.). More recent are the focus considered by A. Bessenyo, ‘Das Rätsel der *actio oneris aversi*. Eine Exegese von D. 19.2.31’, in *Iura antiqua-iura moderna, Festschrift Ferenc Benedek*, Kiado 2001, 23

merchants, claiming to have been disadvantaged, were aiming to get not just their share, as happened with the merchant who got it before the wreck, but the full recovery of the respective load due to unequal treatment. The alternative proposed by Alfenus was either an *actio furti* in case of transport of identifiable goods or its exclusion in the event of bulk transport, due to the *mutatio domini*. That performance would have excluded for Saufeio the blame for *furtum, culpa* or to be accused for any unequal treatment, “since everyone was compelled to start giving back their share of the cargo”.

From all this, it can be seen that the Roman jurists tried to frame the transport conventions when facing them. These were certainly widely diffused in the Mediterranean Hellenistic practice among merchants of various nationalities, who will come to be known at least from the Augustan age as *ναυλωτικάί* or *ναυλῶσαις*.⁵⁰ For example, in the case of the maritime loan or the breakdown (*avaria*), the jurists used the legal tools that were known and available to them. Overall, the lease of an entire ship (*locatio/conductio per aversionem*), either for a certain time period or for a journey, was the simplest and easiest way to solve the problem of transporting goods when lacking suitable nautical means of transport. Another option would be to just lease a space on board in order to stow the goods that would be transported to a predetermined destination (*locatio rei*). In such cases, the merchant presented himself as a *locator*, who obviously bore the risk of the loss of his embarked goods, and the *nauta*, as conductor who depended on the merchant. A similar situation would happen if several merchants had gathered themselves together to locate a single ship or separate spaces, occupied by marked goods, to follow a route with a single stopover or multiple landings. However, if these goods had not been marked when loading and, giving the *nauta* a wider autonomy, they would have been transported in bulk *ad onus vehendum* – at that early stage

ss., which considers it a *condictio triticaria*, based on the alleged configuration as a mortgage of Saufeio's relationship with his loaders (p. 54) and the evaluation of B. Forschner, *Das Schiff des Saufeius* (8 November 2011) (<http://www.forhistiur.de/en/2011-11-forschner/>), which considers it as being out of the procedural system. Convincingly N. De Marco, *L'actio oneris aversi. Appunti su di un equivoco ricostruttivo*, argued that it is in fact a question of reconstructive misunderstanding, based on a technical expression used by the subjects asking the question. The remarkable genericity of the *quaestio* proposed to the jurist as a last resort by the dissatisfied merchants, aducing to agree on time the routes to be followed for each navigation, as in the description of Lacritus and in the orations pseudo-demostenes in general, which in Callimachus famous loan (D. 45.1.122.1), might suggest that they may have proposed to act on an alleged diversion of course, which ended up making better condition than one compared to the other, thus aiming at the entire recovery of the respective quotas. But Alfenus, right at the end of the *responsum* on bulk transport (*...quoniam alicui primum rede eum necesse fuisset*), excludes the admissibility of the proposal formulated - let us remember - not by lawyers and deviation which, in the case of clearly identified goods, could have led to *culpa (actio locati)* or even *furtum (actio furti adversus nautas)*.

⁵⁰ J. Velissaropoulos, *Les naucleres grecs*, Geneve – Paris, 1980, pp. 280 ss.; P. Arnaud, ‘Aux marges du formalisme juridique romain: le contrat de nautisme’, *Annuaire de Droit Maritime et Océanique*, 37, 2019, pp. 378 ss., according to which the oldest document would be by now the P.Koel. 3, 147 of 30/27 BC, preceding P.Oxy. XLV, 3250 of 62 A.D., considered by Velissaropoulos as the oldest. It should be noted that, according to Arnaud, by reproducing models certainly pre-empire and referring to small batches of goods, these could frequently appear in written form. It seems that no more than seven documents are known for the first three centuries of the empire.

of Roman transport – they would have travelled at the risk of the *nauta*, who would have been, of course, rather reluctant to accept them.

With the recognition of the *receptum*, the situation of the Roman shippers would have been assimilated to that of the foreigners, bearing the risk for goods for which a higher freight had been paid and which would necessarily have to be marked to identify them. However, the subsequent increase in responsibility of the Roman *nautae*, both for marked goods because of the *receptum*, and for goods not marked for the *mutatio dominii*, would have led at first to recognize the exemption of force majeure for bulk goods. The procedure stays in accordance with Mediterranean practice, which had long conceived the contract of transport like a μίσθωσις and in particular an ἐργολαβία.⁵¹ In that sort of contract, the *nauta* presented himself as a *conductor*, to express in Latin a service (*opus*) that obliged him to respond only if there had been a specific incident in the custody or a lack of diligence attributable to him. The latter did not apply in the case of force majeure, responsibility that could have been assumed with an explicit clause, as in the case of the *receptum*.⁵²

The disposition known as the *exceptio labeoniana* recognised that the *navicularii* who carried out the *receptum* could be exempted from shipwreck and pirate attack, but of course the convention of *receptum salvam fore* continued to provide protection to the merchants transporting small loads (*casus minores*).

Therefore, without the *receptum*, the situation could be that whether the goods were marked or unmarked, they now travelled at the risk of the merchants, as was already the case in the Hellenistic practice of *annona* transport. In these cases, the responsibility of the shipper for river transport had their contractual, non-legal basis in Greek-Egyptian law. As Cenderelli appropriately argued in contrast to Meyer Termeer,⁵³ the recurrent concern of the consignors to include in the nautical contracts (ναυλωτικαὶ συγγραφαί) express clauses of guarantee which cannot be explained because in this way the carrier would have more solicitous and attentive towards the custody of the cargo. According to Meyer Termeer, this procedure would pre-establish a safer proof of the obligation in order to guarantee any future in the agreement. However, the regime of river transport in Egypt did not automatically provide for the absolute and unlimited responsibility for the

⁵¹ Velissaropoulos, *Les naucleres grecs*, pp. 282 ss.

⁵² Already M.A. de Dominicis, 'La clausola edittale *salvum fore recipere* esclude in età classica la responsabilità per custodia dei *nautae* nel caso di forza maggiore?' *Atti e Mem. dell'Accad. di Scienze, Lettere ed Arti di Padova*, 49, 1933 = *St. vari di St. del Dir. Rom.* (1933-1937), Padova, 1950, pp. 72 e s.; Purpura, Il χειρέμβολον e il caso di Saufeio, p. 147; sulla custodia, *receptum* e responsabilità contrattuale si veda ora C. Pelloso. 'Custodia, *receptum* e responsabilità contrattuale', *Seminarios Complutenses de Derecho Romano*, XXIX, 2016, pp. 263-302.

⁵³ A. Cenderelli, Rec. a A.J.M. Meyer-Termeer, 'Die Haftung der Schiffer im griechischen und römischen Recht', [Studia Amstelodamensia ad epigraphicam, ius antiquum et papyrol. pertinentia, XIII, Terra, Zutphen 1978], *RHD*, 49, 1981, pp. 180 ss. Cfr. anche E. Jakab, 'Vertragsformulare im Imperium Romanum', *ZSS*, 123, 2006, 91 s.; Purpura, *l.c.*

preservation of goods, but it could have been agreed, with higher freight costs charged, as happened in the Roman regime of the end of the republican age.

The progressive and natural juxtaposition of Roman maritime practices with the Hellenistic procedures might have been facilitated by the existence of specific contacts employed for these practices. It has been hypothesized that the visit to Egypt of some Romans, such as Lucio Mummius in 112 BC, were carried out precisely to learn practices such as advanced agricultural administration, the grain levy being conveyed along the Nile to Alexandria, or the Ptolemaic trade, and then later spread throughout the Roman world.⁵⁴

In the Roman world, such practices were provided mainly for loading the merchandise, accompanied by the *locatio mercis vehendae*, proven by witnesses, but reflected *ad probationem tantum* in a probationary act, which could have taken the form of the *testatio*. The latter consisted of the application of various kinds of χειρέμβολα (on pozzolan, lead, clay, wood, etc.) by the *nauta* and their subordinates, enabled to receive, stow and keep safely the merchandise. This practice was first aimed to avoid the risks implied in bulk transport, then to identify the goods, but no longer to transfer the risk, which could now have been voluntarily assumed by the *nauta* via *receptum*. Hence the preparation of a threefold accompanying list of goods, one for the merchant, another for the *nauta*, and the last one for the recipient.⁵⁵ In fact, the control of the goods to be handed over to the recipient, identified by the marks and verified on arrival, releasing a receipt, would have been greatly facilitated by such documentation.⁵⁶ That was already the case for some time in Egyptian and in Mediterranean merchant practices, where transport documents were used to ensure the recognition of the products, ensuring the quality and quantity, and standard measurements such as the σηκῶματα (lat. *mensae ponderariae*) were employed to check volume and weight.⁵⁷ These controls were performed both at the time of boarding (παράδοσις) with the delivery of a perforated

⁵⁴ J. Frösen, 'Chi è il responsabile?', Il trasporto del grano nell'Egitto greco e romano', *Annali della Facoltà di Lettere e Filosofia. Università di Perugia 1, Studi classici* 18, 1980, p. 175.

⁵⁵ This person introduces themselves in an epistle in TPSulp. 80 (= *Tab. Pomp.* 47) that Bove interpreted to be a *mandatum per epistulam* with χειρέμβολον (L. Bove, 'TPSulp. 80 (= *Tab. Pomp.* 47): un *mandatum per epistulam* (con χειρέμβολον: Ulp. D.4.9.1.3)?', *Studi Grelle*, Bari 2006, 21 ss. On this matter, see Purpura, 'Il χειρέμβολον e il caso di Saufeio', pp. 134 ss.; 148 e s. In the annona transport from Egypt they released "una lettera di carico con le ricevute richieste in tre copie. Una spetta allo stratego, una al sitologo del magazzino centrale e la terza per accompagnare il carico. Il sitologo invia il suo rapporto sul carico direttamente ad Alessandria"; Frösen, Chi è il responsabile?, pp. 171 ss.

⁵⁶ The P. Grenf. II, 108 del 167 d.C. has been, for example, considered a receipt released by the recipient of the goods and attesting the regularity of the delivery (*quas has res intra scriptas meas sanas salvas recepisse scripsi*), but others have considered it a copy of the agreement by which the *nauta* assumed the *periculum*, following the *receptum*. De Robertis, *Receptum nautarum*, p. 157 nt. 1; P.I. Carvajal, 'Receptum nautarum and the Grenf. II, 108 Papyrus', *Index*. 36, 2008, pp. 599 ss.

⁵⁷ G. Geraci, 'Sekomata e deigmata nei papiri come strumenti di controllo delle derrate fiscali e commerciali, Tout vendre, tout acheter. Structures et équipements des marchés antiques'. *Actes du Colloque d'Athènes*, 16-19 juin 2009, Paris – Bordeaux – Athènes, 2012, pp. 347 ss.

tessera, which was hung on a special instrument, and then returned at the time of the unloading to continuously control the movement of the merchandise.⁵⁸ During the weighing (ζυγοστασία) and storage of the cargo, it was indispensable to make use of δείγματα,⁵⁹ necessary not only for the sample sale, but also above all in the documentation of bulk transport for the feedback of the quality returned. The use of δείγματα,⁶⁰ has been increasingly attested by archaeological findings in the commercial circles of ancient ports, as well as the practice of sample sale is well documented in the scholarly literature. This practice allowed the transport of goods, bearing the costs and the associated customs clearance, only when the sale had been secured by the control of the sealed sample, or its delivery in advance.

However, a sample could also travel closed with a seal and entrusted to a supervisor of the carrier of the loaded cargo (ἐπίπλοος).⁶¹ These were used in order to ensure the verification of the

⁵⁸ G. Minaud, 'Regard sur la comptabilité antique romaine. La mosaïque de l'Aula des *Mensores* à Ostie, Des doigts et des comptes', *MEFRA*, 116, 1, 2004, pp. 460 ss.; G. Purpura, 'Alle origini delle consuetudini marittime mediterranee. *Symbola, sylai e lex Rhodia*', *Convegno Trani, 30/31 maggio 2013*, pp. 1 ss. [= IURA, Portale di diritto romano e dei diritti dell'antichità del Dipartimento di Storia del Diritto dell'Università di Palermo (<http://www.unipa.it/dipstidir/portale/>) = <https://academia.edu/GianfrancoPurpura>]; Purpura, *Il χειρέμβολον e il caso di Saufeio*, p. 132.

⁵⁹ For the archaeological finds from the ports of Marseille and from Pompeii v. B. Liou, M. Morel, 'L'orge des Cavares: une amphore à inscription peinte trouvée dans le port antique de Marseille', *Revue archéologique de Narbonnaise*, 10, 1977, pp. 189 ss. (https://www.persee.fr/doc/ran_0557-7705_1977_num_10_1_1012; pp. 189 ss.). Il testo dell'anforetta di Marsiglia è: *Massil(iam) ou Massil(iensi) Rubrio / [..]sino / hord(ei) Cavar(um) / sicci mundi / i m(odii) mille (et quingenti)* [A Marsiglia o al marsigliese Rubrio ...sino, 1.500 modii di orzo (del paese dei) Cavari, secco, pulito,...]; for Alexandria, O. Guéraud, 'Deux documents relatifs au transport des céréales dans l'Égypte romaine', in *Annales du Service des Antiquités de l'Égypte*, 33 (1933), 62 ss.; *Id.*, 'Un vase ayant contenu un échantillon de blé (δείγμα)', in *JJP*, 4, 1950, pp. 107 ss., that consisted on a little sack of leather with the written: *Exemplar / hordei missi per Chae/remonam Anubionis / gubernatorem - ex no/mo memphite a<d> metropolin* [sample of barley sent with the pilot Caerremonte, son of Anubio, from the nomos Menfite to the metropolis]. On that finding, see: G. Geraci, 'Mensura, pondus e probatio nel rifornimento granario di Roma imperiale (e di Costantinopoli)', *Politica, retorica e simbolismo*, 2, 2002, pp. 163 ss. About the different uses of the δείγματα, both in Greek and Roman commerce, *cf.* Rougé, *Recherches sur*, 419 e s.; H. Pavis D'Escurac, *La Préfecture de l'annone, service administratif impérial d'Auguste à Constantin*, Rome, 1976, pp. 231 ss.; M. Amelotti, 'L. Migliardi Zingale, Una dichiarazione di *naukleros* del 237 a. Cr. in un papiro inedito della collezione genovese', *Sodalitas. Scritti in onore di Antonio Guarino*, Napoli, 1984, VI, 3009 ss, and concretely, 3010, nt. 4 e 3019; D. Gofas, 'L'échantillon. Recherche historique sur le droit grec des affaires', *Athènes*, 1970 (thèse d'agrégation); *Id.*, 'ΛΟΓΩΙ ΠΡΟΒΑΣ ΣΙΤΟΥ. A contribution to the interpretation of an early byzantine fiscal inscription', *RIDA*, 22, pp. 233ss.; Geraci, *Mensura, pondus e probatio*, pp. 155 ss., *Id.*, *Feeding Rome: The Grain Supply, A Companion to the City of Rome*, Malden, 2018, pp. 231 s.; literature with papyrus also in trade between private individuals from the third century. B.C. to the V / VI century A.D. [P.Cairo Zen. III, 59522; P.Cairo Zen. IV, 59696; P.Col. I, 51; P.Oxy. I, 113 (II AD); C. Th. 14.4.9 (417 AD)]. A tablet of Herculaneum (TH 4) dated September 2, 60 AD, with the words '... *signa salvo praestari*' relating to the integrity of the seals on the wine containers in a *stabulum*, guaranteed not only from a quantitative point of view, but also qualitatively, especially if, for the purposes of the *degustatio*, the tasting of the wine, once ready, had taken place through sealed *ampullae*, accompanying the dolia themselves, to avoid opening the container, similarly to the δείγματα frumentari (M. V. Bramante, 'TH 4 e la prassi romano-campana «de re rustica»', *Index*, 42, 2014, p. 150; D. Vera, 'Un'iscrizione sulle distribuzioni pubbliche di vino a Roma (CIL VI, 1785 = 31931)', *Studi Grelle*, Bari, 2006, pp. 309 s.). The hole found in the lower part of the body of numerous amphorae, closed by a stopper, probably served to facilitate the operation of the *degustatio*, without breaking the seal of the amphora (*cf.*, G. Purpura, 'Alcuni rinvenimenti sottomarini lungo le coste della Sicilia Nord-Occidentale', *Sicilia Archeologica* 28-29, 1975, p. 63, fig. 8).

⁶⁰ D.C. Gofas, *Deigma*, cit., pp. 139 ss.; *Id.*, 'La vente sur échantillon a Athenes d'après un texte d'Hypéride', *Symposion*, 1977, pp. 121-129.

⁶¹ P. Strassb. 31, 6 from the III sec. AD.

quality of the goods following the loading, navigation and unloading, to avoid any possible dispute on arrival, in case the goods were unsealed, to check possible damages to the transported merchandise or, in case that there was any nautical fraud. In the end, a sample, in the case of a bulk transport of low quality goods - not products that on account of their own particular specificity could only be returned identically - was certainly suitable to verify the yield of batches of goods of the same kind belonging to different carriers. These goods were carried in bulk, avoiding the effort and time waste of emptying the hold for the return of what, perhaps, had been placed under so many other goods in the bottom of the hull of a big ship. For the control of the quality of the goods, in the case of liquids, it was necessary to not only take the liquid from the transport containers, barrels, amphorae or *dolia*, and then compare it to the unsealed sample. For this purpose, terracotta or bronze pipes were used, lowery drilled, frequently found in shipwrecks, whose use for immersion of the vessel at the bottom and subsequent occlusion of a hole at the top of the tool, allowed to extract amphorae or *dolia* from barrels, the necessary liquid to compare it with the contents of the δείγμα.⁶² There are now many small containers known with traces of writing, which come from commercial and port environments and which may have been δείγματα. Of course, not all of them were used for the same purpose. One of the first to be identified as such⁶³ was related to the transport of fiscal, not

⁶² D. Djaoui, 'Les pipettes en terre cuite: preuve indirecte de l'utilisation des tonneaux sur Arles et Fréjus à la période flavienne, Abécédaire pour un archéologue Lyonnais'. *Mél. A. Desbat*, Autun, 2015, pp. 207-214; D. Djaoui, L. Sieurac, A. Genot, 'Prélever le vin au tonneau!', *Arelate dossier* (https://www.academia.edu/20483316/Pr%C3%A9lever_le_vin_au_tonneau_). A ritual sprinkler, operating on the same principle, was found, together with other vases under the Mugonia door in Rome, and dates to the eighth century. B.C. (cfr. *Archeologia Viva*, 83, sett./ott. 2000, p. 47). For the amphorae intentionally pierced, cfr. *supra*, nt. 59.

⁶³ SB VI, 9223: Νομοῦ ὄξ(υρρηχίτου) / Ἀμμώνιος Ἀμμωνίου κυβερνήτης πλοίου δημοσίου οὐ ἐπίσημον α., δι' ἐπιπλοῦ Λουκίου Οὐκλατίου στρατιώτου / λεγεῶνος κβ σπείρης β κεντερωονέας Μαξίμου Στολτίου, καὶ Ἑρμίας Πετάλου κυβερνή(της) ἑτέρου πλοίου / οὐ ἐπίσημον Αἴγυπτος, δι' ἐπιπλοῦ Λουκίου Καστρικίου στρατιώτου λεγεῶνος κβ σπείρης δ' κεντερωονέας / Τίτου Πομπηίου. Ἔστιν δ<ε>ἴγμα οὐ ἐμβεβλήμεθα ἀπὸ γενη(μάτων) κη (ἔτους) Καίσαρος, ὁ μὲν Ἀμμώνιος εἰς παράφραγμα / (πυροῦ) (ἀρταβῶν) υλγδ ὁ δὲ Ἑρμίας ὁμοίως (πυροῦ) (ἀρταβῶν) υλγδ (γίγονται) αἱ ἐμβεβλημένοι διὰ Λεωνίδου καὶ Ἀπολλωνίου σιτολ(όγων) ἀπληιώ(του) / μερίδος κάτω<<ι>> τοπαρχ(ίας) (πυροῦ) (ἀρτάβαι) ὡς⊥ καὶ προσμεμετρήμεθα ταῖς ἑκατὸν ἀρτάβ(αις) (πυροῦ ἀρτάβης) (ἡμισυ), τὴν δὲ ἐμβολὴν πεποι- / ἡμεθα ἀπὸ β τοῦ Ἄθῆρ ἕως δ τοῦ αὐ(τοῦ) μηνός καὶ συνεσφραγίσμεθα τῇ ἀμφο(τέρων) σφραγίδι, τοῦ μὲν Ἀμμων(ίου) / ἧς <ε>ἰκὼν Ἀμμωνος, τοῦ δὲ Ἑρμίου ἧς <ε>ἰκὼν Ἀρποκράτης. (Ἔτους) κθ Καίσαρος Ἄθῆρ δ. (2^a mano) Ἑρμίας καὶ Ἀ<μ>μόνι<ο>ς ἐσφραγίσμ<εθ>α τὰ δ<ε>ἴγματα. (Ἔτους) < κθ > Καίσαρος Ἄθῆρ ιθ. ["From the Oxyrhynchus district. Ammonios son of Ammonios, pilot of a public vessel whose emblem is A..., under the escort of the superintendent (ἐπίπλοος) Lucius Oclatius, soldier of the 22nd legion, 2nd cohort, centurion of Maximus Stoltius, and Hermias, son of Petalos, pilot of another vessel whose emblem is Egypt, under the escort of the superintendent (ἐπίπλοος) Lucius Castrius, soldier of the 22nd legion, 4th cohort, centurion of Titus Pompeius. This is the sample (δείγμα) of the cargo we received in delivery from the harvests of the year 28 of Caesar (August): Ammonios up to the parapet wheat artabe 433 and 1/4, and Hermias equally wheat artabe 433 and 1/4, make in total, loaded under the responsibility of Leonidas and Apollonios, sitologists of the western meris of the lower toparchia, wheat artabe 866 and 1/2, and we added a supplement of 1/2 wheat artaba for every hundred artabe. We carried out the load from Hathyr 2 until the 4th of the same month and placed our two respective seals (... συνεσφραγίσμεθα τῇ ἀμφο(τέρων) σφραγίδι, that of Ammonios whose mark is an image of Ammon and that of Hermias whose imprint is a figure of Arpocrates. The year 29 of Caesar (Augustus), 4 of Hathyr (November 1 2 BC). [2nd hand]: Hermias and Ammonios sealed the champions. The year 29 of Caesar (Augustus), 19 of Hathyr (November 16 2 BC)"] (trad. it. by G. Geraci, *Sekomata And deigmata*, cit., p. 355). O. Guéraud, Un vase ayant contenu un échantillon de blé, pp. 107 ss., correctly writes that the "transport is carried out by two twin boats: it is necessary to design the two quantities of wheat, not as two cargoes

private wheat,⁶⁴ and it was dated November 1st of the year 2 BC, but considered homogeneous and unitary, despite being onboard two different vessels sailing in convoy with one or two δειγματα. The two pilots, accompanied by two legionaries, were entrusted with the supervision of an identical quantity of wheat, 433 *artabe* and a quarter each, plus a supplement of half an *artaba* each, perhaps acting as scrap. But why, since there were two different vessels with two pilots and two different supervisors of identical quantities, would the tax grain be transported in common with one or two samples for both?

It seems possible to explain this fact because the size of the two hulls was not equal. One was smaller, loaded at most up to the parapet (...ἐἰς παράφραγμα), that is, up to its full capacity, and the other of greater volume, capable of containing the rest of the grain, including also the supplement.⁶⁵ In the case, by sailing in convoy in the calm waters of a great river, it was possible to build a δειγμα, perhaps even a duplicate, which is mentioned as a double cargo totaling 866 *artabae* and a half. Such a mention would have been completely unjustified if there had been two separate transports, which were not considered as a unit. In practice, when the smaller vessel was loaded with half the grain and assigned to a supervisor, it was wiser to entrust the surplus to another larger hull. Such a hull had to carry an identical quantity plus the surcharge, including one or two δειγματα, with the two pilots' seals, in the custody of the two ἐπίπλοοι, and loaded in two different ships.

It is likely that from such practices, certainly also used in the private Hellenistic trade of goods transported in bulk, either in a ship with several merchants and some δειγματα, or even, as we have seen, in several ships with one or more δειγματα, came the Roman practice of using sample

that happen to be equal, but as the two halves of a single and homogeneous cargo: that is why their equality is pushed up to a 1/4 of the artabe, and the δειγμα refers to two boats, and that the ὑπογραφή is found in the name of both κυβερνήται. All this does not exclude that there could have been a second vase similar to ours, so that each boat has it. This is even likely if I have correctly restored the offending text of line 10. But things are done in such a way that a single vase can, if necessary, be authentic for all the cargo of the two boatmen". The uncertainty of reading (v. p. 114) 10 ((ἐσφραγίσμ<εθ>α τά δ<ε>ίγματα, or rather ἐσφραγίσμ<εθ>α δειγμα), unfortunately it is not verifiable through the image then presented in Guéraud's publication and today it is difficult to solve as the find belongs to the Cairo Museum (No. 88756). It seems, however, that the considerations of the A. at p. 114 are well-founded and that therefore two separate sample jars for each boat have been prepared for safety, with the load of the two joint hulls being considered a homogeneous unit. Moreover, the papyri show that even for a single boat, more sample jars could be prepared (Zilliacus, *Aegyptus*, 19th, p. 62, ll. 13-14 and 32-34; with the observations of O. Guéraud, *op.cit.*, pp. 108 and 114).

⁶⁴ An accurate list of shipwrecks with archaeologically ascertained cargo of cereals in J. Salido Dominguez, *El transporte marítimo de grano en época romana. Problemática arqueológica*, Escuela Espanola de Historia y Arqueologia en Roma- CSIC, Braga 2013, pp. 141 ss. (<http://digital.csic.es/handle/10261/84500>).

⁶⁵ Typically in the Hellenistic age, small river boats (250, 300, 700 artabe). Large boat could exceed 10,000 artabe and even as much as 18,000 artabe (H. Hauben, 'Les propriétaires de navires privés engagés dans le transport de blé d'état à l'époque ptolémaïque', *APF, Beiheft 3, Akten des 21. Intern. Papyrologenkongress*, Berlin, 13-19.8.1995, Stuttgart u. Leipzig, 1997, pp. 437). For the maritime vessels of the second century. A.D., P. Bingen 77 can now be used, indicating an increase in tonnage, however on average the tonnage was less than 2,500 artabe, with the exception of a hull of 22,500 and another of 7,000 artabe. See *supra* cit. nt. 9.

jars, now attested by archaeological finds. One example would be that of Pompeii, which usually reveals the nature and content of the *exemplar*, the recipient, the carrier and sometimes even the means of transport.⁶⁶ But from these finds it is impossible to infer if there was bulk transportation, in particular of wheat, which is not at all to be excluded. As the sample of wheat was intended for the use of a specific carrier, there was no reason to mention the other merchants possibly loading the same products in bulk on the same ship. The shared responsibility of the pilots and overseers of a state cargo embarked on two ships, but considered unitary, led to the record in SB VI, 9223, which mentions two ἐπίπλοοι in a sample. There was no legal formality to be respected, but only a practical necessity, which took various forms, and this allows one to add to the two short Pompeian inscriptions reported above another source that has been the subject of vast scholarly examination: CIL IV, 9591.⁶⁷ But even this *exemplar*, which although presenting a text rich in details not reported in other samples, does not clarify whether it was accompanying a bulk transport of different *vectores*. It has been noted that “from these specimens it can be deduced that many small

⁶⁶ Not. Excavations, 1946, p. 110; CIL IV, 5894 con Add., p. 725: *Ante (missum) [e]xenplar tritici / in nave C. Senti Omeri; / Ti Claudi Orpei / vect(oris)* [Wheat sample (sent) to the ship of Gaius Sentio Homer, of the carrier Titus Claudio Orpheus] and Inv. 12316: *Exemplar tritici / Plutioni Calventi C(ai) ser(vo)* [Wheat sample (sent) to Plutione, servant of Calventio Caio]; A. Varone, Paint cards and amphorae (*deigmata*), Food and flavors in and around Pompeii. Antiquarium of Boscoreale 3 February – 26 June 2005 (cur. G. Stefani), Pompeii, 2005, p. 105 e s.

⁶⁷ CIL IV, 9591: *Ante exemplar / tr(itici) m(odiorum) X̄V̄CC (quindecim milium ducentorum) / in n(ave) cumba amp(horarum) MDC (mille sescentarum) tutela Iouis et / Iuno(nis) parasemi Victoria P. Pompili / Saturi mag(ister) M. Lartidius Vitalis domo Clupeis. (vacat) Vect(ura) Ostis a(...) IIC- (duobus centesimis) sōl(ven)do / [in margine] Gratis m(odii) CC (ducenti) / S(ine) F(raude) pr(idie) Idus octobr(es).* [Sample preceding 15,200 modes of wheat transported on the cargo ship (*cumba*) under the protection of Jupiter and Juno under the banner of Victory owned by Publius Pompilius Satorus. Captain of the ship Marco Lartidio Vitale, originally from Clupea. (vacat) 2% transport fee to be paid to Ostia. (in margin) 200 free ways. Without fraud, October 14]. So according to the recent revision of J. Andreau, L. Rossi, A. Tchernia, ‘CIL IV, 9591: un transport de blé entre Ostie et Pompéi, I parte’, *MEFRA*, 129, 1, 2017, pp. 329-337 (<http://journals.openedition.org/mefra/4646?lang=fr>) e II parte, *MEFRA*, 131, 1, 2019, pp. 1 ss. (<https://journals.openedition.org/mefra/6857>), but the *exemplar* present also from the face (b) an inscription in other ink, not red (Varone, *Schede di pitture*, p. 104 n. 133; *Id.*, L’anforetta del grano, p. 20), but black, like the others on the side (a): (3. hand) *Rustico ab ...*, not taken into consideration, as it was considered relative to a reuse of the container and therefore connected to a subsequent domestic use of it in Pompeii. However, the indication to the recipient's dative, for which the sample was made, is missing. It would be Rustic, as believes J. J. Aubert, ‘Les *institores* et le commerce maritime dans l’Empire romain’, *Topoi*, 9, 1999, p. 156 (http://www.persee.fr/doc/topoi_1161-9473_1999_num_9_1_1809), based on a version of the text now overcome in the revision of J. Andreau, L. Rossi, A. Tchernia, which however does not take into account the inscription of side (b)? *Rustico* is indicated with the same black ink of the side (a). Accepting then a proposal by F. De Romanis to dissolve at line 6 la *a(...)* in *a(ccipienda)* and a solution of M. Della Corte [Pompei, Scoperte epigrafiche (Reg. I, ins. VII-VIII e varie), *Notizie degli Scavi di Antichità*, serie VII, 7, 1946, pp. 110 ss. = AE, 1951, n. 165], as *S(olutio) F(acta)*, choice of Varone, Mataix e Ligios, the interpretation of the finding may be somewhat different. *Cfr.* R. Marichal, ‘Paléographie latine et française’, *Annuaire de l’École pratique des hautes études, Section des sciences historiques et philologiques*, 4, 1973-1974, pp. 521 ss.; Geraci, *Sekomata e deigmata*, p. 356; R. Zucca, ‘Nota sull’amministrazione e l’economia delle città del *Promontorium Mercurii (Africa Proconsularis)*, *Voce concordia. Scritti per Claudio Zaccaria, Antichità Altoadriatiche*, 85, 2016, pp. 304 ss.; A. Varone, *Schede di pitture*, cit., pp. 104 e s.; *Id.*, L’anforetta del grano, p. 20 e s.; E. Mataix Ferrandíz, ‘CIL IV 9591: Propuesta reconstructiva de una *locatio conductio* para el transporte de mercancías por mar’, *Ex Baetica Romam. Homenaje a J. Remesal Rodríguez*, Barcelona, 2020, pp. 787-820; M. A. Ligios, ‘CIL IV, 9591: riflessioni in materia di impresa di navigazione e di prassi commerciale marittima’, *AUPA*, LXIII, 2020 (in corso di stampa)..

anepigraphic containers (*amphorae* or jars) may have been *deigmata*, without any indication of what precise use they had been intended for”.⁶⁸

In this respect they were divided into two basic categories: the first category includes “accompanying samples”,⁶⁹ which ensure that a load was not adulterated during transport and that the product handled was exactly identical to the one that had been delivered at the departure. These control samples are the best known ones, especially for the transport of fiscal wheat or barley on the Nile - such as the leather bag of the pilot Cheremone, which succinctly indicated the nature of the product, the carrier, the place of departure and the destination, but lacked any other information.⁷⁰ Notwithstanding that, it is certain that these samples were also employed in the retail trade of solids and liquids and, above all, that they were used for the transport of fungible goods of multiple carrier merchants carried out in bulk within the same ship, or for the control of a product *eiusdem generis* to be rendered on arrival.

The second category of *exemplaria* or δεῖγματα are the ‘tasting samples’ - which today we would say were sent for publicity purposes - to make known to potential buyers a product stored some distance away, but also on the ship at the quay. These samples meant that the ship did not have to dock the ship or pay import duties before any transaction was made. These numerous samples did not bear the name of the recipient in the dative, such as the one found in Arles that promoted the Albano wine from Valerius Proculus, available in a hundred and forty *dolia* from sixty jars (*sexsagenaria*), to circulate them on the market following the reception of any orders.⁷¹ According to Djaoui, it is also possible that the multiple Baetican oil jars found in the ports of Arles, Fos (fourteen specimens), Rome or Ostia, were *exemplaria*,⁷² sometimes used for tasting, sometimes to go with a cargo. Because these jars are often devoid of *tituli picti* or graffiti, it is difficult to distinguish their use with certainty.

It must be considered that the writing did not always specify its use by the indication, sometimes signed, of the recipient. The sample sealed with the stamp of the transporter, now

⁶⁸ G. Geraci, *Sekomata e deigmata*, p. 356 nt. 48; Andreau, Rossi, Tchernia, *CIL IV, 9591: un transport*, p. 11 e nt. 40.

⁶⁹ So Andreau, Rossi, Tchernia, *CIL IV, 9591: un transport*, p. 7.

⁷⁰ O. Guéraud, *Deux documents relatifs au transport des céréales*, cit., pp. 62 ss. Reported text *supra* in nt. 59. Guéraud notes that, it's not about barley directly sent to Alexandria by the nomo memphite, but to the metropolis of the nomo. The vagueness of the indication *ex nomo memphite* could indicate that not been possible to indicate the exact origin of the various collection villages and this could have been useful in re-using the same container for other matches from other locations of the same nomo.

⁷¹ D. Djaoui, N. Tran, ‘Une cruche du port d'Arles et l'usage d'échantillons dans le commerce de vin romain’, *MEFRA*, 126, 2, 2014 (<https://journals.openedition.org/mefra/2549>).

⁷² D. Djaoui, ‘Découverte d'un pot mentionnant la société des DDCaecilii dans un contexte portuaire situé entre 50-140 apr. J.C., (découverte subaquatique à Arles, Bouches-du-Rhône, France)’, *Atas do II Congr. Intern. da SECAH*, Braga, 2013, II, Porto, 2014, pp. 161-178. For Fos see F. Marty, ‘Aperçus sur les ceramiques à pâlaire du golfe de Fos, Vivre produire et échanger : reflets méditerranéens (a cura di L. Rivet, M. Sciallano)’, *Mél. Bernard Liou*, Montagnac, 2002, (Archéologie et Histoire Romaine, 8), p. 211; for Rome and Ostia C. Pavolini, *La ceramica comune. Le forme in argilla depurata dell'antiquarium*, Roma, 2000, Instituto Poligrafico e Zecca dello Stato (Scavi di Ostia, 13), fig. 34; 58 e 75.

destroyed, could have been entrusted to a supervisor - the δειγμακαταγωγός of fiscal transport - but also to a private carrier. Therefore, the sample was returned to the personal custody of an ἐπίπλοος, who on arrival could have directly handed it over to the recipient for inspection, without any need for specific writings relating to other *vectores* or to the quantity, which in any case had to be determined even in the accompanying documents, which, as has been said, were drawn up in triple copy ('receipts of delivery').⁷³

A rudimentary 'receipt of delivery' has been identified, graffitied with some errors and spelling infelicities, on a Lamboglia 2 amphora from the 1st century BC., heavily resined inside and found in 2006 in the service channel of the island of St. Francis of the Desert in the northern lagoon of Venice.⁷⁴ In fact, there are at least five names written in the genitive indicating ownership,⁷⁵ obviously those of the recipients, each of them followed by the number of amphorae to be delivered on its expedition, and finally the respective weight of each batch. That finding shows the transport on a single vessel of a batch of goods shipped by several merchants, most likely “38, 35 tonnellate di carico, alle quali corrisponderebbero più di 30.000 litri di vino” acquired “direttamente dal/dai produttori vinicoli, stabilendo il prezzo in base alla sua qualità e quantità, concordando inoltre che il prodotto venisse consegnato in anfore (e cioè vinificato)”.⁷⁶

However, without any indication of the differences in the type of goods to be returned to the different merchants, it must be considered that the cargo was homogeneous, that is, all of the same quality, and differing only in the number of amphorae and in the weight.⁷⁷ The persistence of the quality of a cargo *eiusdem generis*, which we could consider transported almost in bulk, could have been guaranteed by one or more accompanying samples, even if the product was not loaded in a way that it was mixed with that of others, as in the case of ships with *dolia*⁷⁸, but they were before with the same wine indifferently returned, it could have been guaranteed by one or more accompanying samples.

⁷³ *Supra* nt. 55.

⁷⁴ A. Toniolo, 'Una 'bolla di consegna' per un trasporto di anfore di I sec. a.C.', *Quaderni di Archeologia del Veneto*, XXIII, 2007, pp. 183-187; G. Cresci Marrone, 'Insediamenti indigeni della *Venetia* verso la romanità', *Antichità Altoadriatiche*, 68, 2009, pp. 213-215; G. Cresci Marrone, 'Novità epigrafiche da *Iulia Concordia*', *Quaderni di Archeologia del Veneto*, XXVII, 2011, pp. 212-214; Id., *Anfora iscritta da San Francesco del Deserto, Brixia. Roma e le genti del Po, Un incontro di culture. III-I sec. a.C.*, Brescia, 2015, p. 302. I thank P.A. Gianfrotta for indicating the discovery to me.

⁷⁵ Based on a recent re-reading of the reperto (Cresci Marrone, *Anfora iscritta*, p. 302). “Le particolarità paleografiche nella resa delle lettere appaiono cronologicamente compatibili all’uso primario del contenitore come veicolo di derrate e non a un suo successivo riutilizzo” (Toniolo, *Una 'bolla di consegna'*, p. 184).

⁷⁶ Toniolo, *Una 'bolla di consegna'*, p. 186.

⁷⁷ The need measurement and weight control see Geraci, *Mensura, pondus e the probatio*, pp. 159 ss.; Id., *Sekomata and deigmata*, pp. 347

⁷⁸ Purpura, *Il χειρέμβολον e il caso di Saufeio*, pp. 149 ss.

Once again, finally, as in the case of the anepigraphic *exemplaria*, there is a non-systematic, occasional use of writing, to determine that poorly tracked notes were engraved on an ordinary object, by people whom due to their demanding profession adapted with difficulty to the indispensable needs of written documentation.

Palermo, 25 February 2020

Gianfranco Purpura