



**Wine dealers and their networks in Roman and
Byzantine Egypt. Some remarks**

Dorota Dzierzbicka

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Wine dealers and their networks in Roman and Byzantine Egypt. Some remarks*

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1. Introduction

Trade can be perceived as a network of merchants, a system connecting sellers to buyers and sellers to sellers. Textual sources from Egypt speak of different groups of individuals engaged in trade –major entrepreneurs, middling traders and peddlers, importers and exporters, retailers and wholesale dealers. Examination of documentary evidence permits one to explore the specifics of connectivity within groups of traders, their dependency patterns and support systems, to assess whether these relations tended to be static or dynamic, and to observe the flow of information between markets. The existence of merchant associations also influenced trade, as they may have played a part in building regional trade networks and enhanced interaction between centers.¹

Among the various trade specializations attested in papyri from Roman and Byzantine Egypt, wine merchants are an important group for the study of trade networks, as they appear fairly frequently in the sources and represent an important branch of the ancient economy. Papyri can be used to trace patterns of wine trade in the *chora* of Egypt to ascertain the place of both urban and rural dealers within the trading system. The available material brings information on wine dealers' social connections, professional ties and position in society. However, the topic of social networks is too vast to address in this short paper; on the pages that follow I concentrate, instead, on questions related to geographic connections: What is the geographic and chronological distribution of texts referring to wine merchants and what does this distribution tell us? What can we say about the geographic connections of wine merchants? Where were they based? Where did they operate? And lastly, what patterns did their operations follow?

2. Sources

Information on the wine trade can be found in many documents dated from the first to the seventh centuries. However, sales and purchases of wine do not always entail the involvement of merchants. The focus of my interest are networks of traders who were specialized professionals; therefore, for the purposes of this study I omitted references to sellers, buyers and transporters of wine who are not explicitly referred to as merchants.² The

* Research on wine dealers is part of the author's project "Egyptian Bazaar. A Study of Trade Networks in Egypt from the 1st century BC to the 7th century AD", carried out by the author at the University of Warsaw and funded by the National Science Centre, Poland ("Sonata 6" funding scheme, UMO-2013/11/D/HS3/02461). I am grateful to the anonymous reviewers for their insightful comments, which helped improve this paper.

¹ Fikhman (1994); Carrié (2005); Gibbs (2008); Venticinque (2016).

² Also for this reason I leave out other evidence of trade, for instance amphorae and non-documentary texts. The trouble with distribution patterns of ceramics is that they cannot be simply equated with trading activity, and a discussion of other factors, such as redistribution and reuse, would be necessary. For an outline of the problem,

main criterion in text selection, therefore, was the presence of Greek terms for wine merchant: οἰνέμπορος, οἰνοπώλης, οἰνοπράτης and οἰνοκάπελος. In addition to these explicit mentions I also included texts referring to persons identifiable as wine merchants thanks to data from archives, specifically the archive of Heroninos and the small archive of Tesenouphis the wine merchant.³ In total, the search combining the above criteria yielded 118 texts.⁴

The texts belong to a variety of categories and are mostly business letters, accounts, registers and contracts. Some provide relevant information on the places of wine merchants' activity. For instance, P.Diog. 13 and 14 from Alexandria, dated to 141, are tax exemptions for supplying wine to be presented at tollgates in Schedia and Iouliopolis. On the order of the prefect, Alexandrian merchants were to deliver 300 *dipla* of wine from Hermopolis Parva and 396 *dipla* from Anthylla to the city in order to provision it. Both villages were located in the Alexandrian *chora*. In Anthylla, the wine was purchased from two other merchants. From another second century text, P.Grenf. II 61 (Arsinoites, 197/198), we learn that an inhabitant of Psenyris received wine from an *oinemporos* from the village of Aphroditis Berenikes Polis. P.Flor. III 314 (Enseu, 428) is a contract between a potter and a wine merchant (*oinoprates*), both said to be from the village of Enseu in the Hermopolite nome. The potter is to provide the merchant with empty jars, which were undoubtedly intended for wine.

Not all texts show the merchants in the context of their wine business. Sometimes we see them in other situations, attested as owners of houses or holders of land, paying taxes or receiving grain. For instance, SPP XXII 179 is a list of money payments mentioning a wine merchant named Paboukas. The text is from Soknopaiou Nesos, therefore it is possible to identify this locality as the wine merchant's base of operation. P.Oxy. I 43v (Oxyrhynchos, after 16 February 295), in turn, mentions the house of Parion the *oinemporos* in Oxyrhynchos. Finally, in P.Cair.Masp. II 67163, a loan contract dated to 30 November 569, Aurelios Georgios *oinoprates* from Lykopolis is seen lending money in Antinoopolis, about 100 km away. Although not directly related to wine sales, such documents also offer information on the merchants' operating range, connections and mobility.

3. Chronological and geographic breakdown of the texts

Not all papyri mentioning wine merchants are as informative as the examples provided above. Overall, looking at individual texts our evidence remains anecdotal and the conclusions tend to be impressionistic. Many texts refer to wine dealers in obscure contexts or fail to provide a context at all. Nonetheless, some information on the presence of wine merchants can be derived from the study of the collected documents as a group. For instance, one can compare mentions of wine dealers in particular centuries and regions. Did the variations in the number of texts concerning wine dealers occur because in certain periods or regions there was more or less wine-dealer related activity or simply because more papyri are preserved from one period or region and fewer from another?

In order to answer this question, it is first necessary to compare the number of papyri mentioning wine dealers from each century and region and their relative changes to the total number of preserved papyri. The assumption in this case is that if the number of wine dealers

see Wilson (2009) 229-237. Due to spatial constraints, also non-documentary texts remain outside the scope of this paper, but see, e.g. Kislinger (1999).

³ For the archives see Rathbone (1991) and Schubert (2007).

⁴ The complete table and the Gephi databases used to construct the visualizations are available at Dzierzbicka (2018) WineDealersData. RepOD, <http://dx.doi.org/10.18150/repod.6244760>.

remains constant, the fluctuations in the number of attestations will follow the fluctuations in the total number of papyri. The century was used as the basic unit, and the dates were weighed to give proper representation to more broadly dated texts.⁵ The Trismegistos database was the source of data on the total number of papyri preserved from each century.⁶ Comparison of the two datasets was possible after calculation of median values for both groups and establishing the distribution of the data in relation to the median. The distribution of values in both datasets is shown on the graph in fig. 1.

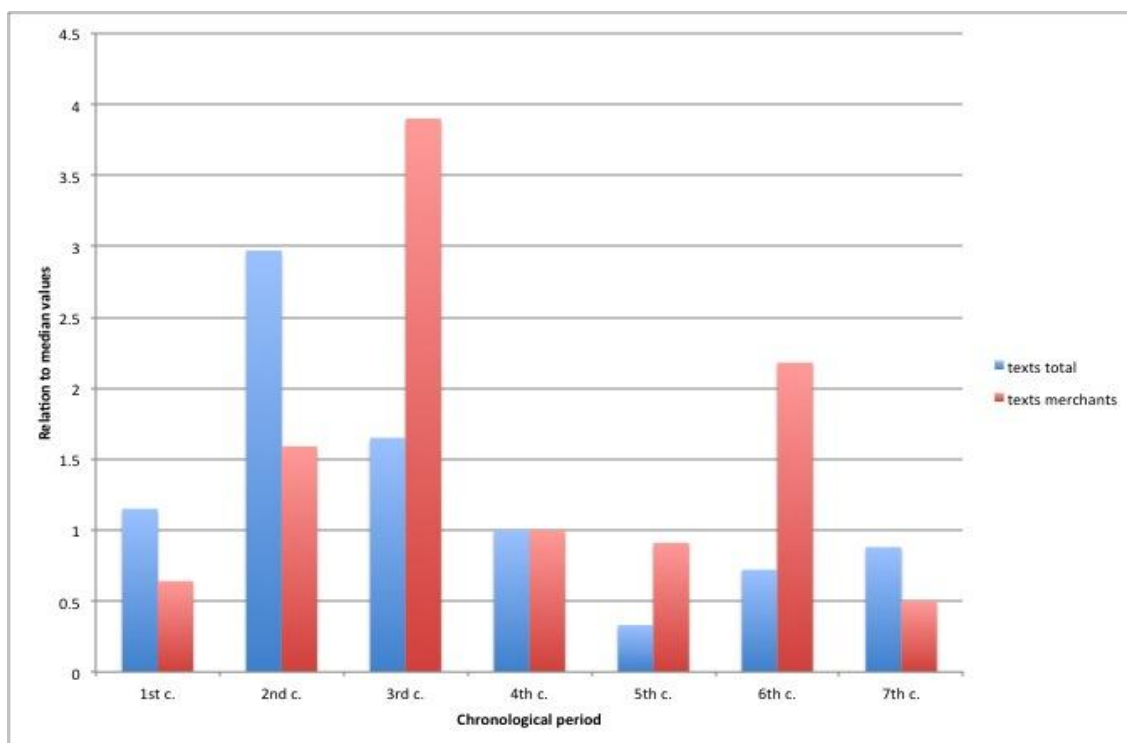


Fig. 1. Chronological distribution of papyri mentioning wine dealers vs total number of papyri preserved from each century. Distribution of values in relation to the median.

The graph in fig. 2 shows the number of papyri mentioning wine dealers divided by century. The number of papyri mentioning wine dealers rises steadily from the first to the third century, then there is a drop and again a rise from the fifth to the sixth century, followed by a decrease in the seventh century. The correlation between the changes in the total number of papyri and in the set of papyri mentioning wine dealers is fairly low, with the Pearson correlation coefficient at 0.3.⁷ This means the two sets of variables do not tend to change together. The number of wine merchant attestations is low compared to the total in the first, second, fourth and seventh centuries, given the number of papyri preserved from these periods, but is relatively high in third, fifth and sixth centuries. In the third century, the archive of Heroninos is partly responsible for the increased number of attestations of wine dealers. However, in the fifth century and especially the sixth century, we could be looking at

⁵ Van Beek / Depauw (2013).

⁶ <http://www.trismegistos.org/tm/search.php>, Provenance: Egypt, date: strict.

⁷ The Pearson Product Moment Correlation is a measure of correlation that permits one to assess the strength of an association between two sets of variables and to show this association in linear form. The coefficient is a number between +1 and -1, where +1 means a perfect positive association, 0 means no association, and -1 means a perfect negative association. See, e.g. Canning (2014) 75-78.

Wine dealers and their networks

a true relative growth in their number, since no similar corpora of texts tip the scale in the body of evidence for wine dealers for this period.

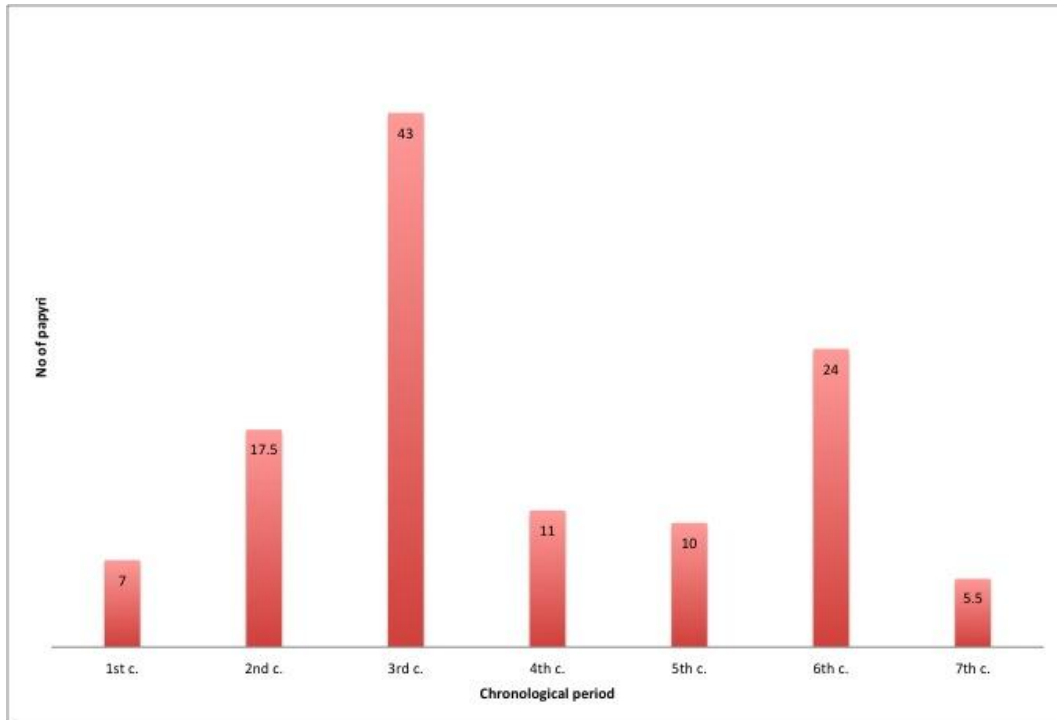


Fig. 2. Chronological distribution of papyri mentioning wine dealers, by century (weighed dates).

Scrutiny of the origin of the texts mentioning wine dealers also requires a comparison to the overall relative number of papyri from the same localities (fig. 3). In each case, the number of papyri mentioning wine dealers is proportional to the total number of papyri from the same localities (Pearson correlation coefficient = 0.7), with one exception: the Theban area. There are also no attestations of wine dealers' activity of any kind further to the south. Of course the fact that wine dealers are not attested south of Thebes does not mean that wine was not produced or consumed in that region. It is possible that south of Thebes the model of distribution of wine was different than in the north. However, it also cannot be excluded –and indeed seems more likely– that wine merchants' activity was concentrated in the major wine-producing areas, especially Middle Egypt and the Fayum, and they were indeed fewer in number in the south.

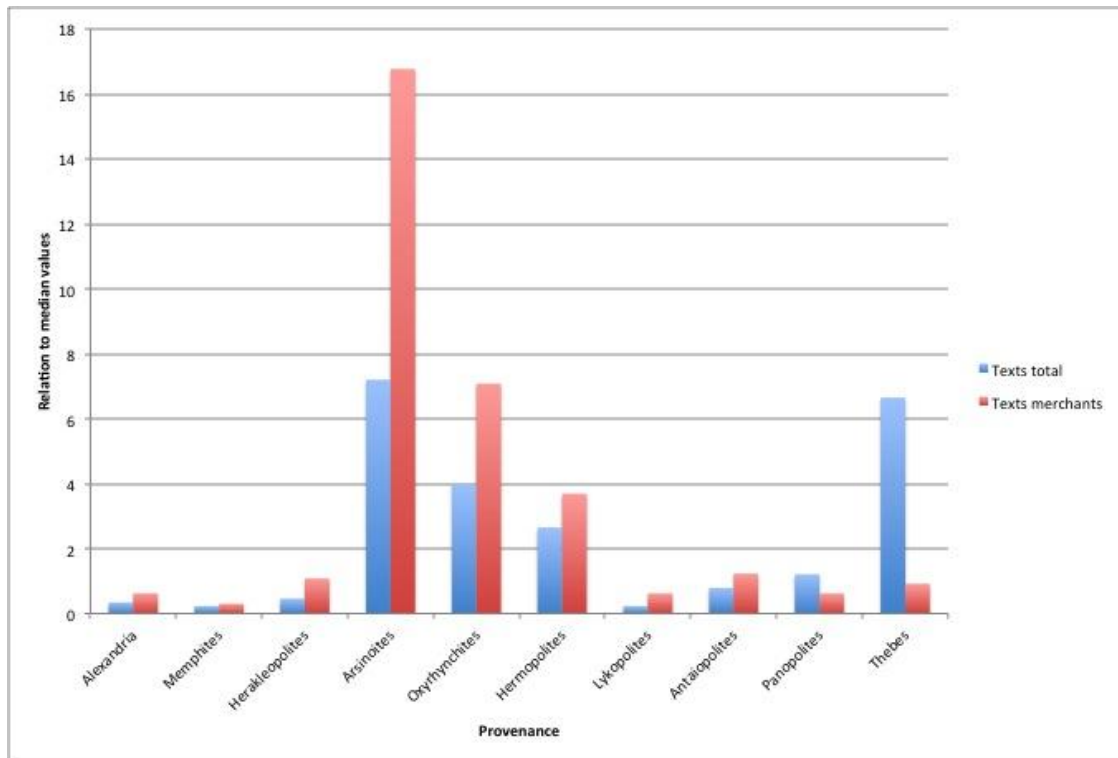


Fig. 3. Geographic distribution of papyri mentioning wine dealers vs total number of papyri preserved from each region. Distribution of values in relation to the median.

It is interesting to set the above conclusion against a communication network model for Egypt constructed by Richard Alston on the basis of contacts attested in Oxyrhynchos papyri of the Roman and Byzantine periods.⁸ According to this model, localities within the Oxyrhynchite nome accounted for 40-50% of all contacts attested for the city. Of non-Oxyrhynchite contacts, ca 45% was with localities within a radius of ca 90 km from the metropolis. 17% of non-Oxyrhynchite contacts fell within a zone extending from 90 km to ca 230-260 km to the north and south, while Alexandria accounted for ca 25% of all contacts outside the nome. The remaining ca 13% of the contacts outside the Oxyrhynchite nome were with the rest of Egypt and locations abroad. Alston's communication network model shows the same general trend as the evidence for connections of wine dealers: little or no contact with the area south of Panopolis and a focus on Middle Egypt and Alexandria. As in Alston's network model, the wine dealers' connections are focused on the urban center and much of their contacts are within the nome, but communication with other centers up to 200 km away is well attested.

The scrutiny of the chronological and geographic distribution of the texts shows that the region responsible for the fourth-seventh centuries peaks in wine-dealing activity is Middle Egypt and the Fayum. Notably, these are also areas where massive amphora production takes place in the same period (see fig. 4). The manufacture of Middle Egyptian amphorae (primarily Late Roman 7), ubiquitous in the Nile Valley in the Byzantine period, has been associated with the intensification of wine-producing activity in this area.⁹

⁸ Alston (1998) 184-186.

⁹ Dixneuf (2011) 154-173; Wickham (2005) 760-764.

Wine dealers and their networks

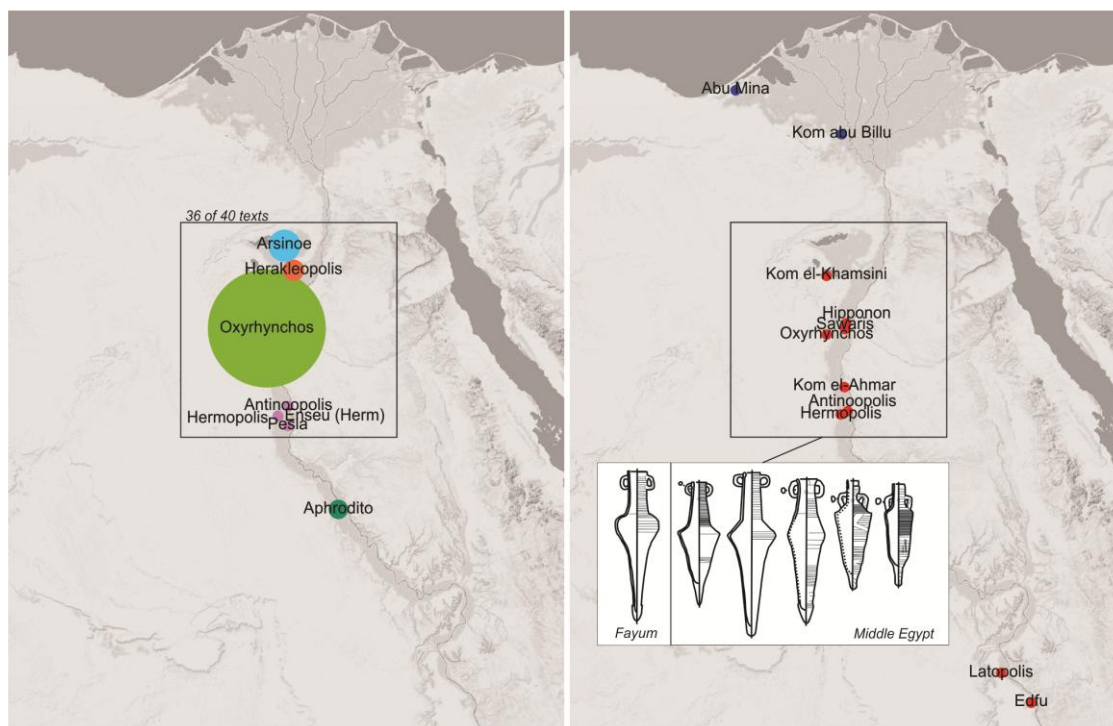


Fig. 4. Geographic distribution of papyri mentioning wine dealers vs sites of amphora production in the 4th-7th cent. Amphorae and kiln sites after Dixneuf (2011).

One also might be tempted to associate the presence of wine merchants in the Fayum and Middle Egypt of fourth to seventh centuries with the emergence of great estates, such as the Apion *oikos* at Oxyrhynchos. After all, in the third century *oinopolai* were certainly involved in the distribution of wine from the Appianus estate.¹⁰ However, wine merchants are hardly attested at all in the Apion archive and they do not seem to have played any role on the estate.¹¹ We cannot be certain that other great estates followed the Apion model (wine was not a cash crop on the estate) but we also have little evidence in favour of connections between major landowners and wine dealers in Late Antiquity.

Apart from owners of great estates, however, a possible group of wine merchants' suppliers in fourth-seventh centuries in Middle Egypt are the lessees of vineyards –people who were burdened with disposing of the wine and who needed cash to pay their rent and taxes. Wine merchants may have served as links between them and the market and as providers of ready money. If this hypothesis holds true, then the higher number of attestations of wine merchants in the fourth-seventh centuries in Middle Egypt and Fayum could be associated with the presence of large rent-seeking estates, but in an indirect fashion.

4. Geographic distribution of wine dealers

The geographic distribution of texts that mention wine dealers is not tantamount to the wine dealers' area of operation. In order to study the latter, we must turn to the content of the papyri and find localities mentioned in the texts as being associated with the activities of wine dealers. In total, the mentioned 118 texts provide references to 54 different localities.

¹⁰ Rathbone (1991) 287-293.

¹¹ Hickey (2012) 141-145.

Plotting these locations on a map proves problematic because aside from the well-known cities and archaeologically attested sites, the location or indeed even the name of many of them is unknown. For this reason I chose, instead, to show these localities and the connections between them on visualizations generated using Gephi network analysis software.

Network analysis, a method borrowed from sociology and mathematics, has recently gained importance in papyrology.¹² The method is rooted in graph theory, from which it adopts techniques for identifying, examining and visualising patterns of relationships. The main goal of network analysis is to detect and interpret patterns of relationships between subjects of research interest, for instance individuals, objects or communities. Network analysis software visualizes data in a manner that can offer a new perspective on information provided by textual sources. A visualisation consists of a set of points which represent the smallest units in the analysis, and a set of lines between these vertices which represent their relationships. When dealing with papyrological data we must keep in mind that this tool essentially represents the state of our sources and reflects scholarly practice rather than reality. In our case, however, the visualizations can help represent geographic connections when the location of places mentioned in texts is unknown.

On the Gephi visualizations presented in this paper, the locations mentioned in the texts are represented as nodes differentiated by colour and size according to the number of attested events related to wine merchants (for instance, location X stands for NN, a wine merchant, pays a tax in village X). The lines, or edges, connecting the different-sized dots are the attested connections between localities (for instance, a line between localities X and Y stands for NN, wine merchant of village X, sells wine in village Y). Even though these are visualizations, not maps, the known localities are plotted roughly according to their relative position in real life to make the visualizations more intuitive. This was done at the cost of emphasizing the connectedness of particular centers because this is not of primary importance for the present paper. Localities whose names are lost or omitted in the documents were given code names, for instance a nameless vineyard in the Oxyrhynchite nome is represented as ‘A (Oxyrhynchite)’.

Figures 5a-d and 6a-c present the attested locations divided by century. Looking at the visualizations, several observations can be made. First of all, Oxyrhynchos is attested as a place of wine merchant activity from the first to the sixth centuries. Second, activity in Thebes is small but consistent from the first to the third centuries. The bulk of the data concerns the second and third centuries. In the second century, the most active circuits are located in the Arsinoites, around Oxyrhynchos and in the vicinity of Alexandria. In the third century, the Arsinoite and Oxyrhynchite circuits are still the best attested, but activity can also be seen further to the south, in the Hermopolite and Panopolite. In the sixth century the best attested nodes are Oxyrhynchos and Arsinoe.

¹² Since Ruffini (2008) there have been other successful applications of network analysis in papyrology, e.g. Broux (2015).

Wine dealers and their networks

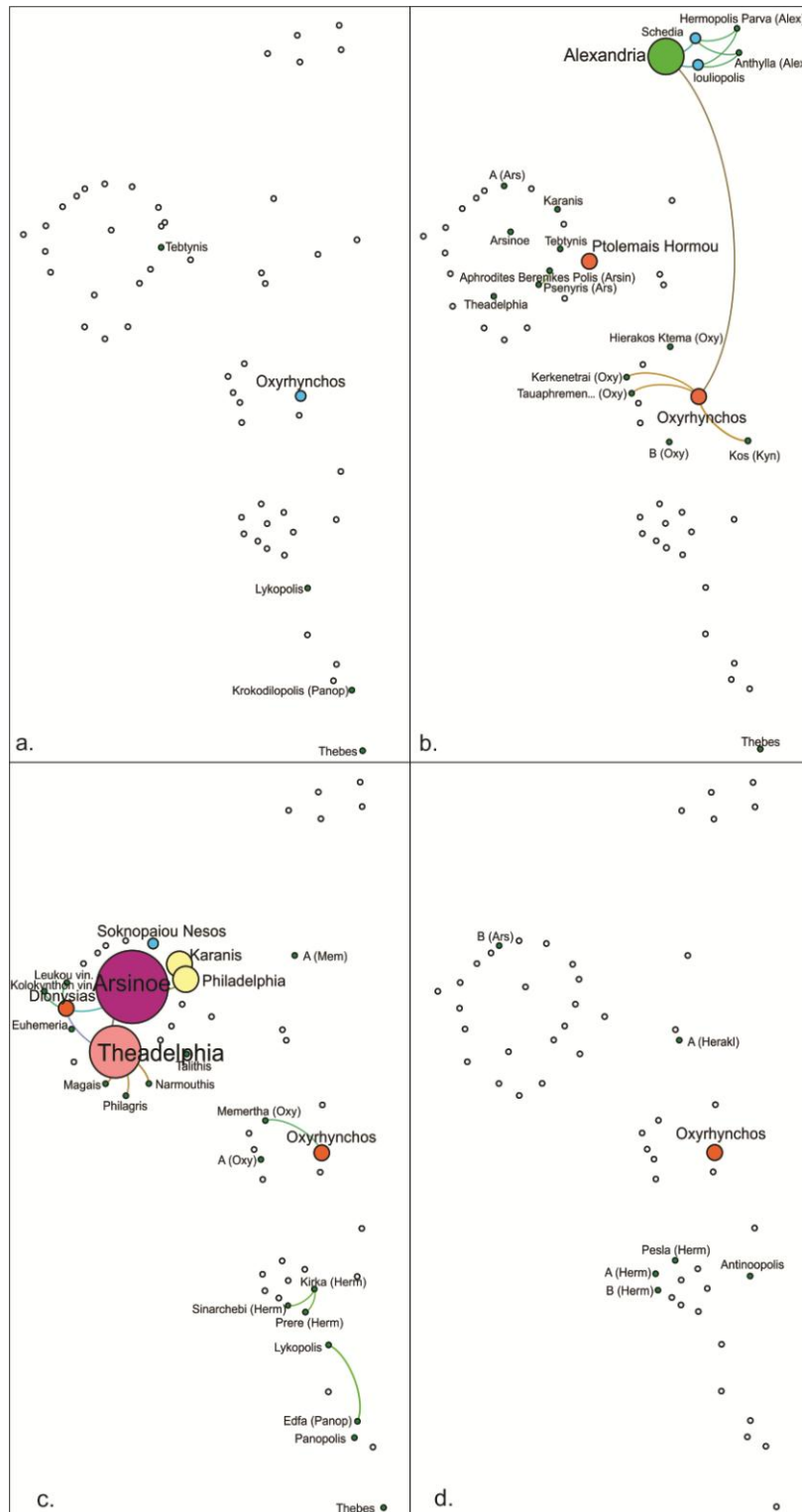
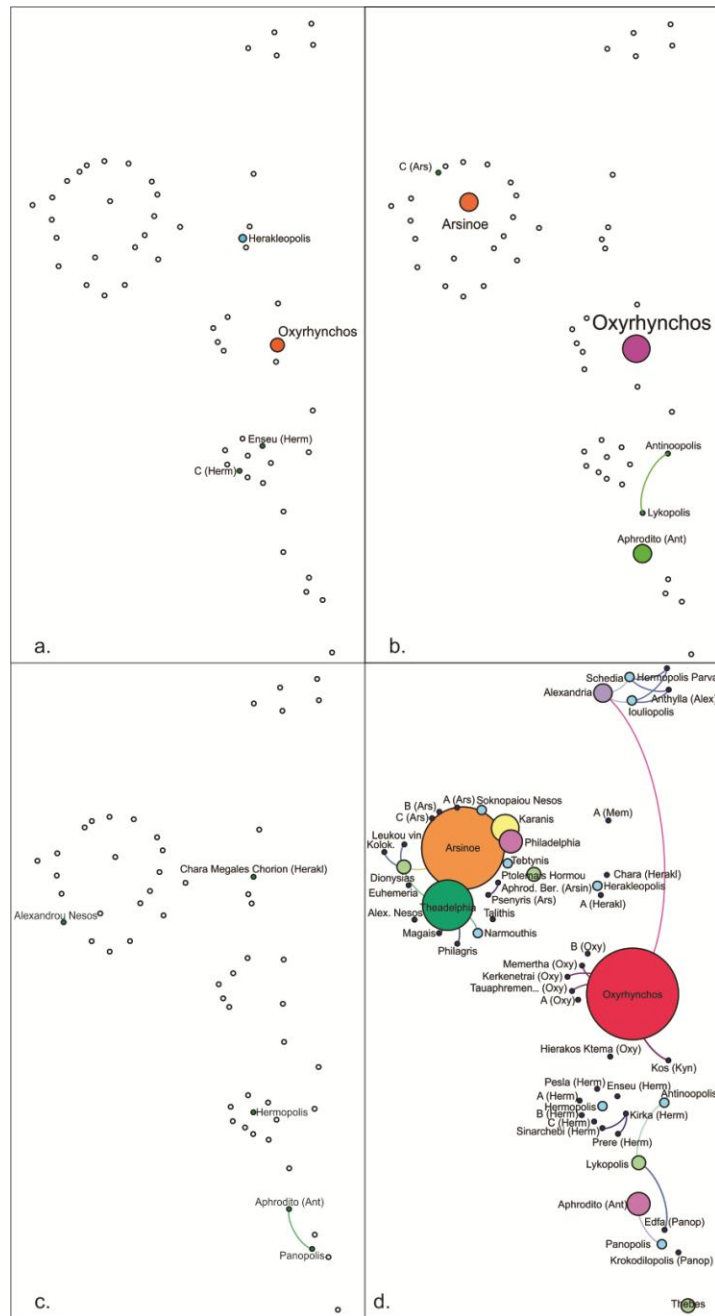


Fig. 5a-d. Locations of wine merchant activity attested in papyri from the 1st (5a), 2nd (5b), 3rd (5c) and 4th cent (5d).

Figure 6d is a cumulative diagram presenting all 54 localities in order to offer a more general view and trace recurring patterns. Among the mentioned localities 11 are nome capitals. The most frequently attested localities are Oxyrhynchos and Arsinoe, for which we have over 10 events. 4 events each are attested for Alexandria, Hermopolis and Lykopolis, and three or less for metropoleis of the Herakleopolite and Panopolite nomes, as well as Thebes. Seven of the localities are Fayum towns: Karanis, Tebtynis, Narmouthis, Ptolemais Hormou, Soknopaiou Nesos, Dionysias, and Theadelphia. Theadelphia is likely overrepresented due to the archive of Heroninos. As many as 33 localities are smaller villages, hamlets and vineyards, and two are customs posts near Alexandria.

Fig. 6a-c. Locations of wine merchant activity attested in papyri from the 5th (6a), 6th (6b) and 7th cent (6c).

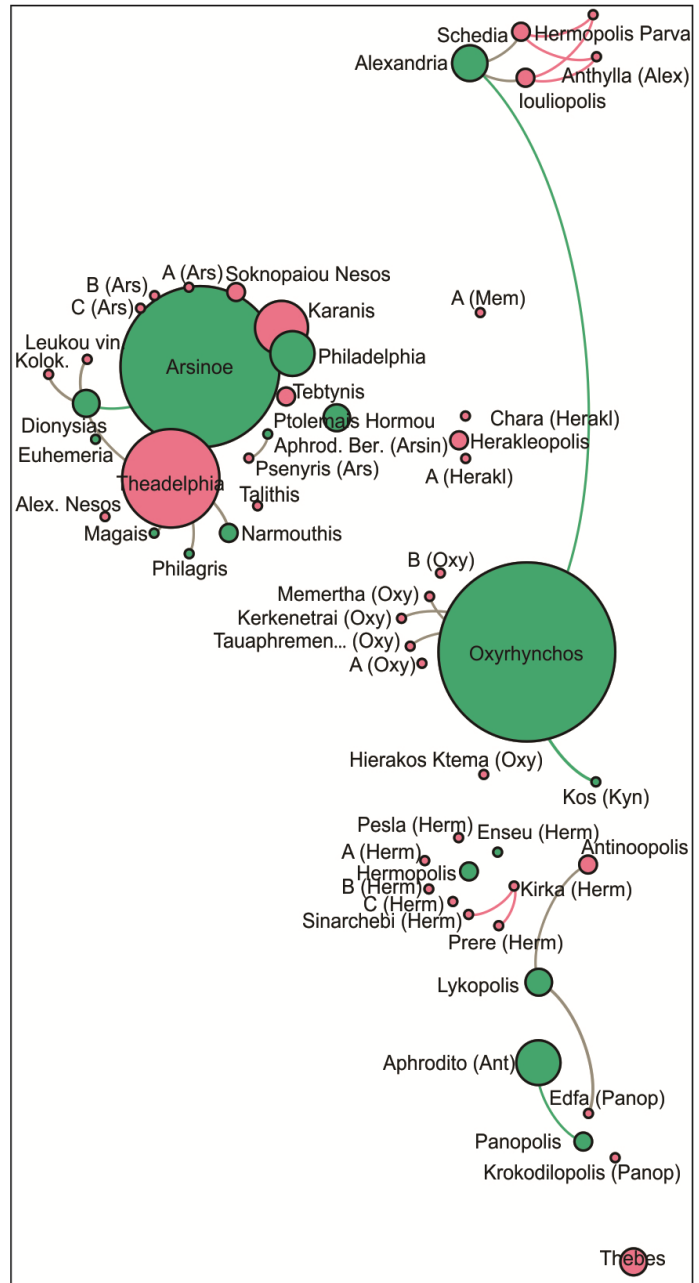
Fig. 6d. Cumulative diagram presenting all places of wine merchant activity attested from the 1st to the 7th c.



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The attested localities can also be divided into places where the wine dealers are based and those in which they are attested only doing business (fig. 7), in green and in pink respectively. Dominic Rathbone, in his study on the archive of Heroninos, noted that the wine merchants associated with the Appianus estate were city-based and village-based.¹³ The collected documentary evidence on wine merchants from beyond the Fayum shows that this division can perhaps be applied more generally. Thus, besides Arsinoe and Alexandria attested in the archive, we have city or ‘town’-based wine merchants in Oxyrhynchos, Hermopolis, Lykopolis, Aphrodito and Panopolis. As for village-based wine merchants, in addition to the large villages in the Arsinoite, most of which are also attested in the archive of Heroninos, we see merchants based in the villages of Ptolemais Hormou and in Enseu, Hermopolites.

Fig. 7 Cumulative diagram showing attested localities as base locations (green) and places of activity (pink) of wine merchants



¹³ Rathbone (1991) 287-293 and 300-305.

5. Networks of connections

Some of the collected texts permit one to map the wine dealers' networks of connections: contacts with partners, agents, clients, administration, etc. (fig. 8). Each connection, marked on the visualizations as an edge, or line, connecting the nodes that represent localities, is an instance of such a contact.

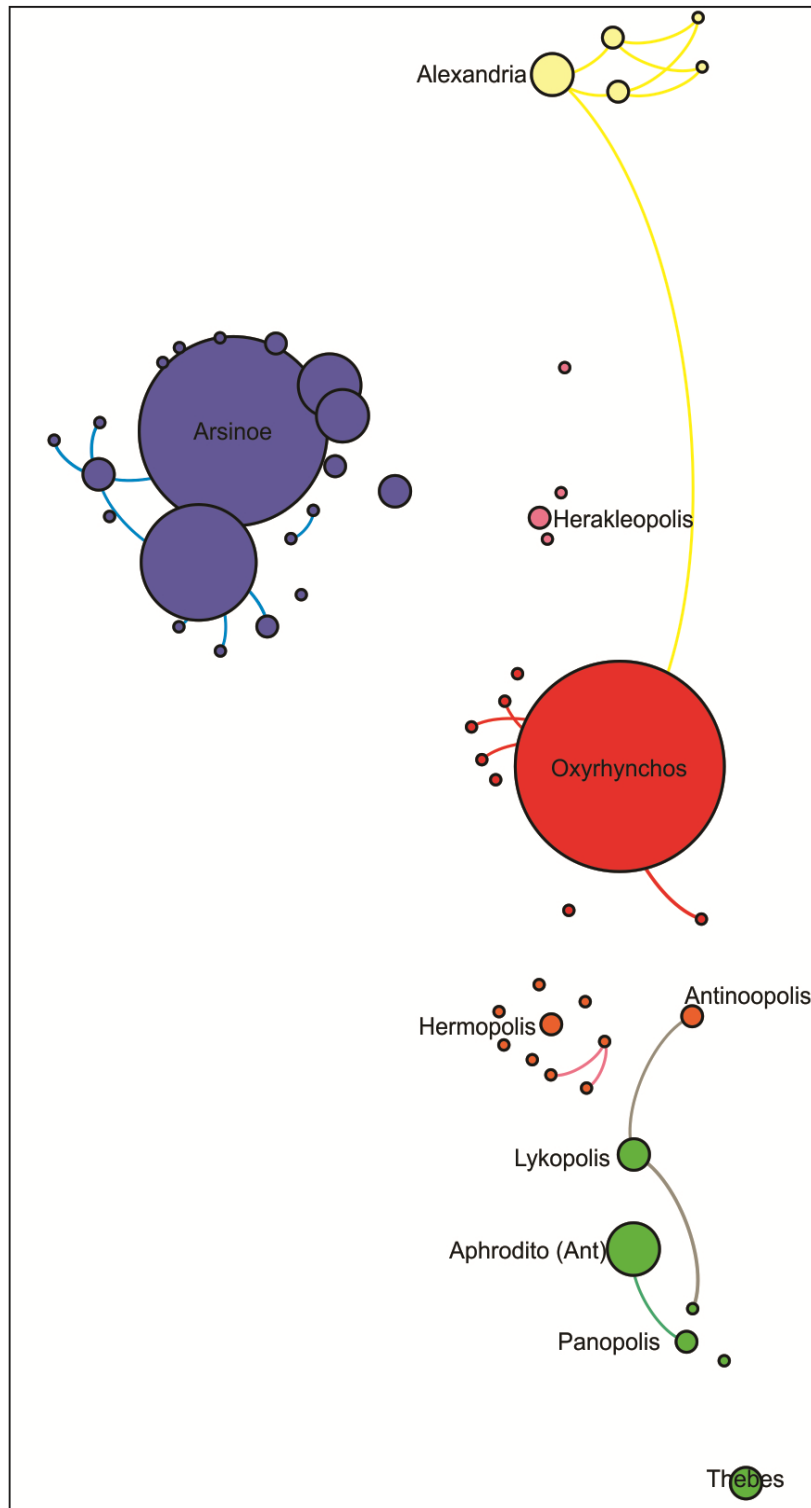


Fig. 8 Connections between places of wine merchant activity and detectable circuits. Cumulative diagram

Several economic models have been applied in the analysis of Egyptian trade networks.¹⁴ The first is the localised trade network model, in which trade is confined to villages and their immediate vicinity. In this model, several villages trade with each other while urban communities may also be part of the network, but do not play a dominant role. The second model is a nome network model incorporating villages and the district capital, which plays a dominant role. Most goods are in this case traded and produced locally for consumption within the nome. The third is the regional trade network model, in which goods are exchanged across several nomes. It focuses on the system's urban communities. The fourth model is a long-distance trade network, in which goods are traded extensively outside the region.

The connections attested in the documents concerning wine merchants seem to correspond to three network models: The regional model is attested in connections between nomes on two levels: capital to capital or other city, for instance Lykopolis to Antinoopolis (P.Cair.Masp. II 67163), or metropolis to village, like Lykopolis to Edfa in the Panopolite (SB X 10270). Ties corresponding to the localized and nome models are also attested. The local connections are from metropolis to village, like from Oxyrhynchos to Memertha (P.Oxy. XXXI 2576), from village to village, like from Kirka to Sinarchebi in the Hermopolite nome (P.Bad. II 26), or from village to vineyard, like between Dionysias and Leukou *ktema* (P.Flor. II 196). We can try to delineate several such local circuits: most definitely Arsinoite and Oxyrhynchite, likely Alexandrian and Hermopolite, as well as for lack of a better word, a Southern circuit or cluster of smaller, regional circuits. Although data is too scarce to say this with certainty, it seems that some regional circuits may have been closer to the nome model, like the Oxyrhynchite one, and others were more diffused, closer to the localized model, like the Arsinoite circuit.

6. The time-and-space versus the terminology of wine merchants

A broad look at the collected dossier of papyri mentioning wine merchants allows one to glimpse differences in the usage of terms used to designate wine merchants in Greek papyri. In turn, the terms themselves provide some information on the level of connectivity and mobility of this group.

As mentioned at the beginning, the main designations in use from the first to the seventh century are *oinemporos*, *oinopoles* and *oinoprates*. The term *oinokapelos*, common during the Ptolemaic period, is practically obsolete in Roman times. The term *oinemporos* is attested in the second and third centuries, mostly in the Oxyrhynchite, but also in Alexandria and vicinity. The term *oinopoles* is in use in the first three centuries of Roman rule and is attested mostly in the Arsinoites. It is the term of choice in the archive of Heroninos, which shows *oinopolai* maintaining connections on a local level, within the nome. The term *oinoprates* is the sole designation of wine merchants from fourth century onwards. It seems to denote both wholesale and retail dealers, even though the attested *oinopratai* have few business dealings outside their place of residence. Nonetheless, two connections are attested and they are both interregional.

Thus, it appears that only the terms *oinemporos* and *oinopoles* function contemporaneously and therefore merit closer investigation to seek possible differences in meaning. Documents mentioning *oinemporoi* are informative in this respect. In SB X 10211. l. 5 (1st-2nd cent.), *oinemporoi* buy wine wholesale directly from a producer and his mother –possibly in

¹⁴ Used and discussed in Alston (1998) 169-170. For problems with defining local, regional and long-distance networks, see e.g. Alcock (2007) 686-692.

advance, since earnest-money is involved— The same is the case of P.Erl. 93 (2nd-3rd cent.), in which two *oinemporoi* buy almost the entire lot (1214 of 1262 jars). This may also be an advance purchase, as no price is mentioned in the account.

Buying wholesale need not imply very large amounts: In P.Oxy. VII 1055 (Oxyrhynchites, 235 or 267), Herakleides the *oinemporos* purchases 203 jars from one vat and 100 from another. In turn, in P.Grenf. II 61 (Psenyris, 197/198) Tapiamis buys wine from an *oinemporos* for 800 drachmas, so the amount must have been about 100 jars. In the aforementioned P.Diog. 13 and 14, the numbers are relatively small as well (300 *dipla* and almost 400 *dipla*). These smaller purchases are comparable in size to batches handled by some *oinopolai*, for instance in P.Bad. II 26. ll. 5, 7, 9, 13 and 17 (Hermopolite, 293), where Silbanos, Hatres and others buy 100-120 jars of wine each. Thus, what seems to have distinguished *oinemporoi* from *oinopolai* were their wholesale dealings, though ‘wholesale’ does not necessarily mean ‘large quantities’. The ‘wholesale’ nature of the dealings of *oinemporoi* seems to consist in purchase of the entire crop in bulk. The latter is indicated, for instance, by the author of P.Oxy. LIX 3989. ll. 11-13, who commends his addressee for selling the wine wholesale (ἐμπ[ο]ρ[ι]κῶς) as opposed to retail, by the *kotyle* (κοτυλίξειν). The number of jars in a bulk purchase, however, depended on the size of the vineyard, and such plots were usually small.

Oinemporoi also seem to have had the largest number of business dealings outside their place of residence and the most trans-regional connections. In P.Oxy. XXII 2342. l. 3 (Oxyrhynchos, 102), *oinemporos* Pasion, possibly from the Herakleopolites or Kynopolites, has a partner in Oxyrhynchos and travels to Alexandria. In PSI X 1123 (Oxyrhynchos, 152), Pokrouris *oinemporos*, presumably from Oxyrhynchos, sells wine from Kerkenetrai and Tauaphremen, localities in the same nome, to another wine merchant, who operates in Alexandria and is to transport the wine to the city. In SB X 10270 Nr. 49. l. 4 (Edfa, 229) Aurelioi Herodes and Herakleides, two *oinemporoi* based in Lykopolis, have dealings with Aurelios Paniskos from Edfa near Panopolis, ca 100 km away.¹⁵ Meanwhile, no inter-regional connections are attested for *oinopolai*.

The pattern observed for *oinemporoi* also seems to apply to other compounds with *-emporos* (e.g. *linemporos*, *eriemporos*, etc.). The tendency to purchase bulk amounts is observable in documents of the guild of salt merchants from Tebtynis, who deal jointly with *emporoi*, possibly in order to meet the required quota (P.Mich. V 245. ll. 30-31; Tebtynis, 47). As for the geographic scope of operations, customs regulations in P.Oxy. I 36 (= W.Chr. 273) refer to *emporoi* carrying their cargo on ships (ll. 8, 9 and 14, possibly also 3 and 5). Although it is not certain whether we are dealing with an internal or external toll tariff, we are certainly looking at trans-regional and not local trade in this case.

7. Conclusions

To sum up, differences in the number of attestations of wine merchants in various regions throughout the Roman and Byzantine periods are, to a degree, correlated with the changing numbers of papyri preserved from a given century and region. However, we can see an increase in the number of wine merchants in the third, and later fifth-sixth centuries compared to other centuries. This could be connected with an overall increase in wine production in these periods and, indirectly, with the development of large estates.

¹⁵ The same applies to the *emporos* attested in T.Varie 3 (not included in the dossier because the merchant is not specifically referred to as a wine dealer). The batch of wine transported by river numbers 5826 *knidia*. See Morelli (2010).

The places of wine merchants' activity are limited to the Nile Valley north of Thebes. A possible explanation of this is that they were active primarily in the production zones and even though wine production is attested also further south both in papyri and in archaeological evidence from the vicinity of Edfu and Aswan, it was clearly on a smaller scale than in Middle Egypt and Fayum.

Wine merchants are based primarily in cities, but also in villages. The decisive criterion in this case may have been the presence of consumers. As for the places where they do business, it is their own hometowns, wine-producing localities (villages, vineyards, etc.) and towns where the owners or managers of the vineyards resided. Papyri often refer to them as wine merchants of town or village X and show them receiving sums of money or consignments of wine for sale.

Wine merchants' connections spanning different localities are not as commonly attested as one would expect, but some connectivity patterns can be indicated. The general impression is that of local circuits linked by trans-regional connections. Overall it appears that the down-the-line exchange model dominates: merchants operated from their bases and worked along established lines of connections, but more complex or long-distance transactions required the cooperation of several individuals engaged in the trade.

Where the documents show us actual shipments of merchandise, they mention individual transactions carried out by merchants from point A to point B. This seems to imply the dominance of wine merchants operating regular routes and dealing with familiar partners rather than, for instance, working as itinerant middlemen sailing up and down the Nile. The latter pattern is, in fact, completely unattested. And for good reason: we see wine merchants borrowing and lending money, signing agreements for the advance purchase of wine and cooperating with owners and managers of large estates, or working with the administration. In order to engage in all of the above interactions they needed to be well integrated into the local society. They had to establish local ties that led to building trust and acquiring information vital for their business dealings. The fact that connections in the presented network are few and rather short-distance shows, in my opinion, this focus on local communities. Paradoxically, it is precisely the absence of intricate, long itineraries that shows the complexity of Egypt's wine trade. What the documentary evidence offers us are only isolated links, but these links formed a web that connected countless individuals into a trade network.

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