

West meets East: At the Borders of the *Oikoumenē* and Beyond

Lecture 12 – The Chronology of the Trade

CLAH6007

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Nature of the Evidence

- Lack of statistical data giving precise figures for volume of trade (see **Pliny *NH* 6.26.101 and 12.41.84**).
- Archaeological evidence offers evidence to provide a least a general sense of broad periods of peak and decline.
- Numismatic evidence more controversial.

Two Common Theories

- Roman trade continuing in strength at least until mid-late second century or third century:
 - Antonine Plague (AD 165 into 180's)
 - Unrest in Egypt, and around Koptos region
 - Caracalla's treatment of Alexandria
 - Upheaval of "third century crisis".
- Roman trade peaking in Julio- Claudian period:
 - High proportion of Julio-Claudian denarii and aurei found in India.

Muziris Papyrus (*P. Vindob G 40822*)

- A document dated to mid-second century AD.
- Verso mentions a consignment of ivory, cloth(?) and nard weighing 3.5 tons and valued at (after a small tax deduction) 1,154 Egyptian talents and 2,852 drachmae (c. 7,000,000 sesterii).
- Rathbone (2000) – sloppily written, careless grammar and syntax - standard boiler plate contract?
- Lack of comparable documents.

“Gangetic nard, 60 containers, whose value is likewise being reckoned at 4,500 silver drachmas per container.... 45 t.”

The *PME* and the “Alexandrian Tariff”

- *Periplus Maris Erythraei* (*PME*) – written by mid-first century Greek speaking merchant from Egypt.
- “Alexandrian Tariff” – Imperial rescript issued by Marcus Aurelius and Commodus (*Digest* of Justinian) – mentions large number of goods subject to *vectigal* (tax/duty) at Alexandria – large number of Indian goods mentioned, but not exclusively.
- 20 plant products mentioned in the Alexandrian Tariff only nine of these appear in the *PME*.
- Neither list can be taken as absolute indicator of all plant products traded in either period, nor can it imply anything about volume.

Red Sea Fleet

- Naval fleet of Aelius Gallus – expedition to Arabia Felix (26/25 BC) – See Strabo 16.4.22.
- Lucius Longinus who served on the Hippokampos (Sea-Horse) a dispatch galley (*tesseraria*) at Myos Hormos – AD 93 (see P.004 – Van Rengan 2011).
- Inscription on Farasan al-Sughra - *vexillatio* of the *legio II Traiana Fortis* - AD 144.
- Inscription on Farasan al-Kubra - *legio VI Ferrata* – c.110-120 AD? (see L'Anne Epigraphique 2004 – 1643, and 2005).
- Protecting against pirates, controlling shipping.



Palmyrene Merchants and the Red Sea

- Inscription at Koptos (see right).
- Greek and Palmyrene inscription at Denderah (c.AD 160-212), Julius Aurelius, who belongs to a community of merchants and *naukleroï*.
- Wooden tablet with Palmyrene text at Hoq on the island of Socotra (early third century AD.

“Zabdalas son of Salmanos, also (called ?) Aneinas, of the merchants of the Red Sea from Hadriane Palmyra, who has set up anew from the foundations the Propylaea and the three stoas and the chambers, entirely from his own funds, his colleagues the merchants of Hadriane Palmyra (set this up) to their friend, for his friendship and distinction.” - ***I. Portes 103.***

Archaeological Evidence

Archaeological Evidence: Roman Goods

- More evidence in certain regions – Indian subcontinent and Southern Arabian Peninsula, less in East Africa – consistent picture.
- **East Africa:**
 - Heis (Munda of the *PME?*), glassware dates to first-half of first century AD.
 - Peak Mediterranean contact at Heis, Damo and West Hafun (Opone of the *PME?*) is first century BC-AD.
 - Adulis - most Roman pottery date from first century BC-AD (principally Dressel 2-4 and Eastern Sigillata A); gap and Late Antique heyday.

Archaeological Evidence: Roman Goods

- **Southern Arabian Peninsula:**
 - Qana' (Kane of the *PME*), most Mediterranean pottery (Koan, Egyptian, Dressel 2-4, Terra Sigillata) from “Lower Period” - mid-first century BC to late first century AD.
 - Khor Rori (Moscha Limen of the *PME*), Mediterranean glassware mostly dates to mid-first century BC and the early-second century AD.
 - ed-Dur (on the coast of the Persian Gulf), Roman material of last quarter of the first century BC and the end of the first century AD.

Archaeological Evidence: Roman Goods

- **Indian Subcontinent:**

- Most at sites amphora Dressel 2-4 - those that have been analysed in more depth often central-southern Italian in origin (Black Sands Fabric) – see Nevasa, also Pattanam (Muziris) – generally first century BC-AD.
- Important sites like Arikamedu see decline in Roman goods by second century AD.
- Begram – Numerous glassware, bronze-ware, and earthenware Mediterranean items, first century AD in date – glassware parallels at Arikamedu, ed-Dur and parallels with finds at Taxila and Tillya Tepe.

Roman Red Sea ports

- **Berenike:**

- Peak in prosperity in first century AD, followed by sharp decline at beginning of second.
- Coin finds at Berenike - 41% date from Augustan period and first century AD (particularly coins of Claudius, Nero, and the Flavians) - only 9% date to the second and third century AD.

- **Myos Hormos:**

- More mixed picture, but general signs of peak of activity in first century AD, especially in harbour area.
- Many buildings falling into disuse in second century AD.
- Majority of datable finds, or finds in datable contexts show peak between Augustan period and early second century AD.

Eastern Desert of Egypt

- Archaeological evidence from the *praesidia* on Koptos to Myos Hormos route mainly Flavian onwards.
- Inscriptional evidence at stations on Koptos to Berenike route particularly Flavian, Sikyat, Aphrodito, and Didymoi (see also *ILS* 2483).

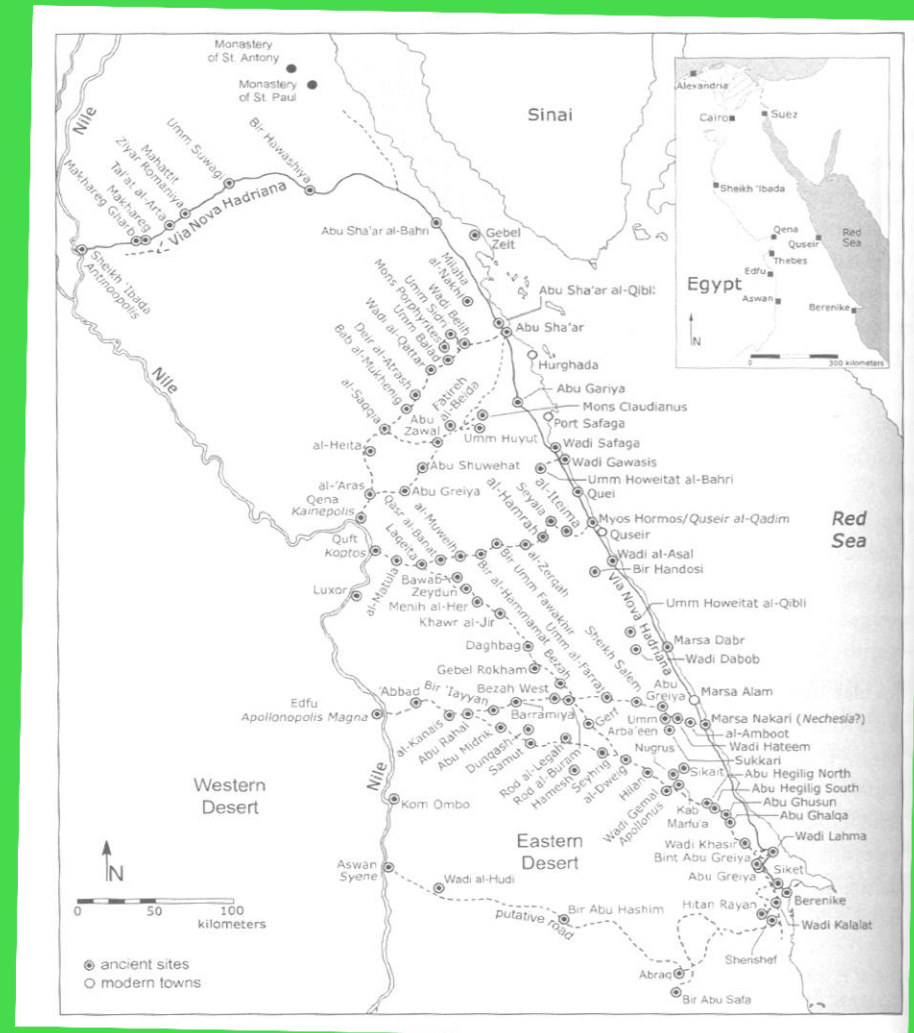
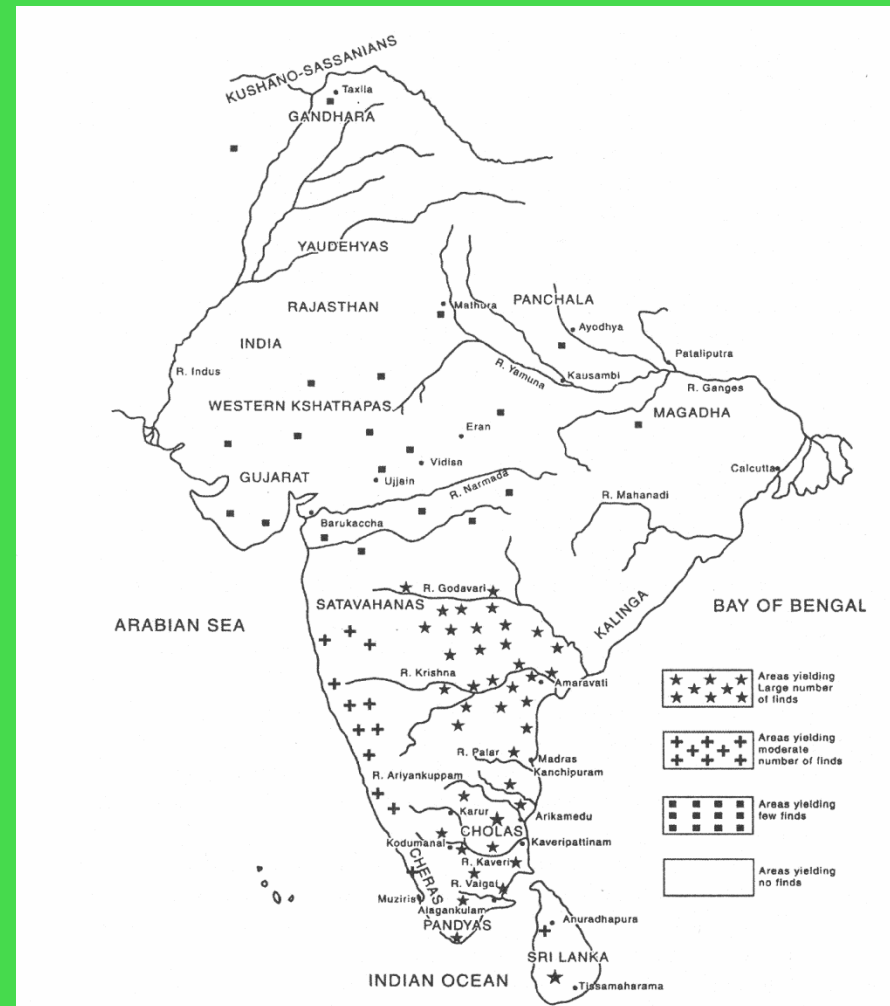


Image from Sidebotham (2011)

Numismatic Evidence

Roman Coins in India

- Roughly 6,000 denarii and 1,550 aurei (not including Kottayam and Parur hoards).
- Finds of these denarii and aurei spread over 130 sites, 170 reported finds.
- Major concentrations around the Coimbatore district (Tamilnadu) and around the Krishna River area (Andhra Pradesh).



Interpretation the Coins

- About 70% of all identifiable denarii and aurei Julio-Claudian, almost all denarii pre-AD 64.
- Idea of Julio-Claudian export peak – Tchernia (Italians exporting denarii), De Romanis (high levels of expenditure among Julio-Claudian elite).
- Condition of coins - circulation of coins within Roman Empire before export or within India?
- Coins not as continuous supplies but exported due to specific events – AD 64 reform, withdrawal of older coinage from circulation (AD 107) – MacDowall and Burnett.
- *PME* refers to export of gold and silver either as wares or as *dēnarion* (denarius) and *khrēma* and *khrēmata* (“money”).

“Batch-Pattern” Hoards

- Hoards at Kaliyampattur, Pudukottai, Nandyal, Eyyal, Kumbalam, Nagavarappupadu, Nedumkandum, and Valuvally, show patterns of worn to increasingly goods coins later emperor minted under.
 - E.g. Kaliyampattur hoard - worn Augustan to Claudian aurei, less worn Neronian aurei, alongside find condition coins of Domitian.
 - 42 coins from Valuvally hoard have die-links (one die duplicate of Hadrian and 20 of Antoninus Pius).
- These eight hoards represent 1118 coins (about 72% of the aurei, excluding Kottayam and Parur hoards).
- Portion of an original trade consignment?

Peak Period of Coin Exports?

- Two groups:
 - Four hoards first century AD (first group)
 - Four hoards early-mid second century (second group).
- 3:2 ration between first and second group.
- 66% Julio-Claudian, 2% Flavian, 32% from the Nervan-Antonines.
- 4:1 ration between denarii and aurei, but aurei substantial more valuable and roughly twice as heavy (pre-64 denarii, c.3.9g, aurei 8g).

Conclusions

Patterns

- Most Roman goods found across East Africa, Southern Arabian Peninsula and Indian subcontinent appear largely to be first century BC-AD (stylistically and by stratigraphic context).
- Settlement occupation patterns at Berenike and Myos Hormos show first century AD peak.
- High level of building activity in Eastern Desert in Flavian period.
- Overlap with coinage evidence – concentration of export in mid-first to early-second century AD, but continuing into mid-second century.

Explanations?

- Why an apparent peak during first and turn of second century AD, followed by decline?
 - Increasing difficulties with nomadic attacks/bandits in Eastern Desert?
 - Decline in demand in Roman society? – evidence too anecdotal to substantiate.
 - Shift to importance of other routes, especially via Persian Gulf, and riverine/overland transport in Mesopotamia? – decline therefore representing one of direct Roman participation rather than demand in Roman society.

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