

Economic History of the Ancient World illustrated by the example of Roman Amphorae I

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SEIT 1386

Economic History of the Ancient World illustrated by the example of Roman Amphorae

1. A brief introduction to the economic history of the ancient world
Development of research activities and ancient sources: contributions from the Ancient History and from the Archaeology

Why amphorae as an example of an economic history of the ancient world?
Other containers used for transport and shipping

2. What information do amphorae give?
Residues of content, painted inscriptions, types, fabrics, geochemistry
3. Case study I: transport in the western Mediterranean by the example of Mainz and its surrounding areas

What happens to the empty amphorae? Reuse and waste disposal by the example of Dangstetten, the first Roman military camp north of the Alps

4. Case study II: transport in the Eastern Alps region by the example of the southern and inner alpine regions of the later province of Noricum

Considerations concerning ancient global economy and economic regions

5. Painted inscriptions from an excavation in Roman Cologne: the largest ensemble north of the Alps

Considerations concerning the function of the painted inscriptions on Roman amphorae.

A brief introduction to the Economic History of the Ancient World

- economic and social history
- focus on literary sources
- focus on Rome and Roman Italy
- geographic and demographic questions
- population density and composition
- supply of the population by agriculture

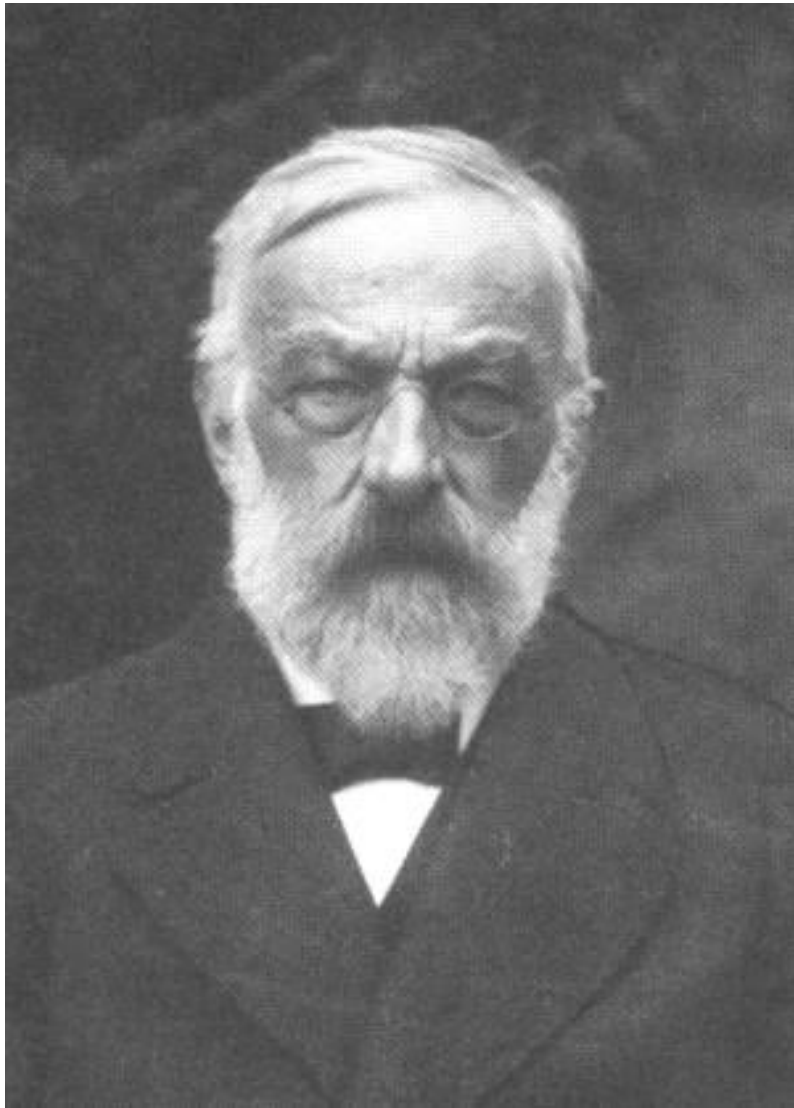
A brief introduction to the Economic History of the Ancient World

Ausdehnung und Bevölkerung des Reiches ca. 14 n. Chr. nach AUSBÜTTEL 1998, 2

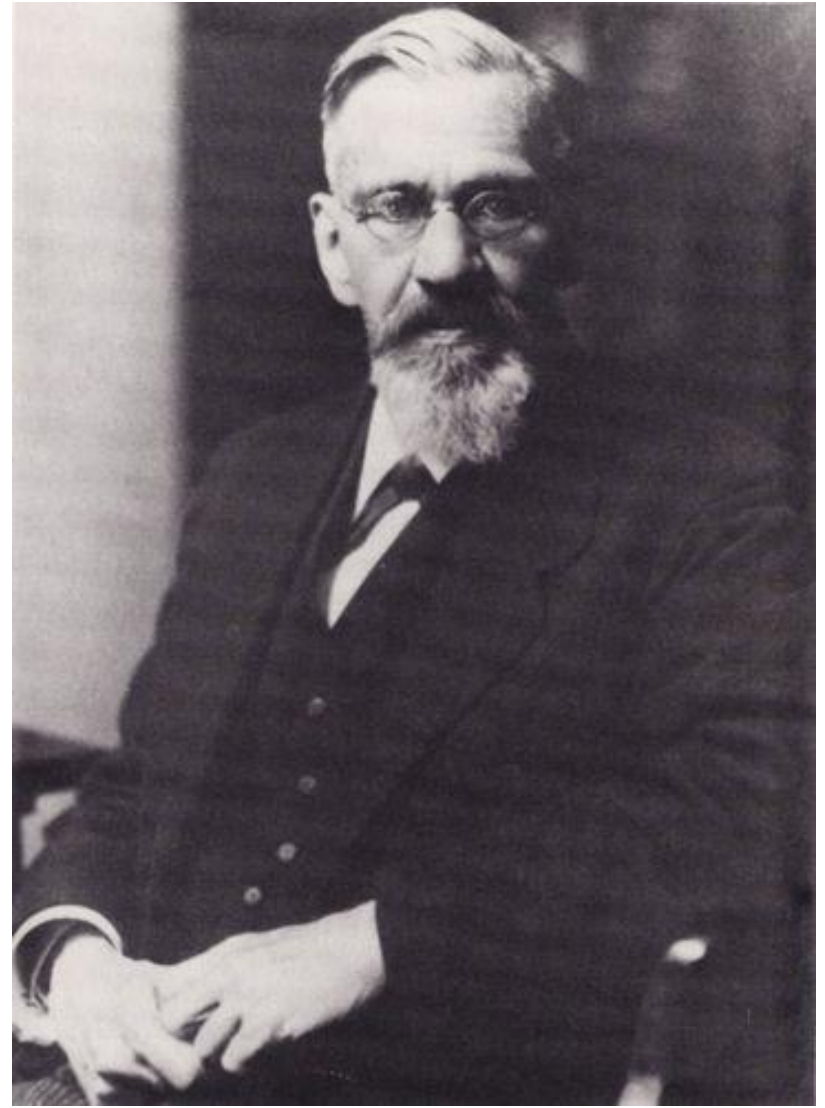
Region	Fläche in km ²	Bevölkerung in Mio		Einwohner pro km ²
		nach Beloch	neuere Schätzungen	
Europa				
Italien	250.000	6	7(-14)	24(-56)
Sizilien	26.000	0,6		23
Sardinien/Korsika	33.000	0,5		15,1
Hispanien	590.000	6		10,1
Gallien	635.000	4,9	5(-20)	7,7(-31,5)
Donauländer	430.000	2		4,7
Griechenland	267.000	3	2	7,5 – 11,2
insgesamt	2.231.000	23	23,1(-45,1)	10,3(-20,2)
Asien				
Kleinasien	547.000	13	11	20,1–23,8
Syrien	109.000	6	3–4,3	27,5–55
Zypern	9.500	0,5		54
insgesamt	665.500	19,5	14,5–15,8	21,8–29,3
Afrika				
Ägypten	28.000	5	4,75	169–178,6
Kyrenaika	15.000	0,5		33,3
Africa (Provinz)	400.000	6	3–4	7,5–15
insgesamt	443.000	11,5	8,25–9,25	18,6–25,9
Röm. Reich	3.339.500	54	45,85(-70,15)	13,7(-21)

A brief introduction to the Economic History of the Ancient World

Debate on the nature of the ancient economy



Karl Bücher („primitivists“)



Eduard Meyer („modernists“)

A brief introduction to the Economic History of the Ancient World

Debate on the nature of the ancient economy

Karl Bücher („primitivists“)

economy of Antiquity:
fundamentally different from and
much less developed than a
modern, capitalist market
economy
closed or independent domestic
economy
domestic production to meet the
immediate needs
mercantile exchange: only of
limited significance
transfer of goods only by gifts,
rapine or war
capital nearly inexistent
no developed division of labor

Eduard Meyer („modernists“)

economy of Antiquity: developed
economy
mercantile exchange
money circulation
division of labor
industrial type of production
competition to conquer export
markets

A brief introduction to the Economic History of the Ancient World

The debate on the nature of the ancient economy after Bücher - Meyer

Michael Rostovtzeff (1870-1952)

- coming out of communist Russia
- ancient economy: on a continuum with modernity, no qualitative difference
- highly politically motivated studies
- capitalism always existed
- used modern economic terminology to describe the ancient world, because of the continuity of society.
- believed that living conditions are not new, because of their continuous progression.

Karl Polanyi (1886-1964)

- cultural approach to economics in opposition to tradition economic
- concept of embeddedness: economy was much more embedded in society, values and culture of antiquity than based on profit

Moses Finley (1912-1986)

- neo-primitivist position
- substantivism: the ancient economy was fundamentally different from the modern economy
- Greeks / Romans did not think of the market as an independent institution or economic relationships separated from other social ones
- economy: mainly subsistence
- terminology used today, cannot be used to describe the ancient economy

A brief introduction to the Economic History of the Ancient World

The debate on the nature of the ancient economy



mainly theoretical discussion

mainly still based on literary sources

long time complete ignoring of archaeological sources

economy was a subject of Ancient History but not of Archaeology

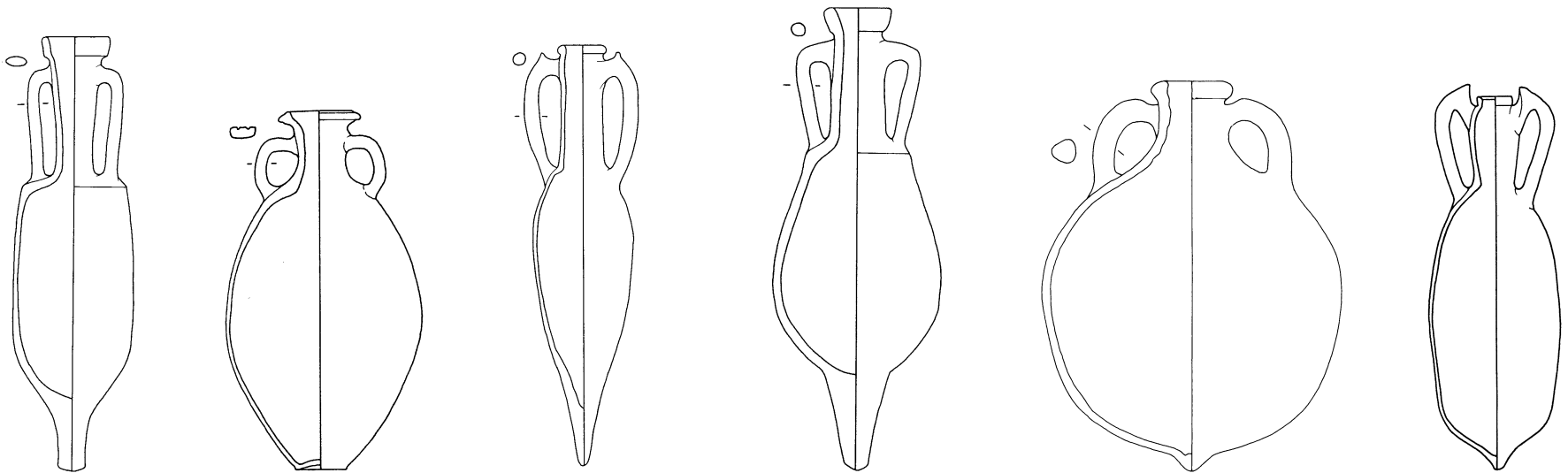
change during the last 30 years

A definition of economy

Economy describes all institutions and operations to ensure the satisfaction of human needs.

Economic activities relate to various levels: states, enterprises and private households; economy has three pillars: **Production, Transport and Consumption of goods.**

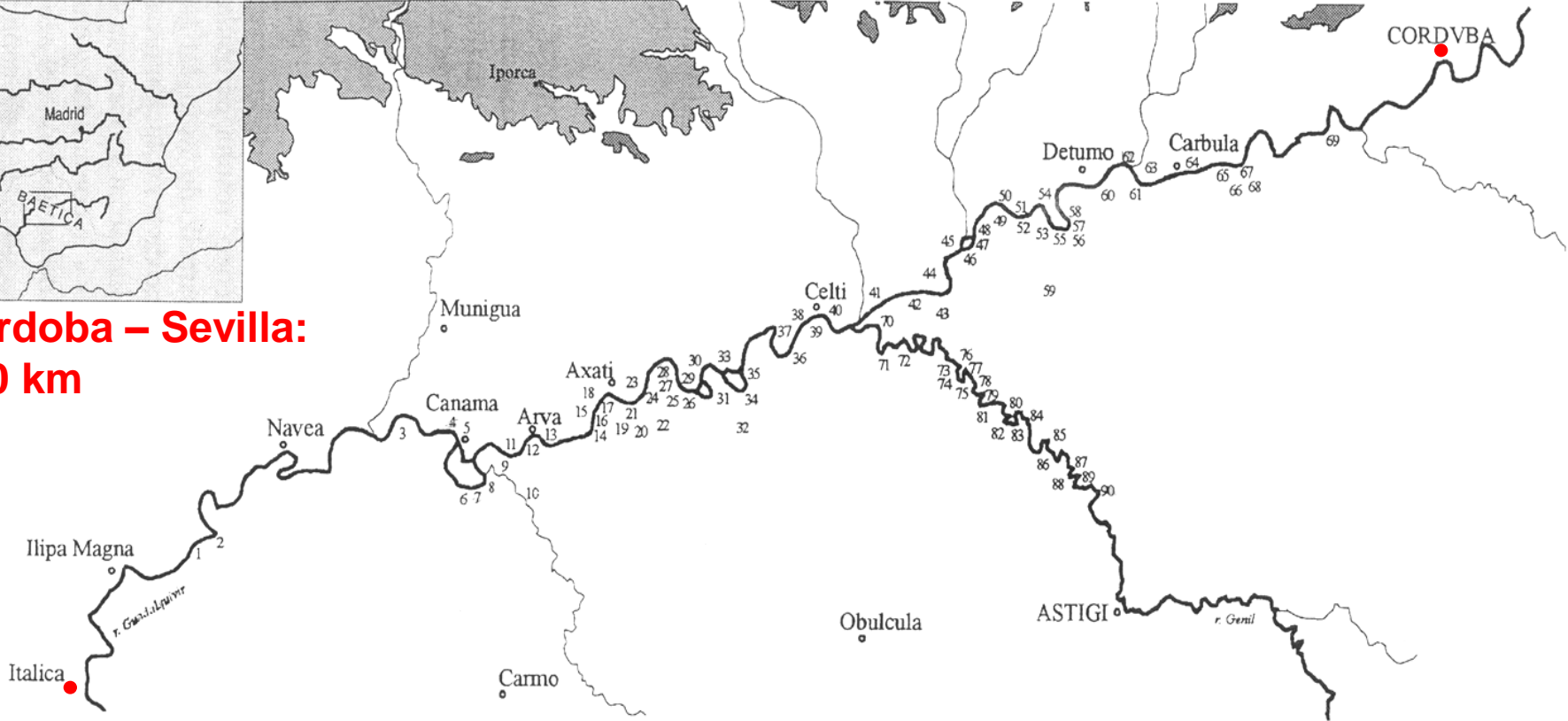
Hardly any other group of archaeological finds combines these three points in a similar manner such as **amphorae**.



Southern Spanish Guadalquivir valley: around 100 potteries producing oil amphorae

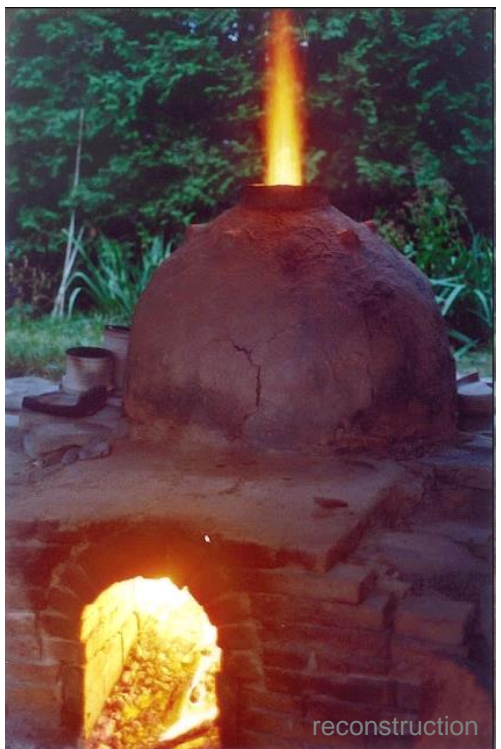
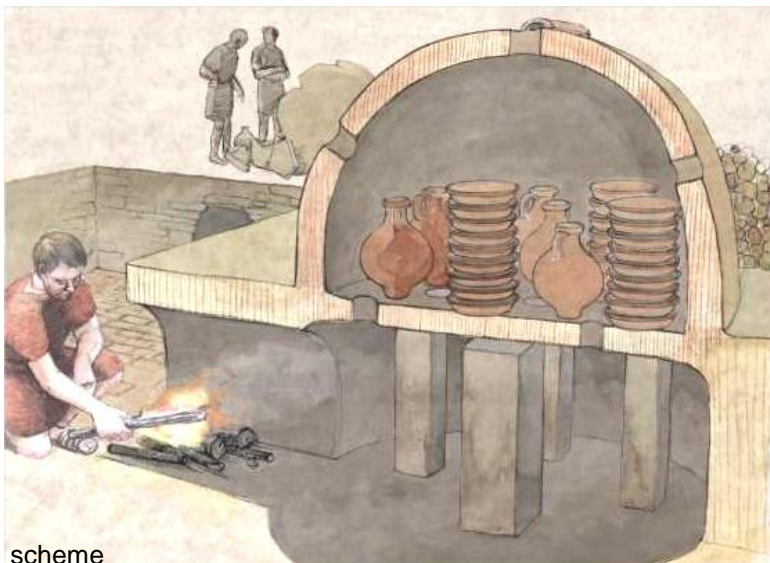


**Cordoba – Sevilla:
140 km**



- | | | | | | |
|----------------------------|------------------------------|-------------------------|----------------------------|--------------------------------|---------------------------|
| 1. Cruz Verde | 16. El Judío | 31. La Ramblilla | 46. Cerro de los Pesebres | 61. Villaseca | 76. Malpica Sur |
| 2. Villar de Brenes | 17. Alamo Alto | 32. El Marchante | 47. Villacisneros | 62. Dehesa de Arriba | 77. Malpica |
| 3. Los Zamorales | 18. Lora del Río | 33. El Berro | 48. Encinarejo Medio | 63. Guadiato | 78. Cortijo de Villalata |
| 4. Huertas de Alcolea | 19. Cortijo de Mochales | 34. Madre Vieja I y II | 49. Casa del Encinarejo | 64. Almodovar | 79. Las Valbuernas |
| 5. Alcolea del Río | 20. Catria Alta | 35. Los Sesenta | 50. La Umbría de Moratalla | 65. El Temple | 80. Isla Grande |
| 6. Guadajoz | 21. La Catria | 36. Calonje Bajo | 51. Casa del Guarda | 66. Cortijo Nuevo | 81. Tarancón |
| 7. Adelfa | 22. Lora la Vieja | 37. La Botica | 52. La Corregidora | 67. El temple (El Rodriguillo) | 82. Tesorillo Doña Mencía |
| 8. Juan Barba | 23. Huertas del Nicasio | 38. El Tesoro | 53. Soto del Rey | 68. El Sotillo | 83. Doña Mencía |
| 9. Mejía | 24. Cortijo del Guerra | 39. Embarcadero | 54. Haza de los Laticos | 69. Cortijo de la Reina | 84. Las Animas |
| 10. El Tesoro | 25. Manuel Nieto | 40. Peñaflor | 55. Las Monjas | 70. Palma del Río | 85. Huerta de la Cueva |
| 11. El Tejarillo | 26. El Acebuchal | 41. Huertas de Belén | 56. Barranco del Picacho | 71. Casas de Pisón | 86. Palmosilla |
| 12. Tostoneras | 27. Haza de Olivo | 42. El Remolino | 57. La Dehesilla | 72. Madueño | 87. Alcotrista |
| 13. Arva | 28. Cortijo de los Coroneles | 43. Cortijo del Romero | 58. La Estrella | 73. Tierras del Judío | 88. San Rafael |
| 14. Azanaque-Castillejo | 29. La Mayena | 44. Isla de la Jurada | 59. Cortijo del Bramadero | 74. La Graja | 89. San Bartolomé |
| 15. La Estacada de Herrera | 30. La María | 45. Cerro de los Vuelos | 60. Mingaobez | 75. Cortijo del Judío | 90. Las Delicias |

Baetican oil amphorae: kilns and form of amphorae

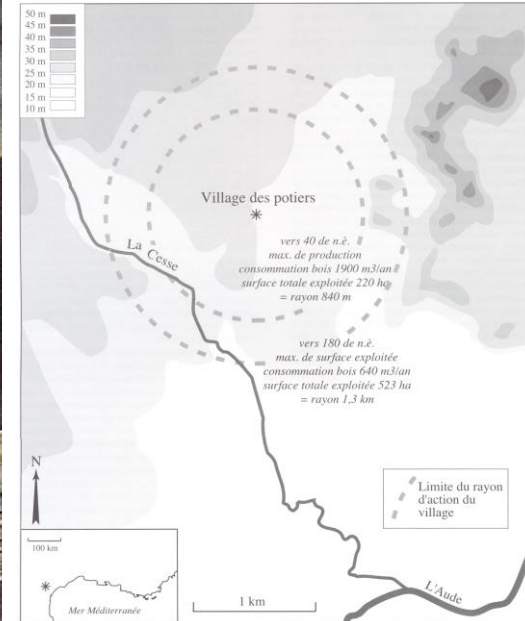


oil amphorae
Dressel 20

Gaulish wine amphorae: pottery Sallèles d'Aude



wine amphorae
Pélichet 47



Mid 1st century AD
annual requirement for
wood: 1.900m³
(~ 9 ha forest)

Production of fish sauces and their packaging on the iberian peninsula

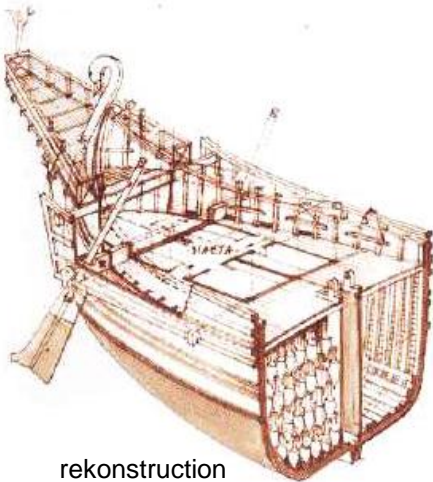
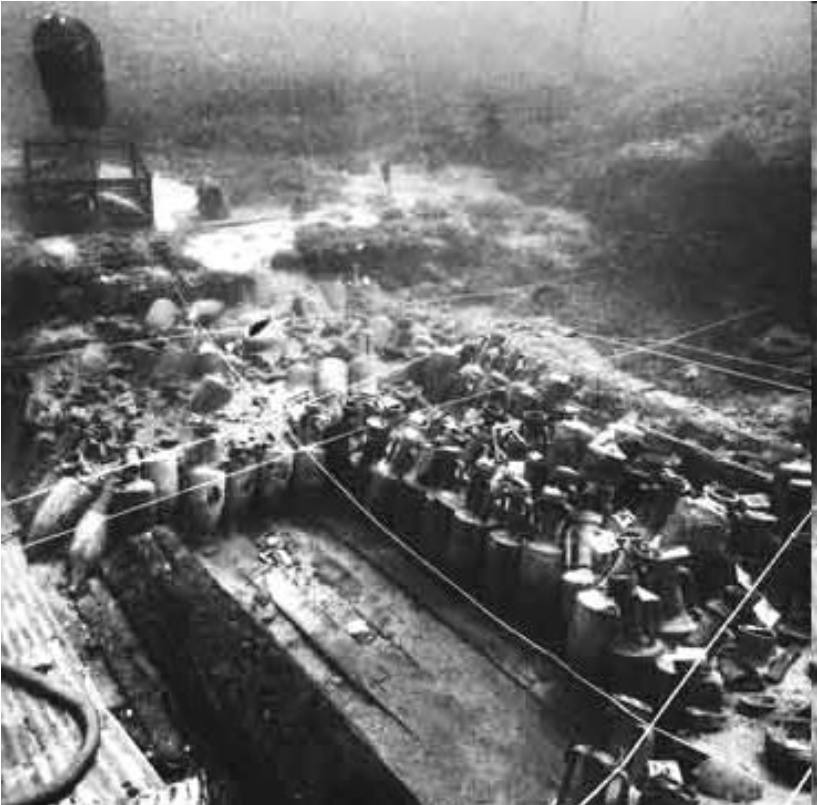


fish sauce amphorae
Pélichet 46

Production of amphorae around the Roman Mediterranean



Amphorae: packaging for the transport by sea (Madrague de Giens)



rekonstruktion



Transport safety and stacking of amphorae



Neumagen: tomb of a wine merchant

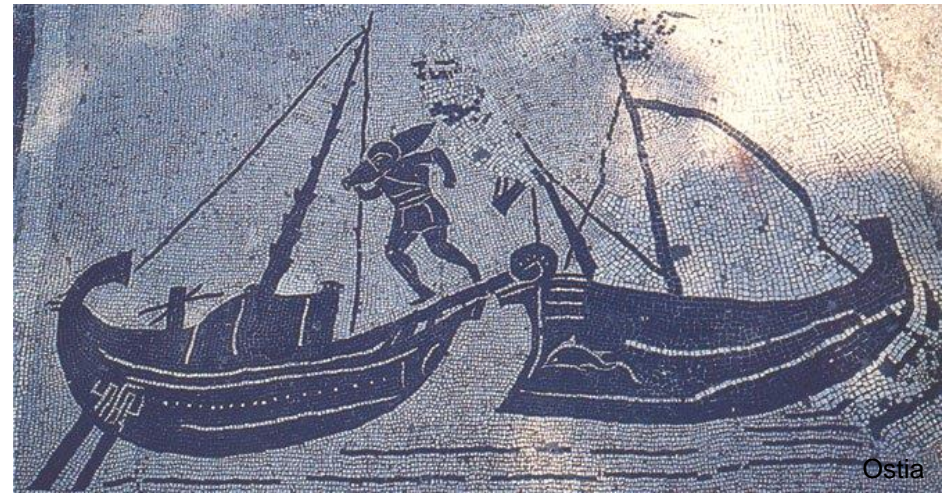


reconstruction

Representation of transport, transfer and unloading of amphorae



Bad Kreuznach



Ostia



sarcophagus Rom



Ostia

Representation of the transport of amphorae by two men

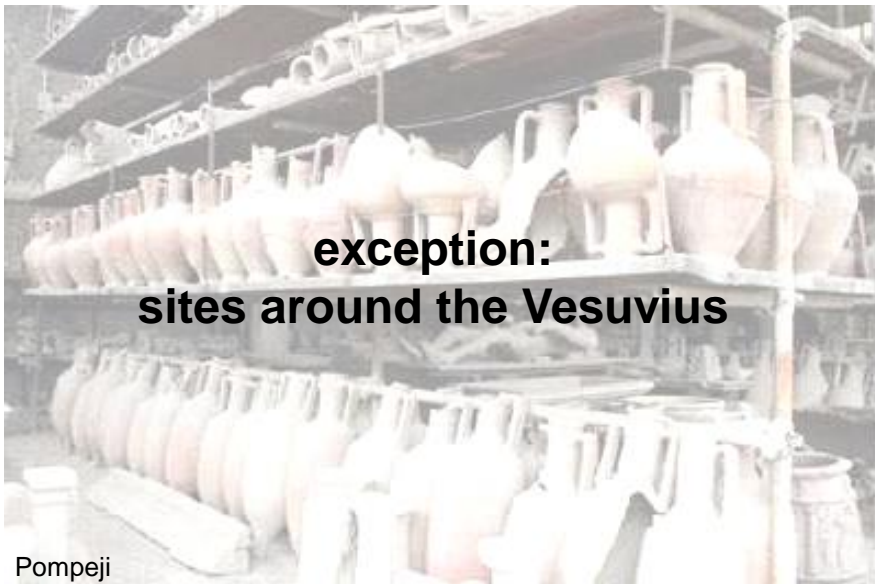


Augustus, Roman wall painting



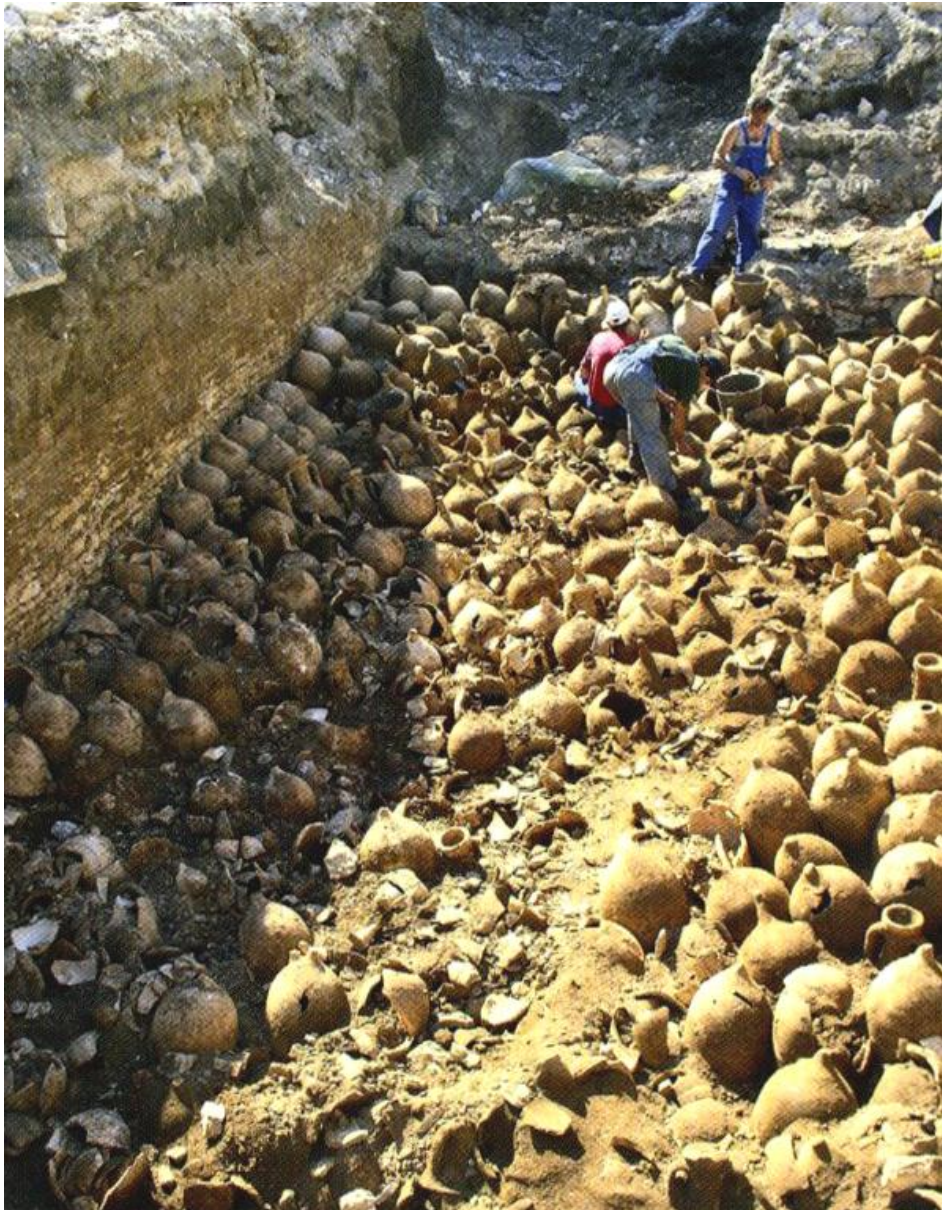
Pompeii, shop sign

From the consumption remain holes...



... and waste

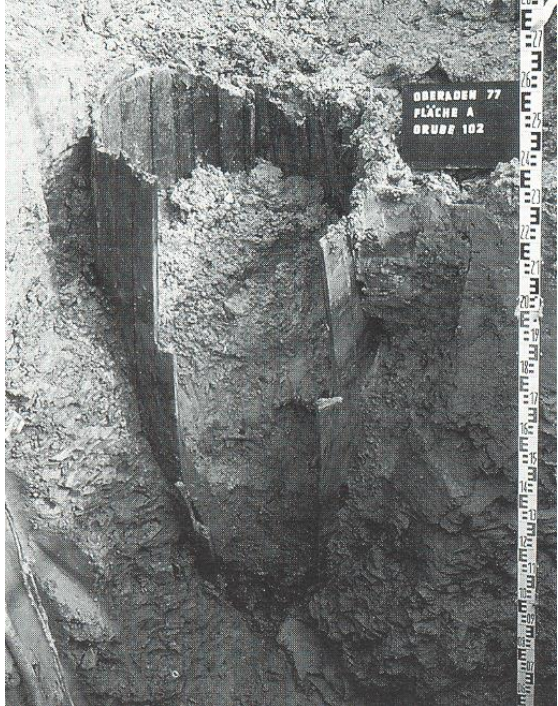
Rome, Monte Testaccio



Pula



Traces of other transport containers: barrels



Oberaden



Troyes



Augsburg

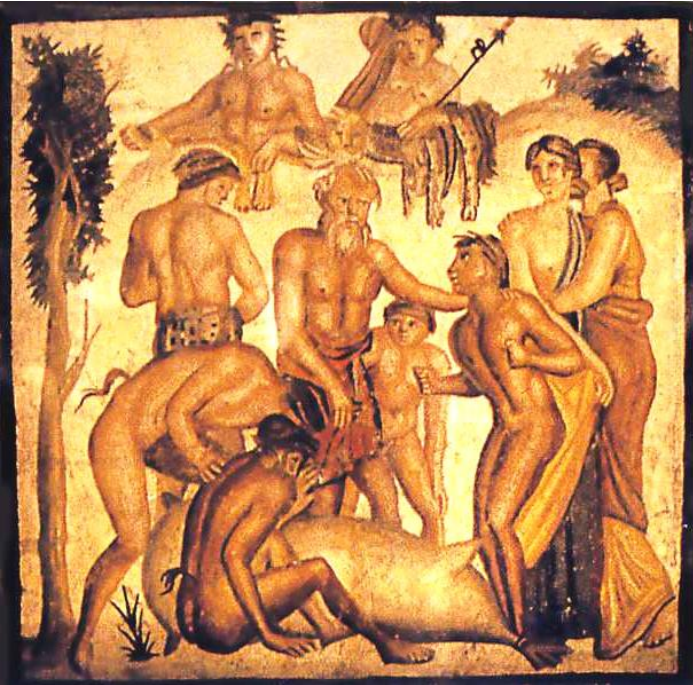


Evora



Mainz

Traces of other transport containers : tubes and sacks



Mus. Berlin



DAI Rome



Ostia

Traces of other transport containers: baskets



Pisa



Saint-Romain-en-Gal



Troyes



Villa di Poppea, Oplontis

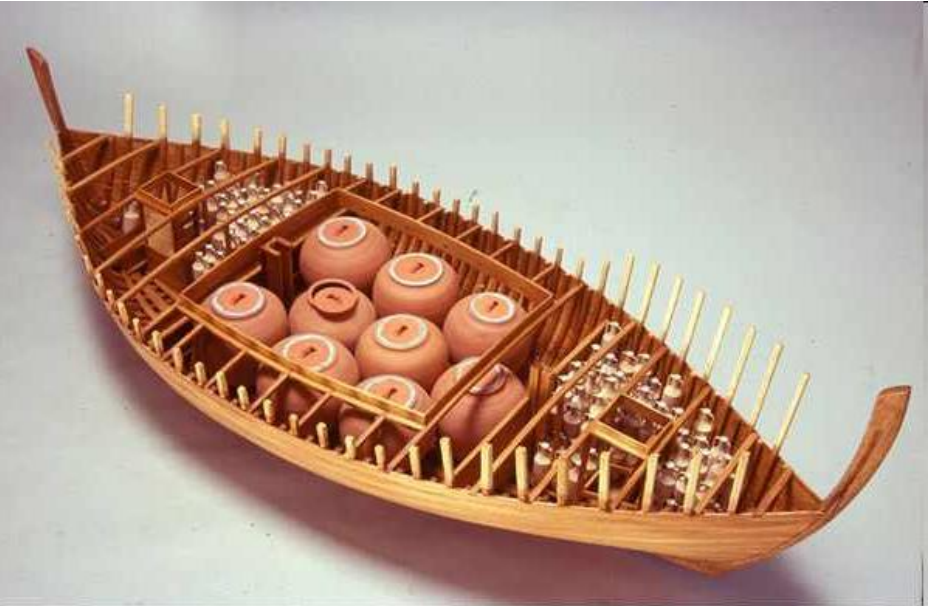
High sea transports in dolia



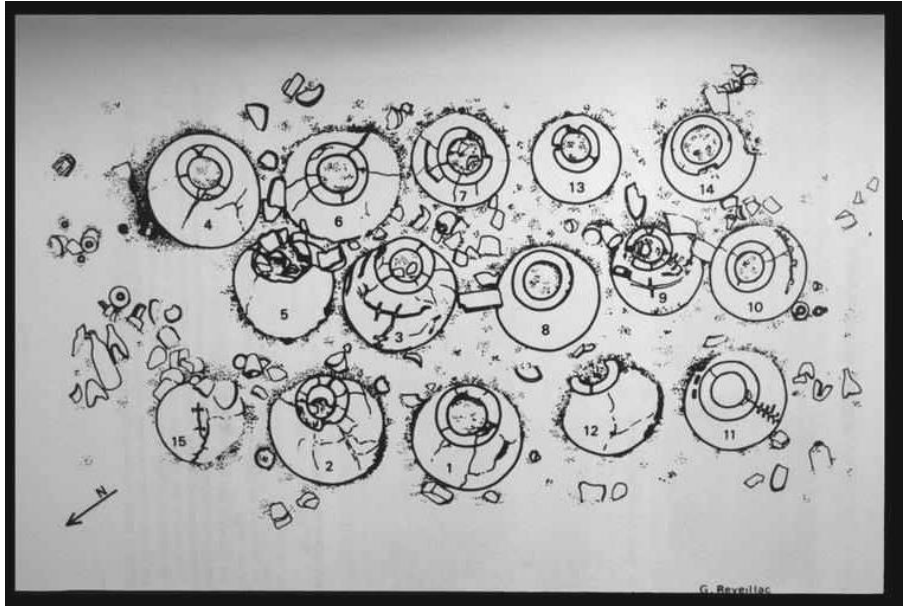
Giraglia



Giraglia



rekonstruktion Grand Ribaud D



Marseille

Dolia used for product processing and storage



Rians



Pardigon



Pardigon



Boscocreale