

A critical review of De Callatay, 2005. The Graeco-Roman economy in the super long-run: lead, copper, and shipwrecks.

Name

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Abstract:

De Callatay (2005) provided an in-depth analysis of methodologies that can extend the analysis of shipwrecks of the Greco-Roman period. In this analysis, the author has provided the seeds of a system that could be expanded using new technologies into paths to conduct further analysis. The following paper provides an analysis of work by De Callatay, 2005. The author investigated methodologies that may be used to measure the Graeco-Roman economy “in the super long-run: lead, copper, and shipwrecks”. This paper is particularly interesting and maybe extended using the advances in weather pattern analysis, nanotechnology and isotope analysis. Furthermore, using statistical methodologies and extensions into ice core samples from alternative locations that may be cross-correlated and statistically modelled, further information concerning the economic activities of ancient peoples may be developed.

Scholarly Review

De Romanis, F. 2015. 'Comparative Perspectives on the Pepper Trade', in F. De Romanis and M. Maiuro (eds.), *Across the Ocean: Nine Chapters on Indo-Mediterranean Trade*. Leiden: Brill, pp. 127–150.

This work by De Romanis was presented in order to analyse the Roman Pepper trade. It was published following the compilation of materials from the conference presented at Columbia University in March 2011. The results of the conference, “A Tale of Two Worlds: Comparative Perspectives on Indo-Mediterranean Commerce”, led to the collation of a study documenting the Mediterranean Pepper trade that was compiled through an analysis of both sixteenth-century source evidence and first-century Roman trade documents. Frederico De Romanis begins with a comprehensive analysis of the sixteenth-century Portuguese pepper trade.¹ Then, using an analysis of existing source documents from the period, the author recreates an economic model of the ship inventories and trade impediments. While open to debate provides an unparalleled analysis of the Indian and Roman Pepper trade.

The author has combined fragmentary evidence of trade tally data obtained from the Muziris Papyrus and uses this compared with sixteen-century trade practice.² The evidence on the papyrus is suggestive that people would be exchanged for a rate of 24 (Morelli) or 6 Egyptian drachmae per mina.³ The paper is conservative, preferring to use the lower figure resulting in a cargo manifesto of up to 554 metric tons of pepper exchanged. Pliny (N.H. 12.14) is noted to state that the first century Pepper price consisted of four denarii per Roman pound (329 grams). Pliny's price is similar enough in value to 24 Egyptian drachmae per mina to match the price presented by Morelli.⁴

The author creates a comparison based on the differing commodities complementing Roman and Portuguese pepper cargoes, noting that while Portuguese pepper cargoes were supplemented with other spices that the most voluminous commodity following Pepper that was carried of Roman ships was the leaves of tamāla (malabathron) that was sourced from the Ganges valley.⁵ Although the author ignores the differences in ancillary cargoes, it is noted that many commonalities existed between the Roman and Portuguese trade. The analysis of ships

¹ De Romanis 2015, p. 127-133.

² Ibid. p. 135.

³ Ibid. p. 136.

⁴ Note, there is further scholarship that links the Roman pepper trade to Malabar, see: Prange, S.R., 2011. 'Measuring by the bushel': reweighing the Indian Ocean pepper trade. *Historical Research*, 84(224), pp. 212-235.

⁵ De Romanis 2015, p. 134.

is extended using primary sources such as the *Periplus Maris Erythraei* that documents large ships used in the merchant trade to Limyrike.

The analysis would require that Roman merchant ships of a size equivalent to later Portuguese galleons existed and were regularly used. De Romanis blends a combination of fictional tales from Philostratus that noted very large ships with existing scholarship documenting the extensive size of 'Egyptian' Indiamen, noting that some of these held an amount of cargo equivalent to several ships in tonnage. The correction in the reading of the Muziris papyrus noted by De Romanis is argued to be significantly different from the values traded at the time for other commodities, including ivory.⁶ When then compared using the analysis of sixteenth-century trade cargo, the author's proposed quantities seem sound.

A further assumption would necessitate similar export levels and consumption rates to those found in sixteenth-century Europe. Given these conditions, a total merchant Navy consisting of between only ten and twelve ships would be required. Such vessels would be engaged in a continual commercial-scale conveyance dedicated to the Pepper trade.⁷ De Romanis continues with the argument that Roman trade in the first century CE involved a similar if not parallel path to that of the Portuguese traded during the first decades of the sixteenth century.⁸ Of note, De Romanis demonstrates how pepper production in the Indian Highlands may be assumed to follow a similar development path and production level in both periods.⁹

In the sixteenth to the eighteenth century, pepper production was formed through a predominantly localised system. Each household produced sufficient for its consumption but sold any extra to purchase foodstuffs treating Pepper as currency. This is supported by scholarship into the hunter-gatherer peoples in the production that would have existed. It is noted that production is thus stimulated through external demand.¹⁰ De Romanis uses the accounts of Philostratus and fra Paolino to demonstrate the position that the early modern age engaged in prodigious exchanges and trade in Pepper that required large seagoing vessels and involved the forest dwellers of the Western Ghats.¹¹

Although constructing such an economic trade system is feasible, some scholars have raised concerns and provided alternatives.¹² Early scholarship in the trade routes with India and

⁶ Ibid. p. 135-139.

⁷ Warmington, Eric Herbert. *The commerce between the Roman Empire and India*. Cambridge University Press, 2014.

⁸ De Romanis 2015, p. 142. See also Goitein, S.D., 1954. From the Mediterranean to India: documents on the trade to India, South Arabia, and East Africa from the eleventh and twelfth centuries. *Speculum*, 29(2, Part 1), pp.181-197.

⁹ De Romanis 2015, p. 144.

¹⁰ Morrison, K.D. and Junker, L.L. eds., 2002. *Forager-traders in south and southeast Asia: long-term histories*. Cambridge University Press.

¹¹ De Romanis 2015, p. 142.

¹² Warmington, 2014.

Rome focused on the cotton trade.¹³ This cotton trade has been the subject of later scholarship; however, the majority of the trade is noted to come from areas vastly distinct from India.¹⁴ Although extensive evidence of trade between India and Rome exists, the determination of what produce was exchanged remains difficult.¹⁵ However, as Matthew Fitzpatrick has noted, even if Roman concepts of trade do not match Adam Smith's notions, they undoubtedly follow an economic process.¹⁶ The author's own scholarship has continued providing further evidence to support his thesis.¹⁷

The first-century Periplus of the Erythraean Sea contains reports from its Greek writer stating that the majority of vessels continue to the "Strand" in southern India, opening the possibility that this trade was not for Pepper but could have been for cotton.¹⁸ (P.M.E. 54/ 59). Other questions remain unanswered, such as whether customs were imposed in Rome or Alexandria. Additionally, Dutch and Portuguese trading ships were designed to traverse the southern African Cape, requiring a design that allowed them to survive longer and more rigorous voyages. Consequently, this presents a difference between the trade routes and the design of ships that needs to be explored further.

The chapter provides an excellent introduction to the commercial practices in Rome, looking at the Pepper trade. Although the evidence is insufficient, this provides an ideal framework and hypothesis to investigate further. The argument presented is inferential but remains tied to unproven premises. Although warranting significant further investigation, the thesis of the paper remains unproven. However, pepper and aromatics had become necessities for the Roman way of life.¹⁹ The author has noted that due to the secrecy surrounding the trade of other goods such as pearls and precious stones, it has come to be challenging to assess the overall economic impact of either the Roman or Portuguese trade with India.

¹³ Mann, J.A., 1860. On the Cotton Trade of India [with Discussion]. *Journal of the Royal Asiatic Society of Great Britain and Ireland*, 17, pp.346-387. This

¹⁴ Wild, J.P., Wild, F.C. and Clapham, A.J., 2008. Roman cotton revisited. *Vestidos, Textiles y Tintes. Purpurae Vestes II. Universitat de Valencia: Valencia*, pp.143-7.

¹⁵ Suresh, S., 2004. *Symbols of trade: Roman and pseudo-Roman objects found in India*. Delhi: Manohar.

¹⁶ Fitzpatrick, M.P., 2011. Provincializing Rome: the Indian Ocean trade network and Roman imperialism. *Journal of World History*, pp.27-54.

¹⁷ De Romanis, F., 2020. *The Indo-Roman Pepper Trade and the Muziris Papyrus*. Oxford University Press.

¹⁸ McLaughlin, R., 2010. *Rome and the distant east: Trade routes to the ancient lands of Arabia, India and China*. Bloomsbury Publishing.

¹⁹ Tomber, R. and Simpson, A., 2008. *Indo-Roman trade: from pots to pepper*. Duckworth. p. 16.

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