

VRG-Folder-0733

4. IV. 91

Today I lent these
 papers of 1979, and
 earlier, which give
 ELW's shape types
 of Roman amphorae
 and their approximate
 dates. ^{to whom?} She photocopied them.
 I reminded her to be
 sure to get permission
 from ELW if wanting
 to use any of this
 stuff, and she said
 of course.

KEEP THIS IN FRONT OF

1.11.79 2.01

CURRENT ROMAN/ell

(copy made 5.11.79
for C9K)

Pulling a date to one) ELW's SS

A. Walker asked me what I knew about
SS 8209. ^(35 is in an Early Roman deposit that is interesting) This turned out to be a Latin
stamp. So, look it up:

ELW (p. 11.58)

1.) List of Latin SS (and unstamped, P. 11.58) with
their attribution to the types. My copy of this list is
kept in folder AGORA TALLIES and NUMERICAL
LISTS, 1st cabinet, top drawer, under AGORA.

But a
copy is
here
attached

2.) ELW list of p. 11.58, "Roman amphoras: probable
dates of stamped types" This is kept right
here, in front of current ROMAN
amphora folder. If the piece is classified in
List (1), then you get a date (out of date?) in
List (2)

ELW's publications, to help in dating or identifying:

1.) "Les Amphoures de Sestius," Revue archéologique de l'Est
^{kept in} et de l'antiquité, Dijon, 1956, pp. 224-244.
^{for 1 folder} (p. 225) ^{the base}
"ROMAN I, 1939-56" Here is a statement about how the one wreck at
the Grand Longlani site. Sestius type is there
(= Dressel 1) Type 4. See illustrations, among others, P 8106,
and use its context, and other contexts.

Not called
Type 4

(She is also cited - ⁽¹⁹⁵⁶⁾ Purys p. 170, under no. 210,
giving a date of AD 66 w. reading ZIRA)

2.) In Nessand ¹⁹⁶² I, pp. 127-8, has comment
on nos. 37 and 38, VISELLI - LVCO, giving date
and presumed source, near Brindisi. This
must be her "Brindisi Type", her "Type 11"

Kept in
file
ROMAN III
1960-1963

3.) "Latin-stamped amphorae in the eastern
Mediterranean area." In Bull. of the Amer. Phil. Society, ¹⁹⁶²,
pp. 647-651. Some more about (Type 11), its
killed in Brindisi (VEHLI) (not so
cited)

4.) In the Antikythera publ.: Trans. of the Am. Phil. Soc.
55, ¹⁹⁶⁵, p. 11. She calls the Antikythera
Roman jar related "to my (Type 7)", but "may be a later
development thereof". Puts Type 7 $\frac{1}{4}$ of 1st, i.e. before
Mithradates in Delos, 88 B.C. (frequent occurrence in Delos).
If Antikythera jar is later than 7, may be $\frac{2}{4}$ of 1st.
Probably from near Taranto or Brindisi.

5.) "Les types amphoraux latins" (in English)
in EAD ¹⁹⁷⁰ 27, pp. 383-386. (Types known):

Type 3, mid 2nd : 1

Types 4, 5, 6, late 2nd : 6 altogether.

Type 7, $\frac{1}{4}$ of 1st (refers to Antikythera publ.) : 7

Type 10, " " " : 10 or 11

Type 13? mid 1st and after : 1 or 2

of 6) and 7)
no (photocopy) kept with coin, letter
of 4. vii. 77

6.) "Two amphorae from Populonia," Journal of Field Archaeology, 1977, (June issue)

(1) is a fragment, top of jar, of "Grecs-Italics" kind. She does not give it a number in her Type series. 23 pieces in Populonia. She talks about the period covered by the class, & but does not put a date to the piece illustrated (not in no). She does give a recent ref. for "Grecs-Italics" paws: Int. Journal of Nautical Archaeology 3 (1974), 44-47.

(2) is a smaller frag., handle-plus, with stamp, descr. as coming from her Type 11 by 2/2 of 1st BC date suggested.

7.) "The Ancient Commercial Amphora," Archaeology 30, 1977, pp. 264-270.
(No good for dating, or sorting.)

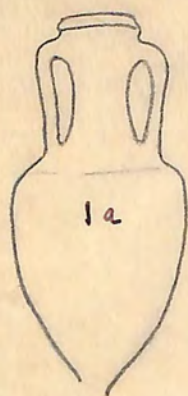
KEEP THIS LIST IN FRONT OF CURRENT ROMAN FOLD

Roman amphoras: probable dates of stamped types

March, 1958
[3.01] 9/16/58

- Type 1a. First half of 2nd century B.C. }
1b. 2nd century B.C. }
2. Second half of 2nd century B.C. }
3. " " " " " " }
4a. Late 2nd - early 1st centuries B.C.
4b. 1st century B.C.
5. Late 2nd - early 1st centuries B.C. 2nd. P 25797
6. " " " " " "
7. " " " " " "
8. " " " " " "
9. " " " " " "
10. First quarter of 1st century B.C.
11a. " " " " " "
11b. " " " " " "
12a. 1st century B.C.
12b. Latter 1st century B.C. - 1st century A.D.
12c. 1st century A.D. (?)
13. Second half of 1st century B.C.
14. Latter 1st century B.C. - first half of 1st century A.D.
15. " " " " " " " " " "
16. " " " " " " " " " "
17. 1st century A.D. (?)
18. 1st and 2nd centuries A.D.
19. Second half of 1st - early 2nd centuries A.D.
20. Mid-^{2nd} century - mid-^{2nd} century A.D. (Correction in letter 9)
21. First half of 3rd century A.D. 27. VII. 58
22. " " " " " "

19. V. 58
She has to 2 data series, one for
particular examples, one for whole periods
a lot of these have earlier contexts than
dates given here.



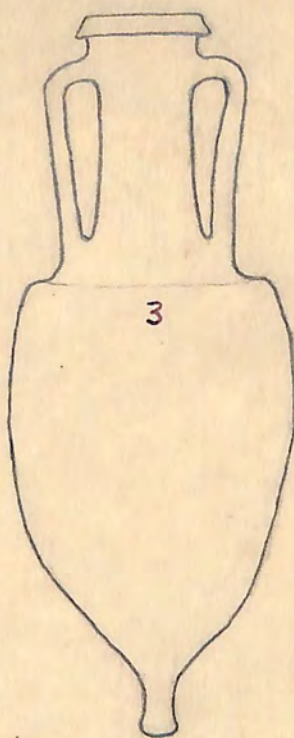
P 17046
B 20:2



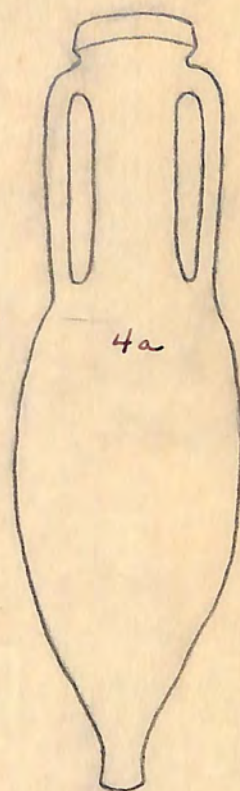
P 6761
F 13:3
(width)



C-47-80



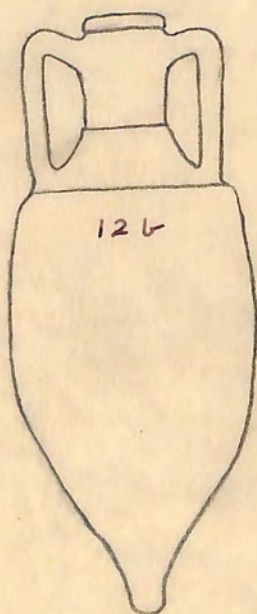
C-47-841



P 8106,
restored
C 9:7



P 11880
N 19:1



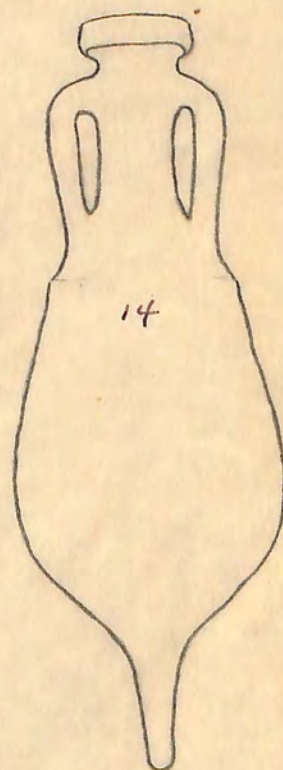
P 3464
Q 8:1



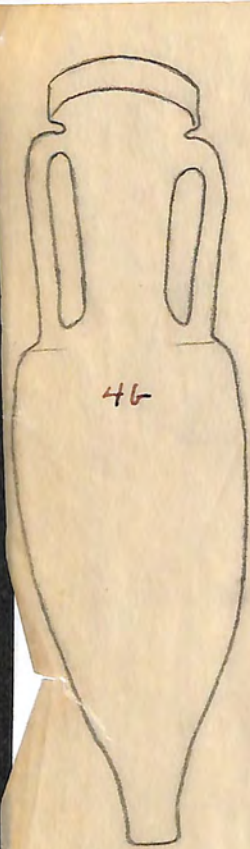
SS 10072,
partly restored



SS 9468
N 21:1



P 25734
R 13:1



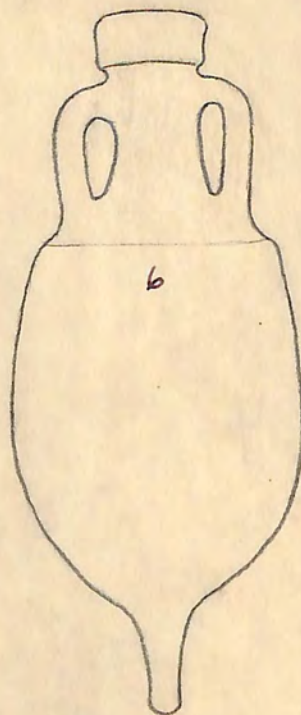
46

TD 6029



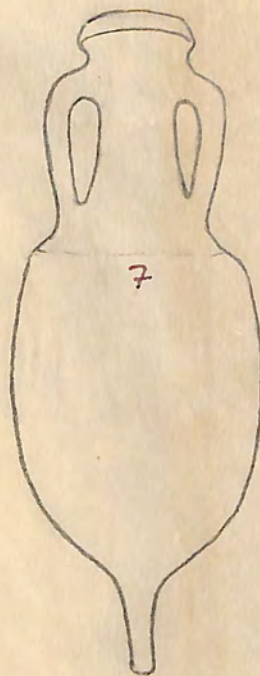
5

Kos
(citadel)



6

Brindisi No. 1



7

SS 9396 (PAS)
D-B 15:1



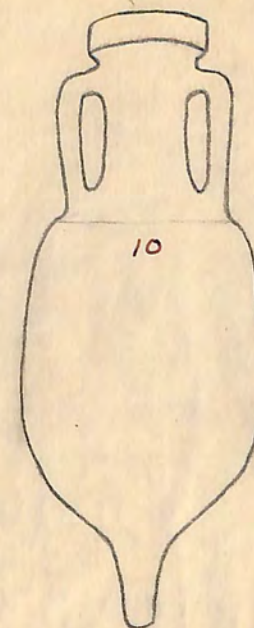
8

TD 4926



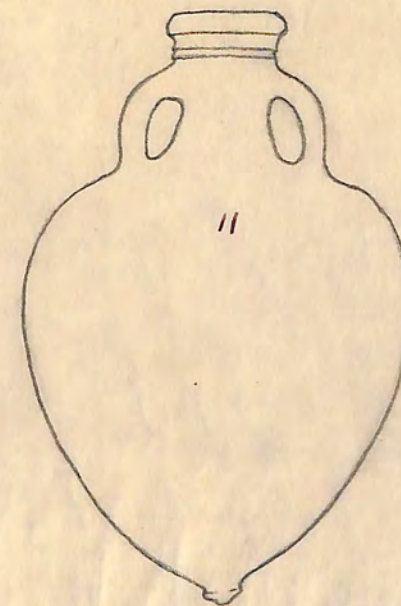
9

Alexandria Museum
P 6818



10

SS 7367
M 18:1



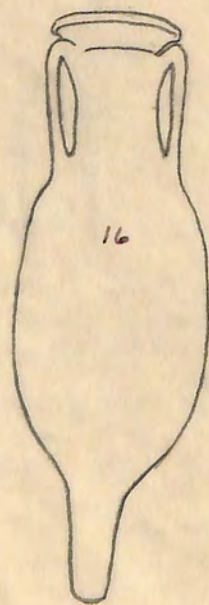
11

Brindisi No. 3



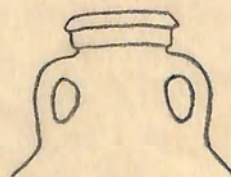
15

Alexandria Museum
7457



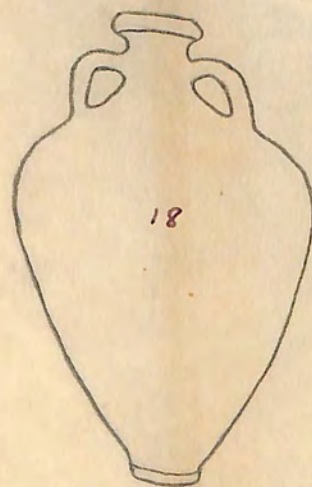
16

P 8484
Q 1311



17

Benachi 404,
partly restored



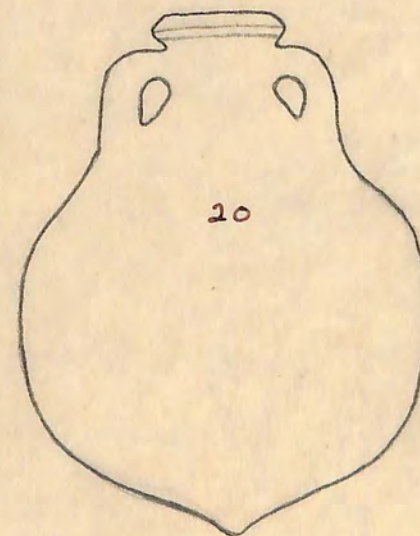
18

P 18000
M 20:2



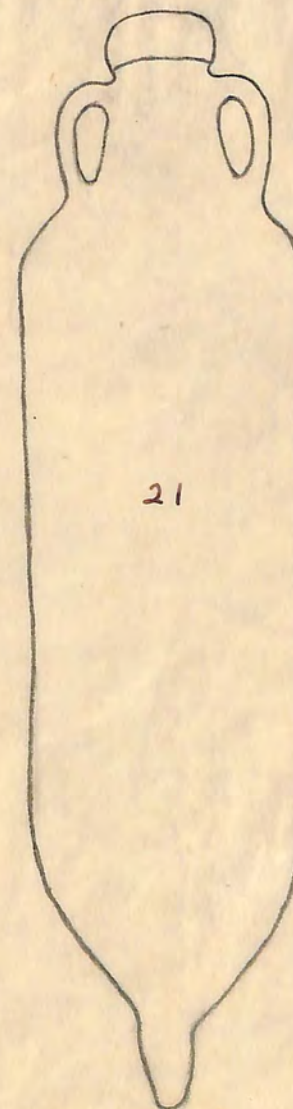
19

SS 11107
N 20:5



20

Saalburg



21

P 14618
Q 20



22

P 18254,
partly restored
(no girdle?)

ELW types
March, 1958

with ell 16.77.58
for FLW 3.03

DATING PAPERS FOR
ROMAN ITEMS AT AGORA

March 10, 1958 4.01
with letter 16. III. 58, 1E

Agora: numerical list of Latin amphora stamps and of unstamped pieces belonging to stamped types.

(P item, begin p. 7)

Type

SS 207.	TRVPO	10
256.	HEON	10
1164.	PHILONI	Similar to 4b
1450 > 1207.	CAR < C.S	4b < miscell. etc.
1501.	LATR	Similar to 8
1695.	PAB	Unclassified
1742.	DA[S (S retr.)	Unclassified
1793.	OLYNT	22
1865.	]AST SAT (incuse; lunate S's)	21
1890.	M H[E PICEN (N retr.)	14
1891.	M HE P] ICEN (N retr.)	14
1985.	SOSIPVS	11a
457 2029.	DEM[E]TR	Similar to 10
2381.	P[	Unclassified
2475.	T.V.P[	18
2613.	M.E.EVRO	20
2841.	SONVS (first S retr., second S lunate)	8
2919.	]LEO MALLEOLI	
	] L. S. H	7
3203.	]BIST (retr.)	5
3248.	FCEA6	Unclassified
3424.	]ICIA	10
3434.	MAR.A	13
3576.	QET[(incuse)	22
3613.	]VRNINT[(incuse)	Unclassified
3640.	HE]RENNIA	15
3823.	CALLIPE	4b
3829.	PHIL.]KB (B retr.)	13
4089.	PLAV[	Unclassified
4358.	P.AMPVDI.[	11a
4452.	]IVL SEVE	14
4458.	]AVSPI	
	]PTI (incuse)	21
4590.	C.MA (retr.)	14

26. VII. 89 On SS 1450, see "The Lamps of the Agora", p. 81, 11
and Hoepf 1985, p. 19, note 47

SS 4660.	HERAC[	Unclassified
5141.	C AN PR	Unclassified
5298.	]AN	Similar to 8
5331.	]NO	14
5400.	]ARCHEI[	5
5447.	]METR	6
5541.	C]AEPO (retr.)	10
5717.	]A.R.N (incuse)	14
5720.	L.DAS[IMI	
	MVSTELI (incuse)	22
5762.	M.TAPIR [	
	AN.REC.OE[(twice)	18
5763.	P.GAE HER	20
5811.	DASI[(retr.)	11a
5885.	HERENNIA	15
5945.	IINIC[(N retr.)	14
6179.	HILAR	14
6248.	MARI.P (retr.)	13
6307.	L.PVBLILI (retr.)	11a
6308.	ALBIAN (N retr.)	Unclassified
6642.	PHIL.KB (B retr.)	13
6781.	DAC	10
6807.	WISE]LLI	11a
6814.	AX	4b
6817.	DO palm N	
	AS branch VL (incuse)	21
6907.	PHILI]PVS	10
7004.	SPE (incuse)	10
7138.	PHIOGEN	Similar to 13
7139.	PHIOGEN	Similar to 13
7145.	PHIL.K[B (B retr.)	13
7146.	DASIO	Unclassified
7173.	SE[]M	4b
7217.	ATRL (retr.) and ξ	10
7228.	ONESI	10
7229.	DIODOR (retr.)	10
7233.	WA	10

SS 7235.	DIODOR (retr.)	10
7236.	]OLL[(retr.)	10
7279.	DIODOR (retr.)	10
7280.	illegible	10
7281.	BALAN (retr.)	10
7282.	WA	10
7283.	SINDA (retr. except for D)	10
7284.	]OLL[(retr.)	10
7286.	APOLLO (twice)	10
7288.	EPIGO[N (retr.)	10
7289.	APH lagynos	10
7290.	DACVS (S retr.)	10
7291.	DACVS (S retr.)	10
7292.	A[PH] lagynos	10
7293.	DACVS (S retr.)	10
7294.	SINDA (retr. except for D)	10
7295.	SILA (retr., A inverted)	10
7296.	DIODOR (retr.)	10
7297.	APH] lagynos	10
7298.	BALA[N (retr.)	10
7299.	WA	10
7300.	EPIGON (retr.)	10
7303.	WA	10
7304.	]O	10
7305.	SINDA (retr. except for D)	10
7306.	SINDA (retr. except for D)	10
7307.	DIODOR (retr.)	10
7308.	S]INDA (retr. except for D)	10
7309.	WA	10
7310.	D[IODOR (retr.)	10
7315.	CREPM (retr.)	10
7316.	SI]NDA (retr. except for D)	10
7317.	.PIL	10
7318.	SPE (incuse)	10
7319.	SPE (incuse)	10
7320.	THEF (retr.) and ξ	10
7321.	DASIO (S retr.)	10

SS 7356.	GEN[<u>T</u> I	7
7365.	CREPM (retr.)	10
7367.	SPE (incuse)	10
7370.	DIOD[OR (retr.)	10
7371.	EPIGON (retr.)	10
7378.	.PIL	10
7379.	SALV	10
7380.	.PIL	10
7381.	THEF (retr.) and Σ	10
7382.	.PIL	10
7383.	SALV	10
7384.	SALV	10
7387.	THEF (retr.) and Σ	10
7388.	.PIL	10
7389.	COEF (retr.) and Σ	10
7441.	HE.H (retr.?) and Σ	10
7442.	.PIL	10
7443.	THE.E (retr.) and Σ	10
7446.	.BARN	10
7447.	THEF (retr.) and Σ	10
7530.	WISELL[I	11a
7539.	]AQTI	
	]Q	13
7718.	VOM[	13
7921.	]CEP	Unclassified
7930.	SPE (incuse)	10
7961.	Q.POPAIDI	Unclassified
8002.	MITRE	15
8013.	ATTA[LVS	7
8028.	MATV	Similar to 8
8041.	LVIPOR (twice)	3
8209.	PELAM	11a
8238.	STR	11a
8257.	CARTO	12a
8480.	OLLOS (retr. except for S)	10
8506.	amphora P.SVLLA	12b
8580.	ART	13

SS 8605.	M HE PICEN (N retr.)	14
8606.	CARISI[	14
8607.	M.LVR	4b
8623.	VISELLI	11a
8733.	DIODOR (retr.)	10
8800.	TEVC.R.FAB (F retr.)	8
8801.	BARBARI	14
8842.	]ELIS[	Unclassified
8981.	MANTA[and FAB	Similar to 10
9000.	MAARCI (retr.)	4b
9011.	F caduceus F	Unclassified
9129.	MAARCI (retr.)	4b
9207.	L SALVI	14
9218.	ÇOCI	Similar to 4b
9257.	SALVI	10
9264.	LEV.GEN	22
9269.	]ACEO[(E retr.)	Unclassified
9305.	]ÇERDO	3
9391.	ALE]XAND	Unclassified
9396.	PASI (twice; one stamp perhaps followed by a device)	7
9439.	ATTA and]MV	6
9459.	P HELIV BALB	Similar to 10
9460.	MAHE[	13
9468.	P]HIL.H and KAN[I	13
9471.	L LENTV.P.F and PH	4b
9478.	T.H.B (incuse)	14
9608.	ARIE.H	13
9638.	]OLY[(incuse) and]L (incuse)	Unclassified
9712.	MAR.A	13
9861.	AGATO[	15
9881.	PHILONI	Similar to 4b
9978.	M HE]PICEN (N retr.)	14
10034.	E	4b
10072.	EVPLVS.ÖRPHE[	12c
10074.	LVCRO	Similar to 4b
10093.	M.HE.PICENTIS	14
10094.	C.IVLI.[	11a

SS 10096.	M.LVR	4b
10179.	VISELLI	11a
10211.	]VLVS	7
10233.	CV.I (incuse)	21
10235.	DIODO	10
10258.	MARI.P (retr.)	13
10335.	TEVC.R.FAB (F retr.)	8
10358.	]C.F.G (incuse)	Similar to 14
10489.	M.VERVVS	4b
10496.	C.IVLI.BRVN[	11a
10666.	TIMO	10
10713.	N.SCAP	Unclassified
10717.	KANI	13
10718.	ARIE.H and KANI	13
10896.	ER.OSD	Similar to 10
-10969.	DE[-	Unclassified
10972.	TI.IVL (incuse)	Unclassified
10981.	HERENNIA	15
10993.	NIC[OMAC (twice) and FAB (twice)	Similar to 10
11012.	PRISCA	14
11021.	A.QVI]NTE	22
11094.	SPE (incuse)	10
11095.	" "	10
11096.	" "	10
11097.	" "	10
11098.	" "	10
11099.	" "	10
11100.	" "	10
11101.	" "	10
11102.	" "	10
11103.	" "	10
11104.	" "	10
11105.	" "	10
11106.	" "	10
11107.	MCCN	19
11125.	T.H.B (incuse)	14
11132.	ALBIA[(retr.)	11a
11152.	PECVL	
	O.T.O (incuse)	Unclassified

P 3464.	Unstamped	Similar to 12b
3465.	"	16
3862.	"	9
4501.	"	14
6761.	"	1b
6867.	"	5
7082.	"	Similar to 4a
8105.	"	4a
8106.	"	4a
8107.	"	Similar to 4a
8108.	"	4a
8484.	"	16
9140.	"	10
10757.	"	14
11691.	"	18
11880.	"	Similar to 12a
12308.	"	4a
14618.	O (incuse)	21
15741.	Unstamped	8
16394.	"	4a
17046.	"	1a
18000.	"	18
18254.	"	22
18449.	"	21
19380.	"	15
20021.	"	15
20695.	"	14
21114.	"	10
21115.	"	10
21116.	"	10
21117.	"	10
21118.	"	10
21119.	"	10
21120.	"	10
21121.	"	10
21122.	"	10
21123.	"	10

P 21124.	Unstamped	10
21125.	"	10
21126.	"	10
21127.	"	10
21128.	"	10
21129.	"	10
21130.	"	10
21131.	"	10
21132.	"	10
21133.	"	10
21134.	"	10
21203.	O (incuse)	21
21493.	Unstamped	18
21786.	"	14
21792.	"	4b
24937.	"	15
25734.	C.PE[]ON	14
25797.	Unstamped	Similar to 5
25973.	"	10
25974.	"	10

Date: Mon, 09 Aug 1999 22:20:47 +0000
From: Elizabeth Lyding Will <elwill@classics.umass.edu>
Subject: Re: Ms. Elizabeth Lyding will
To: Athenian Agora Excavations <agora@agathe.gr>
Reply-to: elwill@classics.umass.edu
Organization: UMass Amherst
Status:

Dear Maria,

Thank you so much for writing. I will keep you informed of any discoveries I make about the amphoras found at Rhode in Spain. Since I wrote you, I have learned that the amphoras from Rhode have just been published in a book about amphoras from NE Spain. The author, Damián Cerdá, is sending me a copy of the book, and I hope also to receive xeroxes this week of the profiles of the jars that have been found in Rhode. (Cerdá lives in Majorca, so I may not receive the book for a while.) If Kalythies 5 has been found in Rhode, it would be an important piece of evidence about Rhodian trading activity in the western Mediterranean.

With love, Letty

Date: Mon, 12 Jul 1999 17:35:38 +0000
From: Elizabeth Lyding Will <elwill@classics.umass.edu>
Subject: Kalythies M* 5
To: "Dr. Maria Savvatianou-Petropoulakou" <agora@ath.forthnet.gr>
Reply-to: elwill@classics.umass.edu
Organization: UMass Amherst
Status:

Dear Maria,

ME I know how busy you must be, but I desperately need some information about Kalythies M* 5. Have you any record about its clay and surface-color? And were the five jars you studied at Kalythies all from the same context?

I'm thinking now about the possibility that M* 5, which is my Greco-Italic Form c, could have been manufactured in the Rhodian colony of Rhode, on the NE coast of Spain. In describing that whole group of jars to me (letter of March 14, 1988), Virginia said they looked to be "somehow unprofessional, rather careless imitations." She also said the two Rhodians in the Kalythies group seemed to her "rather peculiar." If you have any notes on clay, I would be so grateful to you if you could let me know.

With love to you, and also to Andreas,

Letty

Will, Elizabeth - Lyding
84 High Point Drive
Amherst, MA 01002

Athens 2.VIII.99

Dear Letty,

I looked everywhere for additional records about the Kalythies jars, but unfortunately, there is nothing.

They are all found together: 5 jars of ^{the} type "Kalythies", plus 3 Rhodian. (see also V.G. letter to you of March 14, 1988.

With love
Maria

Andreas does not go on with amphorae, more than a year. I do not have news of him.

Newsletter

Archaeological Institute of America



Vol. 6, No. 4

April 1991

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From the Journal of an Amphora Sleuth

by

Elizabeth Lyding Will

2 a.m.,

January 1, 1990. The plane has landed, and I wait for my luggage. From out of nowhere, a smartly uniformed official approaches me with a package. In it is an elegantly bound 1990 desk calendar, its cover padded and gilded. A card reads, "Welcome to India, Destination of the 1990's, and to the Indira Gandhi International Airport, New Delhi." My forty years as a Roman amphora sleuth have taken me to many parts of the world. All over Europe and even in Egypt I have played the self-effacing role appropriate to archaeologists. Now I suddenly find myself called upon, in the middle of the night, to respond to hospitality of a kind seldom encountered in the world's great airports. I look up, searching for words, but the man is gone, as silently as he had come.

Mid-January, 1990. An ordinary work day in the museum at Pondicherry, on the southeast coast of India.



Outside the University of Pondicherry (Tamil Nadu), India. Photo by Steven Sidebotham.

I stand by an inlaid, brocade-covered grand piano, on which are arranged amphora fragments found at nearby Arikamedu, an ancient Greco-Roman trading center. Many such centers, mostly unexcavated, are known to lie south of Madras along the coast of the thundering Bay of Bengal. As I measure the fragments and examine their clay (a process essential to accurate identification of type), handsome, dark-skinned Tamil parents watch intently and whisper softly to their children from behind the barrier that keeps them out of the room where I work, a reconstructed French provincial library in the museum. Pondicherry was once the capital of French India and is now the site of the internationally famous ashram of the Mother. The Tamils are used to foreign eccentrics, but they are clearly mystified by me and my work. The same fragments have been on display for some time in cases in the museum, finds from digging carried on in the 1940s, by French archaeologists and by the famed British excavator, Sir Mortimer Wheeler. Those finds from the 1940s, mostly fragments of ancient shipping amphoras, were published in part by Sir Mortimer, but had been largely forgotten until Vimala Begley of the University Museum

in Philadelphia decided to recommence digging at Arikamedu. Funded by the Smithsonian and with the collaboration of her colleague, Steven Sidebotham of the University of Delaware, and K. V. Raman and his team from the University of Madras, Begley is now opening trenches at Arikamedu and trying to clarify the chronology and history of the site. Such Greco-Roman trading centers, established in the wealthy Tamil kingdoms in southern India as early as the first century B.C., and perhaps earlier, were sources of the luxury goods which only the East could provide to Rome and the Mediterranean, the jewels and spices and unguents and transshipped Chinese silks which were in such demand in the West. In return, the Greco-Roman ships took to India quantities of Roman coins and also exotic Mediterranean foodstuffs not avail-

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able there: amphoras full of the best Greek and Italian wines, Dalmatian and Spanish olive oil, even the Spanish fish-sauce, *garum*. Dishes, too, were brought from Italy. Begley's special interest is in the fine Roman pottery dishes revealed by previous excavations at Arikamedu, and also in the later Indian imitations of those dishes. But for me, it is the amphoras that must be studied, here in Pondicherry and (later in the month) in Madras and Delhi. The finds from Arikamedu have been spread about widely, from Paris to Hanoi, but most are still in India. Even as I work, Begley and Sidebotham and the team from Madras are unearthing new amphora finds, study of which must wait until my next visit to India in January, 1992.

Mid-January, 1990. The driver deposits us in front of a building at the University of Pondicherry, where I am to lecture on trade between the Mediterranean and India. A friendly little Indian elephant, one of several that wander the streets of Pondicherry, stands with its keeper in a nearby portico.

A small crowd has gathered, and there is general agreement that I must be photographed with the elephant. Reverting to an archaeological role inside the building, I lecture to an attentive group of scholars who question me closely and at length after I have finished. A few days later, at the Tamil Nadu State Department of Archaeology in Madras, another academic audience is also very responsive and animated. The projector malfunctions, as such machines do all over the world, but it doesn't matter. I talk without slides, my listeners commenting and questioning as I go along. Surely such instantaneous exchange of ideas makes for an ideal relationship between audience and speaker.

Early June, 1990. Ever on the trail of Roman amphoras, I find myself on the island of Crete, in the attractive museum at Agios Nikolaos, a town that has changed dramatically in the thirty-something years since my last visit. Lines of Greek and Roman shipping amphoras stand at attention along the sides of rooms of cases filled with representations of the Minoan mother goddess and of her post-Minoan successors. The mixture of late amphoras and early fertility figures is perhaps unusual. But some of the goddesses are holding to their breasts pitchers that could have been intended to suggest babies. Other Minoan ceramic containers, too, have anthropomorphic qualities that may relate them to the figures of the goddess and to early notions of woman as container. In such a context, amphoras, the universal shipping container in antiquity, seem quite at home.

On another day in June, 1990, I sit in the Stoa of Attalos in Athens, in the office of Virginia Grace, the undisputed international authority on amphoras, and the person most responsible for calling the

attention of the scholarly world to their historical importance. She has been my mentor since 1951, when she persuaded me, fresh from graduate work in Greek and Latin at Bryn Mawr, to study the Roman amphora collection at the American excavations of the Athenian Agora. I was untrained as an archaeologist, but I had worked at Bryn Mawr with, among others, the great Roman historians, Lily Ross Taylor and T. R. S. Broughton. With that background, I was in a position to understand that amphoras might well help to solve some of the mysteries surrounding Roman trade. As my study of the Agora Roman amphoras began to produce useful results and my investigations expanded to include ever more sites, in Greece and elsewhere, Virginia Grace and Homer Thompson, for many years Field Director of the Agora Excavations, became my strongest supporters. The careful excavation of the Agora has provided me with the precious chronological basis for my study of Roman amphoras. Exchanging amphora news at the Agora with Virginia

Grace, and with her associates, the amphora scholars Carolyn Koehler, Maria Savvatianou-Petropoulakou, and Andreas Dimoulis, and renewing my ties with them, is a pleasure and an inspiration.

Mid-October, 1990. I enter the new archaeological museum in Lyon, France's second largest city, and am startled to find myself in a spacious, darkened entrance lobby decorated only with Roman amphoras. They stand glamorously under spotlights against the dark

blue walls of the room. The atmosphere is clearly meant to suggest to visitors the bottom of the sea, where these jars could have been found. Their shape shows that they were first century A.D. shipping containers for Spanish olive oil. Had I ever before entered a major museum to find myself immediately surrounded by Roman amphoras? Well, yes, but only in Europe, and never so dramatically as here at Lyon. In Europe, from the British Museum on down, curators are beginning to respond to the public's desire to know how life was actually lived in antiquity, not just about the gold and the sculpture with which rich Greeks and Romans surrounded themselves. Shipping amphoras are the chief finds on Roman sites and are of interest and importance for that reason. But the public is also fascinated by what is *on* the amphoras: the trademarks stamped by the potter or the grower of the contents, the graffiti marked on the jars by ancient customs inspectors, the fingerprints of the potters. Shipping amphoras, and coarse wares in general, allow the museum visitor an immediacy of contact with antiquity that elegant objects often fail to provide.

There are other imaginative displays of amphoras in the museum at Lyon, and as I survey them I review in my mind some of the creative

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Elizabeth Lyding Will on the amphora-covered wall around the museum and excavation house at Cosa. Photo by Elaine Gazda.

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amphora exhibits I have visited in recent years elsewhere in Europe. At Pompeii and Herculaneum, of course, amphoras are omnipresent in the houses and shops, and in a reconstructed shop in the Stoa of Attalos Museum one can see a fine selection of amphoras found at the Athenian Agora. A similar display, reminiscent of the one in the shop of the House of Neptune and Amphitrite in Herculaneum, can be found in Switzerland, at the beautiful site of Augst, near Basel. But my thoughts go now to some less well-known efforts to present amphoras in a meaningful way. Perhaps the most exciting exhibit I have seen is in the Nino Lamboglia Museum on the island of Maddalena, off the northeast corner of Sardinia. There dozens of amphoras from the nearby Spargi shipwreck are arranged herringbone-fashion as if they were in the actual hold of a ship. The visitor can examine the barnacle-encrusted jars from above and, descending stairs, can view a reconstructed cross-section of the hold. Nowhere have I felt more keenly the presence of antiquity: the tragedy which such shipwrecks must have represented, not only for the owners and captains of the ships but also for the sailors, and even the potters and growers responsible for the hundreds of filled amphoras destroyed in the Spargi wreck.

On this occasion, I recall that the archaeological museum at Sassari, on the north coast of Sardinia, also gives space to imaginative displays of amphoras, and there are exciting exhibits in the fascinating museum on the island of Lipari, off the north coast of Sicily. There, amphoras from several shipwrecks are arranged in great pyramidal piles reaching from floor to ceiling. The archaeological museum at Barcelona has a striking collection of amphoras from the important Greco-Roman colony at Ampurias, near the border of Spain and France, and at the beautiful site of Ampurias itself many other amphoras can be studied in attractive arrangements in the small museum. I think, too, of Pula, near the tip of the Istrian peninsula in northern Yugoslavia. Pula was a large manufacturing center for olive oil amphoras. Some of the many jars discovered there have been arranged in a dramatic room located, surprisingly, under the arena of the city's great Roman amphitheater. Near the amphora exhibit are placed oil presses and other farm equipment excavated at the Roman villas near Pula where the olives were grown and pressed into oil.

My thoughts turn also to the new museum at Cosa, where I worked on the amphoras for several summers in the 1970s. There one can inspect at close hand the amphoras produced near that ancient city and its port, some ninety miles north of Rome, an excavation conducted under the auspices of the American Academy in Rome. Cosa was an active center for the production and exportation of wine, primarily to the Celts in Gaul during the period of the Roman Republic. The upper Grand Congloué shipwreck off Marseilles, much publicized by Jacques Cousteau and others in the early 1950s, and the first wreck to be explored with the aid of modern methods of underwater research, had a cargo of hundreds of amphoras from the Sestius factory at Cosa. When in the early 1980s I visited the excavations of the huge Celtic city of Manching, on the Danube near

Ingolstadt to the north of Munich, it was very moving to find amphora fragments from faraway Cosa there. They must have been unloaded at the port of Marseilles and then shipped in barges along the Rhône and later transferred by land or by canal to the Rhine and Danube rivers before reaching their destination at Manching. Transportation by river and by land in antiquity was very expensive, but the wealthy Celtic chieftains clearly wanted wine in the original bottles to fill the cisterns of wine we are told they maintained. It would have been cheaper, at the time of unloading the heavy clay shipping containers at Marseilles, to transfer their contents to lighter receptacles of wood or clay, but money, at least at Manching, was clearly no object. Cicero tells us that the Romans had passed legislation preventing the people of Transalpine Gaul from growing the vine or the olive, and the Celts wanted wine at any cost. I was similarly moved to find at Arikamedu pieces of wine amphoras made out of the distinctive clay of the area of Pompeii. Like Cosa, Pompeii and its environs exported large quantities of wine, especially during the late Republic. The port of Pompeii shipped mostly to the east, the port of Cosa to the West.

Another great port of the period of the Roman Republic, Aquileia, at the north end of the Adriatic, also shipped primarily to the East. It sent the choice olive oil of the Istrian peninsula and perhaps of other parts of present-day Yugoslavia, including Pula, to overseas markets like Alexandria and Delos, and even to India. In the attractive museum at Aquileia, amphoras are not aesthetically displayed but are simply heaped in the courtyard, mute testimony to the

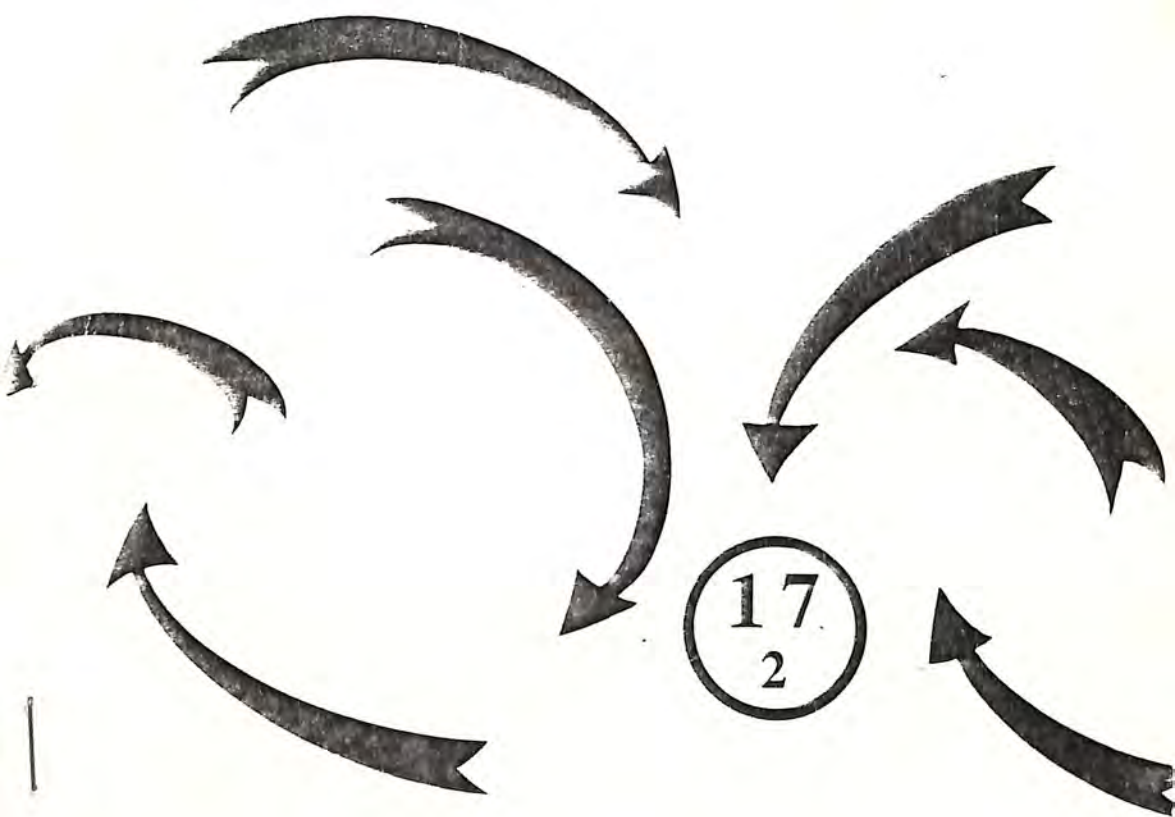
masses of jars discovered in the area and to the difficulties small museums throughout the Roman world often have in finding storage space. Verona in northern Italy, in the heart of another production center for olive oil amphoras, has solved its storage problems not by excavating under its amphitheater but by mounting a great and inaccessible display of jars in pit-like areas sunk in the floor of the so-called "Tomb of Juliet," an important tourist attraction.

The displays of amphoras at Aquileia and at Verona are less creative than impressive, attesting as they do to the gargantuan

number of amphoras and amphora fragments already discovered and still awaiting discovery at Roman sites. So many hundreds of thousands of these jars were made in antiquity as containers for the perishable food products that were a backbone of Roman trade. Amphoras are tangible proof of that trade. They tell the story of how the old Republican export and import harbors were succeeded during the Empire by new trading centers. Spain and Africa became the chief areas of production, and Italy, once the center of production, ultimately became the chief import market. The crisscross of trade routes was an almost impenetrable tangle, but somehow a precarious balance of trade was maintained. That fact may have been one reason why the Roman Empire survived so long, so improbably, and against all odds. Study of amphoras is helping to unravel and interpret the difficult mysteries of Roman trade. Like Odysseus, the much-enduring amphora sleuth must, as Homer says, wander afar and see many cities, must track amphoras under water and on land. It is an exciting life, a true detective story. Δ



Examining one of Harold Edgerton's Roman amphoras at MIT, with an amphora class from the University of Massachusetts. Photo by Harold Edgerton.



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DES AMPHORES ET DES HOMMES 1991*

*Abrégé en DADH

Les lecteurs de cette chronique (non exhaustive) sont invités à l'enrichir en signalant des références à F. Laubenheimer, 3 rue Brézin, 75014 Paris.

Les amphores jusqu'au 2ème s. av. notre ère

En Méditerranée orientale et dans le Pont

Dans une vaste fresque sur les céramiques grecques autour de la mer Noire, 1 J. Bouzek, *Studies of Greek Pottery in the Black Sea Area*, Prague 1990, dresse un tableau des amphores qui ont servi au transport du vin.

Un premier article sur les amphores de Colchis à pâte brune, trouvées en Chersonèse à la période hellénistique, met en évidence des échanges dans lesquels vin et sel jouent un rôle considérable, 2 V. Soznick, G.R. Tsetskhladze, *Colchian Amphorae of the Hellenistic Period in Chersonese*, dans *VDI*, 2, 1991, p. 6.

Parmi la trentaine de cités grecques connues pour avoir estampillé leurs amphores, Sinope, dont on connaît environ 20 000 amphores timbrées, tient la place d'un centre aussi important que Thasos ou Cnide, mais reste loin derrière Rhodes. 3 Y. Garlan, Remarques sur les timbres amphoriques de Sinope, dans *Comptes*

Rendus de l'Académie des Inscriptions et Belles Lettres, avril-juin 1990, p. 490-507, propose une étude du milieu des fabriquants et de l'organisation de la production céramique.

A Thasos, le comblement d'un puits effectué en une seule fois (cf. DADH 1990 n°2), fournit un matériel amphorique important, daté des années 330 av. J.-C. (1446 amphores, le calcul du nombre minimum d'individus est fait sur les fonds d'amphores et non sur les lèvres, pourtant généralement plus nombreuses) Plus de 80% des amphores sont thasiennes, les importations viennent pour une moitié de Grèce de l'Est (Chios et surtout Samos) et pour l'autre de Grèce du Nord (Mendé et les bords de la mer Noire). Les amphores de Grèce continentale sont rares, 4 F. Blondé, A. Muller, P. Mulliez, Le comblement d'un puits public à Thasos, 5. Le matériel amphorique, dans *Bulletin de Correspondance Hellénique* CXV, 1991, p. 213-242.

De nouvelles données sur la production du vin à Thasos, à Délos, à Rhodes et en Crète ont été proposées au colloque sur *La production du vin et de l'huile en Méditerranée de l'Age du Bronze à la fin du XVIème s.*, Aix-en-Provence, 20-22 novembre 1991, à paraître, 5 M. Brunet, Vin local et vin de cru: les exemples de Délos et de Thasos, 6 F. Salviat, Le vin de Rhodes et les plantations du dème d'Amos, 7 A. Marangou, Le vin de Crète de l'époque classique à l'époque impériale : un premier bilan.

L'identification d'une amphore de Chios (d'origine inconnue) dans les collections du Musée de Tournai (Belgique) est l'occasion pour 8 P. Monsieur, Une amphore de Chios au Musée de Tournai, dans *L'Antiquité Classique* LIX, 1990, p. 232-245, de faire un point sur cette production.

En Méditerranée occidentale

Les amphores gréco-italiques de la nécropole étrusque d'Adria sont-elles locales ? Tel est le problème que tentent de résoudre des analyses en fluorescence X 9 S. Bonomi, I. Calliari et A. Toniolo, Caratterizzazione di anfore greco-italiche da una necropoli etrusca di Adria, dans *Ricerche Archeometriche e Studi Archeologici sulla Ceramica Antica*, Convegno Europeo, Rome 10-12 oct 1991, à paraître.

Dans l'île de Mozia, face à Marsala, la présence de fours de potiers de tradition orientale suggère une origine locale pour un lot d'amphores puniques trouvées sur place. Des analyses physico-chimiques tentent de résoudre le problème, 10 C. Caneve, C. Giardino, M.L. Fama, Ceramiche antiche e moderne metodologie : le anfore puniche di Mozia, dans *Ricerche Archeometriche e Studi Archeologici sulla Ceramica Antica*, Convegno Europeo, Rome 10-12 octobre 1991, à paraître.

En Sardaigne, l'émergence d'une production d'amphores archaïques que l'on croit pouvoir situer à Sulchis pose en termes nouveaux la question des exportations vinaires sardes vers l'Etrurie et surtout vers les Pithécuses 11 P. Bartoloni, I recipienti chiusi d'uso domestico e commerciale, S. Antioco : area del cronicarion (campagne di scavo 1983-86), dans *Revista di Studi Fenici*, XVII,1 1990, p. 37-79.

A Ibiza, l'étude du matériel issu des fouilles des dix dernières années montre que les nombreuses amphores archaïques que l'on y trouve appartiennent toutes au type phénico-occidental R1 12 C. Gomez Bellard et coll., *La colonización fenicia de la isla de Ibiza*, Madrid 1990. Par ailleurs, 13 J. Ramon, Sobre los tipos antiguos de las anforas punicas Mana A, dans *Cuadernos de Prehistoria y Archeologia Castellonenses* 13 1987/1988, 1990, p. 181-204, pose, avec les amphores Mana A, le délicat problème d'influence et d'interaction entre une série d'amphores punique et une autre ibérique. De nouveaux travaux menés sur l'épave punique de Binisafuller (Minorque) orientent la datation du naufrage dans la première moitié du 3ème s. 14 V.M. Guerrero, J. Miro, J. Ramon, L'épave de Binisafuller (Minorque), un bateau de commerce punique du IIIème s. av. J.-C., dans *Studia Phoenica* X, Louvain 1989, p. 115-125.

Dans la basse vallée de l'Ebre, le site d'Aldovesta se caractérise par la présence massive de céramiques phéniciennes d'Occident et principalement d'amphores, 15 M.T. Mascort, J. Sanmarti, J. Santacana, *El jaciment protohistòric d'Aldovesta (Benifallet) i el comerç fenici arcaic a la Catalunya meridional*, Tarragone 1991.

En Gaule, l'analyse du développement topographique de la nécropole protohistorique de Pézenas (Hérault) - entre la fin du 7^{ème} s. et le début du 5^{ème} s. - révèle que les amphores étrusques (réutilisées en ossuaires) n'apparaissent dans les tombes que vers 570, alors que la vaisselle étrusque est présente bien avant. Les amphores de type grec (corinthiennes, ioniennes ou ionio-corinthiennes) sont distribuées dans une zone spécifique qui ne chevauche qu'en partie celle des amphores étrusques. Les raisons d'une telle répartition restent encore obscures 16 A. Nickels, Essai sur le développement topographique de la nécropole protohistorique de Pézenas (Hérault), dans *Gallia* 47, 1990, p. 1-27. Dans la région nîmoise, 17 M. Py, *Culture, économie et société protohistoriques dans la région nîmoise*, Rome 1990, analyse avec des données quantifiées, le flux des amphores étrusques, grecques, massaliètes et italiques....

Amphores républicaines et impériales

En Méditerranée orientale

- En Crète

La Crète a connu quelques productions d'amphores à la période hellénistique, mais sa plus forte impulsion dans ce domaine paraît se situer à l'époque impériale. Des ateliers (8 repérés par prospection) s'installent surtout sur la côte, près des ports d'exportation. Ils produisent de façon concomitante un ou plusieurs modèles d'amphores vinaires (huit formes actuellement définies) dont les exportations, aux 1^{er} et 2^{ème} s. de notre ère essentiellement, sont diffusées en Méditerranée orientale, et au-delà, en Italie et jusque sur la côte de Narbonnaise 18, St. Markoulaki, J.-Y. Empereur, A. Marangou, Recherches sur les centres de fabrication d'amphores de Crète occidentale, dans *Bulletin de Correspondance Hellénique* CXIII, 1989, p. 551-580 ; 19, J.-Y. Empereur, Ch. Kristzas, A. Marangou, Recherches sur les amphores crétoises II : les centres de fabrication d'amphores en Crète centrale, dans *Bulletin de Correspondance Hellénique* CXV 1991, p. 481-523. Cette nouvelle étude vient à point pour les chercheurs d'Occident qui peuvent déjà signaler que le vin crétois a très profondément pénétré les Gaules, jusque dans les provinces les plus septentrionales.

En Méditerranée occidentale

- En Italie

Saluons, à Brindisi, la fouille d'une partie d'un atelier de potiers, 20 D. Manacorda, Le fornaci di Visellio a Brindisi. Primo risultati dello scavo, dans *Vetera Christianorum* 29, 1990, p. 375-415, Università degli Studi, Bari. Elle fait apparaître deux fours jumeaux de très grande taille et des amphores timbrées au nom de Visellius par centaines. La capacité de la structure de production conduit l'auteur à penser que Visellius pourrait être le maître d'une véritable manufacture.

Dans la baie de Naples où la production des amphores s'étale sur 8 siècles, jusqu'au début du + 3^{ème} s., P. Arthur donne un regard à la fois sur l'évolution des campagnes : domaines, vignobles et ateliers d'amphores, et sur les villes 21 P. Arthur, Territories, Wine and Wealth : Suessa Aurunca, Sinuessa, Minturnae and the Ager Falernus, dans G. Barker et J. Lloyd ed., *Roman Landscapes, Archaeological Survey in the Mediterranean Region*, Londres 1991, p. 154-159. Le même auteur - 22 P. Arthur, *Romans in Northern Campania*, Archaeological Monographs of the British School at Rome, Londres 1991- publie le fruit de trois ans de prospections et de travaux dans le Nord de la Campanie, un des terroirs les plus fertiles du bassin méditerranéen. Dans son chapitre sur la paix romaine, il montre que le développement des cultures dans la vallée du Garigliano, l'ager Falernus, atteint alors un niveau sans précédent : à la fin du - 2^{ème} s., et au début du -1^{er} s., les ateliers d'amphores D1 (carte) se multiplient sur la côte, tandis que s'installent des systèmes sophistiqués de pressage du vin. La masse des déchets d'amphores est telle qu'elle engendre, à Sinuessa, un style de construction spécifique avec remploi. L'auteur propose de voir des structures de fabrication indépendantes dans les vastes ateliers côtiers, où l'on repère plusieurs séries de timbres différents à la fois. En revanche, à partir de la fin du -1^{er} s., les officines migrent vers l'intérieur des terres et ce sont des unités plus petites qui s'intègrent à un *fundus* et ne signent plus leur production. On trouvera aussi la liste des timbres campaniens associés à un lieu de production et l'évocation d'une production locale d'amphores à fond plat et lèvre à double inflexion externe qui serait, au même titre que les D1 ou les D2/4, le modèle italien exporté en Espagne et en Gaule.

La découverte d'une série d'amphores Richborough 527 à Pouzzoles est l'occasion pour 23 D. Williams et P. Arthur, Roman Amphora form Richborough 527 : a Continuing Petrological Study, dans A. Middleton et I. Freestone (eds), *Recent Developments in Ceramic Petrology, British Museum Occasional Papers* 81, 1991, p.3 89-398, de repenser le problème de leur origine. En fait, l'analyse pétrographique ne montre pas grande différence entre les échantillons découverts en Angleterre, en France ou en Italie, mais les italiennes font apparaître des formes légèrement différentes et surtout beaucoup plus tardives puisqu'elles durent jusqu'au 4^{ème} s. Doit-on envisager une production dans un lieu unique pendant 4 siècles ? La question est sans doute plus complexe, me semble-t-il, lorsque l'on apprend qu'un premier atelier vient d'être découvert, dans une région qui n'est ni le Massif Central ni la Campanie -les deux hypothèses proposées par les minérologues-, mais la Provence (F. Gateau *et al.*, à paraître dans *SFECAG, Actes du Congrès de Cognac 1991*). Il semble, en outre, que les variétés typologiques ne soient peut-être pas étrangères à diverses origines.

A Minturnes, se situe l'atelier de fabrication des navires à chargement mixte de vin en vrac dans des *dolia* et de vin en amphores D2/4 P. Gianfrotta fait le point de la question : 24 A Roman Shipyard at Minturno : Indications from Underwater Archaeology, dans *Tropis II, 2nd International Symposium on Ship Construction in Antiquity*, p. 195-205.

A Rome, la reprise des fouilles sur le Mont Testaccio donne lieu à des études archéométriques : 25 O. Grubessi, A. Villani, L. Lazzarini, Progetto Testaccio Studio archemetrico delle anfore Dressel 20, et 26 F. Burragato, L. Lazzarini, P.L. Di Russo, Le anfore africane di Monte Testaccio in Roma : considerazioni sulla composizione e tecnologia ceramica, dans *Ricerche Archeometriche e Studi Archeologici sulla ceramica antica, Convegno Europeo, Rome, 10-12 oct. 1991*, à paraître.

En Italie du Nord, dans la région de Modène, à Maranello, un important centre de production de l'époque républicaine est repéré et un four fouillé (sole carrée de 4m x 3,5m). Deux formes d'amphores, sont fabriquées à la fin du -2^{ème} s., l'une est une transition entre les formes gréco-italique et Lamboglia 2, l'autre, plus rare, est proche de la forme 1 d'Apani 27 N. Giordani, Documenti sull'attività di

produzione e di scambio nelle prime fasi della romanizzazione dell'Ager Mutinensis, dans *Etudes Celtiques*, XXVII, 1990, p. 131-162.

- Dans la Péninsule ibérique

A Majorque, à travers le comptage des amphores de l'exploitation saline de San Jordi (dont on ne nous dit pas comment il se fait), se dessine le marasme des débuts de l'époque coloniale qui dure depuis -123 jusqu'aux environs de -50. A partir de l'époque d'Auguste, et jusqu'à la fin du 1^{er} s., se développe une intense activité dominée par la production locale d'amphores vinaires qui s'effondre à partir du 2^{ème} s., 28 V.M. Guerrero Ayuso, Problemas en torno al inicio de la Romanización en Mallorca, dans *Saguntum* 23, 1990, p. 225-242.

Une installation spécifique dans une maison du village ibérique de Burriac, près de Barcelone, présente un silo de 2m de diamètre environ, équipé de 18 amphores entières, tête en bas. Réutilisation originale que l'auteur n'interprète pas et qui ressemble fort à un système de drainage, le silo ayant sans doute une fonction très particulière dans l'activité de la maison. Il semble que toutes les amphores aient été placées d'un coup, dans les années 90-80 avant notre ère, comme l'indique une marque peinte. Pour les 14 D.1, l'auteur se heurte aux habituelles difficultés classificatoires entre les types A, B encore si mal définis... On compte aussi une variante de la forme L2 et trois amphores puniques, 29 J. Miro, Un conjunto de ánforas tardo-republicanas de un silo del poblado ibérico de Burriac (Cabrera de Mar, Barcelona), dans *Saguntum* 24, 1991, p. 53-67. Citons par ailleurs l'étude de 30 E. Sanmarti Grego, Las ánforas romanas del campamento numantino de Pena Redona (Garray, Soria), dans *Empuries*, 47-1985, 1991.

En Léétanie, près de Barcelone, une fouille nouvelle sur l'atelier de Sant Boi Llobregat a mis au jour un four à double alandier. La production concerne à la fois, comme c'est souvent le cas, les amphores (P1 et D2/4), la céramique commune et les matériaux de construction. Trois timbres apparaissent sur les amphores : IVLI(us) ANICETVS, QVA(dratus) et SOS(ibia), 31 A. Lopez Mullor, Une nouvelle fouille dans le centre producteur d'amphores de Sant Boi de

Llobregat (Barcelone), dans *SFECAG, Actes du Congrès de Mandeure-Mathay*, 1990, p. 187-198.

Dans la région de Castellon, apparaît la production la plus méridionale d'amphores P.1, associée à celle de D2/4, D28 D1C et D28, dans le cadre d'une villa, un four à alandier unique et sole circulaire est apparu, 32 C. Boras i Querol, Avance de las excavaciones en la villa romana del Mas d'Arago (Cervera del Maestrat), dans *Cuadernos de Prehistoria Arqueologia Castellonenses* 13, 1987/1988, p. 379-397.

A Javea, un graffite ibérique sur une amphore D2/4 pourrait correspondre à une indication de quantité, 33 J. Bolufer Marques, Un grafit iberic sobre àmfora itàlica del museu de Xabia, dans *Xabiga, Revista de Cultura* 3, 1987, p. 37-40. Découvertes sur la côte du Pays valencien, au large d'Altea, un lot de 46 amphores de diverses collections privées représentent un répertoire très varié de la fin de la République au Bas-Empire, 34 F. Sala Selles, Contribucion al estudio del trafico maritimo antiguo en la costa norte de la provincia de Alicante, dans *Xabiga, Revista de Cultura* 5, 1989, p. 40-63.

- Dans les Gaules

Dans une approche globalisante des boissons, le vin et les autres, 35 M. Dietler, Driven by Drink : the Role of Drinking in the Political Economy and the Case of Early Iron Age France, dans *Journal of Anthropological Archaeology* 9, n°4, Décembre 1990, p. 352-406, considère "le boire" comme traceur caractéristique d'une société et de sa culture. Il propose un modèle, représentation schématique de processus complexes (qui boit, quoi, quand, comment, où et pourquoi ?) qui régissent les sociétés. Il l'applique à celles du Bassin du Rhône et de la Saône dans l'Antiquité, en s'appuyant notamment sur la distribution du matériel à boire et sur celle des amphores.

En Gaule comme en Espagne, la masse des amphores présentes dans les mines - des D1 surtout, mais d'autres amphores aussi - conduit C. Domergue 36, Les amphores dans les mines antiques du Sud de la Gaule et de la Péninsule ibérique, dans *Festschrift für Wilhelm Schüle zum 60. Geburtstag, Veröffentlichung des Vorgeschichtlichen Seminars Marburg Sonderband 6 Internationale Archäologie* 1, 1991, p. 99-125, à démontrer qu'il s'agit de remplois servant vraisemblablement à transporter l'eau des mineurs. Elles ne traduisent pas un

échange direct, sur la mine même, de vin contre du métal. On trouvera un exemple supplémentaire d'association mine-D1 dans 37 C. Dubois et J.E. Guibaut, Un exemple d'exploitation minière antique dans les P.O. ariégeoises : la mine du Rougé à Esplas de Serou, dans *Revue Archéologique de Narbonnaise* 22, 1989, p. 363-370.

Une étude déjà un peu ancienne, mais récemment parue, de A. Fitzpatrick, 38 The Structure of a distribution Map : Problems of Sample Bias and Quantitative Structure, dans *Rei Cretariae Fautorum, Acta XXV-XXVI*, 1987, p. 79-113, pose, encore une fois, le problème de la cartographie des données archéologiques en prenant pour exemple la distribution des D1 dans le nord de la Gaule. Les questionnements et des travaux de plus en plus pointus sur les comptages et la représentativité des échantillons ont beaucoup progressé récemment et sont au cœur des recherches actuelles, cf. *Production et circulation des amphores en Gaule, Actes de la Table Ronde de Metz*, oct. 1990, sous presse.

La fouille d'un remblai hellénistique de Marseille, 39 G. Bertucchi, A. Marangou, Le remblai hellénistique de la Bourse à Marseille, dans *Revue Archéologique de Narbonnaise* 22, 1989, p. 47-87, montre, dans un échantillon à peine supérieur à 3 m³ et très riche en céramiques, au début du -2ème s., la place encore importante des amphores de Marseille dont la masse dépasse celle des gréco-italiques, tandis que les rhodiennes et puniques sont présentes, mais rares. Dans la fourchette -170 -140, les marseillaises s'estompent au profit des gréco-italiques; rhodiennes et puniques sont toujours rares. Quelques imitations marseillaises de gréco-italiques ou D1 restent marginales.

A l'occasion des confrontations chronologiques entre Gaule interne et Gaule méditerranéenne, un bilan de la datation des D1 et des premières amphores impériales est présenté par 40 A. Hesnard, Les amphores, dans *Gaule interne et Gaule méditerranéenne aux IIème et Ier s. av. J.-C.*, sous la direction de J.-P. Morel et Y. Roman, sup. 21 à la *Revue Archéologique de Narbonnaise*, 1990, p. 47-54. Dans le même ouvrage, 41 A. Tchernia, Contre les épaves, p. 291-301, souligne la difficulté de dater à dix ans près une épave, qui, par définition, ne peut se caller dans une stratigraphie, et la nécessité,

pour se faire, de comprendre les éléments de base des fondements chronologiques mis en jeu.

Un lot de 43 timbres et marques peintes sur D1 trouvées à Rodez vient enrichir le corpus de la Gaule d'une collection appréciable, 42 L. Dausse, P. Gruat, Estampilles et inscriptions peintes sur amphores vinaires Dressel 1 trouvées à Rodez, dans *Vivre en Rouergue, Cahier d'archéologie aveyronnaise* n°5, 1991, p. 66-77. En Dordogne, la belle officine de potiers protohistorique de Lacoste a fourni par milliers des tessons d'amphores italiques (gréco-italiques et D1) avec quelques P1 et des amphores gauloises à fond plat 43, C. Sireix, Officine de potiers et production céramique sur le site protohistorique de Lacoste à Mouliets-et-Villemartin (Gironde), dans *Aquitania* 8, 1990, p. 45-97.

A partir d'un échantillonnage de sites, 44 A. Colin, La chronologie des *oppida* en France non Méditerranéenne, dans *Les Gaulois d'Armorique*, sup. 3 1990 à la *Revue Archéologique de l'Ouest*, p. 195-208, trace à grands traits l'évolution de l'approvisionnement en amphores notamment.

A Lyon, un quatrième fossé, découvert à l'hôpital Ste-Croix, livre un riche matériel. La proportion d'amphores, près de 50% des céramiques - 33 D1A/B, 1 D1C, 1 D2/4 orientale - est plus forte que celle d'un habitat, mais bien inférieure à celle du fossé du Verbe Incarné. Les auteurs restent prudents sur la datation, 45 Mandy, M. Monin, S. Krausz, L'hôpital Ste-Croix à Lyon, un quatrième fossé..., dans *Gallia* 47, 1990, p. 79-102.

La très belle publication de la tombe de Clemecy, en Gaule Belgique, 46 J. Metzler, R. Waringo, R. Bis, N. Metzler-Zens, *Clemecy et les tombes de l'aristocratie en Gaule Belgique*, Luxembourg 1991, montre sa richesse particulière avec 30 à 40 amphores D1 servant pour des libations autour du bûcher funèbre, tandis qu'une dizaine étaient déposées dans la tombe. Une amphore D7/11 a aussi été utilisée lors de la crémation. S'agissait-il vraiment de sauces de poissons (on connaît des contre-exemples, B. Liou, Le contenu des amphores, typologie et épigraphie: quelques cas aberrants ou embarrassants, dans *SFECAG, Actes du congrès d'Orange*, 1988, p. 171-178) ? Un autre exemple est signalé : D9 et sans doute D12 dans une tombe de la région (voir l'inventaire des tombes à amphores républicaines de la partie occidentale du pays trévire qui accompagne l'étude). Une étude comparative des D1 de

Clemecy et de celles de quelques épaves datées conclut à une datation entre 80 et 60 pour un type intermédiaire, entre D1A et D1B. L'étude des rites funéraires et de la distribution des amphores sur divers types sites conduit notamment à proposer une nouvelle interprétation des fossés de la Sarra à Lyon dont le remplissage pourrait être rituel, dans la tradition des sanctuaires gaulois.

A Bordeaux, le site de La France, rue de la Porte Dijaux, fournit une stratigraphie du 1er s. av. J.-C. Les amphores D1 y sont rares, quelques dizaines de tessons au mieux, sauf dans un cas, où un peu moins de 2000 tessons (on ne nous dit pas combien d'amphores cela représente) sont réutilisés pour faire un sol. Il paraît difficile de tracer une évolution des importations vinaires à partir de données si peu comparables entre elles, 47, F. Berthault, Le commerce du vin à Bordeaux au 1er s. avant notre ère, dans *Revue Archéologique de Narbonnaise* 22, 1989, p.89-97.

Combien d'amphores à Bibracte ? L'analyse des découvertes des masses d'amphores qui avait tant impressionné Bulliot et Déchelette permet d'en renouveler la lecture et de mieux approcher la réalité. Le catalogue des 195 amphores timbrées, surtout italiques, fournit la plus grande collection de D1 estampillées publiée en France à ce jour, 48 F. Laubenheimer, *Les amphores de Bibracte, Le matériel des fouilles anciennes*, Documents d'Archéologie Française, n° 29, Paris 1991.

Dans la haute vallée du Rhône, le site de Massongex-Tarnaiaie fait l'objet d'un bilan à la suite de fouilles récentes 49, M.-A. Haldimann, P. Curdy, P.-A. Gillioz, G. Kaenel, F. Wiblè, Aux origines de Massongex VS, *Tarnaiaie*, de La Tène finale à l'époque augustéenne, dans *Annuaire de la Société Suisse de Préhistoire et d'Archéologie* 74, 1991, p. 129-182. Les amphores D6A et B confirment les liens existant entre le Valais et l'Italie septentrionale.

A Genève, un vaste chantier a mis au jour les ports qui se sont succédés depuis l'époque protohistorique, 50 C. Bonnet, G. Zoller, P. Broillet, M.-A. Haldimann, C.-A. Baud, C. Kramar, C. Simon, C. Olive, Y. Billaud, Les premiers ports de Genève, dans *Archéologie Suisse*, 12, 1989, p. 2-17. A signaler une Lamboglia 2 dans la période antérieure à 123 ; peu fréquentes vers le milieu du +1er s.,

les amphores se multiplient dans la deuxième moitié du siècle, les apports gaulois (G3 et D2/4) sont notables.

A St-Gervais, 51 M.-A. Haldimann, Un ensemble céramique préaugustéen mis au jour à St-Gervais GE, dans *Archéologie de la Suisse* 14, 1991/2, p. 215-217, un petit lot de 9 amphores compte notamment une D1C, 1 D2/4 orientale, 1 D6, 1 G2 de Marseille, et 1 D9.

Le matériel amphorique (352 amphores souvent complètes) de trois habitats provençaux détruits militairement entre 130 et 90 av. J.-C., se répartit entre amphores gréco-italiques et D1(surtout), mais on trouve aussi des importations de Cos et de Rhodes, des amphores puniques, des Lamboglia 2 et des amphores de Brindes. C'est aussi l'occasion de faire un point précis et précieux sur les principes typologiques séparant gréco-italiques et D1, et D1A et D1B, avec des applications qui, à partir d'un échantillonnage important, proposent des corrections, 52 F. Gateau, Amphores importées durant le II^{ème} s. av. J.-C. dans trois habitats de Provence occidentale : Entremont, Le Baoux-Roux, Saint-Blaise, dans *Documents d'Archéologie Méridionale* 13, 1990, p. 163-183.

Dans la région lyonnaise, les amphores à fond plat de Marseille de type G2 ou Bertucchi 6 apparaissent entre -32 -20 et cessent au début du 1^{er} s. 53 A. Desbat, Amphores récentes de Marseille. Les types à fond plat de la région lyonnaise, dans *Documents d'Archéologie Méridionale* 13, 1990, p. 259-266.

Dans le centre de la France les sépultures de Fontillet (Cher) et de Neuvy Pailloux (Indre), anciennement découvertes, mais récemment réétudiées (Ferdère, à paraître), contiennent, avec un mobilier métallique remarquable notamment, des amphores vinaires P1 de Tarraconaise en quantité : 10 pour l'une, datée entre -20 et le changement d'ère, et 57 pour l'autre (vers +40 +50), un chiffre qui se place dans la tradition des offrandes vinaires de Clemecy, 54 F. Beck, H. Chew, *Masques de fer, un officier au temps de Caligula*, Catalogue d'exposition, Paris 1991.

Un nouveau bilan des marques sur amphores P1 de Port-la-Nouvelle, Narbonne vient compléter le premier travail publié en 1974 par A. Bouscaras : 55 A. Bergé, Les marques sur amphores Pascual 1 de Port-la-Nautique, dans *Cahiers d'Archéologie*

Subaquatique IX, 1990, p. 131-201. Quelques estampilles sur D.20 sont signalées sur le site de La Courgoulade à Lattes, 56 G. Fédière, D. Rouquette, Marques sur matériaux de terre cuite, estampilles sur amphores et céramiques décorées du site de La Cougourlude à Lattes (Hérault) dans *Hommages à Henri Prades*, Archéologie en Languedoc 1989, Lodève 1990, p. 113-119.

Des analyses par fluorescence X ont confirmé l'origine locale des amphores dites de Fréjus-Lenzbourg, 57 D. Brentchaloff, M. Picon, Amphores de Fréjus-Lenzbourg : origine contrôlée, dans *SFECAG, Actes du Congrès de Mandeure-Mathay*, 1990, p. 225-230.

A Bordeaux, la découverte de ceps de vigne dans un contexte du 1^{er} s. vient conforter l'idée d'une production viticole locale dès cette époque, comme la production d'amphores régionales avait déjà été évoquée 58 F. Berthault, L'origine du vin de Bordeaux, dans *Archeologia* 271, 1991, p. 28-35.

A St-Romain-en-Gal, des dépôts d'amphores italiques D2/4 des 2^{ème} et 3^{ème} s. (timbres et marques consulaire peinte) invite à prolonger dans le temps la fabrication et l'exportation de tels produits, 59 A. Desbat, H. Savay-Guerraz, Note sur la découverte d'amphores Dressel 2/4 italiques, tardives, à St-Romain-en-Gal, dans *Gallia* 47, 1990, p. 203-213.

A l'occasion d'une exposition sur la Lorraine antique, J. Baudoux donne un premier aperçu du commerce des amphores impériales, 60 J. Baudoux, Le commerce des amphores en Lorraine sous l'Empire romain, dans *La Lorraine Antique, ville et villages*, Catalogue d'exposition, Moulins-lès-Metz 1990, p. 101-105.

- En Bretagne

Signalons, d'abord, sous la plume de R.P. Symonds et de J.R. Perrin, la troisième parution de la 61 Roman Pottery Bibliography, dans *Journal of Roman Pottery Studies* 3, 1990, p. 92-125, qui compte 280 références indexées (le mot amphore notamment) sur la Grande-Bretagne et une rubrique sur les publications étrangères.

Dans l'estuaire de la Tamise, une amphore London 555 contenait environ 6500 olives. Sa publication est l'occasion de montrer une distribution importante en Grande-Bretagne de cette forme qui, pour les auteurs est originaire de Bétique 62 P.R. Sealey,

P.A. Tyers, Olives from Roman Spain : a Unique Amphora Find in British Waters, dans *The Antiquaries Journal*, LXIX, 1989, p. 53-72.

Célèbre pour ses inscriptions peintes sur tablettes de bois, Vindolanda a aussi fourni une petite collection de timbres, graffites et marques peintes sur D 20, 63 P.P.A. Funari, Dressel 20 Amphora Inscriptions Found at Vindolanda : the Reading of the Unpublished Evidence, dans *Roman Frontier Studies* 1989, Exeter 1991, p. 65-71.

- En Pannonie

Le fort de Vetus Salina, fouillé dans les années cinquante, a fourni une petite collection de 11 amphores qu'il est intéressant d'examiner à la lumière des connaissances récentes. On y compte des D6B, des D20, D.7/11 et Pélichet 46, 64 T. Bezeczky, Amphorae from the Auxiliary Fort of Adony (Vetus Salina), dans *Különlenyomat az Archaeologiai Értesítő* 117, 1990, p. 96-102.

Amphores tardives

- Dans la Péninsule ibérique

Du 3ème au 5ème s., l'huile de Bétique continue à être exportée dans des amphores D23, comme le prouvent les découvertes d'Ostie, Rome, Cologne, Ampurias et Tarragone, 65 J. Remesal Rodríguez, El Aceite bético durante el bajo imperio, dans *Antigüedad y Cristianismo VIII, Homenaje al Profesor Dr. J.M. Blasquez Martínez*, Murcie 1991, p. 355-361.

Dans le port de Grau Vell (Sagonte), un bâtiment, dépendant d'une villa, contenait un lot de 28 amphores bien datées par céramiques et monnaies de la fin du 3ème s. et du début du 4ème s. On y trouve des Almagro 51c, des grandes africaines, des amphores d'Ibiza RE 0101 et quelques formes indéterminées, 66 C. Aranegui Gasco, M. Lopez Pinol, M. Orfila Pons, Anforas tardorromanas en el Grau Vell (Sagunto, Valencia), dans *Saguntum* 24, 1991, p. 117-127.

- En Afrique

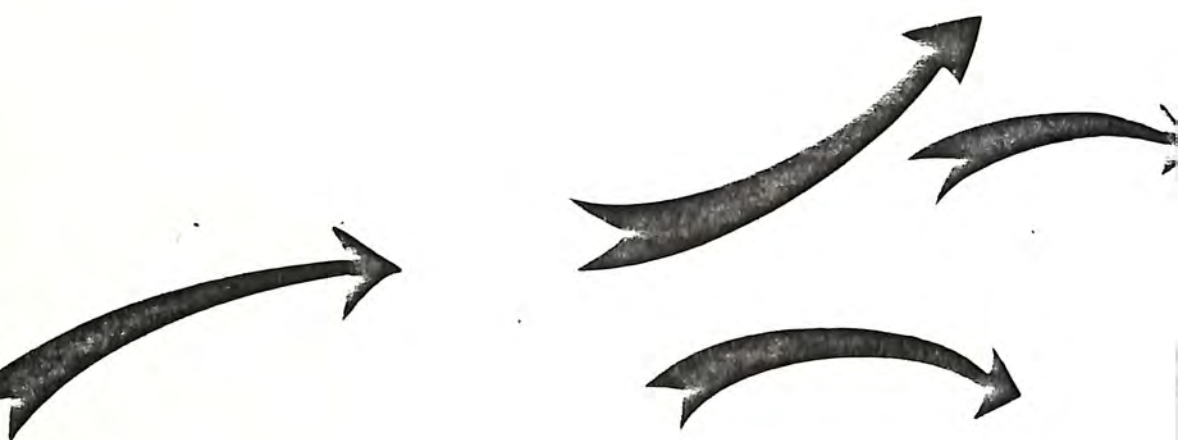
A Carthage, trois amphores cylindriques de Byzacène (Keay XXV) du 4ème s. ont été placées dans un mur de la *cavea* du théâtre

(daté du 2ème s.), lors d'une restauration, 67 J. Freed, K.E. Ros, Tunisian Amphoras of the Fourth Century A.D., Built in the Roman Theater at Carthage, dans *CEDAC Carthage*, Institut National d'Archéologie et d'Art, Tunis, n°11, 1990, p. 19-23. Par ailleurs, des amphores ont été réutilisées, disposées autour d'une cuve et maçonnées dans les sol, 68 C. Balmelle et al., Recherches franco-tunisiennes dans la maison du cryptoportique (1988-1989), dans *CEDAC Carthage*, Institut National d'Art et d'Archéologie, Tunis, n°11, 1990, p. 11-18.

Quatre campagnes de prospection en Tunisie ont permis de découvrir 18 fours à amphores (faut-il comprendre 18 ateliers ?) entre le 2ème et le 6ème s. de notre ère. L'examen du matériel - typologie, technologie et étude minéralogique de la pâte - montre deux mouvements ou tendances. Dans un premier temps, les ateliers sont proches des villes et situés sur la côte. Ils fabriquent des amphores Africaines I et II. Dans un deuxième temps, les ateliers sont ruraux et produisent des amphores tardives comme les Keay LXII. Une telle réorganisation (dont les causes ne sont pas connues : menaces des Vandales ? passage du conditionnement du garum à celui de l'huile ?) s'accompagne d'une transformation technologique, 69 D.P.S. Peacock, R. Tomber, Roman Amphora Kilns in the Sahel of Tunisia : Petrographic Investigation of Kiln Material from a Sedimentary Environment, dans A. Middleton et I. Freestone (eds), *Recent Developments in Ceramic Petrology, British Museum Occ. Papers* 81, 1991, p. 289-304.

En terminant, mentionnons un livre d'images "à l'usage du non spécialiste, plongeur, étudiant ou amateur amené à rencontrer des amphores pendant ses loisirs ou à l'occasion d'un travail"... Hélas, ce lecteur amateur aura bien du mal à jouer avec la bibliographie, livrée en bloc et sans relation avec les illustrations, 70 M. Sciallano, P. Sibella, *Amphores, comment les identifier ?*, Aix-en-Provence 1991.

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From the Journal of an Amphora Sleuth

by

Elizabeth Lyding Will

2 a.m.,

January 1, 1990. The plane has landed, and I wait for my luggage. From out of nowhere, a smartly uniformed official approaches me with a package. In it is an elegantly bound 1990 desk calendar, its cover padded and gilded. A card reads, "Welcome to India, Destination of the 1990's, and to the Indira Gandhi International Airport, New Delhi." My forty years as a Roman amphora sleuth have taken me to many parts of the world. All over Europe and even in Egypt I have played the self-effacing role appropriate to archaeologists. Now I suddenly find myself called upon, in the middle of the night, to respond to hospitality of a kind seldom encountered in the world's great airports. I look up, searching for words, but the man is gone, as silently as he had come.

Mid-January, 1990. An ordinary work day in the museum at Pondicherry, on the southeast coast of India.



Outside the University of Pondicherry (Tamil Nadu), India. Photo by Steven Sidebotham.

I stand by an inlaid, brocade-covered grand piano, on which are arranged amphora fragments found at nearby Arikamedu, an ancient Greco-Roman trading center. Many such centers, mostly unexcavated, are known to lie south of Madras along the coast of the thundering Bay of Bengal. As I measure the fragments and examine their clay (a process essential to accurate identification of type), handsome, dark-skinned Tamil parents watch intently and whisper softly to their children from behind the barrier that keeps them out of the room where I work, a reconstructed French provincial library in the museum. Pondicherry was once the capital of French India and is now the site of the internationally famous ashram of the Mother. The Tamils are used to foreign eccentrics, but they are clearly mystified by me and my work. The same fragments have been on display for some time in cases in the museum, finds from digging carried on in the 1940s, by French archaeologists and by the famed British excavator, Sir Mortimer Wheeler. Those finds from the 1940s, mostly fragments of ancient shipping amphoras, were published in part by Sir Mortimer, but had been largely forgotten until Vimala Begley of the University Museum

in Philadelphia decided to recommence digging at Arikamedu. Funded by the Smithsonian and with the collaboration of her colleague, Steven Sidebotham of the University of Delaware, and K. V. Raman and his team from the University of Madras, Begley is now opening trenches at Arikamedu and trying to clarify the chronology and history of the site. Such Greco-Roman trading centers, established in the wealthy Tamil kingdoms in southern India as early as the first century B.C., and perhaps earlier, were sources of the luxury goods which only the East could provide to Rome and the Mediterranean, the jewels and spices and unguents and transshipped Chinese silks which were in such demand in the West. In return, the Greco-Roman ships took to India quantities of Roman coins and also exotic Mediterranean foodstuffs not avail-

(Will - continued on page 4)

FROM THE EXECUTIVE DIRECTOR

Archaeology is sometimes a perilous endeavor and often this is due to political machinations unknown to and certainly beyond the control of archaeologists. Such was the case with the AIA expedition to Cyrene.

Shortly before 8:00 a.m. on the morning of March 11, 1911, Herbert Fletcher De Cou, archaeologist with the AIA expedition to Cyrene, began his walk from camp to the site of the dig near the ancient acropolis. A few minutes later, shots were heard, and when guards ran to investigate, they found De Cou lying dead, the victim of an ambush by tribesmen from outside the local vicinity.

The AIA expedition under the direction of Professor Richard Norton had arrived in Cyrene in October of 1910. They soon learned that the Italian contingent in Benghazi coveted the Cyrene site and had spread rumors that the Americans were there to exploit sulphur and potash deposits and to confiscate land for colonization. As Norton and his colleagues progressed with their work over the next few months, they gained the trust of the local inhabitants who were surprised that, contrary to what they had been led to believe by the Italians, the Americans were engaged in archaeological fieldwork.

What the AIA expedition took for professional jealousy was much more than they imagined, as archaeology had little to do with the Italians' reasons for wanting the Americans out of Cyrene. Italy viewed the north African Turkish provinces of Tripolitania and Cyrenaica (modern Libya) as within its natural sphere of power and it was empire, not archaeology, providing the motivation for their actions. After the murder, the ensuing investigation clearly indicated that the Italians were responsible for the incident.

On September 29, 1911, Italy declared war on Turkey, commencing what is now known as the Italo-Turkish War. The Italians quickly occupied Tripoli, Derna and Benghazi, but heavier than expected resistance kept them confined to coastal areas until they were able to push inland with a successful offensive between July and October of 1912. Growing problems in the Balkan states prompted Turkey to sue for peace and the Treaty of Lausanne, ending the war, was signed on October 18, 1912. In the treaty, Tripolitania and Cyrenaica were ceded to Italy, satisfying Italian expansionist desires for the moment.

At the cessation of hostilities, Herbert Fletcher De Cou, as much a casualty of the war as those who died in battle, lay buried at Cyrene, where archaeology was forgotten for the moment.

Mark J. Meister
Executive Director

AIA TERM LIFE INSURANCE

During the April 23-June 1, 1991, Charter Enrollment Period, all AIA members who are under age 60 are eligible to apply for their choice of \$60,000 or \$45,000 in coverage under the New AIA Group Term Life Insurance Plan. Spouses may also apply even if the member does not, provided the spouse is also under age 60. Acceptance is easy if members and/or spouses can accurately answer "no" to the three questions on the application.

The Group Term Life Insurance is available at low group rates. The mass purchasing power of AIA allows members to update their life insurance the most economical way possible.

This Plan can be used to bring a member's life insurance coverage up-to-date with his or her current responsibilities or as a "starter" policy for those just starting their life insurance portfolios.

Members will be receiving further information about the AIA Group Term Life Insurance Plan, including rates, in the mail soon. For further information contact our Group Insurance Administrator: Albert H. Wohlers & Co., AIA GROUP INSURANCE PLANS, 1440 N. Northwest Highway, Park Ridge, Illinois 60068-1400. Or call toll-free: 1-800-323-2106. Illinois residents call: 1-708-803-3100.

IMPORTANT REQUEST FROM THE COMMITTEE ON COMPUTER APPLICATIONS AND ELECTRONIC DATA

The AIA Committee on Computer Applications and Electronic Data is beginning to compile information about the use of computers in archaeology—in the field, the office or the lab. Our goal is to provide information about a wide variety of computer issues, including the availability of data in computer forms and reports on systems in use. A questionnaire is being prepared, but we would like first to find out simply who is using computers for archaeological work. If you are now using a computer to assist with your archaeological work or if you plan to do so in the near future, please fill in the form, cut it out of the newsletter and send it to: Computer Committee, Archaeological Institute of America, 675 Commonwealth Avenue, Boston, MA 02215.

Name: _____

Tel: _____

Address: _____

e-mail address: _____

If your use of computers is limited to word processing, please check here. ☐

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SOCIETY NEWS

The **South Pennsylvania Society** of the AIA held, as its January meeting, a "Festival of Museums," a "home-grown" program that might inspire other smaller chapters to try similar shows. Held on a Saturday afternoon, this parade of "Museums You Can't Afford to Miss" was available to students and townspeople who might not be present at a traditional evening lecture. All the speakers were members of the Chapter: Leon Fitts (Dickinson College) on the York (England) Museums; Gunlag Anderson (Wilson College) on the Baltic Museums, specifically those in Sweden and Finland; Birgitte Ginge (Dickinson College) on the Ny Carlsberg Glyptothek in Copenhagen; Philip Lockhart (Dickinson College) on the museums of "Le Midi," especially the Château Borély in Marseilles; and Carolyn Snively (Gettysburg College) on the National Museum in Thessaloniki. Predictably, each presentation introduced not only a great Museum, outside the British-Louvre-Vatican-Athens tourist trail, but also a fascinating branch of archaeology: Roman epigraphy in York; prehistoric and historic boats in Scandinavia; classical sculpture in Copenhagen; animal art in Marseilles; and Macedonian art in Thessaloniki. For three hours professionals, students and amateurs followed their guides through collections whose origins covered time from the Ice Age to our own century. Each speaker balanced the professional and the popular, but each showed a personal attachment to the museum she or he described. Mary Moser (Dickinson College), as M.C., underscored those connections. Though Dickinson hosted this first festival, the Chapter has already begun plans for annual revivals on the other campuses (Gettysburg, Wilson and Mt. St. Mary's) that support the South Pennsylvania Chapter. Although the festival was planned before the Persian Gulf War started, the heightened threat of terrorism in travel made the armchair feel especially good.

The **Washington Society** 1990/1991 program features a series of nine lectures in the fields of Mesopotamian, Egyptian, European prehistoric, Aegean and Greco-Roman archaeology. The season will conclude on May 8 when the Fourth Annual Richard Hubbard Howland Lecture, the Washington Society's endowed lectureship, will be given by Emily Vermeule of Harvard University. In the fall of 1990 the Washington Society inaugurated a Travel Fellowship Grant with great success. A committee chaired by Board Member Cameron Sanders raised sufficient funds to send one Washington area student of archaeology to the 92nd Annual Meeting of the AIA in San Francisco. The 1990 recipient was Ms. Markella Magoulas, a graduate student in the Department of Art History and Archaeology at the University of Maryland, College Park. The Travel Fellowship, funded by the Marcia Brady Tucker Foundation and private contributions, enabled Markella to attend papers and colloquia and to meet established professionals in the field of archaeology and other graduate students with similar interests. She returned with high enthusiasm and renewed commitment for the field of ancient art and archaeology. The Society expects to award the Travel Fellowship on an annual basis and in this way to draw promising Washington area students into the field of archaeology and into a lasting involvement with the AIA.

The **Western Massachusetts Society** has been offering a number of tributes by colleagues, students and friends to Phyllis Williams

Lehmann for her role at Smith College, where she taught until 1978, and for her fieldwork at Samothrace beginning in 1939. Her husband, Karl Lehmann, with whom she shared many years of fieldwork, directed the excavations at Samothrace, sponsored by the Institute of Fine Arts, until his death in 1960. Phyllis Lehmann carried on the project until 1966 when Dr. James R. McCredie became the Director of the excavations. Mrs. Lehmann continued as editor of publications for the project. Dr. McCredie will give the first endowed annual lecture honoring Mrs. Lehmann on April 20th at Smith College in Stoddard Hall at 11:00 a.m.

THE BEAZLEY ARCHIVE, UNIVERSITY OF OXFORD (Located at the Ashmolean Museum, in Oxford)

The database is a major research project of the Beazley Archive. Since 1970, when the Archive was installed in the museum its objective has been service to the international community of scholars and patrons of the arts with an interest in classical Greek art and archaeology. It welcomes foreign scholars and aims to assist their research. Its database, begun in 1979, of Athenian black- and red-figure vases of the 7th-4th centuries B.C. is available 'on line' in Europe and North America. In 1990 the database was linked to international telecommunications networks for academic research networks in Europe (x.25) and America (Nsfnet relay). Requests can be made by FAX or letter. There are ten tables or categories (technique, shape, find place, collection, date, subject, inscriptions, signature, artist and publications) which can be searched in any combination. The documentation from the database is of considerable value also to scholars of ancient Greek myth, society and religion and to art historians of later periods with an interest in Classical iconography.

Requests for further information, current availability and plans for the future should be addressed to the Beazley Archive, Ashmolean Museum, Oxford OX1 2PH, Great Britain; FAX 0865 278082.

ARCHAEOLOGY MAGAZINE INDEX

An index for *Archaeology* Magazine volumes 27-43 (1974-1990) will be available May 1, 1991. This comprehensive index covers all material published in *Archaeology* Magazine during this 17-year period. Articles are listed by author and subject. Book Reviews are listed by author and Film Reviews by title.

Each index costs \$9.95 for individuals; \$8.95 for direct orders from libraries and institutions. Add shipping and handling cost of \$2.00 for the first book and 50¢ for each additional one. Checks or money orders must be in U.S. funds. New York, California, Louisiana and Iowa residents must add appropriate sales tax.

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(Will - continued from page 1)

able there: amphoras full of the best Greek and Italian wines, Dalmatian and Spanish olive oil, even the Spanish fish-sauce, *garum*. Dishes, too, were brought from Italy. Begley's special interest is in the fine Roman pottery dishes revealed by previous excavations at Arikamedu, and also in the later Indian imitations of those dishes. But for me, it is the amphoras that must be studied, here in Pondicherry and (later in the month) in Madras and Delhi. The finds from Arikamedu have been spread about widely, from Paris to Hanoi, but most are still in India. Even as I work, Begley and Sidebotham and the team from Madras are unearthing new amphora finds, study of which must wait until my next visit to India in January, 1992.

Mid-January, 1990. The driver deposits us in front of a building at the University of Pondicherry, where I am to lecture on trade between the Mediterranean and India. A friendly little Indian elephant, one of several that wander the streets of Pondicherry, stands with its keeper in a nearby portico.

A small crowd has gathered, and there is general agreement that I must be photographed with the elephant. Reverting to an archaeological role inside the building, I lecture to an attentive group of scholars who question me closely and at length after I have finished. A few days later, at the Tamil Nadu State Department of Archaeology in Madras, another academic audience is also very responsive and animated. The projector malfunctions, as such machines do all over the world, but it doesn't matter. I talk without slides, my listeners commenting and questioning as I go along. Surely such instantaneous exchange of ideas makes for an ideal relationship between audience and speaker.

Early June, 1990. Ever on the trail of Roman amphoras, I find myself on the island of Crete, in the attractive museum at Agios Nikolaos, a town that has changed dramatically in the thirty-something years since my last visit. Lines of Greek and Roman shipping amphoras stand at attention along the sides of rooms of cases filled with representations of the Minoan mother goddess and of her post-Minoan successors. The mixture of late amphoras and early fertility figures is perhaps unusual. But some of the goddesses are holding to their breasts pitchers that could have been intended to suggest babies. Other Minoan ceramic containers, too, have anthropomorphic qualities that may relate them to the figures of the goddess and to early notions of woman as container. In such a context, amphoras, the universal shipping container in antiquity, seem quite at home.

On another day in June, 1990, I sit in the Stoa of Attalos in Athens, in the office of Virginia Grace, the undisputed international authority on amphoras, and the person most responsible for calling the

attention of the scholarly world to their historical importance. She has been my mentor since 1951, when she persuaded me, fresh from graduate work in Greek and Latin at Bryn Mawr, to study the Roman amphora collection at the American excavations of the Athenian Agora. I was untrained as an archaeologist, but I had worked at Bryn Mawr with, among others, the great Roman historians, Lily Ross Taylor and T. R. S. Broughton. With that background, I was in a position to understand that amphoras might well help to solve some of the mysteries surrounding Roman trade. As my study of the Agora Roman amphoras began to produce useful results and my investigations expanded to include ever more sites, in Greece and elsewhere, Virginia Grace and Homer Thompson, for many years Field Director of the Agora Excavations, became my strongest supporters. The careful excavation of the Agora has provided me with the precious chronological basis for my study of Roman amphoras. Exchanging amphora news at the Agora with Virginia

Grace, and with her associates, the amphora scholars Carolyn Koehler, Maria Savvatiannou-Petropoulakou, and Andreas Dimoulis, and renewing my ties with them, is a pleasure and an inspiration.

Mid-October, 1990. I enter the new archaeological museum in Lyon, France's second largest city, and am startled to find myself in a spacious, darkened entrance lobby decorated only with Roman amphoras. They stand glamorously under spotlights against the dark

blue walls of the room. The atmosphere is clearly meant to suggest to visitors the bottom of the sea, where these jars could have been found. Their shape shows that they were first century A.D. shipping containers for Spanish olive oil. Had I ever before entered a major museum to find myself immediately surrounded by Roman amphoras? Well, yes, but only in Europe, and never so dramatically as here at Lyon. In Europe, from the British Museum on down, curators are beginning to respond to the public's desire to know how life was actually lived in antiquity, not just about the gold and the sculpture with which rich Greeks and Romans surrounded themselves. Shipping amphoras are the chief finds on Roman sites and are of interest and importance for that reason. But the public is also fascinated by what is on the amphoras: the trademarks stamped by the potter or the grower of the contents, the graffiti marked on the jars by ancient customs inspectors, the fingerprints of the potters. Shipping amphoras, and coarse wares in general, allow the museum visitor an immediacy of contact with antiquity that elegant objects often fail to provide.

There are other imaginative displays of amphoras in the museum at Lyon, and as I survey them I review in my mind some of the creative

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Elizabeth Lyding Will on the amphora-covered wall around the museum and excavation house at Cosa. Photo by Elaine Gazda.

THE PROTECTION OF CULTURAL PATRIMONY

Dr. Leslie E. Wildesen, a member of the President's Cultural Property Advisory Committee, presented "The Protection of Cultural Patrimony" at the Plenary Session of the 92nd Annual Meeting in San Francisco. In her talk, Dr. Wildesen suggested 35 ways in which all of us can preserve the world's cultural patrimony and with her permission, we present to you the portion of her talk relating to that list.

"I promised to share with you some steps you personally could take tomorrow to start making a difference. I'm going to take my text from another issue in the news - the global environment. And as with that issue, we need to 'think globally and act locally.' As with that issue, each of us can make a substantial contribution to resolving it.

"What can YOU, personally, do? Well, here's my list of 35 things you can do to save the cultures of the world.

"First, educate yourself. Read Karl Meyer's 1973 expose, *The Plundered Past*, as apt today as it was 17 years ago. Read Phyllis Messenger's insightful recent anthology, *The Ethics of Collecting Cultural Property*. Familiarize yourself with the U.S. Cultural Property Committee, by talking with your AIA trustees who are or have been on the committee: Patty Anawalt, Clemency Coggins, John Slocum. These are powerful information sources.

"Those of you who are in the academic community, educate your students and colleagues about this issue. Hold seminars, class discussions; take field trips to looted sites; have guest lecturers from the U.S., government (especially land-managing agencies) who deal with this problem every day right here at home. Ethics is just as important a topic in art history or archaeology classes as are cultural sequences or excavation methods, for without the former, who needs the latter?

"Museum professionals can hold conferences, mount exhibits, sponsor field trips, generate discussions with board members, patrons, and donors; develop brochures and other printed materials; and have lecture series to help heighten awareness in their publics.

"You can take a variety of 'direct actions' yourself, or through your institution or professional groups. You can "just say no" to antiquities - because after all, it is demand that drives the system. You can notify foreign embassies, or the International Foundation for Art Research, in New York, if you are approached by someone asking for authentication of an ancient artifact. You can encourage the creation and sale of replicas - help make it 'trendy' to own a signed replica, instead of an 'original' of questionable provenance. You can meet with your local museum of art or history or anthropology or whatever, and encourage them to adhere to the AAM code of ethics, or to develop one of their own. You can invite foreign colleagues here to learn about conservation technology, or fundraising, or museum development, or international negotiating, or law enforcement, or computer data bases.

"You can have lunch with each of 5 friends and tell them about this problem. It helps if they are ministers of culture from foreign nations, or influential art dealers, collectors or museum directors. But any five will do.

"You can write five letters to government agencies, the Congress,

news media, outlining the problem and calling for action to solve it. Especially during this holiday season, remember the successful efforts of MADD, and look how they've changed the world!

"You can spend one class period discussing this issue, and assign readings from Meyers or Messenger.

"You can spend part of your sabbatical year helping a third-world nation develop suitable facilities, inventory methods, financial incentives, or legal protection for its heritage.

"You can give three talks a year, to your local Rotary, or to a professional or church group.

"You can write one article next year about this issue.

"You can do one local talk show, or cable TV series, or one Op-Ed piece about this problem.

"My main point here is that it is critical to change the way we deal with cultural property and it is possible to do so. It is critically important in this smaller, more intimate world, to share our cultures and history, to show off this incredible diversity of human accomplishment. And yes, responsible museums and dealers and collectors have a significant role to play in that process. But, as the editor-in-chief of *Art and Auction* stated in a recent editorial about the Indianapolis art dealer who purchased looted Cypriot mosaics, 'The world indeed has changed.... To so wrongfully and blatantly appropriate the cultural heritage of another people can no longer be accepted.'

"If each of you takes just one action in this next year toward halting the destruction of our worldwide cultural heritage, that will be a giant step toward changing the world. The important thing is, to quote the Nike ad, just do it!" Δ

ROME

Please note that because the Italian Ministry of Culture has cancelled all exportation of cultural objects due to questionable security, the exhibition "Rome," to have been held in Montreal this summer, will be cancelled for the current year.

ANNOUNCEMENTS

Archaeological Photography: An On-Site Workshop,
July 7-12, 1991. Annapolis, Maryland.

The workshop offers a chance for those working on excavations to improve their photography skills. The instructor, Aaron Levin, M.A., photographed in Caesarea, Israel, for Kenneth Holum and John G. Pedley in Paestum, Italy. Eastman Kodak will supply film, paper and chemicals. For complete information contact:

Carol Bogash, Director, Liberal Arts Programs
School of Continuing Studies, 204 Shaffer Hall
The Johns Hopkins University, Baltimore, MA 21218
(301) 338-7428

Russ Maede [RR#2, Box 32, Fairbury, IL 61739] is seeking photographs of Marib, Republic of Yemen, in particular of the ruins of the Temple to the Moon (Awwam) at Marib. Mr. Maede, an AIA member, will reimburse anyone for the photographs.

KEY FEDERAL ACTS ON ARCHAEOLOGY AND HISTORIC PRESERVATION (with summaries)

- (1) National Historic Preservation Act (P.L. 89-665, 16 U.S.C. 470-470t): Establishes policies and authorities for national historic preservation program, including the National Register of Historic Places. Cornerstone of the national program, it was enacted in 1966, with major amendments in 1976 and 1980.
- (2) Historic Sites Act of 1935 (P.L. 74-292, 16 U.S.C. 461-467): Declares Federal policy to preserve historic and prehistoric properties of national significance.
- (3) Antiquities Act of 1906 (P.L. 59-209, 16 U.S.C. 431-433: Authorizes a permit system for investigation of archaeological sites on Federal lands and allows the President to establish national monuments on Federal lands in order to protect them.
- (4) Archaeological Recovery Act ("Moss-Bennett") (P.L. 86-523, 16 U.S.C. 469-469c): Requires Federal agencies to provide notice to the Secretary of Interior of any dam constructions and, if archaeological resources are found, for recovery or salvage of them.
- (5) Archaeological Resources Protection Act (P.L. 96-95, 16 U.S.C. 470aa-47011): Regulates the taking of archaeological resources on Federal lands, contains a permit system for excavating or removing archaeological resources and prohibitions on the sale, purchase, transport or entry into interstate commerce of items taken in violation of the Act. Penalties include fines and imprisonment.
- (6) Abandoned Shipwreck Act of 1987 (P.L. 100-298: Signed into law April 28, 1988. Transfers to States title to abandoned shipwrecks, on or eligible for the National Register of Historic Places.
- (7) Archaeological Resources Protection Act Amendments (P.L. 100-555; 100-588): Two amendments. P.L. 100-555 amends ARPA by requiring Federal Agencies to develop plans for surveying lands not scheduled for projects and develop and implement a uniform system for reporting and recording archaeological violations. P.L. 100-588 amends the Act by lowering the felony threshold to \$500.
- (8) Native American Graves Protection and Repatriation Act (P.L. 101-601; 104 Stat. 3048, 25 USC 3001 note): Signed into law November 16, 1990. Requires Federal Agencies and museums to inventory human remains and associated funerary objects and to provide culturally affiliated tribes with the inventory of collections; requires repatriation, on request, to the culturally affiliated tribes; makes the sale or purchase of Native American human remains, whether or not they derive from Federal or Indian lands, illegal.

For further information write to Ms. Loretta Neumann, President, CEHP Incorporated, 1333 Connecticut Avenue, N.W., Suite 400, Washington, DC 20036.



AIA TOURS FOR MEMBERS

Albania

Space is still available on the Albania tour, scheduled for **August 18-30**, with Professor Norman Hammond of Boston University. He will lead the group to Elbasan, Korce, Gjirokaster, Saranda, Butrint, Apollonia, Berat, Durrës, Kruja and Tirana.

Four Corners

A special tour of the Four Corners area of the American Southwest is scheduled for **October 12-25** with tour leader David Snow, formerly the archaeologist at Los Alamos National Laboratory. During the first three days travellers will visit the Pueblo Grande Site of the Hohokam people, the 12th century cliff dwellings at Montezuma Castle National Monument, the Museum of Northern Arizona and the Wupatki National Monument. Canyon de Chelly and Hopi Country are reserved for days four and five, and days six and seven cover Mesa Verde, the largest archaeological preserve in the U.S. The Aztec Ruins National Monument, Chaco Canyon, Acoma Pueblo, Santa Fe and an optional trip to Taos will round out the tour.

Columbian Quincentenary Tour to the Island of Hispaniola

The AIA is pleased to announce its second post-Annual Meeting tour to take place **December 30, 1991-January 8, 1992**. The tour, to be led by Spanish contact specialist Dr. Charles R. Ewen of the University of Arkansas, will be through the heart of the Dominican Republic in the virtual footsteps of Christopher and Bartholomew Columbus. Starting at Puerto Plata on the north coast of the island, participants will tour the historic town and fortifications. Then it is off to the site of Isabela, where Columbus established his first colony after the fiasco at La Navidad. Leaving La Isabela, the tour turns south on its way to Santo Domingo. Along the way will be a stop at the site La Vega Vieja, where archaeologists have uncovered the remains of the sixteenth-century settlement of Concepcion de la Vega. After a stopover at the modern city of Santiago the tour will arrive at Santo Domingo, the sixteenth-century Capital of the Indies. Among the places that will be visited are the Museo del Hombre which has extensive collections pertaining to the island's prehistory and the Museo de Casas Reales, with some of this hemisphere's finest colonial collections.

The Rapa Nui Festival on Easter Island and the Geoglyphs of Northern Chile

Scheduled for late **January/February, 1991**, this trip can be selected as a 12-day Easter Island tour or a 17-day tour including Northern Chile. Dr. Georgia Lee, an Easter Island expert, who was recently featured on the BBC/NOVA television special on Easter Island, will lead the group on its exploration of archaeological sites and the famous stone statues called, *Moaï*, which gaze out to sea. The visit to the island will coincide with the *Rapa Nui* (the Polynesian name for the island) Festival which includes ancient Polynesian dances in front of open-air temples and by torchlight on the beaches. For those including Northern Chile on the tour the sites of Quitor, Tulum, The Giant of Atacama, the geoglyphs at Pintador, Lluta Valley and Azapa Valley are included in the itinerary.

For more information about these exciting tours, please write Travel/Study Tours Abroad, Archaeological Institute of America.

(Will - continued from page 4)

amphora exhibits I have visited in recent years elsewhere in Europe. At Pompeii and Herculaneum, of course, amphoras are omnipresent in the houses and shops, and in a reconstructed shop in the Stoa of Attalos Museum one can see a fine selection of amphoras found at the Athenian Agora. A similar display, reminiscent of the one in the shop of the House of Neptune and Amphitrite in Herculaneum, can be found in Switzerland, at the beautiful site of Augst, near Basel. But my thoughts go now to some less well-known efforts to present amphoras in a meaningful way. Perhaps the most exciting exhibit I have seen is in the Nino Lamboglia Museum on the island of Maddalena, off the northeast corner of Sardinia. There dozens of amphoras from the nearby Spargi shipwreck are arranged herringbone-fashion as if they were in the actual hold of a ship. The visitor can examine the barnacle-encrusted jars from above and, descending stairs, can view a reconstructed cross-section of the hold. Nowhere have I felt more keenly the presence of antiquity: the tragedy which such shipwrecks must have represented, not only for the owners and captains of the ships but also for the sailors, and even the potters and growers responsible for the hundreds of filled amphoras destroyed in the Spargi wreck.

On this occasion, I recall that the archaeological museum at Sassari, on the north coast of Sardinia, also gives space to imaginative displays of amphoras, and there are exciting exhibits in the fascinating museum on the island of Lipari, off the north coast of Sicily. There, amphoras from several shipwrecks are arranged in great pyramidal piles reaching from floor to ceiling. The archaeological museum at Barcelona has a striking collection of amphoras from the important Greco-Roman colony at Ampurias, near the border of Spain and France, and at the beautiful site of Ampurias itself many other amphoras can be studied in attractive arrangements in the small museum. I think, too, of Pula, near the tip of the Istrian peninsula in northern Yugoslavia. Pula was a large manufacturing center for olive oil amphoras. Some of the many jars discovered there have been arranged in a dramatic room located, surprisingly, under the arena of the city's great Roman amphitheater. Near the amphora exhibit are placed oil presses and other farm equipment excavated at the Roman villas near Pula where the olives were grown and pressed into oil.

My thoughts turn also to the new museum at Cosa, where I worked on the amphoras for several summers in the 1970s. There one can inspect at close hand the amphoras produced near that ancient city and its port, some ninety miles north of Rome, an excavation conducted under the auspices of the American Academy in Rome. Cosa was an active center for the production and exportation of wine, primarily to the Celts in Gaul during the period of the Roman Republic. The upper Grand Congloué shipwreck off Marseilles, much publicized by Jacques Cousteau and others in the early 1950s, and the first wreck to be explored with the aid of modern methods of underwater research, had a cargo of hundreds of amphoras from the Sestius factory at Cosa. When in the early 1980s I visited the excavations of the huge Celtic city of Manching, on the Danube near

Ingolstadt to the north of Munich, it was very moving to find amphora fragments from faraway Cosa there. They must have been unloaded at the port of Marseilles and then shipped in barges along the Rhône and later transferred by land or by canal to the Rhine and Danube rivers before reaching their destination at Manching. Transportation by river and by land in antiquity was very expensive, but the wealthy Celtic chieftains clearly wanted wine in the original bottles to fill the cisterns of wine we are told they maintained. It would have been cheaper, at the time of unloading the heavy clay shipping containers at Marseilles, to transfer their contents to lighter receptacles of wood or clay, but money, at least at Manching, was clearly no object. Cicero tells us that the Romans had passed legislation preventing the people of Transalpine Gaul from growing the vine or the olive, and the Celts wanted wine at any cost. I was similarly moved to find at Arikamedu pieces of wine amphoras made out of the distinctive clay of the area of Pompeii. Like Cosa, Pompeii and its environs exported large quantities of wine, especially during the late Republic. The port of Pompeii shipped mostly to the east, the port of Cosa to the West.

Another great port of the period of the Roman Republic, Aquileia, at the north end of the Adriatic, also shipped primarily to the East. It sent the choice olive oil of the Istrian peninsula and perhaps of other parts of present-day Yugoslavia, including Pula, to overseas markets like Alexandria and Delos, and even to India. In the attractive museum at Aquileia, amphoras are not aesthetically displayed but are simply heaped in the courtyard, mute testimony to the

masses of jars discovered in the area and to the difficulties small museums throughout the Roman world often have in finding storage space. Verona in northern Italy, in the heart of another production center for olive oil amphoras, has solved its storage problems not by excavating under its amphitheater but by mounting a great and inaccessible display of jars in pit-like areas sunk in the floor of the so-called "Tomb of Juliet," an important tourist attraction.

The displays of amphoras at Aquileia and at Verona are less creative than impressive, attesting as they do to the gargantuan

number of amphoras and amphora fragments already discovered and still awaiting discovery at Roman sites. So many hundreds of thousands of these jars were made in antiquity as containers for the perishable food products that were a backbone of Roman trade. Amphoras are tangible proof of that trade. They tell the story of how the old Republican export and import harbors were succeeded during the Empire by new trading centers. Spain and Africa became the chief areas of production, and Italy, once the center of production, ultimately became the chief import market. The crisscross of trade routes was an almost impenetrable tangle, but somehow a precarious balance of trade was maintained. That fact may have been one reason why the Roman Empire survived so long, so improbably, and against all odds. Study of amphoras is helping to unravel and interpret the difficult mysteries of Roman trade. Like Odysseus, the much-enduring amphora sleuth must, as Homer says, wander afar and see many cities, must track amphoras under water and on land. It is an exciting life, a true detective story. Δ



Examining one of Harold Edgerton's Roman amphoras at MIT, with an amphora class from the University of Massachusetts. Photo by Harold Edgerton.

AMERICAN JOURNAL OF ARCHAEOLOGY

The AIA's official journal continues to feature the new research of an international group of scholars. Coming in the July 1991 issue: Karen Robinson focuses on the rich finds, including jewelry, from a Bronze Age tomb at Dinkha Tepe (Iranian Azerbaijan) as evidence for Dinkha's participation in Old Assyrian and Babylonian trading networks. Patrick E. McGovern, Stuart J. Fleming and Charles P. Swann provide technical analyses of the beads from the Dinkha tomb and discuss the origins and development of glassmaking in the Near East. Giampaolo Graziadio studies the rich finds from the famous Grave Circles at Mycenae and draws important conclusions from the burials about the social stratification of Mycenaean society. Samuel Mark reappraises the passage in Homer's *Odyssey* describing the construction of Odysseus's ship in the light of recent evidence from Bronze Age shipwrecks. Susan Alcock documents and examines the phenomenon of cult activity at Bronze Age tombs during the post-Classical period in Greece. Virginia Goodlett collects the evidence from inscriptions regarding the artists who produced bronze statues on Rhodes in the Hellenistic period and sheds light on the structure of Greek sculptural workshops. James Russell publishes a new Roman military diploma from Cebel Ires in eastern Pamphylia and discusses how much more information can be gleaned from such inscriptions when their findspots are known. The July issue of *AJA* also marks the inauguration of a new annual newsletter on archaeology in Israel, prepared by Samuel Wolff of the Ben Gurion University of the Negev and made possible in part by the generosity of Norma Kershaw.

Annual Review of Aegean Prehistory

Beginning in 1992, the *American Journal of Archaeology* will publish as an annual feature a review of new discoveries and recent research in Aegean prehistory. Publication of these reviews has been made possible by the Institute of Aegean Prehistory. The temporal and spatial focus as well as the authorship will vary from year to year. Topics for the first two reviews are 1) the Aegean islands

(exclusive of Crete, but including the Cyclades, northern Sporades, Dodecanese and islands of the northeastern Aegean) in the Neolithic and Bronze Age (Jack L. Davis), and 2) the southern Greek mainland in the pre-palatial phases of the Bronze Age, i.e., EH I through LH II (Jeremy B. Rutter).

The authors wish to solicit help from colleagues in assembling information and suggestions for illustrations (published and unpublished) to be included in the reports. Any assistance will be gratefully acknowledged in print.

The *AJA* deadline for the 1992 report (Aegean islands) is December 1991. Contributions are needed urgently and will be of greatest value if received by June 1991. Please contact Professor Jack L. Davis, Department of Classics, University of Illinois at Chicago, Box 4348, Chicago, Illinois 60680; tel. 312-996-4184; FAX 312-413-2093; bitnet U28632@UICVM. For the 1993 report (southern Greek mainland), please contact Professor Jeremy B. Rutter, Department of Classics, Reed Hall, Dartmouth College, Hanover, New Hampshire 03755; tel. 603-646-2910; FAX 603-646-3520; bitnet Jeremy.B.Rutter@Mac.Dartmouth.edu.

ARCHAEOLOGY MAGAZINE

Arkansas's struggle to preserve its Native American heritage in the face of rampant looting and destructive farming techniques is *Archaeology's* May/June cover story. For a century pothunters have mined the Mississippi River Valley in eastern Arkansas in search of pottery buried in thousand-year-old Native American graves. The high prices paid for grave goods on the local art market and the poverty of the state's rural population make looting an appealing sideline in counties where the sale price of Indian pottery often exceeds the price of the land in which it was buried. Associate Editor Spencer P. M. Harrington interviews state archaeologists, collectors and pothunters in an effort to document one state's attempt to preserve its past. The May/June issue also includes the annual Travel Guide to the New World.

Editor, Galina Gorokhoff. Please address all editorial correspondence to the editor. All rights reserved. Prior permission to reproduce is required.

The *Newsletter* is published with the generous assistance of Norma Kershaw.

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May 17, 1990

Department of Classics

My dear Virginia,

I don't know whether you may have heard that I will be in Athens at various times between May 31 and June 16, taking part in the School "On-Site" trip to Crete and Thera. I couldn't withstand the temptation to take part in the trip. I haven't been to Crete and Thera since 1950-51. I will be in Athens May 31, June 1, June 2, and June 15, and I am very much in hopes that you will be free to see me on one or all of those days. I assume I am not compelled to take part in all the group's activities in Athens. In fact, the hope of seeing you is one of my chief reasons for making the trip, as, though the catalogue of the book is now computerized, catalogue nos. given, etc., there are still some things I need to discuss with you. One of those things is the enclosed chapter, which is to appear in a popularized publication, *Rome and India: The Sea Trade*, edited by Vimala Begley and Richard De Puma. (A scholarly publication will be done later.) Vimala is the person who organized the colloquium on the same topic at the San Antonio meetings in 1986, and for three years thereafter she tried to get permission to dig at Arikamedu. I believe you have corresponded with her and probably know some of her difficulties. Funding was no problem, as the Smithsonian gave her a large grant, but the Archaeological Survey of India, which gives permissions for excavations, was slow about doing so in this case. Finally, late in 1989, the permission came through, and I found myself flying off to Arikamedu right after the Boston meetings. I was there all during January, and have now produced, under protest, the enclosed preliminary summary, which of course I don't want to publish without your concurrence. I'm faced, really, with a difficult situation, in that I was expecting to find the material at Arikamedu was mostly Campanian. Instead, it turned out to be more than half Koan. There was no time to consult you before doing this piece, as I haven't had time to concentrate on it until now, and the publisher (Wisconsin) wants it right away. I just don't have time to write while I am also teaching three classes and doing alot for the AIA. What I have tried to produce is a tentative statement, which can be changed in any way you suggest. If you would consent to it, after seeing the photos and descriptions I'll bring with me to Athens, I'll be delighted for you to be co-author, both of the enclosed short piece and of the later catalogue and final publication. I realize that I have no business commenting on Koans, but I hope I have made it clear that the identifications were made on the basis of your criteria.

It was so wonderful to be present, and sitting near Homer, when you were awarded the AIA Gold Medal at the Boston meetings. I am sure you have heard from many who were there what a moving occasion it was. Your niece looks so much like you that it almost seemed you were there, too.

More when we have a chance, I hope, to talk in Athens. I hope we can go over, among other things, the M 18:1, G 14:2, and Antikythera sequence.

The student who visited you last year, Robyn Schinke, is about to be graduated from Mount Holyoke. All year I have been working with her on Roman amphoras, and she has produced an excellent Senior Honors Thesis on how (she feels) Type 20 evolved out of Type 11b. She has a Fulbright to England for next year and will work on archaeological techniques at Sheffield and Southampton. I think she really plans to devote her career to Roman amphoras.

Please tell Andreas I appreciated his note so much, the one appended to your last letter. Regards also to Maria.

With Love,
Litty

separate component parts (handles, rims, toes) are usually, except in some early pieces, larger in size; for example, the average width of pseudo-Koan handles at Arikamedu is 0.057 m., as opposed to an average of 0.049 m. for the Greek Koan handles. The Italian clay, except in the earliest examples of the type (to be described *infra*), is uniformly coarse and much darker in color than the Koan clay, with many inclusions. The surface is regularly a worn, dirty cream color with no greenish tinge. Such is the clay of the fragments from Arikamedu, and indeed of most examples of Italian pseudo-Koan Type 12 found throughout the Mediterranean.

The history of the manufacture of pseudo-Koan Type 12 is, however, a long one. The first Italian imitations of Koan amphoras seem to come from the area of the great harbor of Brindisi, where fine-clayed jars with double-ribbed handles were being manufactured by the end of the second century B.C., apparently as containers for imitation Koan wine.⁶ Those jars bear in some cases the same stamps from the same dies as the so-called "Brindisi-type" amphoras, Will Type 11a, fat-bellied containers that took Italian olive oil to ports throughout the Mediterranean in the late second and early first centuries B.C. Contexts at the Athenian Agora make that date a certainty.⁷ But by the end of the second quarter of the first century B.C., the manufacture of Type 12 had moved from the Brindisi area to the west coast of Italy, especially, I believe, to the Bay of Naples and the neighborhood of the export harbor of Pompeii. Such jars, of coarse, distinctive "Vesuvian" clay, became export containers not only for factitious Koan wine but also for Pompeian, Vesuvian, Surrentine, and other Campanian vintages.⁸ For the next century and a half, until the destruction of the city in 79 A.C., Type 12 was being manufactured in the Pompeii area and probably also at other Campanian sites. Trademarks on finds of Type 12 at import centers throughout the Roman world name a number of known Pompeians, among them P. Cornelius Sulla, the nephew whom the dictator sent to Pompeii in 80 B.C. to settle colonists there after the Roman conquest, and L. Eumachius, father of the Pompeian philanthropist, Eumachia.⁹

Clementina Panella and Marco Fano (*supra* n. 4) have published photographs and profiles showing the gradual evolution of Type 12 (their Groups 1-4) in the Pompeii area over the decades. My own research, based primarily on finds at the Athenian Agora and in the town and the port of Cosa, corroborates theirs. The earlier Italian jars (Dressel's Form 4, Panella and Fano Groups 1-2, Will Type 12a¹, and early examples of Dressel's

Form 3, Panella and Fano Group 3, Will Type 12a²) have shorter necks and toes (fig. 9.2), both of which features lengthen in the later examples (Dressel's Form 3, Panella and Fano Groups 3-4, Will Type 12a² and 12a³; fig. 9.3). The shapes of rims, handles, bellies, and toes also differ in the earlier and later versions.¹⁰ Owing to the fact that the material at Arikamedu is preserved in small fragments, further study will be necessary to determine to what extent earlier and later shapes are represented there. Since the earlier jars were being manufactured in the Pompeii area by about the end of the second quarter of the first century B.C., and since the later jars were in use in great numbers in Pompeii at the time of its destruction, the dates of the pseudo-Koan amphora fragments at Arikamedu will be seen to lie between about 50 B.C. and 79 A.C.

Only one amphora trademark bearing Latin letters has so far been reported from a site in India, and it comes from an earlier, short-necked amphora of Type 12 excavated far from Arikamedu, at the inland site of Mathura, south of Delhi (fig. 9.4).¹¹ Found widely at sites throughout the Roman world, this stamp foreshadows the insights into Roman economic history that will result from the discovery of similar epigraphical evidence in India. The evidence is surely there, waiting to be uncovered, at Arikamedu and elsewhere.

There is at this stage of our research, then, a possibility that Greek Koan wine, which, as mentioned supra, may have been coming to Arikamedu as early as the second century B.C., had been driven off the Indian market, or at least supplanted there, by Italian pseudo-Koan wine by about the middle of the first century B.C. Greece had been conquered by Rome in the second century B.C., but the amphora evidence increasingly indicates that trading rivalries still existed among areas of the Roman world. In this connection, it is interesting to note that several of the Greek Koan pieces at Arikamedu are covered with patches of what appears to the eye to be pozzolana cement, a distinctive, water-resistant cement regularly used by the Romans in the construction of underwater installations. In such structures (breakwaters, seawalls, piers, and the like), the Romans routinely used amphora fragments as "bricks," as was also frequently their practice on land.¹² We are probably safe in concluding that the cement-covered amphora fragments at Arikamedu were once used in the building of port installations at the site. The fact that Greek Koan amphora fragments are almost the only ones covered with pozzolana cement suggests that Koan wine had, by the time of the building of permanent port installations, been replaced at Arikamedu by its Italian equivalent.

see also E.L. Will, "Two Amphoras from Populonia," in A.M. McCann et al., "Underwater Excavations at the Etruscan Port of Populonia," *JFA* 4 (1977), 295-96.

8. Painted inscriptions on amphoras found at Pompeii relate this type of jar not only to (factitious?) Koan wine (*CIL* IV.5536-5539, 5541) but also to Pompeian (i.e., imitation Koan) wine (*CIL* IV.5559), mentioned by Pliny the Elder (*NH* 14.70) as rather short-lived; to Vesuvian wine (*CIL* IV.2557-2559), which was probably identical with Pompeian wine; and to the wine of Sorrento (*CIL* IV 2556, 5521-22, 5525 [type of amphora not mentioned], 5560-61).

Painted inscriptions found in Rome on amphoras similar to Dressel's Form 3 also name *vinum Surrentinum* (*CIL* XV².4592-93). According to Pliny the Elder (*NH* 14.22) Aminean grapes were grown on Vesuvius and at Sorrento. An amphora inscription (*CIL* IV.2677) shows that wine made from them was also bottled in Type 12 amphoras. It is thus apparent that Type 12, though originally used in Italy for imitation Koan wines, ultimately became a shipping container for other wines produced in the Vesuvius-Sorrento area of Campania.

9. Cicero, *pro Sulla* 60-62; T.R.S. Broughton, *The Magistrates of the Roman Republic* (New York 1951) II, 82. The amphora trademarks of P. Sulla have been found at Athens, Alexandria, and Taranto. They, as well as trademarks of L. Eumachius and other known Pompeians, will be published in my forthcoming *Athenian Agora* volume (supra n. 3).

10. Fig. 9.2 (an early example of Type 12a²) is from the Athenian Agora (no. P 3464, from context G 8:1, datable to the Augustan period). Fig. 9.3 (Type 12a³) is also from the Agora (no. P 21671; context not dated).

11. I am indebted to M.C. Joshi, from whose excavation at the Ambrish Tila at Mathura this stamped piece comes, for permission to publish the photograph reproduced here. The handle (Mathura inv. no. MTR-8) is stamped with a two-part trademark, each part impressed on one half of a typical double handle of Type 12a¹ or early 12a² (fig. 9.4).

Although several other examples of the same stamp have been found at Pompeii (including one or more on unbroken amphoras), Ostia, Carthage, Alexandria, and at Avenches and Vindonissa in Switzerland, the

15. Fig. 9.6 (Arikamedu inv. no. R 51) is an early, small handle of Type 20. The rare fragments of early Type 20 at Arikamedu mark, in my view, the point when Baetican olive oil jars were developing as a distinct type out of Type 11b. On that evolution, see my recent remarks in the 1989 Split chapter (supra n. 14), 62 and 63.
16. Fig. 9.7 (Arikamedu inv. no. R 1 III A). On Istrian olive oil jars, see also my discussion in the Split chapter (supra n. 14) 62.
17. Wheeler et al. 24.

The Mediterranean Shipping Amphoras from Arikamedu: list of captions for figures:

Figure 9.1: Neck fragment of Koan amphora. Second century B.C. (?). Arikamedu inv. no. R 6. P.H., 0.150 m. Scale, 1:2.

Figure 9.2: Amphora of Will Type 12a² (early). Augustan period. Agora Excavations, Athens, no. P 3464. H., 0.805 m. Scale, 1:10.

Figure 9.3: Amphora of Will Type 12a³. First century A.C. Agora Excavations, Athens, no. P 21671. H., 1.105 m. Scale, 1:10.

Figure 9.4: Stamped handle from amphora of Will Type 12a¹ or early 12a². Middle of the first century B.C. Mathura (Ambrish Tila), no. MTR-8. Width of handle, 0.048 m.; thickness, 0.027 m. Scale, 1:2.

Figure 9.5: Rim fragment from amphora of Will Type 16. Probably last quarter of the first century B.C. Arikamedu inv. no. R 7 III B. P.H., 0.058 m. Scale, 1:2.

Figure 9.6: Handle fragment from amphora of Will Type 20 (early). Probably last quarter of the first century B.C. Arikamedu inv. no. R 51. Width of handle, 0.040 m.; thickness, 0.035 m. Scale, 1:2.

Figure 9.7: Neck fragment from amphora of Will Type 14. Probably last quarter of the first century B.C. Arikamedu inv. no. R 1 III A. P.H., 0.110 m. Scale, 1:2.

9. THE MEDITERRANEAN SHIPPING AMPHORAS FROM ARIKAMEDU

Elizabeth Lyding Will

Mediterranean shipping amphoras have been found at many sites in the Indian subcontinent, from the foothills of the Himalayas in the north to the Coromandel coast in the south. Although the material has not yet been brought together and analyzed, and no systematic survey of amphora finds has been undertaken, we know enough already to enable us to realize that India must have been a substantial market for the Greeks and the Romans from as early as the second century B.C. well into the first century A.C.

Arikamedu, on the Coromandel coast near Pondicherry, is the Indian site at which the largest concentration of Mediterranean amphoras has so far been found. Some 116 amphora fragments were discovered by Sir Mortimer Wheeler and his Indian colleagues in 1945, and 39 of those pieces were published in 1946. French excavations also occurred at Arikamedu in 1943-1944 and 1947-1950, but the amphora finds were not published, though two were illustrated by Wheeler in his publication (nos. 83-84). The Arikamedu amphora fragments are now widely scattered, among museums in Pondicherry, Delhi, Madras, Paris, and even Hanoi, and the new Indian-American excavations which commenced in early 1990 at Arikamedu promise to add still further amphora discoveries to the total.¹ Closely similar finds recently made by Indian archaeologists at several other sites south of Madras are beginning to indicate, further, that Arikamedu was just one of several centers importing Mediterranean products along the southeast coast of India.²

The process of locating and analyzing the Arikamedu amphora finds is now under way. Results are still tentative, but their broad outlines are already emerging. It is clear that amphoras for wine, *garum*, and olive oil are represented in the collection and that wine jars far outnumber the rest. At this stage, we are able to assign about half of the total number of Arikamedu fragments studied so far to a category of Mediterranean wine jars with twin-ribbed, or double, handles. Originally, and as early as the third century B.C., such double-handled amphoras seem to have been made primarily on the Greek island of Kos (Cos) in the Aegean Sea, but by the first quarter of the second century B.C. the Romans in Italy were imitating the famous wine of Kos, as we know

from a recipe given by Cato the Elder in *de agri cultura* (112), a work probably dating from the 180's B.C. Such imitation Koan wine does not, however, seem to have been produced in Italy in sufficient quantities for export until the end of the second century B.C. After that time, and until the end of the first century A.C., pseudo-Koan double-handled amphoras of Italian origin are very common finds throughout the Mediterranean, and later, in the second century A.C., imitation Koan jars were also manufactured in France and Spain. A little more than half of the double-handled fragments at Arikamedu appear at this stage to come from Greek Koan amphoras. The remainder are Italian imitations of Koan amphoras (Will Type 12, Dressel Forms 4 and 3, Panella and Fano Groups 1-4), and must have brought factitious Italian-made Koan wine to India.³

The task of distinguishing between Koan and pseudo-Koan fragments, at Arikamedu or elsewhere, is a complicated one, based largely on study of the dimensions and the fabric of the objects. Greek Koan amphoras are by now well known through the publications of Virginia Grace, who is preparing, with Maria Savvatianou-Petropoulakou, a corpus of Koan stamped amphoras.⁴ Dr. Grace has identified the chief characteristics of Koan amphoras: the double-barreled handles, the offset between neck and shoulder, and the often greenish surface tone of the clay. Perhaps most importantly, she notes that trademarks on the Koan jars contain Koan names (in Greek letters) or Koan coin-symbols. At Arikamedu, the clay of the pieces assigned to the Koan category is fine, generally pinkish to tannish in color, and containing inclusions that are small in size (fig. 9.1).⁵ The lighter colored surface is often greenish in hue. Dimensions of rims and handles are regularly smaller than those of their pseudo-Koan counterparts (see discussion *infra*). No Koan trademarks have so far been found at Arikamedu. Study of these Koan pieces is continuing. At this stage, the Arikamedu fragments appear to come from jars resembling most closely Koan amphoras of as early as the second century B.C., as illustrated in Dr. Grace's publications.

Italian pseudo-Koan imitations of Greek Koan amphoras are like them in two prominent physical characteristics, the double-ribbed handles and the offset between neck and shoulder, but there the resemblance breaks down. Trademarks, where they exist, are in Latin letters and seem to lack any reference to the island of Kos. The Italian jars are also taller and narrower than their Greek models, and fragments of some of their

separate component parts (handles, rims, toes) are usually, except in some early pieces, larger in size; for example, the average width of pseudo-Koan handles at Arikamedu is 0.057 m., as opposed to an average of 0.049 m. for the Greek Koan handles. The Italian clay, except in the earliest examples of the type (to be described *infra*), is uniformly coarse and much darker in color than the Koan clay, with many inclusions. The surface is regularly a worn, dirty cream color with no greenish tinge. Such is the clay of the fragments from Arikamedu, and indeed of most examples of Italian pseudo-Koan Type 12 found throughout the Mediterranean.

The history of the manufacture of pseudo-Koan Type 12 is, however, a long one. The first Italian imitations of Koan amphoras seem to come from the area of the great harbor of Brindisi, where fine-clayed jars with double-ribbed handles were being manufactured by the end of the second century B.C., apparently as containers for imitation Koan wine.⁶ Those jars bear in some cases the same stamps from the same dies as the so-called "Brindisi-type" amphoras, Will Type 11a, fat-bellied containers that took Italian olive oil to ports throughout the Mediterranean in the late second and early first centuries B.C. Contexts at the Athenian Agora make that date a certainty.⁷ But by the end of the second quarter of the first century B.C., the manufacture of Type 12 had moved from the Brindisi area to the west coast of Italy, especially, I believe, to the Bay of Naples and the neighborhood of the export harbor of Pompeii. Such jars, of coarse, distinctive "Vesuvian" clay, became export containers not only for factitious Koan wine but also for Pompeian, Vesuvian, Surrentine, and other Campanian vintages.⁸ For the next century and a half, until the destruction of the city in 79 A.C., Type 12 was being manufactured in the Pompeii area and probably also at other Campanian sites. Trademarks on finds of Type 12 at import centers throughout the Roman world name a number of known Pompeians, among them P. Cornelius Sulla, the nephew whom the dictator sent to Pompeii in 80 B.C. to settle colonists there after the Roman conquest, and L. Eumachius, father of the Pompeian philanthropist, Eumachia.⁹

Clementina Panella and Marco Fano (*supra* n. 4) have published photographs and profiles showing the gradual evolution of Type 12 (their Groups 1-4) in the Pompeii area over the decades. My own research, based primarily on finds at the Athenian Agora and in the town and the port of Cosa, corroborates theirs. The earlier Italian jars (Dressel's Form 4, Panella and Fano Groups 1-2, Will Type 12a¹) have shorter necks and toes (fig.

9.2), both of which features lengthen in the later examples (Dressel's Form 3, Panella and Fano Groups 3-4, Will Type 12a² and 12a³; fig. 9.3). The shapes of rims, handles, bellies, and toes also differ in the earlier and later versions.¹⁰ Owing to the fact that the material at Arikamedu is preserved in small fragments, further study will be necessary to determine to what extent earlier and later shapes are represented there. Since the earlier jars were being manufactured in the Pompeii area by about the end of the second quarter of the first century B.C., and since the later jars were in use in great numbers in Pompeii at the time of its destruction, the dates of the pseudo-Koan amphora fragments at Arikamedu will be seen to lie between about 50 B.C. and 79 A.C.

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There is at this stage of our research, then, a possibility that Greek Koan wine, which, as mentioned supra, may have been coming to Arikamedu as early as the second century B.C., had been driven off the Indian market, or at least supplanted there, by Italian pseudo-Koan wine by about the middle of the first century B.C. Greece had been conquered by Rome in the second century B.C., but the amphora evidence increasingly indicates that trading rivalries still existed among areas of the Roman world. In this connection, it is interesting to note that several of the Greek Koan pieces at Arikamedu are covered with patches of what appears to the eye to be pozzolana cement, a distinctive, water-resistant cement regularly used by the Romans in the construction of underwater installations. In such structures (breakwaters, seawalls, piers, and the like), the Romans routinely used amphora fragments as "bricks," as was also frequently their practice on land.¹² We are probably safe in concluding that the cement-covered amphora fragments at Arikamedu were once used in the building of port installations at the site. The fact that Greek Koan amphora fragments are almost the only ones covered with pozzolana cement suggests that Koan wine had, by the time of the building of permanent port installations, been replaced at Arikamedu by its Italian equivalent.

In addition to Koan and Koan-type wines, other types of Aegean wine were also imported by Arikamedu. Several fragments, two of them stamped, of amphoras possibly from the Greek island of Knidos have been found so far. They may have brought Knidian wine to India. Another group of pieces, perhaps datable to the first century B.C., can be attributed to late forms of amphoras from the island of Rhodes. Further study of these fragments is in progress.¹³

A few fragments of early Spanish jars for *garum* (Dressel's Forms 7 and 8; Will Types 16b and 16c) suggest either that *garum* had become popular in India by the late first century B.C. and early first century A.C. or that it was being imported for their own tables by Roman traders possibly in residence at Arikamedu. Originally a Greek condiment (the earliest literary references occur in fragments of the fifth century B.C. dramatists Aeschylus, Sophocles, Pherecrates, and Cratinus), *garum* was being manufactured in Italy by at least the first century B.C. Manufacture had spread to southern Spain by the late first century B.C. and early first century A.C., and some of those Spanish containers made the trip of several thousand miles to Arikamedu.(fig. 9.5).¹⁴

Two fragments of very early examples of Spanish olive oil amphoras (Dressel's Form 20; Will Type 20) can probably also, like the *garum*, be dated to the Augustan period(fig. 9.6).¹⁵ Smaller and more delicate than their later counterparts, these pieces help to clarify the cloudy picture of the origin of Baetican oil amphoras, and, with the *garum* jars, throw light on the extent of Spanish commercial activity at the beginning of the Roman Empire. Like the *garum* amphoras, the olive oil jars may suggest either that India had developed a taste for that product or that it was in demand among the members of a Roman trading colony of some kind at Arikamedu. In addition to the evidence of olive oil importation from Spain, a few fragments of jars from the Istrian peninsula in the northern Adriatic show that the famous oil of Istria, praised by Pliny the Elder, was also being shipped to Arikamedu. Such amphoras (Dressel's Form 6; Will Type 14) date from as early as the latter first century B.C. down to the third quarter of the first century A.C. (fig. 9.7).¹⁶

The presence at Arikamedu and elsewhere in India of Mediterranean amphoras of as early as the second century B.C. suggests that Greek and Roman traders were, even in the Republican period, aware that such

Indian exports as precious woods, animals, spices, oils, perfumes, ivory, gems, and rock crystal could be obtained more directly and probably more cheaply by sea than by the arduous and costly overland trade routes. In turn, exporting to India perishable Mediterranean liquids in amphoras, something that could only be accomplished by sea, was economically advantageous both to the traders and to the individuals who produced and bottled the goods. Trade with India by sea made possible a greater balance between imports and exports for the Mediterranean area.

In the material presently available for study, there is no certain evidence of the importation of Mediterranean products into Arikamedu after the first century A.C. Wheeler et al. felt that the occurrence of amphoras in levels of the second century A.C. suggested continued trade between India and the West until that time.¹⁷ And it may have occurred, though finding pottery fragments in levels much later than their date of manufacture is certainly not unusual. At this time, however, there is no sure evidence at Arikamedu of the typical later imperial containers that took olive oil and *garum* all over the Empire in the second and third centuries A.C. and later. The finds of shipping amphoras at Arikamedu suggest at present that trade with the Mediterranean had ceased by the end of the first century A.C.

FOOTNOTES:

1. Wheeler et al. 17-124 (summary in R.E.M. Wheeler, *Rome Beyond the Imperial Frontiers* [Harmondsworth 1955] 173-79 and pl. XIX, B). Cf. Begley 1983 which reassesses Wheeler's finds as well as those of Casal 1949, a summary of the results of the French excavations of the late 1940's. Casal mentions (p. 35) but does not describe or illustrate his amphora finds. Finds from the French excavations conducted by L. Faucheux and others in 1943-1944 are also unpublished. Before my trip to India in January, 1990, made possible study of the actual fragments preserved in the museums at Pondicherry and Madras and in the Central Antiquities Collection in Delhi, I had studied them by means of photographs kindly made for me by Dr. Begley, and measurements and clay samples generously provided by the Pondicherry Museum and the Tamil Nadu State Department of

Archaeology. Dr. Begley has also given me photographs of unpublished Roman amphoras found at other Indian sites, and copies of publications of amphoras in several Indian excavation reports. I would like to take this opportunity to thank her very warmly for providing me with that important material and also for the assistance she gave me in so many ways during my four weeks of research in India. I also wish to give sincere thanks to Dr. E. Marianne Stern, who, before my trip to India, generously shared with me the notes and photographs she had made in 1986 of 30 of the amphora fragments in the Pondicherry Museum. It is a pleasure, also, to thank at this time the many persons who so kindly facilitated my work in India: in Pondicherry, Dr. Begley, the Director, and Dr. Steven Sidebotham, both of the American team excavating at Arikamedu, and Dr. K.V. Raman, the Director, and Messrs. P. Ravichandran and D. Dayalan of the Madras team, as well as Mr. Thiru K. Rajaram, the Director, and Miss Selvi S. Nirmala Devi and other members of the staff of the Pondicherry Museum; in Madras, in addition to Dr. Raman, Messrs. N. Kasinathan, Director of the Tamil Nadu State Department of Archaeology, N. Devasahayam, Curator of Anthropology at the Madras Museum, Mrs. S. Vasanthi of Madras University, and Dr. P.V. Rao of the American Institute of Indian Studies; in Delhi, Dr. M.C. Joshi, Additional Director General, Shri L.K. Srinivasan, Director of Antiquities, Miss A. Banerji, Messrs. D.K. Malik, S. Jamal Hussain, S.C. Sarem, and A.K. Sinha, all of the Archaeological Survey of India, and Dr. P.R. Mehendiratta and Mr. L.S. Suri of the American Institute of Indian Studies.

2. For more on general Roman trade with the southeast coast of India, cf. recent discussions in Begley 1983, p. 462; L. Casson, "Rome's Trade with the Eastern Coast of India," *Cahiers d'histoire* 33 (1988), 303-308; K.V. Raman, "Port Towns of Tamil Nadu - Some Field Data and the Prospects of Marine Archaeology," *Marine Archaeology of Indian Ocean Countries*, 114-118. Tamil literature contains references to the presence of "Yavanas" (Greeks and probably Romans) as traders and mercenaries among the Tamils.

3. In a paper delivered in 1986, before I had studied the objects themselves (cf. AJA 91 [1987], 293), I suggested that the double-handled fragments at Arikamedu were chiefly from Italian imitations of Greek Koan amphoras. Study of the actual clay and dimensions of the fragments themselves in Arikamedu, however, has revealed that less than half of the pieces were Italian in origin, the remainder being apparently from the

Greek island of Kos. On Greek amphoras associated with the island of Kos, see V.R. Grace, *Amphoras and the Ancient Wine Trade*, revised ed. (Princeton 1979), text and notes accompanying Figs. 56-61; id., "Standard Pottery Containers of the Ancient Greek World," *Hesperia*, Suppl. 8 (1949), 181, 186, 188-89 (on p. 189, Dr. Grace refers to the Koan-type amphora finds at Arikamedu; id. and Maria Savvatianou-Petropoulakou, "Les timbres amphoriques grecs," in Philippe Bruneau et al., *L'Ilot de la Maison des Comédiens. Exploration archéologique de Délos* 27 (Paris, 1970), 363-65. Cf. also Dr. Grace's comments in "The Middle Stoa Dated by Amphora Stamps," *Hesperia* 54 (1985), 18. Dressel's Forms 4 and 3 (I cite Form 4 first because it appears to antedate Form 3) are from the amphora typology published by H. Dressel in *CIL* XV², Pl. 2. Dressel's drawings of the two forms are somewhat imprecise or idealized renditions of amphoras now stored for the most part in the Market of Trajan, Rome. His Forms 4 and 3 parallel in general terms my own Types 12a¹ and 12a², respectively. Type 12 will be examined in detail in my volume, *Stamped Roman Amphoras in the Eastern Mediterranean (Athenian Agora)* (forthcoming). See most recently the discussion of Type 12 in my chapter, "Relazioni mutue tra le anfore romane: i ritrovamenti in Oriente, alla luce dei dati ottenuti nell'Occidente," in *Amphores romaines et histoire économique: dix ans de recherche* (Rome: Ecole française de Rome, 1989), 306-308. For the typology of Panella and Fano, see C. Panella and M. Fano, "Le anfore con anse bifide conservate a Pompei: contributo ad una loro classificazione," *Méthodes classiques et méthodes formelles dans l'étude des amphores (Actes du colloque de Rome, 27-29 mai 1974)* (Rome 1977), 133-77. Their Groups 1 and 2 appear to parallel Dressel's Form 4, whereas their much more frequently occurring Group 3 parallels Dressel's Form 3, and also Form XII in the typology of Pompeian amphoras by R. Schoene and A. Mau in *CIL* IV. Panella and Fano Group 4 is not paralleled in the typologies of Dressel and Schoene-Mau but is included in my Type 12a³.

4. See *supra* n. 3.

5. Fig. 9.1 illustrates a typical Koan neck fragment from Arikamedu, inv. no. R 6 (cf. Wheeler et al. fig. 10:83).

6. See the remarks in my chapter in A.M. McCann et al., *The Roman Port and Fishery of Cosa* (Princeton 1987) 206 and in the chapter cited *supra* n. 3.

7. Especially Deposit C 9:7 (late second century B.C.) and Deposit M 20:1, middle fill, consisting of debris dumped into a cistern after the Sullan destruction of the Agora of Athens in 86 B.C. On the date of Type 11a,

see also E.L. Will, "Two Amphoras from Populonia," in A.M. McCann et al., "Underwater Excavations at the Etruscan Port of Populonia," *JFA* 4 (1977), 295-96.

8. Painted inscriptions on amphoras found at Pompeii relate this type of jar not only to (factitious?) Koan wine (*CIL* IV.5536-5539, 5541) but also to Pompeian (i.e., imitation Koan) wine (*CIL* IV.5559), mentioned by Pliny the Elder (*NH* 14.70) as rather short-lived; to Vesuvian wine (*CIL* IV.2557-2559), which was probably identical with Pompeian wine; and to the wine of Sorrento (*CIL* IV 2556, 5521-22, 5525 [type of amphora not mentioned], 5560-61).

Painted inscriptions found in Rome on amphoras similar to Dressel's Form 3 also name *vinum Sorrentinum* (*CIL* XV².4592-93). According to Pliny the Elder (*NH* 14.22) Aminean grapes were grown on Vesuvius and at Sorrento. An amphora inscription (*CIL* IV.2677) shows that wine made from them was also bottled in Type 12 amphoras. It is thus apparent that Type 12, though originally used in Italy for imitation Koan wines, ultimately became a shipping container for other wines produced in the Vesuvius-Sorrento area of Campania.

9. Cicero, *pro Sulla* 60-62; T.R.S. Broughton, *The Magistrates of the Roman Republic* (New York 1951) II, 82. The amphora trademarks of P. Sulla have been found at Athens, Alexandria, and Taranto. They, as well as trademarks of L. Eumachius and other known Pompeians, will be published in my forthcoming *Athenian Agora* volume (supra n. 3).

10. Fig. 9.2 (Type 12a¹) is from the Athenian Agora (no. P 11880, from context N 19:1, datable to the second and third quarters of the first century B.C.). Fig. 9.3 (Type 12a³) is also from the Agora (no. P 21671; context not dated).

11. I am indebted to M.C. Joshi, from whose excavation at the Ambrish Tila at Mathura this stamped piece comes, for permission to publish the photograph reproduced here. The handle (Mathura inv. no. MTR-8) is stamped with a two-part trademark, each part impressed on one half of a typical double handle of Type 12a² (fig. 9.4).

Although several other examples of the same stamp have been found at Pompeii (including one or more on unbroken amphoras), Ostia, Carthage, Alexandria, and at Avenches and Vindonissa in Switzerland, the

interpretation of the letters, always carelessly impressed, is still uncertain. Scholars have long puzzled over the stamp. The example at Mathura makes it clear that the first letter is "M" -- a fact which could not be ascertained from the other examples. The entire stamp appears to read M.CANSTR (first part) and SVR (second part), or the reading might be M.CAVSTR (first part) and SVR (second part). We must assume that the first letter is a *praenomen*, the next three letters an abbreviation of a *nomen*, and the last three letters an abbreviation of a *cognomen*, but reconstructing the name is difficult.

An M. Cantrius Marcellus is named as a *duovir* and as a benefactor of the city in a Pompeian inscription (CIL X.857d; cf. P. Castrén, *Ordo Populusque Pompeianus* (Rome 1975) no. 98 and p. 102, n. 7. *Canius* (Castrén no. 97) and *Caudinus* (Castrén no. 108) are also known *nomina* at Pompeii that could perhaps be associated with this stamp. The *cognomen* (?) STR could be reconstructed in several ways, and SVR, on the second part of the stamp, may be the name of a slave-potter or possibly a reference to *vinum Surrentinum*.

Whatever the correct interpretation of this stamp, its spread from Switzerland to central India suggests that the manufacturer was a person of wealth and influence, and it throws further light on the importance of India as an integral part of the Roman trading network. The stamp will be examined in detail in my *Athenian Agora* volume (supra n. 3). Cf. also the comments in Panella and Fano (supra n. 3), 157, nos. 1001 A and 477, and in A. Tchernia and F. Zevi, "Amphores vinaires de Campanie et de Tarraconaise à Ostie," *Recherches sur les amphores romaines* (Rome: Ecole française de Rome, 1972) 40 and n. 3.

12. On the use of pozzolana in underwater construction, see E.K. Gazda's remarks in A.M. McCann et al (supra n. 5), esp. pp. 145-46, n. 44.

13. For general remarks on Knidian amphoras, see Grace 1979 (supra n. 3), text and notes accompanying figs. 64-66. For an example of the later Rhodian form represented at Arikamedu, see H.S. Robinson, *Pottery of the Roman Period. The Athenian Agora 5* (Princeton: American School of Classical Studies at Athens, 1959) 20 and pl. 3 [F 94], who refers to Wheeler's publication of a fragment of the same type.

14. Fig. 9.5 (Arikamedu inv. no. R 7 III B). On the dating of early jars for *garum*, see most recently my remarks in S. McNally and I.D. Schrunck, eds., *Diocletian's Palace 6* (Minneapolis: University of Minnesota 1989) 62, and the bibliographical references cited there.

15. Fig. 9.6 (Arikamedu inv. no. R 51) is an early, small handle of Type 20. The rare fragments of early Type 20 at Arikamedu mark, in my view, the point when Baetican olive oil jars were developing as a distinct type out of Type 11b. On that evolution, see my recent remarks in the 1989 Split chapter (*supra* n. 14), 62 and 63.
16. Fig. 9.7 (Arikamedu inv. no. R 1 III A). On Istrian olive oil jars, see also my discussion in the Split chapter (*supra* n. 14) 62.
17. Wheeler et al. 24.

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May 17, 1990

Department of Classics

My dear Virginia,

I don't know whether you may have heard that I will be in Athens at various times between May 31 and June 16, taking part in the School "On-Site" trip to Crete and Thera. I couldn't withstand the temptation to take part in the trip. I haven't been to Crete and Thera since 1950-51. I will be in Athens May 31, June 1, June 2, and June 15, and I am very much in hopes that you will be free to see me on one or all of those days. I assume I am not compelled to take part in all the group's activities in Athens. In fact, the hope of seeing you is one of my chief reasons for making the trip, as, though the catalogue of the book is now computerized, catalogue nos. given, etc., there are still some things I need to discuss with you. One of those things is the enclosed chapter, which is to appear in a popularized publication, *Rome and India: The Sea Trade*, edited by Vimala Begley and Richard De Puma. (A scholarly publication will be done later.) Vimala is the person who organized the colloquium on the same topic at the San Antonio meetings in 1986, and for three years thereafter she tried to get permission to dig at Arikamedu. I believe you have corresponded with her and probably know some of her difficulties. Funding was no problem, as the Smithsonian gave her a large grant, but the Archaeological Survey of India, which gives permissions for excavations, was slow about doing so in this case. Finally, late in 1989, the permission came through, and I found myself flying off to Arikamedu right after the Boston meetings. I was there all during January, and have now produced, under protest, the enclosed preliminary summary, which of course I don't want to publish without your concurrence. I'm faced, really, with a difficult situation, in that I was expecting to find the material at Arikamedu was mostly Campanian. Instead, it turned out to be more than half Koan. There was no time to consult you before doing this piece, as I haven't had time to concentrate on it until now, and the publisher (Wisconsin) wants it right away. I just don't have time to write while I am also teaching three classes and doing a lot for the AIA. What I have tried to produce is a tentative statement, which can be changed in any way you suggest. If you would consent to it, after seeing the photos and descriptions I'll bring with me to Athens, I'll be delighted for you to be co-author, both of the enclosed short piece and of the later catalogue and final publication. I realize that I have no business commenting on Koans, but I hope I have made it clear that the identifications were made on the basis of your criteria.

It was so wonderful to be present, and sitting near Homer, when you were awarded the AIA Gold Medal at the Boston meetings. I am sure you have heard from many who were there what a moving occasion it was. Your niece looks so much like you that it almost seemed you were there, too.

More when we have a chance, I hope, to talk in Athens. I hope we can go over, among other things, the M 18:1, G 14:2, and Antikythera sequence.

The student who visited you last year, Robyn Schinke, is about to be graduated from Mount Holyoke. All year I have been working with her on Roman amphoras, and she has produced an excellent Senior Honors Thesis on how (she feels) Type 20 evolved out of Type 11b. She has a Fulbright to England for next year and will work on archaeological techniques at Sheffield and Southampton. I think she really plans to devote her career to Roman amphoras.

Please tell Andreas I appreciated his note so much, the one appended to your last letter. Regards also to Maria.

With love,
Lettie

Production, Distribution, and Disposal of Roman Amphoras

Elizabeth Lyding Will

Shipping amphoras, the large clay export containers for bulk quantities of wine, olive oil, *garum* (the smelly fish sauce popular in antiquity), and other perishables, provide a good illustration of how closely ceramic production, distribution, and disposal systems were interrelated during the Roman period. And it is particularly relevant to study shipping amphoras in this regard, since they are the most frequent finds on Roman archaeological sites, both on land and underwater. Amphoras are found not only in their original unbroken state, especially under water, where the hazards of daily use on land, and consequent breakage, are absent, but they are also found reused in a multiplicity of ways; in fact, disposal of these containers after use was an integral part of the Roman production and distribution system. For the Romans, disposal was the end of the distribution process. Interest in these containers has accelerated dramatically during the last half century, and we are now able to pinpoint many of the chief production centers and the distribution routes emanating from them. In so doing, we are making significant strides in documenting and understanding Roman economic history, a topic about which little reliable evidence can be gleaned from literary sources.

Study of kiln finds and of trademarks and the other kinds of information often painted or scratched on the amphoras shows that these containers were usually produced in close proximity to seaports or river ports. The explanation for that is simple. Amphoras were heavy and unwieldy. When empty, they weighed about 40 pounds, on the average. When filled, they contained about six gallons and weighed around 80 pounds. Freight costs on land being high in the Roman period, it made sense to manufacture and fill the amphoras close to the place from which they were to be shipped by water; that is, to bring to them in lighter containers of wood or animal skins the olive oil or wine or whatever products were to be shipped in them. From such export harbors, the filled containers were shipped in large numbers to their destinations, over well-defined routes.

The extensive and complicated history of the production and distribution of Roman shipping amphoras is beginning to be energetically investigated at sites stretching from Britain to India and is now

known to have covered about eight centuries (the third century B.C. to the fifth century A.C.). Because amphoras are coarse pottery, they have sometimes been overlooked, almost scorned, by those classical archaeologists with primarily art historical perspectives. It should be noted, however, that the firm chronology we now have for Roman amphoras has been made possible through study of the precisely documented material discovered in the excavations of the Athenian Agora, where the work of Virginia Grace was making clear as early as the 1930's the usefulness of the study of Greek amphoras in dating archaeological contexts and in throwing light on the ancient economic history not only of the city of Athens but also of the areas, in the Aegean Sea and elsewhere, from which the amphoras were sent to Athens.¹

Research on Roman amphoras indicates that until the end of the first century B.C., the production and distribution of these containers and of the products shipped in them centered in the Italian peninsula and was in the hands of private individuals, probably in part under state supervision. In other words, Italy, at the same time that it was becoming the dominant political and military power in the Mediterranean world, was also asserting economic dominance in that world. By the first century A.C., with the rise of the Roman Empire and the institution of a more tyrannical form of government, control of the amphora industry began to pass to the state. A leisure ethic became dominant in the city of Rome and in much of the Italian peninsula, productive farms gave place to huge showplace-villas, and amphora manufacture and the production and exportation of agricultural surpluses moved from Italy to the provinces, especially to Spain, France, and Africa. Rigid governmental controls ultimately regulated both production and distribution.

To look first at the production and distribution of amphoras during the earlier period, from the third to the first centuries B.C., we find the evidence centering in such major Italian ports as Brindisi, the Port of Cosa, Pompeii, and probably Aquileia. These were export harbors, but, to put exportation into perspective, the point should be made that Rome's economic goals during the late Republic were also tied to the need for imports, especially grain. Italy was perennially in need of grain, but the fact that grain was shipped in perishable sacks makes it much more difficult to assess on archaeological grounds the evidence for its importation than the evidence provided by shipping amphoras for the exportation of other products. The related question of whether emphasis on the production of wine and olive oil brought about a need for grain or was caused by that need cannot now be answered. But, whether or not they served as import harbors, the

major harbors of Italy controlled the production and distribution of exports and of the amphoras in which the exports were shipped, and those commodities were imported by markets elsewhere in Italy and especially by the centers in and beyond the western and eastern Mediterranean that were now subject to Rome.

Though little has been done in the way of excavating Roman harbors in Italy itself, we are fortunate in having the recent partial excavations of the Port of Cosa, 90 miles north of Rome, as an example of the type of evidence which will emerge as more Roman ports are investigated.² The massive harbor installations at the northern Adriatic port of Aquileia, too, have been explored in part.³ No excavation work has been done on the port areas of Pompeii or of Brindisi, but widespread amphora trademarks, in the case of Pompeii, and the presence of extensive networks of kilns, in the case of Brindisi, document the importance of both harbors as production and distribution centers.⁴ Archaeological investigation has shown that these four ports were certainly among the chief centers of exportation from Italy during the late Republic. The Port of Cosa exported primarily to the West, especially to France and Spain, and Brindisi exported primarily to the East, particularly to Alexandria, Delos, Corinth, and Athens. Pompeii exported in both directions, and as far east as India. Aquileia exported chiefly to the East, to the Aegean and to Alexandria. On the basis of what we now know, the area of Pompeii may have been dominant during the first half of the second century B.C., giving place to Cosa and Brindisi and perhaps Aquileia from the middle of the second to the middle of the first centuries B.C. In the middle of the first century, a resurgence of export activity took place in the area of Pompeii, as trademarks, and finds of Pompeian amphoras as far away as India, attest. The sudden and rapid growth of exportation from these centers, and lesser ones like them, after the Second Punic War ended in 201 B.C. is documented by the shipping amphoras. So is the fact that the various distribution centers kept in touch with each other and maintained a relationship that was at times competitive, in the sense that a situation not unlike our own Cola Wars could and did develop, and at times cooperative, in the sense that markets were apparently divided up among the chief centers. These factors and others suggest the possibility that some sort of supervision of exportation and importation, probably on the part of the state, may have been put into effect after the defeat of Rome's chief economic rival, Carthage, in 201 B.C.⁵

If we consider more closely the actual production and distribution processes at the two sites about which we have the most archaeological evidence for the earlier period, the Port of Cosa and Brindisi, we

find them differing in important respects. At Cosa, a single family, the Sestii, seems to have begun a wine-and-amphora business soon after the Second Punic War. Utilizing rudimentary mass-production methods and a large staff of potters, both slave and free, the Sestius factory, though overshadowed during the first half of the second century B.C. by some similar large factories in the area of Pompeii, by the middle of the second century was beginning to dominate the table-grade wine trade in the entire western Mediterranean, where France was the chief market, and was apparently doing some business in the eastern Mediterranean as well. A law prohibiting the growing of vines by the Transalpine peoples must have fostered the Sestius monopoly. Though no actual kiln sites have yet been found at Cosa itself, the great Sestius shipwreck explored by Cousteau in 1952 off the Grand Congloué rock near Marseilles documents the size of the factory's production, as do the massive amphora finds (including wasters) of my Type 4 at Cosa. Clay tests also point convincingly to the Cosa area as the location of the factory. In its long life of almost two centuries, the Sestius factory became so large and powerful that it foreshadowed the evolution of modern capitalist enterprises by practising competition, risk-taking, diversification, acquisitions, and mergers, in addition to mass production. Close study of the trademarks on the amphoras allows us to see these processes at work. The members of the Sestius family became proverbially wealthy and were influential political figures at Rome for much of the first century B.C.⁶

At Brindisi, however, a similar wine industry, which had also, as at Cosa, begun after the end of the Second Punic War, experienced a reversal in the middle of the second century B.C., when its chief market, the Greek port of Corinth, was destroyed by Rome in 146 B.C. Brindisi turned to the export of olive oil, which was in demand in Egypt and also at the free port of Delos in the Aegean, and by the latter second and early first centuries B.C., when the Sestius factory was at its height at Cosa, we find at Brindisi not so much the monopoly by one large factory that developed at the Port of Cosa but rather a closely interconnected group of smaller factories located along the coast, belonging to otherwise unknown individuals like C. Vehilius, L. Visellius, and M. Betilienus, potteries again based on the labor of slaves and freedmen, manufacturing amphoras of my Type 11 for the exportation of massive quantities of choice Venafran olive oil to Alexandria and to such import centers in Greece as Delos and Athens. Competition, mass production,

merging, and diversification also took place at Brindisi, and the industries there, some of which survived into the first century A.C., spawned descendants and imitators as far away as Spain.⁷

We can speak, thus, of private domination, though with some state interference, of production and distribution of Roman amphoras and their contents during the Roman Republic, but the picture changes with the advent of the Roman Empire. As I have already noted, wine and oil production in Italy decreased markedly during the Empire, and, as a consequence, the manufacture of shipping amphoras in Italy also declined. Centers for the production and distribution of wine, olive oil, and *garum* developed in the provinces, and Italy, once the chief exporter of amphoras and their contents, now became a major importer of those products.⁸

The enormous olive oil industry of Baetica, a Roman province in southern Spain, provides the best illustration of amphora production and distribution during the Roman Empire. Dozens of potteries located along the Guadalquivir river manufactured large ball-shaped amphoras (my Type 20) that took olive oil to markets stretching from Britain to Egypt, and apparently even to India. As was the case with amphoras manufactured elsewhere in the provinces, the Spanish oil jars imitated the old shapes of Italian amphoras of the Republican period, the Spanish jars going back in shape to the amphoras of Brindisi. But, in contrast to Republican practice, potters, growers, and shippers were now different individuals or companies. During the early Empire, in the first century A.C., distribution of Spanish oil was diffused over the entire area under Roman control.⁹ But, with the growth of the dole in the city of Rome, more and more of the oil and amphora production of southern Spain went to the city itself. Mute testimony to this fact is Monte Testaccio, the so-called eighth hill of Rome, a dump that grew into a 150-foot-high pile of amphoras that had been emptied and broken after they had been unloaded at the port installations on the Tiber River in southern Rome. The kiln sites along the Guadalquivir have also been identified or explored and provide additional information about this huge industry. The increasingly tyrannical imperial government in Rome closely supervised the details of this production and distribution, through the network of officials and agents that were in all the provinces. But in spite of more rigorous governmental control during the Empire, the amphora factories and oil distribution points along the Guadalquivir managed to compete, diversify, and merge, as the elaborate trademarks, graffiti, and painted inscriptions on the pottery containers signify.¹⁰

the broken
amphoras
are used?

Spain exported *garum* and wine, too, during the Empire, as did imperial Africa and other provincial areas. Africa, in fact, gradually displaced Spain as the chief exporter of olive oil. From the third to the fifth centuries A.C., small potteries along the coasts of modern Tunisia and Libya supplied the thousands of containers that took African oil not only to Rome but to the entire Mediterranean area.¹¹ This industry was still very active in the fifth century, as massive finds at, for example, Ravenna in Italy and in Diocletian's huge palace at Split in Yugoslavia attest.¹² The topmost layer of amphora sherds on Monte Testaccio is also African. The imperial family was active in, and may have controlled, this African amphora industry of the late Empire, as was the case with the brick industry in the city of Rome, which came under the control of the imperial family, especially its female members, in the second century A.C.¹³ And it should be noted that production and distribution of shipping amphoras continued to be closely interrelated down to the end of the Empire, as had been the case for the preceding eight centuries. The African amphora kilns were located near the sea, close to the ports from which the olive oil was to be shipped, and the sea-lanes that had formerly radiated out from Spain, in the first and second centuries A.C., were replaced in the later Empire by routes fanning out in all directions from north Africa.

Reused in a multitude of ways (for example, as coffins by early Christians, or in the construction of domed roofs), the late Roman amphoras from Africa attest not only to the wide spread of the African trade but also to the ingenuity with which the Romans solved the problem of the disposal of "empties," one of the major dilemmas of our own day. Divorced as consumers have been in the modern world from the reality of production and distribution processes, they have turned their attention to disposal problems only during the closing decades of the twentieth century, when the need for waste management has become critically acute. For the Romans, however, the procedures of production, distribution, and disposal seem always to have been closely intertwined. Disposal of amphoras was for them the final stage of distribution. It was also a stimulus to production. Consumers of course wanted the commodities which were shipped in amphoras, but they also wanted the empty amphoras for a variety of purposes. For the Romans, disposal of amphoras was intimately tied to reuse. Disposal had the modern connotation of "throwing away" only near large cities, and in particular the city of Rome. Olive oil was one of the major consumer commodities of antiquity, being a primary nutritional source as well as the fuel for lamps and the Roman equivalent of soap. The dole dis-

tributed in Rome as a means of caring for the needy in the overpopulated city meant that the thick-walled amphoras for olive oil had to be disposed of in such great numbers that the hill of broken fragments, Monte Testaccio, referred to above, grew up on the southern fringe of the Aventine Hill. This huge pile of amphora necks and handles and body fragments stood, and stands, in mute testimony to the massive production stimulated by the dole in the city of Rome, and it forms a complete contrast to the usual outcome of the production and distribution procedures of the Romans.

The archaeological evidence amply confirms that distribution and disposal of amphoras were a balanced process. Provision was made at the port of importation for reuse of these massive jars. The problem was not a very challenging one, for the Romans were not an acquisitive people. The excavations of Pompeii and Herculaneum, the best preserved Roman towns we have, prove that the Romans did not have the large amounts of personal possessions that characterize the modern world. Even furniture was regularly foldable and portable, and rooms had a correspondingly uncluttered spaciousness that stimulated elaborate decoration of walls, floors, and ceilings. The Romans, in fact, suffered from a particular dearth of storage containers, and since wine, olive oil, and *garum* were the chief liquid food products, we find shipping amphoras often reused for storage of those products, in the home as well as in inns and food shops, at production centers as well as in the import areas. Much wine needed to be aged, and amphoras were used for that purpose on the producing farm as well as in the homes of consumers. But both at production and reception centers amphoras also served a multitude of other uses for the unacquisitive Romans. Broken up, they became primary sources of building material, and were used on land, both as "bricks" and in the rubble cores of walls. Bound together by water-resistant cement, amphora fragments were the chief components of harbor walls and piers. The port installations at Cosa, for example, are chiefly composed of amphora fragments, perhaps for the most part from jars discarded as wasters, for Cosa, as has been noted, was a major center for the production of wine. Architectural reuses can also be seen in the presence of amphoras in domes and roofs, as in the "Mausoleum" of Galla Placidia in Ravenna, and in the Circus of Maxentius in Rome they served partly to lighten the weight of the structure and partly to enhance the acoustics. The amphora is a natural megaphone, and the Romans built them not just into roofs and domes but they immured them in theaters and put them under the floors of forums (as at the Roman city of Pula in Yugos-

lavia, a center of amphora production) for acoustic purposes. Multi-purpose shipping amphoras were also reused as coffins, as containers for the ashes of the dead, and as decoration for graves and for the tops of walls, where in addition they served a protective purpose. Along Hadrian's wall in Britain, the Roman soldiers used amphoras for everything from coolers to ovens. Filled with poisonous snakes or burning pitch, they even became ballistic missiles in time of war. The Roman understanding of the necessary balance among production, distribution, and disposal is illustrated by nothing so much as by the recycling of shipping amphoras. Except in the artificial situation caused by the dole in Rome, production and disposal were integrated in such a way as to become inevitable parts of the same process. Disposal was seen as the final stage of distribution, as inseparable from it. The three processes were in a sense one, and the existence of that unity helps to explain the strength and momentum of the Roman economy over many centuries, even during frequent periods of political disunity.

ENDNOTES:

1. The bibliography of Dr. Grace (to 1982) is summarized in *Hesperia* 51:3 (1982) 365-367. My remarks in the present paper stem from research done at the Athenian Agora since the 1950's. A volume documenting the results of that research, *Stamped Roman Amphoras in the Eastern Mediterranean*, to appear in the *Athenian Agora* series, is in the final stages of preparation. So vast is the field of Roman amphoras, and so comparatively recent is scholarly interest in the subject on the part of classical archaeologists, that an effort such as I have been making to present what is known about the field as a whole in one volume has necessarily been a protracted one. The *Athenian Agora* volume, with approximately 2,800 catalogue entries, includes material not just from the Agora and from other sites and collections in and near Athens (including the National Museum and the Kerameikos Excavations) but also from the trading centers of Corinth, Delos, and especially Alexandria, the chief entrepôt of the eastern Mediterranean. In addition to those sites, I have also worked on the amphoras found at the Roman town of Cosa in central Italy, an excavation of the

American Academy in Rome, and a volume on those amphoras is also close to completion. The amphora finds from the Port of Cosa, a site with a separate history from that of the town, have already been published in my chapter in A.M. McCann et al., *The Roman Port and Fishery of Cosa* (Princeton: Princeton University Press, 1987). See also my recent publications of the amphoras from the Celtic city of Manching in Germany ("The Roman Amphoras from Manching: A Reappraisal," *Bayerische Vorgeschichtsblätter* 52 [1987] 21-36); from Split, the palace of Diocletian in Yugoslavia ("Roman Amphoras," in S. McNally and V. Schrunk, eds., *Diocletian's Palace*, Volume Six [Minneapolis: University of Minnesota, 1989], 58-113), and Arikamedu, India ("The Mediterranean Shipping Amphoras from Arikamedu," in V. Begley and R. De Puma, eds., *Rome and India: The Sea Trade* [Madison: University of Wisconsin Press, forthcoming 1990]). I have also worked and published extensively on underwater finds of Roman amphoras. The era of nautical archaeology, which came into sudden being with the invention of the aqualung and Cousteau's exploration of the Grand Congloué wrecks off Marseilles after 1952, provided a stimulus to the study of Roman amphoras, which are the chief finds in underwater wrecks. My work has shown that the upper Grand Congloué wreck was a ship that set out from the Port of Cosa loaded with hundreds of amphoras of *vin ordinaire* intended for distribution to Celtic markets.

Since the 1960's, particularly after the publication in 1965 of Maurice Callender's *Roman Amphorae* (Oxford University Press), a careful listing of trademarks found on amphoras, a growing number of specialists in Europe has also been working on Roman amphoras, but those scholars have for the most part tended to limit their research to finds from specific areas or sites. At the forefront of that group is an Italian scholar, Clementina Panella, who has produced since the late 1960's thoughtful and meticulous studies of the amphora finds from Ostia, Pompeii, and Tunisia. Two British scholars, D.P.S. Peacock and D.F. Williams, published in 1986 a comprehensive survey of amphoras, *Amphorae and the Roman Economy* (London and New York: Longman). In 1989 there appeared a large volume, *Amphores romaines et histoire économique. Dix ans de recherche* (Rome: Ecole française de Rome), a collection of papers presented at an international amphora colloquium at Siena in 1986. Much work remains to be done on the typology and chronology of Roman amphoras. The field is certain to become a very active one in Roman archaeology in the 21st century.

2. On the publication of the Port of Cosa, see *supra* note 1.
3. On the port of Aquileia, see Mario Mirabella Roberti, "Il porto romano di Aquileia," *Atti del Convegno Internazionale di Studi sulle Antichità di Classe* (Ravenna: Edizioni A. Longo, 1968), 383-395.
4. On amphora production at Pompeii, see my remarks in the Port of Cosa publication (*supra*, note 1), pp. 173, 183, 205-206. Production at Pompeii and at Brindisi is discussed by me most recently in the chapter "Relazioni mutue tra le anfore romane," in *Amphores romaines et histoire économique* (*supra* note 1), *passim*.
5. See my discussion of these matters in the two chapters referred to *supra* note 4 and in "Celtic Importation of Roman Wine in the Second and First Centuries B.C.," in R.R. Holloway, ed., *Rome's Alpine Frontier* (Brown University, in press).
6. See my discussion in the Port of Cosa publication (*supra* note 1).
7. See my chapter in the Split volume (*supra* note 1), p. 62 (under Type 11b).
8. See the discussion in my chapter, "Amphoras and Trade in Roman Sardinia," in M.S. Balmuth, ed., *Studies in Sardinian Archaeology, II* (Ann Arbor: University of Michigan Press, 1986), esp. pp. 211-212.
9. On Spanish olive oil production, see J.M. Blázquez Martínez and José Remesal Rodríguez, eds., *Producción y comercio del aceite en la antigüedad* (Madrid: Universidad Complutense, 1983), *passim*. My chapter in the same book, "Exportation of Olive Oil from Baetica to the Eastern Mediterranean," pp. 391-440, reviews some of the evidence for early trade between southern Spain and the East. My discovery this year of fragments of Spanish olive oil amphoras in Arikamedu, India, is discussed in the forthcoming Begley and De Puma volume, *Rome and India: The Sea Trade* (*supra*, note 1).
10. Emilio Rodríguez Almeida's many publications of his important research on Monte Testaccio and its relationship to the olive oil industry along the Guadalquivir culminated in his definitive book, *Il Monte Testaccio* (Rome: Edizioni Quasar, 1984). More than any other scholar, he has managed to provide interpretations of the trademarks and customs documentation scratched and painted on the Spanish fragments found on Monte Testaccio. Many other scholars have made important contributions in the same area, as the Blázquez Martínez and Remesal Rodríguez volume cited *supra* (note 9) attests.

11. Pioneering work on this topic was done by Fausto Zevi and André Tchernia, "Amphores de Byzacène au Bas-Empire," *Antiquités africaines* 3 (1969), 173-214. Cf. the work of Clementina Panella, "Appunti su un gruppo di anfore della prima, media e tarda età imperiale (secolo I-V d.c.," *Ostia* 3 (1973), esp. pp. 574-592, and her two chapters in Andrea Giardina, ed., *Società romana e impero tardoantico: Le merci gli insediamenti* 3 (Bari: Editori Laterza, 1986), "Le merci: Produzioni, itinerari e destini," 251-272, 823-825, and "Le anfore tardoantiche: Centri di produzione e mercati preferenziali," 431-459, 843-845. Cf. also Daniele Manacorda, "Anfore," *Ostia* 4 (1977), esp. pp. 156-225; J.A. Riley. "The Coarse Pottery from Berenice," in *Excavations at Sidi Khrebish Bengazi (Berenice)* 2 (Supplement to *Libya Antiqua* 5), ed. J.A. Lloyd (Tripoli, 1979), esp. pp. 164-167, 200-205; and S.J. Keay, *Late Roman Amphorae in the Western Mediterranean. A Typology and Economic Study: the Catalan Evidence*. BAR International Series, 196 (Oxford, 1984), passim.
12. See my chapter in the Split volume (supra note 1), 63-63 (Types 21 and 23).
13. The brickstamps listed in the corpus of Latin inscriptions (*Corpus Inscriptionum Latinarum*), vol. XV.1, attest to the activity of women in that lucrative industry, as owners, managers, and workers. The most important and successful brick factory in the Roman period was owned by Domitia Lucilla the Younger, the mother of the man destined to become the emperor Marcus Aurelius.

ROMAN

13

American School of Classical Studies
54 Swedias Street, Athens 106 76, Greece

November 15, 1990

Dear Mr. Bezeczky,

Thank you for your letter accompanied by two books, one Roman Amphoras from the Amber Route in Western Pannonia, Oxford 1987, and the other a picture book about Budapest full of lovely color pictures, which the group at morning coffee at the Agora have enjoyed. Your letter is dated in its heading Nov.25, but I received letter and books on Nov.13, and the postal cancellation in Budapest on the outside of the packet is Nov.5. Maybe you will want to correct the date in your copy of the letter.

Latin stamps are not in the field of my competence: many years ago I turned over my material of that kind to Elizabeth Lyding Will. However, in studying our amphora finds at the Agora in order to store ^{the collection} ~~it~~ in classified order when we moved into the Stoa of Attalos, I became rather familiar with the shapes ^{of the amphoras} and their approximate dates. Looking through your book, I would suggest that next time you might use for additional references on amphora shapes H. Robinson's book, vol. V of the Athenian Agora series. It is not one of the latest, but it probably ~~includes~~ includes most of your shapes, and most were found in context, and they are well illustrated. For instance, your "Aegean Type". I may say (or did I when you were here?) that Grace 1961, fig.67, as in your book, was a good reference for spatheia, as it is the original identification of the shape with the name. No one recognizes that fact, because they can't imagine putting anything new and original in a picture book.

When you send me your short article about a Knidian stamp, we will see about where it might be published. You may know that there are a lot of other Knidian stamps waiting to be published, but perhaps yours has an interesting context?

We expect you to come back to have more time looking at the amphoras in the basement.

Yours sincerely,

O. R. Grace
Virginia R. Grace

14.01

HUNGARIAN NATIONAL MUSEUM

Research Laboratory

H-1370. Budapest, Múzeum krt. 14-16. Pf.364. Tel.:1382-122 /48

Prof. Virginia R. Grace
American School of Classical Studies
54, Soudias Street
10676 ATHEN

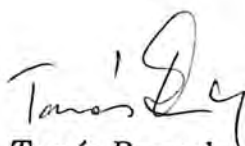
*Received! Nov. 13
in Budapest
Cancelled Nov. 5
out*

25 November 1990
Oztr?

Dear Prof. Grace,

I was really pleased to meet You.
I have learned quite a lot from Your works. I had wanted to meet you for a long time and for Your advice.
There are only amphora fragments among the Pannonian finds - with very few stamps, but there are relatively many Greek and Oriental fragments among them. I hope I'll be able to study Your unique collection sometime in the future.
I enclose two essays and a book about Budapest.
I'll send You a short article about Knidian stamp in a month. Could You please tell me where it could be published?

Yours sincerely


Tamás Bezeczky

14.02

MAGYAR NEMZETI MÚZEUM
KÖZPONTI RÉGÉSZETI KÖNYVTÁR
H-1370 Budapest, Pf.: 364.



970
80

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14.03

Prof. Virginia R. Grace
American School of Classical Studies
54, Soudias Street
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Yours sincerely

Tamas Bezecsky
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Mr. Tamas Bezecsky
Hungarian National Museum
Research Laboratory
H-1370 BUDAPEST Pf.364
HUNGARY

*address
used in
my letter
K.B.*

date Nov. 16, 1990

VIA AIR M
CORREO AE

For article on Roman amphorae,
(in opposite alph. fol)
see opposite page:

Lambenhauer

including "Gauloise 3, Gauloise 4",
"Gauloise 5", "Gauloise 1"
(Some of them are stamped - Lili)

PSEUDOKOAN

PIGS, BACCH

Two early Roman jars to be

identified for Photine's Tyrovolouzi(?),
found 3 units on site of Makrianna
Museum.

Photine ("I'm Photine") T. called on March 17
(see entry in Cat. Visitation book) and asked me to
look at photos. of 3 amphoras. Of one, only
body was pres., no foot, no handles, no neck. I
did not try to identify that.

We sipped through the SHAPES cards of items
on the early Roman racks in the E. basement, &
matched the other two jars. One was a "baggy pig",
i.e., in line with the SPE jars, but ^(baggy) later, of
1st AD. The other seemed to be the kind of "pseudo-
Koan" shown at right end of the 3 jars in Amphoras,
fig. 60. ^{also in fig. 61 - Pompeii} We looked in Agora 5, to find published
parallels, and found the 2 shapes illustrated
together, see pl. 19, [M 13] and [M 14] ^{baggy pig}

She seemed a little unsatisfied, I'm not sure
why.

Another time, when photos are not to be
given to us, to sure to get photos ^{i.e. what they ask us to identify} of them.
We have no identifi. of these jars, no numbers.

⊗ Problem for the "pseudo-Koan"? ; Photine insisted that there does
not have double handles. She was to look,

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ANFORE ROMANE E STORIA ECONOMICA : UN DECENNIO DI RICERCHE

*Atti del colloquio di Siena (22-24 maggio 1986)
organizzato dall'Università degli Studi di Siena
l'Università degli Studi di Roma-La Sapienza,
il Centre national de la recherche scientifique (RCP 403)
e l'École française de Rome*

EXTRAIT

ÉCOLE FRANÇAISE DE ROME
PALAIS FARNÈSE
1989

FANETTE LAUBENHEIMER

LES AMPHORES GAULOISES SOUS L'EMPIRE : RECHERCHES NOUVELLES SUR LEUR PRODUCTION ET LEUR CHRONOLOGIE

La production des amphores gauloises était quasiment inconnue il y a seulement quinze ans. Dans une ambiance nouvelle et générale d'intérêt accru pour l'histoire économique, j'ai consacré l'essentiel de mes recherches depuis 1976 à une étude systématique des amphores fabriquées en Narbonnaise. Une première synthèse, parue dans un livre récent (Laubenheimer 1985), se fonde sur l'étude de 33 ateliers : la production se développe essentiellement aux I^{er} et II^e siècle de notre ère ; aux premières fabrications imitant des types connus, P. 1, D. 2/4 par exemple, succèdent ensuite des séries standardisées typiquement gauloises, les G. 1, G. 4 et G. 5 ; il s'agit très généralement d'amphores vinaires.

Ma documentation s'était arrêtée en 1982. Or, depuis quatre ans, les nouvelles découvertes se sont multipliées très largement. Elles permettent de compléter et de rectifier les premières conclusions, mais aussi de poser de nouveaux problèmes, voire une nouvelle problématique. Je présenterai donc ici une synthèse des derniers acquis de nos connaissances et de ma réflexion sur les amphores gauloises, en faisant état des travaux de nombreux chercheurs dont certains ont bien voulu me communiquer des résultats encore inédits et que je remercie vivement de leur collaboration¹.

I - NOUVEAUX ATELIERS EN NARBONNAISE ET EN GAULE CHEVELUE

Aux 33 officines d'amphores présentées dans mon livre vient s'ajouter une quantité appréciable de nouveaux ateliers d'amphores. Nous en comptons 13 en Narbonnaise et 5 en Gaule Chevelue (fig. 1). Les recherches et explorations dont ils ont fait l'objet sont inégales, simple signalement, reconnaissance, fouille de sauvetage ou fouille programmée. Pour certains, une étude a déjà été publiée ; pour d'autres elle est en cours ; d'autres enfin

¹ Je pense notamment aux chercheurs suivants : C. Becker, l'Abbé Boyer, J.-P. Brun, G. Congès, C. Laroche, A. Michelozzi, C. Olive, H. Ribot, L. Rivet, J.-M. Théveny. Je remercie également M. Picon qui a réalisé au laboratoire de céramologie de Lyon les analyses par fluorescence X du matériel de St-Just (Ardèche).

n'ont pas encore suscité de recherche particulière. Nous proposons de faire un tour rapide de la situation en présentant les ateliers par département et par ordre alphabétique.

1.1. - NARBONNAISE (fig. 1)

Alpes Maritimes

La zone de production d'Antibes. Deux amphores D. 2/4 portant des marques peintes indiquant pour origine : Antibes, ont été découvertes l'une à Londres (Hassal, Tomblin, p. 344, n° 37), l'autre à Ostie (Panella à paraître).

- L'amphore de Londres a été trouvée en 1983 dans les fouilles de Southwork, dans un contexte probablement flavien. Sur le col, on peut lire (fig. 2) :



Fig. 1 - Carte des ateliers d'amphores en Gaule. Les numéros indiquent les nouveaux ateliers : 1, Antibes; 2, Cannes-St-Cassien; 3, Mandelieu; 4, St-Just; 5, Marseille; 6, Puyloubier; 7, Beaucaire-Privat; 8, Aoste; 9, Ponteilla; 10, Le Beausset; 11, Le Castellet; 12, Sanary; 13, Cavalaire; 14, Crouzilles-Mougou; 15, Thésée-Pouillé; 16, Lyon; 17, Gueugnon; 18, St-Martin-l'Ars.

LIQVAM

ANTIPOL

EXC

L TETTI AFRI

CANI

AFRI

Fig. 2 - Marque peinte sur le col d'une amphore D. 2/4 d'Antibes, trouvée à Londres et contenant de la saumure : *Liquam(en) / Antipol(itanum) / exc(ellens) / L(ucii) Tett(i) Afri/cani / (Afri(cani))*.

LIQVAM
ANTIPOL
EXC
L TETTI AFRI
CANI
AFRI

Liquam(en) Antipol(itanum) exc(ellens) L(ucii?) Tett(i)i Africani, Afri(cani) « Sauce de poisson d'Antibes, excellente, de Tettius Africanus, Africanus ».

- L'amphore d'Ostie est en cours de publication. Sur un col fragmentaire, on peut lire la mention de *muria* d'Antibes.

La région d'origine de l'amphore et de son contenu est indiquée par la mention de la cité; on connaît déjà l'exemple analogue des amphores D. 2/4 de Béziers (*CIL*, XV, 4542 et 4543). La localisation de l'atelier précis où l'emballage a été fabriqué n'est pas donnée, mais l'on peut raisonnablement penser qu'il se trouve dans la région d'Antibes, voire aux abords même de la ville. La production d'amphores dans ce secteur a laissé quelques traces avec les deux ateliers de Cannes (Laubenheimer 1985, p. 95 sq.) et celui de Mandelieu. L'un d'eux (St-Cassien, voir *infra*) a justement fabriqué des amphores

D. 2/4, mais il n'était certainement pas le seul, et il serait téméraire de lui attribuer les amphores de Londres et d'Ostie, en l'absence d'analyses chimiques et surtout d'une meilleure connaissance de la zone productrice.

Nous entendons donc par amphores d'Antibes tout un secteur de production dont témoignent trois ateliers, deux marques peintes sur amphores et aussi un texte de Martial (13, 103) qui mentionne une *amphora muriae* d'Antibes.

- *Cannes, St-Cassien*. A l'ouest de Cannes, à St-Cassien, carte IGN, 1:25000, Cannes 1/2, coordonnées Lambert III, zone sud, X = 972, 4; Y = 149, 4, la production d'amphores a été localisée par la découverte fortuite, lors de travaux d'édilité, d'un dépôt d'amphores D. 2/4 très partiellement fouillé (Laubenheimer 1985, p. 95). Cinq d'entre elles ont été récupérées, dont une déformée par la cuisson. L'analyse par activation neutronique de trois de ces amphores (par le Groupe d'Archéologie Nucléaire d'Orsay-Saclay) et de dix-sept échantillons d'un atelier fabriquant des formes G. 6, situé à Cannes, à 4 km de là, a montré le caractère local de ces deux productions.

On ne connaît rien de l'extension de l'office de St-Cassien ni de sa période d'activité.

- *Mandelieu*. L'atelier de Mandelieu a été découvert lors d'une fouille d'urgence sur le site d'une villa gallo-romaine en 1979 et 1980, au sud-ouest de la ville actuelle, dans le quartier «Les vigneron», au lieu-dit N.-D. d'Avignonnet (Aygueparse, Fixot, Codon 1981). Elle est située sur une butte naturelle, constituée d'un banc d'argile, dominant deux cours d'eau, l'Argentière au sud-ouest et la Siagne au nord. Les structures mêmes de l'officine n'ont pas été mises au jour, mais c'est à travers le matériel extrêmement riche de couches stratifiées de remblais (55 000 tessons) que L. Rivet (Rivet 1986) a mis en évidence les traces d'une activité de production de céramiques.

Des déchets de cuisson, abondants et des objets en série attestent la fabrication de céramiques communes à pâte brune et claire, de tuiles et d'amphores de deux types différents : de petites amphores à fond pointu d'une forme nouvelle que nous nommerons G. 11 et des amphores à fond plat et lèvre à double inflexion externe. Leur apparition dans les couches les plus anciennes se place au milieu du 1^{er} siècle et à l'époque flavienne. Le site est occupé jusqu'à l'Antiquité tardive; il est difficile de dire quand cesse la production des amphores.

Avec l'atelier de Mandelieu émerge, dans la région de Cannes, un groupe d'ateliers du Haut-Empire (Cannes, Cannes St-Cassien et Mandelieu) aux productions très diversifiées : G. 6, D. 2/4, G. 11 et amphores à lèvre à double inflexion externe.

Ardèche.

- *St-Just* (Laubenheimer, Leclère, Odier à paraître). Des prospections systématiques menées depuis plusieurs années par H. Leclère dans la région de Bourg-St-Andéol ont conduit en 1985 à la découverte d'un atelier de potiers à 1 km au nord-ouest de St-Just. (Carte IGN, 1:25000, Bourg-St-Andéol 2939 est, coordonnées Lambert III, zone sud, x = 780, 5; y = 3225, 5; cadastre de St-Just, section A, parcelles 660b, 82 et 79). Situé à flanc de colline, (88 m d'altitude), sur une terrasse aménagée et partiellement cultivée en vigne

aujourd'hui, l'office se développe sur une surface de l'ordre de 0,5 ha. Les labours ont remonté à la surface des morceaux de fours, des déchets de cuisson et divers fragments de céramique qui ont été ramassés. La production d'amphores accompagne, comme il est fréquent, celle de matériaux de construction (tuiles, briquettes, tuyaux); mais il faut souligner tout de suite le caractère exceptionnel de cette officine qui s'oriente vers l'imitation de produits italiques, dont la fabrication dans notre région était jusqu'alors inconnue. On y trouve en effet des amphores du type D. 1B (et peut-être aussi D. 2/4), dont les déchets de cuisson ne sont pas rares. L'imitation gauloise d'amphores vinaires républicaines italiques, pose en termes nouveaux, comme nous le verrons à la lumière d'autres découvertes, les débuts de la production des amphores en Gaule à la période romaine.

Il est remarquable que la même officine ait fabriqué également des plaques décoratives en terre cuite. Treize fragments ont été recueillis en surface, dont certains déchets de cuisson. Ces plaques sont faites sur le modèle des fabrications italiennes connues dans la région de Rome à partir du milieu du 1^{er} siècle av. n. è. et surtout développées au cours du premier quart du 1^{er} siècle de notre ère (Borbein 1968, p. 28 sq).

Parmi les thèmes décoratifs identifiés à Saint-Just, on retiendra la Victoire taurobole, thème majeur de l'imagerie des plaques Campana. Si le thème de la victoire est ancien, depuis la Niké de l'archaïsme grec, il se développe considérablement à Rome avec la prise du pouvoir par les *imperatores*. Le sacrifice très spécifique du taureau symbolise la victoire perpétuelle de l'empereur. Cette documentation issue d'un atelier rustique s'ajoute aux nombreux témoignages d'art triomphal dans la Narbonnaise augustéenne.

L'analyse par fluorescence X de 21 échantillons d'amphores et de plaques (Laboratoire de céramologie de Lyon) a confirmé l'origine locale de ces productions.

Malgré l'absence de fouilles qui eussent apporté des données chronologiques précises, le matériel d'accompagnement recueilli en surface, d'une étonnante homogénéité, offre déjà des indications précieuses. Il s'agit de 59 tessons de céramique sigillée arétine (l'analyse de la pâte n'a pas été réalisée, toutefois aucune trace de déchets de cuisson ne laisse pressentir une origine locale). Neuf fragments ont une forme identifiable. Ils appartiennent pour les vases lisses aux formes Goudineau 13, 15 et 16 pour les formes précoces (-30, -12); 23, 27 et 28 pour les formes classiques; 37 (?) pour la seule forme tardive (+ 5 + 16); une seule forme décorée enfin, Drag. II, est augustéenne. L'ensemble constitue un matériel typiquement augustéen; on remarque l'absence en amont de formes archaïques et en aval des sigillées sud-gauloises. Cette datation est en bon accord avec ce que l'on sait par ailleurs des amphores et des plaques décoratives. Elle tend à montrer que, dans les dernières décennies du 1^{er} siècle av. notre ère et le tout début du 1^{er} siècle ap., on a fabriqué des amphores D. 1 B en Gaule Narbonnaise, comme en Italie où se font encore les dernières productions de ce type. Tout se passe comme si l'officine de St-Just à la production très «italianisante» n'avait fonctionné que quelques décennies, interrompant son activité à la veille des grandes mutations économiques, dans le domaine viticole notamment, qui feront naître de vastes ateliers d'amphores, aux formes typiquement gauloises. Néanmoins, les amphores vinaires de St-Just marquent déjà à l'époque augustéenne la présence d'une viticulture locale, sans doute plus limitée, première évidence du vignoble des Helviens connu de Pline (HN, XIV, 18 et XXIII, 47).

Bouches-du-Rhône.

Marseille. Les fouilles de sauvetage entreprises à partir de 1981 sur la Butte des Carmes ont amené la découverte d'une officine de céramique importante, dont l'extension totale n'est cependant pas connue. L'atelier est situé à l'intérieur de la ville antique. Il est caractérisé par des fours, des bassins, des dépotoirs, dont l'étude d'ensemble n'est pas encore publiée. Ses productions sont variées : céramiques communes, matériaux de construction (tuiles, briquettes, pesons) et des amphores que nous connaissons mieux grâce à deux études récentes (Bertucchi 1982, 1983).

La fabrication des amphores marseillaises de tradition grecque s'est interrompue après le début du II^e siècle avant notre ère. On ne dispose que de quelques rares témoignages d'une production locale d'amphores gréco-italiques à pâte marseillaise dont la chronologie et l'importance restent encore à définir (Bertucchi 1982, p. 159).

Les travaux récents ont mis en évidence deux phases de production nettement différenciées.

- À la fin du I^{er} siècle avant J.-C. sont fabriquées deux séries d'amphores à fond plat :

- la première, la plus abondante, dite « à lèvre à bandeau » par G. Bertucchi (Bertucchi 1982, p. 147 sq; 1983, p. 93 sq.) ne correspond à aucune des formes gauloises jusque-là définies. Nous la classerons comme Gauloise 2. (p. 124, fig 7)

- la seconde, que Bertucchi distingue par sa lèvre « à bandeau rentrant » (Bertucchi 1982, p. 151; 1983, p. 95-96) se distingue très nettement du type précédent, à la fois par des caractéristiques morphologiques et technologiques : le col est tronconique avec son diamètre minimum au niveau de l'attache supérieure des anses; la lèvre marque une seule inflexion externe, sans retour sur elle-même. Il nous paraît donc impossible d'admettre, comme le suggère Bertucchi (Bertucchi 1983, p. 87), que cette amphore représente la demi-mesure de la précédente. Sa contenance est moindre, certes, mais les caractéristiques de sa fabrication montrent bien qu'on a cherché à faire non un modèle réduit de l'amphore G. 2, mais une autre catégorie d'objets. Elle correspond en effet au type G. 7 déjà caractérisé dans les ateliers d'Aspiran, Velaux-Moulin du Pont et Fréjus (Laubenheimer 1985, p. 302 sq.). (une ill. de G. 7)

- Une troisième catégorie d'amphores à fond plat, représentée par deux fragments de lèvres, reste inclassable, faute d'une documentation plus fournie (Bertucchi 1983, p. 93 la nomme curieusement « amphore dite gauloise »).

Pendant la même période, l'atelier marseillais produit également des formes D. 2/4 en quantité moindre que la forme G. 2 et avec la même pâte (Bertucchi 1982, p. 151, 157-159).

- Des productions totalement différentes caractérisent le 1^{er} et 2^e siècles de notre ère. Il s'agit d'un matériel rencontré massivement sur l'atelier, composé d'amphores, dont la pâte est plus épurée que celles de la période précédente (Bertucchi 1982, p. 152 sq.). Les formes, G. 4 essentiellement, G. 3 et G. 5, correspondent à des types bien connus dans les ateliers de Narbonnaise.

Les récentes fouilles de Marseille mettent en valeur la place remarquable des productions que l'on pressentait pour la période romaine. Dans une cité dotée d'une longue tradition dans ce domaine, après un hiatus depuis le début du II^e siècle jusque dans le courant du I^{er} siècle av. J.-C., on a recommencé à fabriquer des amphores : il y a une production exceptionnellement variée et de longue durée, d'autant plus intéressante que Marseille est maintenant dénuée de tout rôle politique et que l'on avait pu supposer que ses activités économiques étaient très faibles.

- *Puyloubier* (Laubenheimer, Gruel, Naciri, Pasquier, Widemann 1984). À 19 km à l'est d'*Aquae Sextiae* une officine rurale s'est développée dans une zone agricole riche, le bassin de l'Arc, cadastré et occupé par de nombreux domaines.

Seules des prospections en surface ont été menées (prospection magnétique et cartographie des objets). Juxtaposée à un habitat, une zone artisanale comporte trois ou quatre fours. Le site, dont l'extension est inférieure à 1 ha, se classe parmi les officines de taille moyenne en Narbonnaise.

La production compte tout à la fois des tuiles, de la céramique commune et des amphores. Ces dernières sont de deux types seulement : des amphores vinaires D. 2/4 et des amphores à fond plat et lèvre à double inflexion externe que nous avons nommées G. 1 variante B. Le matériel de surface indique une activité qui commence à la fin du I^{er} siècle av. notre ère, se poursuit pendant le I^{er} siècle ap. et cesse ensuite.

Gard.

- *Beaucaire.* L'occupation romaine très riche dans la région de Beaucaire (*Ugernum*) a fait l'objet d'une étude systématique récente qui, mettant en relation diverses données disponibles (sites, voies, cadastres...), vise à décrypter les structures du paysage antique (Fiches, Gasco, Michelozzi à paraître). Plusieurs points de fabrication d'amphores s'intègrent dans ce cadre.

- Un premier ensemble, composé d'une riche villa avec une exploitation agricole et un atelier de potier de taille moyenne (1 ha environ) dont la production dominante est consacrée aux amphores G. 4 et G. 1, est déjà connu au lieu-dit Pauvre-Ménage, à 3 km au sud de Beaucaire (Laubenheimer 1986, p. 131 sq.).

- Des prospections récentes (Michelozzi 1983 et prospection Michelozzi, Gasco 1984) ont conduit à la reconnaissance à 900 m à l'est de Pauvre-Ménage d'un autre ensemble très important à Privat, groupant villa et atelier sur une surface de 4 ha environ (lieu-dit Mas de Martin et Mas de Forton Nord, carte IGN 1:25 000, coordonnées Lambert III zone sud, X = 781, 8; Y = 3168,9; cadastre de Beaucaire, 1940-1983, section H, feuille 2, parcelles 390-392-395-396).

L'implantation dans la zone du piémont des deux exploitations rurales de Pauvre-Ménage et Privat privilégie l'exploitation simultanée des terroirs du plateau, des côteaux et de la plaine. La distance régulière qui sépare les sites majeurs de ce secteur (entre 800 m et 1000 m, Fiches, Gasco, Michelozzi à paraître) correspond sans doute à la largeur moyenne des finages allongés regroupant les trois types de terrains.

La production céramique est essentiellement orientée vers les amphores vinaires G. 4 (présentes en série avec des déchets de cuisson) et G. 1 dans une moindre quantité, comme à Pauvre-Ménage. On ne peut rien dire de l'origine (locale ou importée) de rares fragments de D. 2/4 et P. 1. Le matériel de surface lié à l'habitat, un fragment de céramique arétine et surtout de la sigillée sud-gauloise, correspond à une période d'activité qui couvre le I^{er} siècle de notre ère.

- On sera plus réservé sur l'activité céramique liée au très vaste site de costière de Valescure (Mazauric 1909, 221-222; Fiches, Gasco, Michelozzi à paraître) à 8 km au S.O. de Beaucaire. Occupé du Haut au Bas-Empire, il n'a fourni qu'un seul fragment très petit d'amphore G. 1.

Les ateliers de Privat et de Pauvre-Ménage s'inscrivent dans une région où la production des amphores G. 1 et G. 4 a été particulièrement développée sous le Haut-Empire, la proximité du Rhône étant sans doute un atout important pour l'exportation des amphores vinaires.

Isère.

- Aoste (Laroche 1984). Une fouille de sauvetage entreprise au cœur du *vicus* d'*Augusta* (Aoste) (à 60 km environ à l'est de Lyon et à 25 km environ à l'ouest de Chambéry) à partir de 1983 a mis en évidence un centre artisanal de céramique (fours et dépotoirs) dont la production était très diverse : céramique engobée rouge, commune à pâte claire et à pâte grise, *dolia* et amphores à fond plat. Elle s'est développée dès l'époque augustéenne et a continué durant tout le I^{er} siècle de notre ère. Les amphores à fond plat et lèvre à double inflexion externe seront étudiées dans une prochaine publication (Laroche à paraître). L'officine d'Aoste apporte un témoignage tout à fait nouveau de la production d'amphores au nord de la Narbonnaise, dans une zone où elle n'était pas attestée jusqu'ici.

Pyrénées orientales.

- Ponteilla (Olive, à paraître). À 10 km de Perpignan, l'atelier de Ponteilla a été révélé par la présence de tessons remontés par les labours dans une vigne. On ignore quelle est son extension. Une fouille de sauvetage limitée en surface (10 x 10 m) a été menée en 1984 sous la direction de C. Olive, découvrant des structures liées à l'atelier et un dépotoir.

Comme à l'habitude, les productions sont diverses : matériaux de construction (tuiles, briques, tuyaux), céramiques communes et amphores de quatre types : D. 2/4, les plus abondantes, G. 1, G. 3 et des amphores à fond plat et lèvre à double inflexion externe. On a pu dater de la fin du I^{er} siècle ou du début du II^e siècle la cessation de l'activité, sans pouvoir en situer le début.

L'atelier de Ponteilla est le premier que nous connaissions en Roussillon. Il constitue un trait d'union entre la zone de Béziers, Narbonne et les officines catalanes de la région de Gérone et de Barcelone (Laubenheimer, à paraître). Sa production est nettement orien-

tée vers les amphores vinaires. L'association des types qu'il fabrique est originale : des D. 2/4 et des amphores à fond plat et lèvre à double inflexion externe, comme souvent en Catalogne, mais pas la forme P. 1 généralement associée aux D. 2/4 dans cette région ; des G. 1 dont l'essentiel de la production est concentrée dans la basse vallée du Rhône, et pas d'amphores G. 4 produites massivement à partir du I^{er} siècle en Narbonnaise et fréquemment associées aux G. 1 ; enfin des G. 3, associées, comme à Corneilhan (Hérault) à des D. 2/4 et à des amphores à lèvres à double inflexion externe, mais, pour la première fois ici, à des G. 1.

Var.

Trois ateliers ont été découverts à l'ouest de Toulon, dans une région où l'on n'en connaissait pas. Deux sont situés à quelques km à l'intérieur des terres, le troisième sur la côte (Brun, Laubenheimer, Ribot, Theveny à paraître).

- Le Beausset. À une dizaine de km de Toulon, au sud du village, au lieu-dit «chemin de Rouve», les travaux d'aménagement d'un collège ont conduit à la destruction d'un site (Informations archéologiques, *Gallia*, 1960, p. 311) qu'il y a tout lieu de considérer comme un atelier d'amphores (carte IGN, 1:25000, Toulon ouest 33-46, coordonnées Lambert III, zone sud, X = 881,75; Y = 3105,3). Deux tonnes d'amphores auraient été envoyées à la décharge. Deux cols et deux fonds d'amphores furent heureusement recueillis par l'abbé Boyer. Ce sont des G. 4 dont la pâte orangée est typique de la région toulonnaise.

- Le Castelet. À 3 km à l'est du Beausset, à cheval sur les communes de La Cadière et du Castellet, au lieu-dit La Pinède (carte IGN, 1:25000 Toulon ouest 33-46, coordonnées Lambert III, zone sud, X = 878,85; Y = 3105,65), une fouille menée par J. M. Theveny en 1981 a mis au jour un bâtiment construit au début de la deuxième moitié du III^e siècle. Le fossé de fondation de l'un des murs a été comblé par un remblai plus ancien que le bâtiment, mais qui reste encore difficile à dater précisément. Il était constitué pour l'essentiel des déchets d'un atelier de potiers avec notamment plusieurs dizaines d'amphores. L'emplacement même de l'officine, sans doute très proche, n'est pas connu. Les amphores sont de trois types : des D. 2/4 (deux variantes); des amphores à fond pointu d'une forme inédite que nous nommerons G. 10; quelques petites amphores à fond plat avec une lèvre à bourrelet.

- Sanary-sur-mer. Située sur la côte même, au lieu-dit Portissol (carte IGN, 1:25000, Toulon ouest, 33-46, coordonnées Lambert III, zone sud, X = 881; Y = 3096,3), un atelier de potiers avait été reconnu anciennement lors de la mise au jour d'un four. Des fouilles, reprises de 1983 à 1985 sous la direction de H. Ribot, ont permis de préciser l'activité de l'officine. Étendu sur 1 ha environ, le site a connu une occupation du I^{er} au IV^e siècle. La production comptait à la fois des tuiles, de la céramique commune et des amphores : une importante série de variantes de la forme G. 4 (avec des déchets de cuisson) qui semblent devoir être datées entre le II^e et le IV^e siècle. Une fouille complémentaire est prévue pour préciser la chronologie.

- *Cavalaire*. À une soixantaine de km à l'est de Toulon, des fouilles entreprises depuis 1984 sous la direction de J.-P. Brun et G. Congès, au lieu-dit Pardigon 2 (carte IGN, 1:25000, St-Tropez coordonnée Lambert III, zone sud, X = 943,1, Y = 3107,4), ont mis en évidence une villa maritime occupée entre la deuxième moitié du I^{er} siècle avant notre ère et le VI^e ou VII^e siècle. À la période de Claude et Néron, un four associé à la villa produisait des tuiles, de la céramique commune et des amphores dont la pâte brun orangé est très caractéristique. Le matériel amphorique est encore très peu abondant et fragmentaire. On peut identifier deux formes : D. 2/4 et amphores à lèvres à double inflexion externe.

L'atelier de Cavalaire est le premier identifié dans cette zone.

1.2. - GAULE CHEVELUE (fig. 1)

Indre-et-Loire.

- *Crouzilles-Mougon*. Sur les bords de la Vienne, à quelques 35 km au sud de Tours, une officine connue depuis plus d'un siècle a fait l'objet de fouilles récentes (Ferdière, Blanc, Fehrbach, Toulhier, Toulhier-Vallée 1986). Il s'agit d'un atelier d'une très grande ampleur, couvrant 15 ha et voué aux productions les plus diverses (matériaux de construction, céramiques communes, statuettes, sigillée, amphores...). Ces dernières ne représentent qu'une part marginale des productions, mais apportent des renseignements très nouveaux sur le développement du vignoble en Touraine dès le milieu du I^{er} siècle avec deux séries d'amphores vinaires, répliques de modèles produits à la même période en Narbonnaise. Il s'agit des formes D. 2/4 (deux variantes) et G. 4; en outre, deux variantes d'amphores à fond plat sont nouvelles (Laubenheimer 1986; Laubenheimer, Sabir, Widemann 1986).

Loir-et-Cher.

- *Thésée-Pouillé*. À 60 km au NE de Crouzilles-Mougon, sur les deux rives du Cher, le site, reconnu au XIX^e siècle, a été fouillé à partir de 1962 (Laubenheimer 1986). Cette vaste officine comporte plus de 19 fours destinés à une production très variée (céramiques communes engobées ou non, mortiers, *dolia*, briques, et, pour une part non majoritaire, des amphores). La période de fonctionnement se place au II^e siècle sans que l'on puisse, pour le moment, percevoir une évolution. Une trentaine de cols d'amphores trouvés dans les fouilles anciennes ont été conservés. Il s'agit d'amphores vraisemblablement à fond plat de quatre formes différentes appartenant à des types méconnus en Narbonnaise, dont l'un se rapproche des productions rhénanes. Totalement différentes de celles de Crouzilles-Mougon, et plus récentes d'au moins un demi-siècle, les amphores de Thésée-Pouillé, bien locales comme le confirment les analyses de pâte, mis dont on ignore la fonction, attestent une production originale au II^e siècle, à une période où la fabrication standardisée de G. 4 connaît son plus grand développement en Gaule du Sud.

Rhône.

- *Lyon*. La production d'amphores dans la capitale des Gaules a été signalée pour la première fois en 1950 lors de la découverte d'un four avec son chargement d'amphores D. 7/11 trop cuites (Informations archéologiques, *Gallia*, 1950, p. 150) dont le matériel a aujourd'hui disparu.

Lors de récents travaux d'urbanisme, un drain composé d'une vingtaine d'amphores a fourni d'autres témoignages d'une fabrication locale de D. 2/4 et D. 1 que l'on a pu attester par des analyses de pâte (Becker, à paraître). Elle est confirmée par les analyses d'autres D. 2/4 lyonnaises (Desbat, *infra*).

Avec Crouzilles-Mougon, ce nouvel exemple lyonnais souligne l'ampleur de la zone de production des D. 2/4 que l'on croyait, il y a peu de temps encore, limitée au Sud de la Narbonnaise. La fabrication régionale d'amphores D1, avec les D1B de St-Just notamment, ouvre des perspectives nouvelles sur les imitations en Gaule d'amphores italiques.

Saône-et-Loire.

- *Gueugnon*. Dans la vallée de l'Arroux, à 45 km au sud d'Autun, s'est développé sur 10 ha un vaste complexe de production céramique, avec une cinquantaine de fours (Laubenheimer, Notet 1986). Des fouilles entreprises depuis 1966 ont mis en évidence une production très variée, qui comporte toutes les céramiques régionales traditionnelles (commune, sigillée, statuettes, amphores...) évoluant du I^{er} au début du IV^e siècle. Par la diversité de ses fonctions, et son ampleur, il est clair que l'officine n'est pas le simple complément de la production agricole des villas, mais se définit plutôt comme une structure indépendante.

C'est au I^{er} siècle que se place la fabrication d'amphores : deux formes nouvelles à fond plat et des G. 4 de petit module. Destinées très certainement au transport du vin local, elles apportent un argument de poids en faveur du développement du vignoble bourguignon dès le I^{er} siècle dans une zone où aucune production de ce genre n'était jusqu'alors connue. Leur diffusion est à la fois régionale et lointaine (Angleterre).

Vendée.

- *St-Martin-l'Ars*. Pour mémoire enfin, signalons cette découverte du milieu du siècle dernier (Fillon 1864, p. 26-27).

1.3. - LA GÉOGRAPHIE DES PRODUCTIONS

Il était clair à mes yeux que je n'avais travaillé que sur une documentation très parcellaire : je m'étais limitée à la Narbonnaise et les ateliers retenaient assez peu l'attention des spécialistes. En conséquence, l'aire de répartition des ateliers n'était définie que de manière lacunaire. Depuis, une mutation importante s'est produite et l'intérêt accordé

aux officines s'est beaucoup développé; on commence d'autre part à disposer d'une information sur les Trois Gaules.

Dans une géographie nouvelle des officines de Narbonnaise, ce qui me frappe d'abord, c'est que des blancs disparaissent, et d'autres importants. La région de Toulon a beaucoup donné, à la suite d'une prospection plus méthodique. La lacune entre le groupe si important des ateliers de la région Narbonne-Béziers et ceux de Catalogne est comblée par le témoignage de Ponteilla. L'Ardèche se peuple avec St-Just qui, avec la production de plaques décoratives type Campana, montre jusqu'où peuvent aller les ambitions de potiers rustiques. De plus grande conséquence peut-être est le témoignage d'Aoste dans l'Isère, qui prouve que la production peut remonter haut vers le Nord de la province, en pleines Préalpes.

Pour les Trois Gaules, le plus nouveau est la découverte d'ateliers non seulement à Lyon, mais dans une zone médiane qui correspond au bassin de la Loire. Leur rapport au réseau fluvial est particulièrement net. Leur superficie dépasse très largement celle des plus grandes officines de Narbonnaise. Ils témoignent enfin d'une extension de la viticulture dans la vallée de la Loire plus précoce qu'on ne l'estimait précédemment.

C'est donc une multitude d'informations neuves sur les ateliers qui me sont parvenues au cours des quatre dernières années : elles apparaissent comme un peu atomisées et sans cohérence, parce que, d'une part, elles résultent de découvertes souvent très fortuites et, d'autre part, qu'elles sont fonction de mes propres facultés de documentation.

De fait une certaine cohérence commence à se dégager, et parfois non sans netteté. Des résultats nouveaux apparaissent dans le décryptage de la réalité amphorique : ils concernent les formes, les standards et la chronologie.

II - RECHERCHES NOUVELLES SUR LES FORMES ET LES STANDARDS D'AMPHORES

2.1. - IMITATIONS GAULOISES D'AMPHORES ITALIQUES

2.1.1. Les amphores D. 1.

L'imitation en Gaule d'amphores du type D. 1 était, jusqu'à une époque récente, quasi inconnue. On rappellera cependant que des amphores gréco-italiques ont été fabriquées exceptionnellement à Marseille, si l'on en juge par les rares exemplaires à la pâte micacée caractéristique signalés à Marseille même ou en Languedoc (Nages, Pech-Maho, Bertucchi 1982, p. 159). Par ailleurs, l'analyse d'une série d'amphores D. 1 trouvées dans l'Aude avait indiqué la provenance très vraisemblablement locale de l'une d'elles (Sabir, Laubheimer *et al.* 1983). La découverte toute nouvelle de deux ateliers d'amphores D. 1 a permis de localiser à Lyon et à St-Just dans l'Ardèche deux centres de production en Gaule.

De l'officine de Lyon, nous connaissons, outre une série de D. 2/4, six cols et un fond que l'on peut assimiler à la forme D. 1 (fig. 3, 1). Le diamètre minimum du col se place au niveau de l'attache inférieure des anses. La lèvre marque une inflexion externe soulignée par un creux sur sa face interne au niveau de la liaison col/lèvre. L'anse porte 2 sillons.

DIMENSIONS MOYENNES EN MM DES D1 DE LYON

	Diam. lèvre	Haut. lèvre	Ép. lèvre	Diam. mini col	Larg. anse	Ép. anse
Nb échantillons	3	3	3	3	4	4
Moyenne	179	75	20	92	57	35
Écart-type	3	5	2	7	3	2

Le profil et la hauteur de la lèvre, la position du diamètre minimum du col sont caractéristiques des D. 1B; l'anse, en revanche, relève du groupe D. 1C, si l'on s'en tient aux grandes catégories proposées naguère par M. Lamboglia. On ne s'étonnera pas des difficultés de classement que posent ces séries encore trop mal connues (Laubheimer 1980).

Dans la vallée de l'Ardèche, à St-Just, sont présentes deux variantes d'amphores proches de la forme D. 1B, et vraisemblablement produites avec des D. 2/4, comme à Lyon (fig. 3, 2). La pâte est beige, avec des inclusions visibles (notamment du mica doré).

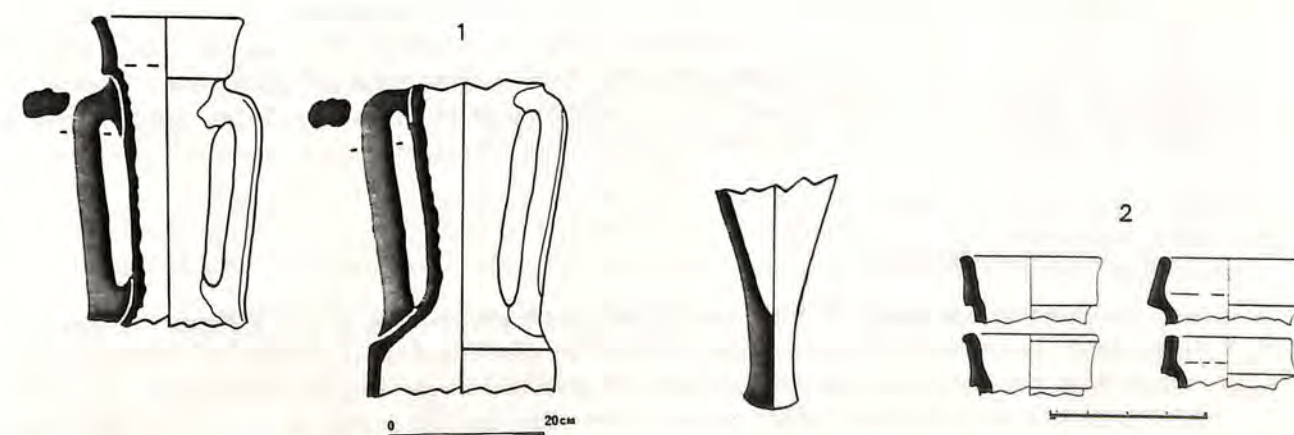


Fig. 3 - 1. Amphores D. 1 produites à Lyon (d'après C. Becker). 2. Amphores D. 1 de l'atelier de St-Just d'Ardèche : variante 1 à gauche, variante 2 à droite.

La première variante présente une lèvre à inflexion externe qui se distingue des amphores lyonnaises par l'absence du creux interne au niveau de la liaison lèvre/col et par une hauteur moindre sur l'échantillonnage disponible.

Dans la seconde variante, la lèvre marque deux inflexions, externe puis interne.

DIMENSIONS MOYENNES EN MM DES D. 1B DE ST-JUST

	Diam. lèvre	Haut. lèvre	Ép. lèvre	Larg anse	Ép. anse
<i>Variante 1</i>					
Nb échantillons	12	15	15		
Moyenne	187	61	18		
Écart-type	11	5	2		
<i>Variante 2</i>					
Nb échantillons	9	10	10	Nb éch. : 29	29
Moyenne	181	56	15	Moyenne : 62	32
Écart-type	10	6	2	écart-type: 5	3

Les dimensions des lèvres des deux variantes ne se séparent pas. On remarque néanmoins que celles de la variante 2 sont en moyenne plus faibles pour les trois paramètres mesurés.

Les anses, ovales, n'ont pas de sillons. L'épaule est très caractéristique, elle porte un bourrelet externe au changement de courbure.

De analyses de pâte par fluorescence X (Laboratoire de céramologie, Lyon) ont confirmé, pour les deux ateliers, la provenance locale du matériel. Pour ne pas compliquer la typologie et respecter les habitudes acquises, nous nommerons ces amphores : Dressel 1, sans leur donner un numéro particulier parmi les productions gauloises, comme cela a déjà été fait pour la P. 1, D. 2/4 et D. 7/11.

2.1.2. Les amphores D. 2/4.

La fabrication des D. 2/4 en Gaule paraissait ponctuelle, il y a à peine six ans; en effet, dans les années 80, on comptait en tout et pour tout trois ateliers en Narbonnaise. Aujourd'hui, ce sont dix nouveaux centres de production qui ont été découverts, portant à 13 le nombre des officines, réparties pour l'essentiel en Narbonnaise, mais aussi en Gaule Chevelue (fig. 4). Suivant le matériel disponible, les productions sont plus ou moins bien connues.



Fig. 4 - Carte des ateliers produisant des amphores D. 2/4 en Gaule.

- À St-Just, la fabrication locale de D. 2/4 parallèlement aux D. 1 est suggérée par la présence de deux anses faussement bifides, dont l'analyse chimique montre l'origine locale ou régionale (Laboratoire de céramologie de Lyon).

- À Marseille, l'atelier de la Butte des Carmes a fabriqué, à l'époque augustéenne, avec des amphores G. 2, des D. 2/4 (Bertucchi 1982, p. 157 sq.). Les anses sont bifides, le matériel très fragmentaire traduit une certaine diversité, notamment dans les modules.

- À quelques dizaines de km de Marseille, à Puyloubier, les D. 2/4 sont produites avec des formes G. 2 aussi. Aucun col complet n'est conservé. Les anses, faussement bifides, comportent soit un sillon externe et interne, soit seulement un sillon externe. (Laubenheimer, Gruel et al. 1984, p. 104, sq.).

- À Cavalaire (Var), à l'époque de Claude-Néron, avec des amphores à fond plat et lèvre à double inflexion externe, on a également tourné des D. 2/4 à anses bifides, comme en témoigne un fragment de col. (fig. 5, 1).



Fig. 5 - Amphores Dressel 2/4 des ateliers de Cavalaire (1), du Castellet (2) variantes 1 et 2, de Ponteuilla (3), de Lyon (4) et de Crouzilles-Mougou (1 : 10).

- Les cinq amphores de l'atelier de St-Cassien à Cannes (dont on ne connaît pas les éventuelles autres productions) ont une panse étroite, un col bitronconique, des anses faussement bifides très coudées, une lèvre haute (fig. 6).



Fig. 6 - Amphore Dressel 2/4 de l'atelier de St-Cassien à Cannes.

- L'amphore D. 2/4 provenant d'Antibes et retrouvée à Londres a des caractéristiques semblables à celles de St-Cassien. Cependant les anses présentent une protubérance verticale au niveau du coude.

- Au Castellet près de Toulon, avec des amphores de forme G. 10 (voir *infra*), sont produites deux variantes D. 2/4 à une époque encore mal définie. Une vingtaine de cols en pâte beige se séparent en deux variantes par la forme de la lèvre triangulaire et courte, ou arrondie et plus haute (fig. 5, 4). La seconde variante est plus abondante que la première.

DIMENSIONS EN MM DES D. 2/4 DU CASTELLET

	Éch.	Diam. lèvre	Haut. lèvre	Larg. anse	Ép. anse
Lèvre triangulaire	3	144 ± 6	21 ± 0	51 ± 2	29 ± 3
Lèvre ronde	17	137 ± 9	24 ± 1		

Le fond pointu et plein est rajouté à la panse, large et très carénée sous l'attache inférieure des anses. La liaison du col à la panse est visible à l'intérieur de l'amphore. Le diamètre minimum du col est souligné par un cercle en creux extérieurement. Les anses, faussement bifides, portent un sillon à l'extérieur. Les traces de soudure aux attaches sur le col restent visibles.

- L'atelier de Velaux-Plaine du Levrau (B. du R.) a produit au I^{er} siècle, avec des G. 4 et D. 7/11, trois variantes de D. 2/4 (Laubenheimer 1985, p. 316).

- Celui de Velaux-Moulin du Pont (B. du R.), à la même période, fournissait une forme D. 2/4 avec (ou antérieurement) des G. 4.

- À Corneilhan, ce sont deux variantes D. 2/4 qui ont été produites au I^{er} siècle, avec des G. 3 et des P. 1 (Laubenheimer 1985, p. 316).

- Dans les Pyrénées-Orientales, à Ponteilla, la fabrication de D. 2/4 s'est accompagnée, au I^{er} siècle, de celle de G. 1, G. 3 et amphores à fond plat et lèvre à double inflexion externe. Trente-quatre lèbres ou hauts de col D. 2/4 ont été conservés (fig. 5, 2) : la lèvre est arrondie, l'anse faussement bifide avec sillon interne et externe; il y a un cercle sur le bas du col, au niveau du diamètre minimum. Le diamètre de la lèvre laisse voir deux modules mesurant respectivement 158 ± 4 mm (21 échantillons) et 137 ± 5 mm (13 échantillons).

- À Lyon, avec des amphores D1, sont produites des D. 2/4 dont une quinzaine de cols et quelques panses sont conservées (fig. 5, 3). Le pied est caractéristique avec un anneau en relief au niveau du diamètre minimum. La panse est fortement carénée sous l'attache inférieure des anses. Le col, tronconique, porte, à la liaison col/panse qui correspond à son diamètre minimum, un cercle extérieur en creux.

- À Crouzilles-Mougou (I.-et-L.) dans la vallée de la Vienne, on a également produit, au I^{er} siècle, des G. 4 et deux variantes à fond plat (Laubenheimer, Sabir 1986). Les D. 2/4 présentent deux variantes qui ont toutes deux un col dont le diamètre minimum se place sous la lèvre (fig. 5, 5).

La vision plus large que nous avons maintenant des amphores D. 2/4 de Gaule montre que leur production relativement fréquente (1/5 des ateliers connus sont concernés) n'est pas caractéristique d'une région : on a imité de D. 2/4 un peu partout. Elle n'est pas non plus systématique, l'atelier d'Aspiran (Hérault), par exemple, qui pourtant fonctionnait depuis la fin de l'époque augustéenne, n'a pas associé, comme son voisin de Corneilhan, les D. 2/4 aux P. 1. Les D. 2/4 ne sont jamais produites seules, mais toujours en association avec d'autres formes, D. 1, P. 1, G. 2, G. 10, G. 1, G. 3, des amphores à fond plat et lèvre à double inflexion externe, des G. 4 aussi, qui, parfois, peuvent leur succéder dans le temps.

La forme des D. 2/4 est, comme on pouvait s'y attendre, très variée. Il ne s'agit pas d'une production standardisée. L'état fragmentaire d'un matériel souvent trop rare rend difficile une étude typologique précise. Néanmoins, il apparaît déjà que les formes varient d'un atelier à l'autre, la diversité se marque notamment dans les profils des lèbres et du

col, celui de l'anse et sa section, la forme du pied. . . On remarque aussi que très souvent deux variantes sont produites sur le même atelier.

La production des D. 2/4 apparaît en Gaule dès la fin du I^{er} siècle avant notre ère (Marseille, St-Just, Lyon), elle s'intensifie semble-t-il, puis cesse au cours du I^{er} siècle.

Tous les exemplaires où une inscription permettait d'identifier le contenant faisaient jusqu'ici référence à du vin. L'inscription de l'amphore D. 2/4 d'Antibes découverte à Londres, et celle d'Ostie, apportent un témoignage nouveau : elles contiennent une sauce de poisson, *liquamen* pour l'une, *muria* pour l'autre. La production de *salsamenta* à Antibes est de fait bien connue à la fois par les vestiges archéologiques (Laubenheimer 1985, p. 407) et par les mentions qu'en donnent Plinius (H.N. 31, 85) et Martial (13, 103). On ignorait jusqu'alors dans quelles amphores on les transportait, la forme D. 2/4 a été utilisée à cette fin, mais peut-être n'était-elle pas la seule. L'association amphore D. 2/4-transport de vin, si elle n'est pas aussi systématique qu'on a pu le croire, reste vraie cependant dans la plupart des cas. En effet, la majorité des ateliers situés à l'intérieur des terres est en liaison avec la production viticole, cependant que les D. 2/4 des officines côtières ont pu servir à la fois pour le vin et pour les sauces de poisson.

2.2. - LES AMPHORES G. 2 ET LA MULTIPLICATION DES AMPHORES À FOND PLAT ET LÈVRE À DOUBLE INFLEXION EXTERNE

2.2.1. Les amphores G. 2.

Les amphores à fond plat augustéennes de Marseille (dites à lèvre à bandeau) éclairent désormais un aspect précoce de la production que l'on pressentait à travers l'étude des G. 1, forme standardisée, caractéristique à partir du premier quart du I^{er} siècle de n.è. (Laubenheimer 1985, p. 386) de plusieurs ateliers de la basse vallée du Rhône. En effet, des variantes, peu nombreuses, des G. 1 identiques par la forme du col, des anses et les proportions, mais différentes par la forme de la lèvre, sont parfois issues des mêmes ateliers, comme le prouve la répétition du même timbre sur les unes et sur les autres. L'absence d'un matériel abondant et complet rendait impossible la caractérisation d'un type, et je m'étais contentée, dans l'espoir de nouvelles découvertes, de réserver vacant le n° 2 de la typologie (Laubenheimer 1985, p. 254, sq.). Or, les amphores de Marseille, dont la production a commencé antérieurement, représentent une production de série dans laquelle se classe parfaitement ce que j'avais appelé G. 1 variantes A et B (notamment, Bertucchi 1982, fig. 10, 2 et 6), et que je nommerai désormais G. 2 (fig. 7).

Il s'agit d'une amphore à pied annulaire large, dont le diamètre équivaut à celui de la lèvre; la panse et le col sont tournés séparément; la liaison col/panse est visible à l'intérieur. Le col, bitronconique, porte un anneau en relief au niveau de l'attache supérieure des anses. La lèvre, faite par retournement de la pâte sur elle-même, marque une ou deux inflexions externes, suivant les cas; sa face extérieure est rectiligne (Bertucchi 1982, fig. 10, 2, 3) ou concave (*ibid.*, 5 et 6). G. Bertucchi a bien observé que le profil de la lèvre « n'est pas très stable », contrairement à celui des amphores plus récentes (G. 4, G. 5) (*ibid.*, 157), caractéristique intéressante d'une forme qui n'est pas standardisée com-

me le seront les autres. Les anses, plates, portent deux ou trois sillons. La lèvre est parfois timbrée. La forme d'un exemplaire complet a pu être restituée :

hauteur totale	590 mm
diamètre max. panse	340 mm
diamètre de la lèvre	140 mm
contenance	26,4 l
poids	8,75 kg

L'existence d'un petit module est suggérée par une lèvre au profil identique (Bertucchi 1983, fig. 5, 3 et 6, 6 : il s'agit bien d'une G. 2 et non d'une G. 7) dont le diamètre est de 114 mm. Dimensions et proportions, contenance, poids et modules marquent une parenté avec la forme G. 1 développée plus tard dans la basse vallée du Rhône essentiellement, qui semble en dériver.

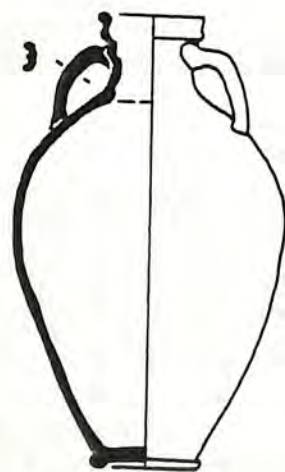


Fig. 7 - Amphore Gauloise 2 de l'atelier de Marseille (1 : 10).

L'atelier de Marseille n'est pas le seul à fabriquer des G. 2. L'officine qui timbre S.I.S. des amphores G. 1 et G. 2 à pâte sableuse, caractéristique de la région de Bagnols-sur-Cèze, en est certainement une autre, plus récente (Laubenheimer 1977), comme celles de Puyloubier (B. du R.) (Laubenheimer, Gruel *et al*), de Velaux-Moulin du Pont (Tchernia, Villa 1977, fig. 9, n° 2).

D'autre part, toujours à la période augustéenne, on produit aussi en Catalogne, à Tivissa notamment (Tchernia 1976), des amphores à fond plat de forme Oberaden 74,

avec une lèvre à double inflexion externe. Contemporaines sont les productions du petit atelier de St-Côme (Gard) qui fabrique aussi des amphores à fond plat, lèvre à double inflexion externe, anse à un sillon, qui - bien que fragmentaires et imparfaitement connues - ont été classées comme G. 8 (Laubenheimer 1985, p. 306). Lorsque des séries plus complètes seront disponibles, il sera sans doute loisible de mieux comprendre les relations entre toutes ces amphores sans doute groupables sous le sigle G. 2.

2.2.2. Les amphores à fond plat et lèvre à double inflexion externe.

A la lumière des découvertes récentes dans la totalité des Gaules, on s'aperçoit que la production des amphores à fond plat et lèvre à double inflexion externe que l'on peut maintenant classer dans la tradition marseillaise s'est développée au I^{er} siècle dans une dizaine d'officines². Elles peuvent représenter la totalité des amphores fabriquées sur place, ou seulement une part marginale. On observe parfois, comme à Marseille, des variations sensibles du profil de la lèvre dans la même officine, à Mandelieu, par exemple, mais surtout, le même modèle ne se répète pas, identique, d'un atelier à l'autre. Il s'agit de productions variées et locales qui ne visent absolument pas à la standardisation que l'on a su si bien réussir pour les formes G. 1, G. 4 ou G. 5 notamment. Il apparaît donc deux types de fabrication : amphores standardisées ou non, qui répondent à des impératifs de production et d'usage nécessairement différents. La diversité des amphores à fond plat et lèvre à double inflexion externe rend difficile un classement rigoureux, d'autant que, bien souvent, le matériel est fragmentaire et peu abondant et que nous ignorons la capacité et la fonction de ces amphores. Dans l'état actuel de la recherche, et ce n'est sans doute qu'une étape, on visera à caractériser la production de chaque atelier, tout en considérant comme un phénomène global la multiplication, au I^{er} siècle, de ces amphores non standardisées qui ont en commun deux caractères : un fond plat et une lèvre à double inflexion externe faite par retournement de la pâte sur elle-même. Nous présenterons la production des ateliers par département, suivant l'ordre alphabétique.

Alpes-Maritimes.

- *Mandelieu* (fig. 8, 1). Les amphores à fond plat et lèvre à double inflexion externe, associées ici à la forme G. 11, représentent la plus grande part de la production (Rivet 1986). Deux variantes se distinguent par le profil de la panse et celui du col, cylindrique ou bitronconique sur la trentaine d'exemplaires utilisables. La face supérieure de la lèvre est plate; les anses à deux ou trois sillons s'attachent sous la lèvre. Des variations sensibles du diamètre du col et des dimensions de la lèvre marquent une production peu régulière. La pâte est beige orangé, avec de fines inclusions, dont beaucoup de micas.

² Lors de ma première synthèse sur la Narbonnaise, quelques-unes de ces amphores étaient apparues marginalement et je ne les avais pas classées (Laubenheimer 1985, p. 310 et fig. 169, 1-2, 4 et 5).

Bouches-du-Rhône.

- *Velaux-Levrau* (fig. 8, 2). Marginal par rapport aux productions de D. 2/4, G. 4 et D. 7/11, un seul col avec anse à double sillon, en pâte beige, fine, se classe dans cette catégorie (Laubenheimer 1985, p. 310 et fig. 169, 4).

- *Velaux-Moulin du Pont*. On compte ici aussi un seul col à lèvre à double inflexion externe, anse à un sillon, pâte beige et fine (fig. 8, 4), dans une production orientée surtout vers les D. 2/4 et les G. 4 (Laubenheimer 1985, p. 310 et fig. 169, 2).

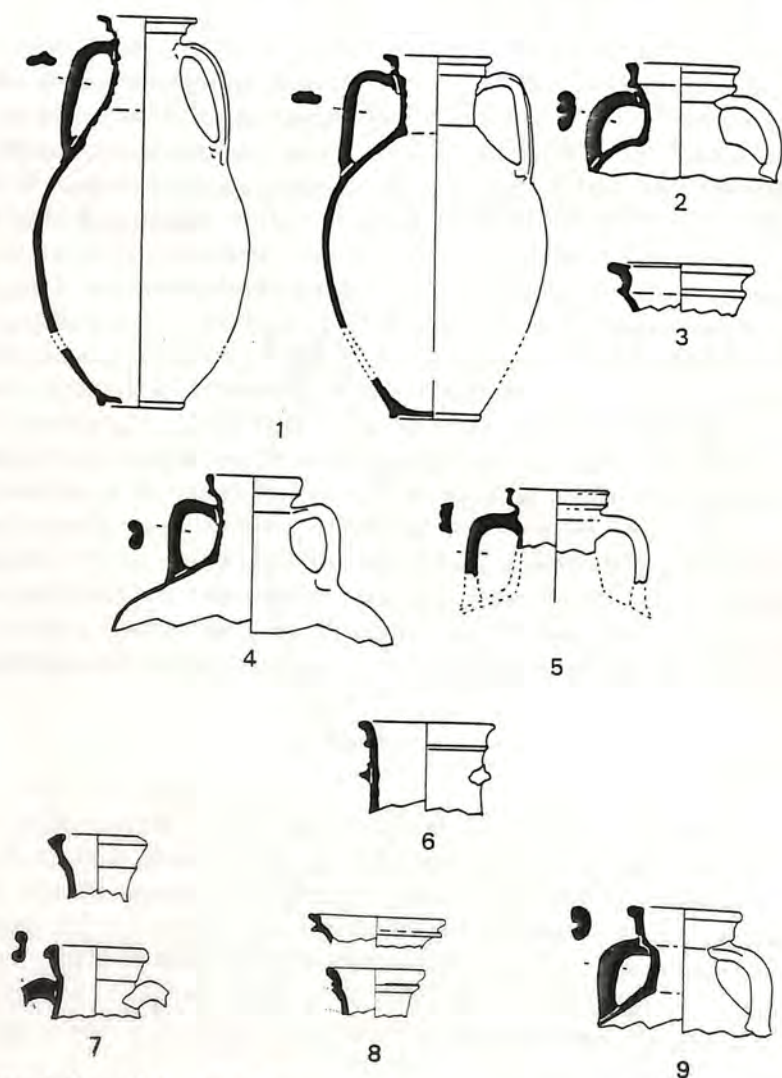


Fig. 8 - Amphores à lèvre à double inflexion externe des ateliers de Mandelieu (1), de Velaux-Levrau (2), Corneilhan (3), Velaux-Moulin du Pont (4), Aspiran (5), Cavalaire (6), Crouzilles-Mougou (7), Pontella (8) et Gueugnon (9) (1 : 10).

Hérault.

- *Corneilhan* : deux fragments de lèvre (fig. 8, 3), toujours avec le même type de pâte, se distinguent des D. 2/4, P. 1 et G. 3, plus largement produites (Laubenheimer 1985, p. 310 et fig. 169, 5).

- *Aspiran* : Huit fragments de cols (fig. 8, 5) ou lèvre avec col tronconique, anneau en relief au niveau de l'attache supérieure des anses à triple sillon pâte beige et fine, de la période Tibère-Claude, succèdent aux productions augustéennes (P. 1, G. 7 et G. 9) et précèdent celle des G. 4 (Laubenheimer 1985, p. 310 et fig. 169, 1).

Indre-et-Loire.

- *Crouzilles-Mougou*. Deux exemplaires à col tronconique, anse à un sillon attachée sous la lèvre dont la partie supérieure est arrondie offrant une pâte à inclusions bien visibles et nombreuses (fig. 8, 7). Ils semblent marginaux dans une production composée essentiellement de D. 2/4 et G. 4 (Laubenheimer 1986).

Isère.

- *Aoste*. La totalité de la production d'amphores est constituée d'amphores à lèvre à double inflexion externe dont la partie supérieure est arrondie; l'anse porte un sillon (Laroche, à paraître).

Pyrénées-Orientales.

- *Ponteilla*. Cinq lèvres dont la face supérieure est plate semblent se répartir suivant deux modules (fig. 8, 8). Elles représentent une part non négligeable de la production, qui comprend également des D. 2/4, G. 1 et G. 3 (Olive, à paraître).

Saône-et-Loire.

- *Gueugnon*. Douze cols en pâte orangée ou blanche, portent une lèvre à double inflexion externe, dont la partie supérieure est plate ou arrondie (fig. 8, 9). Les anses, à sillon central, s'attachent sur le haut du col au niveau d'un cercle en relief. Cette production bien représentée est associée à une forme inédite (voir *infra*) et à des G. 4 (Laubenheimer, Notet 1986).

Var.

- *Cavalaire*. Le matériel, encore très fragmentaire, de la fouille en cours a donné quelques exemplaires avec un col tronconique, des anses attachées sous la lèvre (fig. 8, 6). La pâte est orangée avec de fines inclusions, dont beaucoup de micas. Ces amphores ont été produites avec des D. 2/4.

- *Fréjus*. L'atelier du Pauvadou a livré quelques exemplaires de cols d'une amphore à lèvre à double ressaut (Brentchaloff 1980, p. 111, II, n° 11 et 12), mieux connue maintenant par la découverte d'une vingtaine d'exemplaires complets sur l'épave des Roches d'Aurelle, chargée d'amphores fréjusiennes dont une majorité de G. 5 du même atelier. Les amphores à lèvre à double ressaut ont un fond bombé et une anse à sillon central; la partie supérieure de la lèvre est plate. La pâte rose orangé, avec des inclusions visibles, est caractéristique de la région de Fréjus (Brun, à paraître).

2.3. - NOUVELLES FORMES D'AMPHORES GAULOISES

Plusieurs formes inédites sont en outre apparues dans les ateliers gaulois. Lorsqu'elles sont complètes et suffisamment bien représentées, il est possible de caractériser un type: c'est ce que j'ai fait pour les G. 10 et G. 11 qui s'ajoutent à la classification antérieure. En revanche, lorsque seul le haut de l'amphore est conservé, je me suis contentée de décrire la forme et de l'associer à l'atelier qui l'a produite, sans la classer comme un nouveau type, dans l'attente d'une documentation plus large.

2.3.1. Une nouvelle forme à Gueugnon (fig. 9).

Elle n'est connue que par son col, dont deux exemplaires timbrés ont été trouvés dans l'atelier même et un troisième à Autun. Le col, de couleur orangée, tourné séparément de la panse, est bitronconique. Son diamètre minimum se place au niveau de l'attache supérieure des anses. Il porte un anneau en relief visible entre les anses. La lèvre, faite par retournement de la pâte sur elle-même, marque une inflexion externe. Les anses portent un sillon central; les traces de soudure au col sont légèrement visibles. Le timbre MAGIO.ADB (ucius) F(ecerunt) est placé sur le col, entre les anses. Nous la désignons



Fig. 9 - Amphore de la forme 1 de l'atelier de Gueugnon.

comme la forme 1 de Gueugnon. Les deux associés qui l'ont produite, au I^{er} siècle, MAGIO et ADBUCIUS, portent des noms gaulois; leur association est temporaire puisque ADBUCIUS produit aussi, seul ou avec un autre associé avec lequel il partage une *figlina*, des amphores à lèvre à double inflexion externe et même des mortiers (pour le détail de cette production, voir Laubenheimer, Notet 1986).

2.3.2. Les quatre formes de Thésée-Pouillé (fig. 10).

Les quatre formes nouvelles de Thésée-Pouillé sont identifiables par des cols, seuls conservés: tournés indépendamment de la panse, leur pâte est identique, de couleur

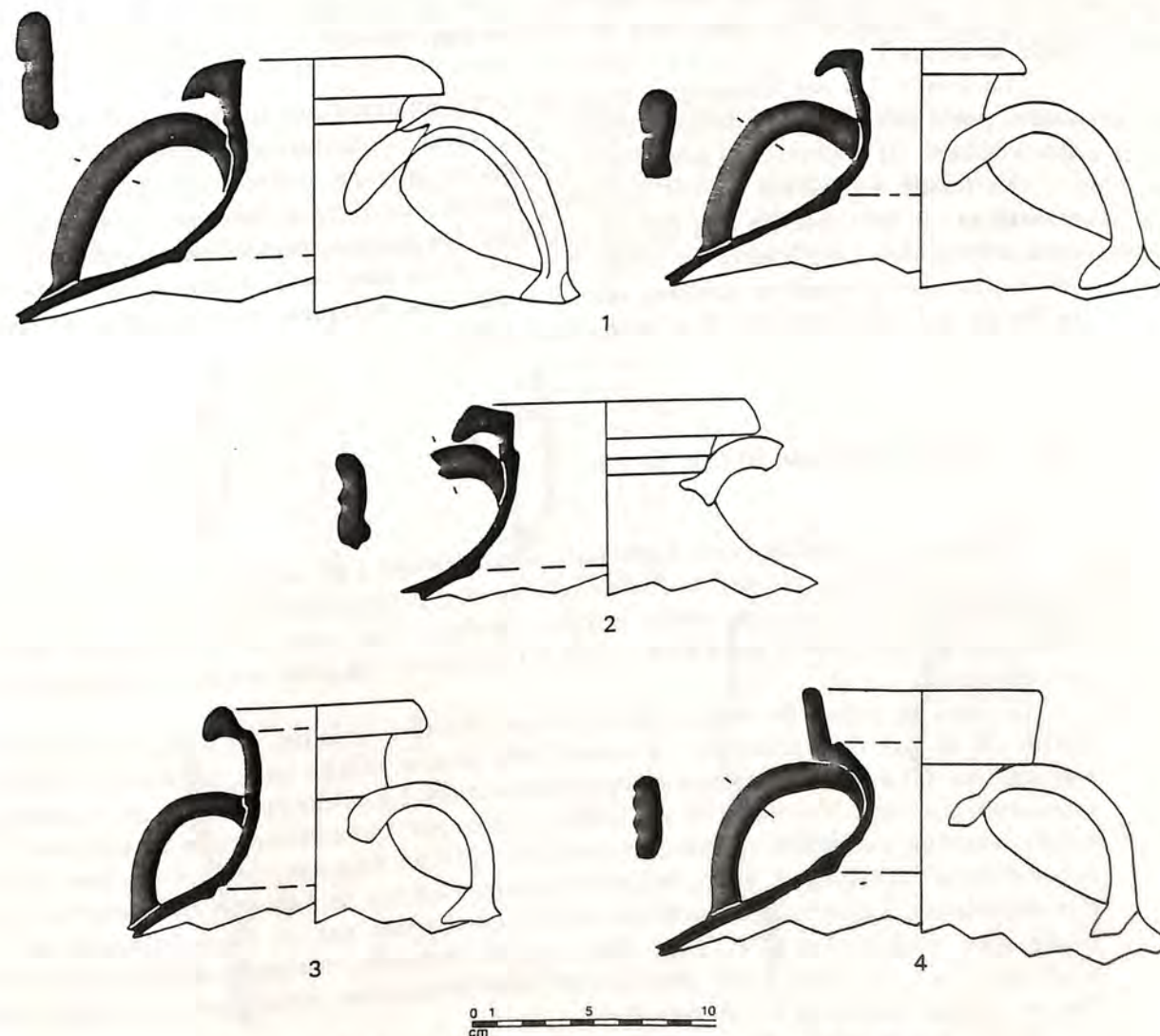


Fig. 10 - Quatre formes d'amphores de l'atelier de Thésée-Pouillé.

variable, du gris au brun rouge suivant la cuisson, et comporte de nombreuses inclusions visibles à l'œil nu.

La forme 1 se caractérise par un col bitronconique. Un cercle en relief à peine perceptible apparaît de façon aléatoire entre l'anse et la lèvre. Celle-ci, faite par retournement de la pâte sur elle-même, marque deux inflexions, externe puis externe. L'extrémité est arrondie. L'anse porte un sillon central; les traces de soudure au col sont très visibles. La pâte est couverte extérieurement d'un engobe gris ou orangé. La forme 1 existe en deux modules.

La forme 2 a un col tronconique plus large, avec deux cercles très légèrement en relief au-dessus de l'attache supérieure de l'anse. La lèvre, faite par retournement de la pâte sur elle-même, marque deux inflexions, externe puis externe. Son extrémité est plate. L'anse porte deux sillons; les traces de soudure sont visibles. La couverte est la même que pour la forme 1.

La forme 3 à col bitronique, avec un cercle en relief au niveau du diamètre minimum, porte une lèvre à inflexion externe. Les traces de soudure de l'anse à un sillon sont très visibles. La couverte est orangée. La panse est peignée horizontalement.

La forme 4 présente un col bitronconique et une lèvre à inflexion externe avec un ressaut sur la face interne à la liaison col/lèvre, les anses à trois sillons ont des traces de soudure visibles. La couverte est rouge. L'usage de ces amphores, datées du II^e siècle, n'est pas connu. Les premières données sur leur diffusion indiquent des exportations dans la vallée de la Loire, à Angers (Laubenheimer 1986).

2.3.3. La forme gauloise 10 (fig. 11, 1).

L'atelier du Castellet (Var) a produit, parallèlement à des amphores D. 2/4, une série bien représentée d'amphores de forme inédite que nous nommerons G. 10. À la panse, tournée séparément, sont rattachés le col et le fond; les traces de raccord sont nettes à l'intérieur de l'amphore, mais bien lissées à l'extérieur. On peut restituer la hauteur totale à environ 1 m.

Le fond en forme de pointe, plat à son extrémité inférieure, est plein, mais évidé au centre de sa partie supérieure. La panse, très fuselée (diam. max. autour de 224 mm) s'attache au col au niveau de son diamètre minimum. Le col, tronconique, a son diamètre maximum au contact avec la lèvre. Celle-ci, faite par retournement de la pâte sur elle-même, marque une inflexion externe, soulignée par un creux sur sa face interne. La face supérieure est arrondie. L'anse, de section ovale, s'élargit de l'attache inférieure à l'attache supérieure. Les traces de soudure au col (soulignées par un coup de pouce) et à la panse sont visibles. La pâte, beige clair, parfois orangée, comporte de fines inclusions (Brun, Laubenheimer *et al.*, à paraître).

Pour le moment, on ne connaît pas l'usage de cette amphore (transport de liquide, sans doute) qui reste encore mal datée. Sa diffusion n'a pas été étudiée.

2.3.4. La forme Gauloise 11 (fig. 11, 2).

Une petite amphore à fond pointu de forme inédite, que nous nommerons G. 11, a été fabriquée en série dans l'atelier de Mandelieu (Rivet 1986). L'amphore est tournée en deux parties : la panse et le col d'une part, le pied, plein, de l'autre; le raccord est bien visible à l'intérieur de l'amphore. La panse, épaisse de 8 à 10 mm, est tournassée dans sa partie inférieure; son diamètre maximum se place au niveau de l'attache inférieure des anses. Le col est bitronconique, avec un diamètre minimum au niveau de l'attache supérieure des anses, où il porte, le plus souvent, un cercle en relief. La lèvre marque une inflexion externe; la face extérieure est plate ou concave. Les anses ont un sillon central; les traces de soudure sont peu apparentes. La pâte, beige ou orangée, comprend de fines inclusions, avec notamment une part importante de micas.

Une amphore a des dimensions nettement supérieures aux autres pour la hauteur du col, 147 mm et le diamètre de la panse, 180 mm; elle est peut-être représentative d'un module supérieur. Un exemplaire complet du module moyen a pu être restitué, haut de 583 mm, il a une capacité de 4,7 l (pein à ras bord) et pèse 3,5 kg. Le rapport poids de denrées transportées/poids total est peu avantageux. La faible capacité de cette amphore et

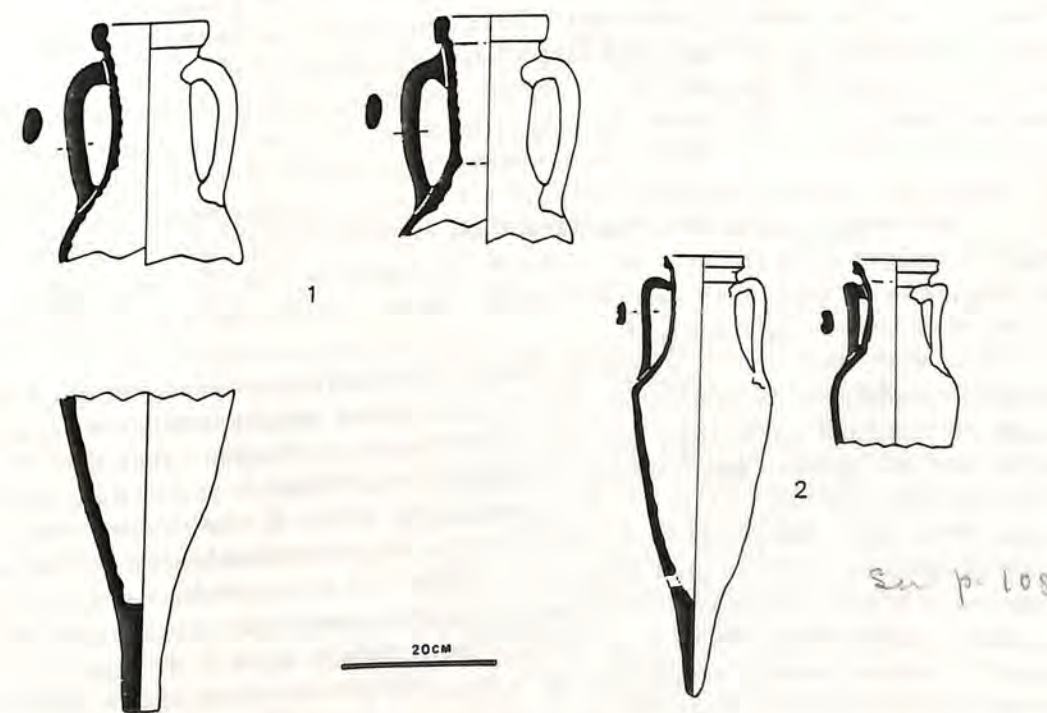


Fig. 11 - 1. Amphores Gauloise 10 de l'atelier du Castellet, 2. Amphores Gauloise 11 de l'atelier de Mandelieu.

DIMENSIONS MOYENNES (EN MM) DES G. 11 DE MANDELIEU

	1	2	3	4	5	6	7	8
Moyenne	15	108	11	80	111	151	15	31
Écart-type	2	6	2	5	12	4	2	2
Échantillons	29	29	29	6	6	3	7	7

1 = Hauteur de la lèvre; 2 = Diamètre de la lèvre; 3 = Épaisseur de la lèvre; 4 = Diamètre minimum du col; 5 = Hauteur du col; 6 = Diamètre maximum de la panse; 7 = Épaisseur de l'anse; 8 = Largeur de l'anse.

la largeur de son col suggèrent le transport d'un produit précieux comme du *garum*. La G. 11 est datée à Mandelieu du I^{er} siècle. Sa diffusion n'est pas encore étudiée.

2.4. - DES AMPHORES G. 4 STANDARDISÉES ET NON STANDARDISÉES

Plus de 2000 objets étudiés et mesurés dans 18 ateliers d'amphores G. 4 de Narbonnaise ont mis en lumière l'uniformité de la production (Laubenheimer 1985, p. 291 sq.). Les dimensions, pas plus que les caractères technologiques des G. 4 n'étaient propres à une région et encore moins à un atelier. En revanche, la faible dispersion des dimensions des paramètres mesurables sur les cols et les fonds, la répétition d'une même technique d'un bout à l'autre de la Narbonnaise mettaient en valeur le souci de fabriquer aux I^{er} et II^e siècles une amphore standardisée, qui a toujours le même aspect, à la différence des D. 2/4 par exemple, dont la forme varie d'un atelier à l'autre (3). Actuellement, on connaît 29 ateliers dans lesquels des G. 4 ont été produites (fig. 12). Des données nouvelles en Narbonnaise, mais aussi dans le reste des Gaules, concernent à la fois l'évolution de la forme et la chronologie des G. 4.

Dès le I^{er} siècle des G. 4 sont produites hors de Narbonnaise, dans le bassin de la Loire. La technique de fabrication est identique, mais les productions se séparent facilement du standard narbonnais par leurs dimensions. A Mougou-Crouzilles, les G. 4 sont nettement plus grosses par toutes leurs dimensions (tableau 1) et l'attache supérieure des anses se fait plus bas sur le col (Laubenheimer 1986). Il semble que l'on y ait aussi fabriqué un petit module de G. 4, comme tend à le montrer un petit col; c'est une coutume déjà mise en évidence pour les grandes séries G. 1 et G. 5, mais, semble-t-il, plus rare pour les G. 4. On trouve encore la trace d'un petit module en pâte blanche à Gueugnon (Laubenheimer, Notet 1986). Il se sépare très largement de la G. 4 moyenne de Narbonnaise. Le grand module n'apparaît pas dans l'atelier bourguignon. En Narbonnaise, la production de plusieurs nouveaux ateliers vient conforter l'image de l'amphore G. 4 standardisée. En revanche des données nouvelles sur la forme et la chronologie sont apparues dans l'Aude et dans le Var. Dans l'atelier de Sallèles d'Aude où, aux I^{er} et II^e siècles s'est



Fig. 12 - Carte des ateliers produisant des amphores G. 4 en Gaule.

développée une production standardisée de G. 4, les fouilles récentes ont montré que la fabrication des amphores se poursuivait au III^e siècle. On construit notamment un nouveau bâtiment artisanal, bien daté par une monnaie de Plautille dans sa fondation, avec un très grand four. Les G. 4 fragmentaires qui accompagnent la couche d'utilisation du four sont caractérisées par un col plus court, l'attache supérieure des anses touche la lèvre. Ces deux caractères marquent une sorte d'abâtardissement de la forme au III^e siècle, qui se confirme sur les exemplaires de même époque présents sur les sites de consommation, à Lyon par exemple. L'évolution de la forme G. 4 se marque encore avec les productions de l'atelier du Beausset, malheureusement non datées (fig. 13, 1). Le col est court, l'anse touche la lèvre, la distance entre le dessus de l'anse et celui de la lèvre est très faible par rapport à celle du standard narbonnais (tableau 1), de même la hauteur et l'épaisseur de la lèvre sont moindres. Les fonds, enfin, sont plus étroits.

Les G. 4 de l'atelier de Sanary caractérisent aussi une production tardive (II-IV^e siècles) de deux variantes en pâte orangée (fig. 13, 2). La première est constituée de petites G. 4 à col court et anses touchant la lèvre, très différentes par toutes leurs dimensions du

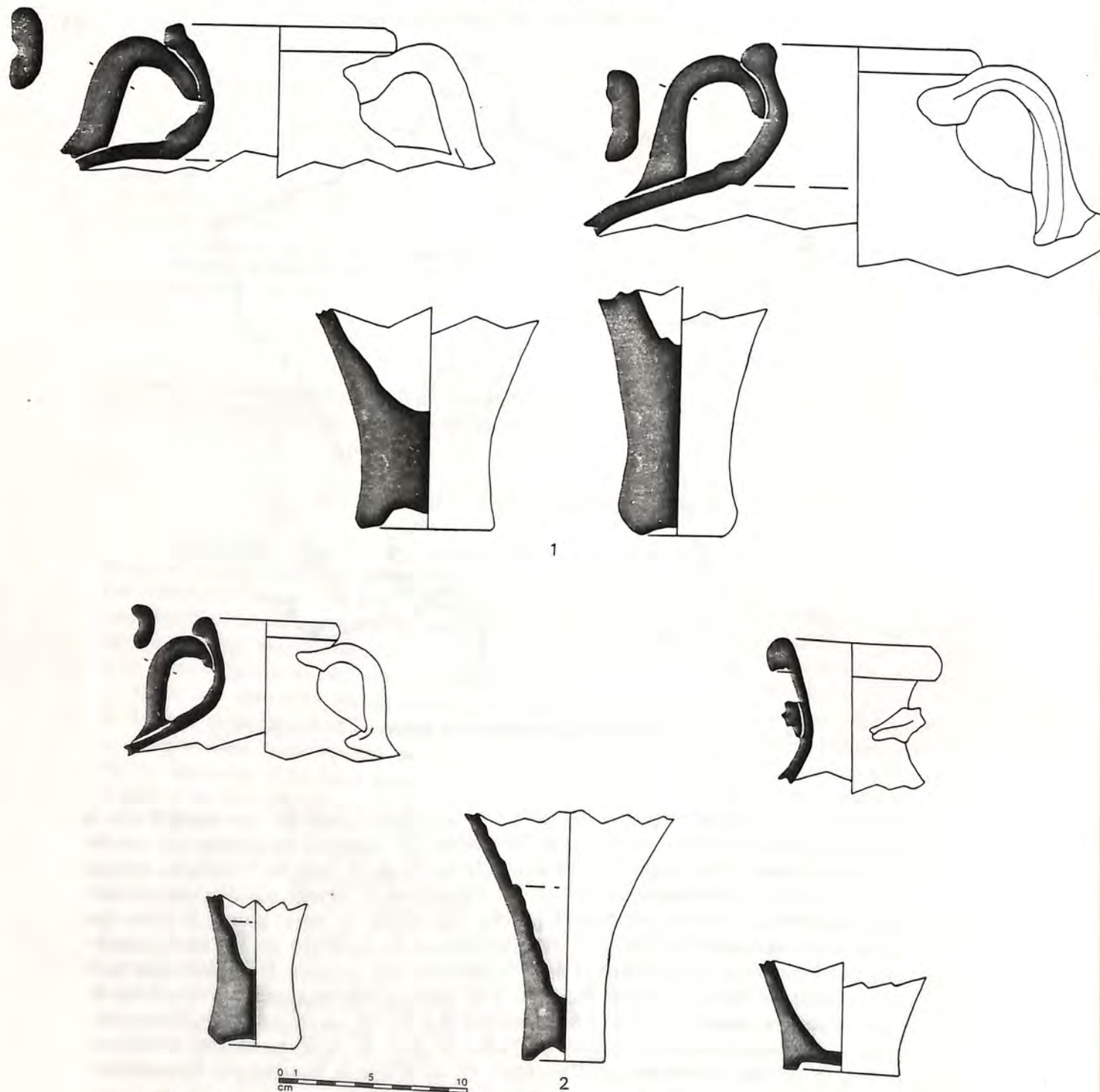


Fig. 13 - 1. Amphores G. 4 de l'atelier du Beausset. 2. Amphores G. 4 de l'atelier de Sanary (Portissol).

standard narbonnais (tableau [ci-dessous]). La seconde, en revanche, ne s'en sépare pas par ses dimensions, mais sa lèvre marque une inflexion externe plus accusée, proche des amphores D. 30 de Maurétanie Césarienne. Les fonds qui se rapportent à la variante 1 ou à la variante 2 sont caractérisés par un diamètre très étroit, comme ceux du Beausset. Leur profil est également proche de celui des D. 30, mais ils sont pleins.

DIMENSIONS (EN MM) DES AMPHORES G. 4 STANDARDISÉES ET NON STANDARDISÉES FABRIQUÉES EN GAULE

	Haut. lèvre			Diam. lèvre			Ép. lèvre			Diam. min. col			Anse à lèvre			Larg. anse			Ép. anse			Diam. fond		
	X	S	E	X	S	E	X	S	E	X	S	E	X	S	E	X	S	E	X	S	E	X	S	E
STANDARD NARBONNAISE	24	2	456	121	5	391	21	22	456	83	4	162	27	5	160	47	3	549	22	3	548	94	6	428
CROUZILLES	24	3	11	131	4	11	22	2	11	92	4	5	42	4	3	53	3	3	25	1	3			
GUEUGNON Petit module	22	4	3	96	10	3	16	4	3	61	6	2	36	1	2	42	1	2	20	1	2			
SANARY 1	16	2	20	110	6	20	17	1	20	85	4	3	14	1	2	39	6	26	16	3	25	69	8	8
SANARY 2	25	4	18	115	9	18	18	3	18															
BEAUSSET	17	0	2	121	4	2	17	0	2	91	12	2	7	1	2	46	4	2	15	1	2	68	8	2

X = moyenne
S = écart type
E = échantillons

Au total, différentes tendances sont apparues au cours des dernières recherches :

- les imitations italiques se sont multipliées, d'une part par la fabrication de D. 1 jusqu'ici inconnues en Gaule, d'autre part par la découverte de très nombreux ateliers produisant des D. 2/4;

- j'ai été amenée à créer un type - G. 2 - pour connoter les amphores marseillaises à lèvre à double inflexion externe, qui sont largement imitées au I^{er} siècle dans de nombreux ateliers gaulois;

- plusieurs formes entièrement nouvelles sont apparues : une à Gueugnon, quatre à Thésée-Pouillé, ainsi que deux types nouveaux à fond pointu, G. 10 et G. 11;

- sur les G. 4, il reste vrai qu'elles sont standardisées en Narbonnaise aux I^{er} et II^e siècles; elles ne le sont point dans les ateliers connus des Trois Gaules à la même époque. D'autre part il apparaît maintenant que le standard narbonnais évolue à partir du III^e siècle.

CONCLUSION

C'est donc ici un bilan de mes recherches portant sur les quatre dernières années. Comme tel, il est contingent, et non moins provisoire, d'autant que se multiplie allègrement la documentation : c'est comme une période de turbulence dans le monde jusqu'ici passablement isolé et tranquillement clos de l'amphore gauloise.

Contingent ne veut pas dire nécessairement arbitraire. De nouvelles lignes de force apparaissent, ou se précisent, qu'on peut synthétiser en deux points.

D'une part, dans un premier temps chronologique, avec la multiplication des ateliers, se multiplient les formes qui apparaissent le plus souvent comme des variantes d'une forme plus générale, des espèces dans un genre, si je prends le vocabulaire des sciences de la nature. Il y a donc une extrême variété d'un atelier à l'autre, ce qui est normal dans un système de production très largement diversifié (chaque coin du terroir ayant son ou ses ateliers au moins dans certaines zones), et où les officines nouvelles imitent nécessairement les types qui circulent. Mais cette variété n'entraîne pas d'autant une atomisation des formes, dont un certain nombre se détachent comme des types dont on peut maintenant étudier les variantes : constatation importante pour le problème de la typologie amphorique sur lequel j'aurai à revenir bientôt. À partir de ces productions relativement exubérantes c'est - à partir du milieu du I^{er} siècle de notre ère - une phase toute nouvelle, autre, qui débute, lorsque se standardise la production³.

En second lieu, la chronologie s'étend largement dans les deux directions temporelles. Vers le bas, d'une part, ce qui rassure, car les amphores n'ont certainement pas été remplacées si rapidement et dans tous leurs usages, par le tonneau ou d'autres contenants, et, au reste, on sait bien qu'on en produit encore au Moyen-Âge. Il y a donc une longue continuité, et il est capital qu'elle s'inscrive maintenant beaucoup mieux sur le terrain. Et ce à la fois sur des sites clefs de ma première recherche, comme Sallèles d'Aude, mais où l'on ne descend encore la production que jusqu'au III^e siècle, soit environ d'un siècle, et ailleurs, où l'on peut parler d'amphores des III^e et IV^e siècles.

D'autre part, l'on découvre aussi, en même temps, combien la production est plus précoce qu'on ne le pensait avec la multiplication des officines augustéennes : processus capital pour mieux comprendre l'histoire économique des Gaules dans ce tournant déterminant du début de l'Empire où éclate une vitalité économique neuve des provinces de l'Occident.

Ces ateliers augustéens fabriquent essentiellement des imitations d'amphores italiennes D. 1 et D. 2/4. C'est un processus normal et universel. Très significative en revanche est la novation qui fait apparaître à Marseille, puis dans la basse vallée du Rhône, des

³ Si le souci d'uniformité d'aspect est bien mis en évidence par l'étude du matériel disponible : cols et fonds, il est clair que l'étude des standards ne pourra se faire complètement qu'à partir de séries d'amphores complètes dont nous connaissons le profil entier, le poids et la contenance.

amphores à fond plat, qui ne sont pas dans la tradition italienne et qui s'imposeront plus tard comme le type le plus fréquent dans les Gaules. Représentent-elles une création marseillaise? Sont-elles imitées des fonds plats catalans, bien datés sous Auguste? Font-elles partie, comme les catalanes, d'un ensemble culturel commun à une zone assez large de Marseille à la Catalogne? Ce sont diverses hypothèses, entre lesquelles on ne peut encore choisir, pas plus qu'on ne peut rendre compte de l'apparition de cette forme. Plus commode en raison du meilleur rapport poids contenant/poids contenu? Destinée à imposer une sorte de label nouveau pour une production qui s'intensifie et dépasse un certain seuil de notoriété? Ce qui est clair, nonobstant, au milieu de tant d'interrogations, c'est qu'on saisit mieux les débuts de la production gauloise, maintenant que se dégage plus nettement ce type auquel je donne le nom de G. 2. Sur ce point, de gros progrès ont été réalisés grâce à une documentation plus large : les amphores à lèvres à double inflexion externe, dans la tradition des G. 2 marseillaises, qui me faisaient de réelles difficultés, sont largement fabriquées et me permettent de proposer une analyse.

Les amphores gauloises apparaissent ainsi mieux, dans un fonctionnement multi séculaire, comme des témoins d'une activité déterminante de production, de circulation et de consommation. Elles multiplient, grâce à l'intérêt nouveau qu'elles suscitent, les signes polyphoniques qu'elles émettent et qui font sens : à nous de les capter et de les décrypter dans toute la richesse de leur témoignage et de leur apport.

Fanette LAUBENHEIMER

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D. must be Dressel : On pp. 120-121, caption use full word "Dressel 2/4". Shd be same - in full form.

G 1		G 7	
G 2	p. 124	G 8	
G 3		G 9	
G 4	p. 134	G 10	} p. 131
G 5		G 11	
G 6			

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RELAZIONI MUTUE TRA LE ANFORE ROMANE

I RITROVAMENTI IN ORIENTE, ALLA LUCE DEI DATI OTTENUTI NELL'OCCIDENTE

Quando si tratta di precisare la storia delle anfore romane e di interpretare la storia economica sulla loro base, conviene far bene attenzione a non fare distinzioni di sorta tra ritrovamenti nelle regioni orientali e ritrovamenti in occidente. Centri di fabbricazione e mercati meritano la stessa attenzione, e si deve cercare di capire non solo l'interrelazione tra centri di fabbricazione e centri di diffusione, ma anche le relazioni tra i diversi centri di produzione e tra i diversi mercati. Lavorando a lungo sulle anfore romane trovate nei principali centri di diffusione e di mercato delle provincie orientali, mi sono ad un certo punto trovata con la sensazione di non potere interpretare (e tanto meno pubblicare) quei materiali in modo adeguato senza una più approfondita conoscenza dei centri di produzione italici e del resto dell'occidente. Ecco perchè mi sono trovata a cercare e, alla fine, a riscoprire nel 1961, le figline dell'area brindisina più tardi scavate da Sciarra; ed ecco come mi sono trovata a cominciare nel 1974 lo studio delle anfore trovate a Cosa e nel suo porto. Un previo e sommario esame del materiale trovato a Cosa sin dal 1955 mi aveva portato a suggerire, in *RAECE* 1956, che Cosa doveva aver avuto un suo proprio centro di produzione anforaria. Ora, col supporto del materiale e dei risultati di tutti questi anni di lavoro, siamo in condizione di tirare le somme sui ritrovamenti orientali di anfore fabbricate in occidente.

Lo studio delle anfore suggerisce che è verso la fine della prima guerra punica, conclusa nel 241 a. C., che i romani prendono sul serio il problema del commercio internazionale; che la fine della seconda guerra punica segna il momento di maggiore incremento del peso economico romano; che, in fine, con la conclusione della terza guerra contro Cartagine, Roma acquisisce di fatto l'indiscussa supremazia economica nel Mediterraneo. Per ovvie ragioni di spazio non posso ora trattenermi sui primi passi, nel secolo III a. C., di questo commercio internazionale romano. Ad ogni modo, già per i primi anni del secolo II abbiamo l'evidenza (un'evidenza che si arricchisce ogni giorno di nuovi dati) che in Italia esistevano tre principali centri di esportazione anforaria, e che da essi le anfore venivano esportate sia verso oriente che verso occidente. Mi riferisco alla Campania (in cui Pompei ha un suo importante ruolo), all'Etruria centrale (e particolarmente al porto cosano) e alla antica Calabria (singolarmente al circondario di Brindisi). Mentre i ritrovamenti indicano che Cosa esporta principalmente (ma non esclusivamente) verso occidente, e che Brindisi diffonde principalmente (ma non unicamente) verso oriente,

l'esportazione campana pare diffondesse ugualmente nell'una che nell'altra direzione. Il fatto che tutti e tre le aree si trovino, a quanto pare, ingaggiate in un accelerato processo di sviluppo commerciale già al principio del secolo II a. C. indica che gli ultimi anni della seconda guerra punica coincidono con ciò che potremmo definire un programma romano di espansione del potere economico. Un tale programma si riflette nei modi in cui le tre aree si stimolano e si rispondono a vicenda. Vi traspare, tra esse, una specie di movimento di flusso e riflusso. La posizione geograficamente centrale della Campania determina, anche, un suo ruolo di centro nervoso del sistema. Lo studio delle anfore mostra chiaramente come il «dialogo» Campania-Brindisi trovi riflesso quasi parallelo a nord, tra Cosa e Campania. Esistevano, è vero, altri centri minori di esportazione, ma questi tre citati in precedenza sembrano essere stati sempre predominanti. La loro interrelazione, come ho già detto, sembra indicare un vero e proprio programma di espansione economica alla fine della seconda guerra punica. E questo è suggerito anche dall'interrelazione tra i centri di diffusione a cui arrivavano i prodotti di queste aree.

La proliferazione dei tipi anforari romani avviene dopo la metà del II secolo a. C., quando Roma ha ormai acquistato la supremazia economica. Nella prima metà del secolo, il principale tipo di anfora in tutti i tre centri principali di produzione era stato il tipo «standard» di anfora vinaria greco-italica, il mio tipo 1d (fig. 1), molto simile al tipo la (fig. 2) databile tra gli ultimi anni del secolo IV e i primi anni del III a. C. Ma il tipo 1d ha un collo più lungo, un labbro meno sporgente, un piede solido e una pasta grossolana: un netto contrasto con il collo corto, lo sporgente labbro, il piede cavo e le fine pasta del tipo la. Mi sembra che i dati in nostro possesso indichino (come ho detto nel mio articolo sulle anfore greco-italiche in *Hesperia* 1982) che il primo centro di produzione italica di questo tipo di contenitore sia stata la Campania. Esiste, per esempio, l'evidenza epigrafica relativa ai Trebii o Ovii pompeiani, i quali, noti anche da altre fonti come possessori di fornaci nella Pompei sannita, si trovano ad esportare anfore del tipo 1d sia a oriente che a occidente nella prima metà del secolo II a. C. Credo che siamo in condizioni di affermare che il tipo 1d sia un derivato del tipo 1c (fig. 3), l'anfora-tipo del relitto del Grand Congloué I, un tipo databile verso il 200 a. C. (ultimi anni del secolo III e primi del II). La ricerca futura sul tipo 1c frutterà sicuramente interessanti dati ancora, ed è ben possibile che la prova di una sua precoce fabbricazione in Campania e nel basso Lazio sia già stata scoperta nelle prospezioni che Hesnard e altri portano ora avanti. Per ora sappiamo che anfore del tipo 1c raggiunsero punti tanto lontani nell'entroterra come Manching sul Danubio, dove la mia ricerca nel 1982 ha rivelato la presenza di un sorprendentemente alto numero di frammenti.

Ad ogni modo, durante la prima metà del secolo II a. C., e forse anche prima, Pompei (ed altri centri campani?) esportavano anfore 1d e, forse, 1c. Credo che il modello campano di industria anforaria per l'esportazione sia servito da modello per lo sviluppo (o, forse, per un risveglio) di una industria simile a nord, nell'area di Cosa. Che Pompei e Cosa si trovassero in stretto contatto è provato anche dall'apparizione a Cosa di un bollo di 1d appartenente agli Ovii pompeiani. Ad ogni modo, sempre nella prima metà del secolo II, i Sestii cosani producono in grande numero le loro anfore 1d, e nell'area di Cosa si trova la maggiore concentrazione di ritrovamenti di tale tipo. Cosa sembra aver rapidamente sorpassato i suoi rivali a sud, e l'industria vinaria campana, sebbene ancora



Fig. 1 - Will Tipo 1d. Coll. Porto Ercole, collezione privata. Alt. pres., ca. 0.698 m.



Fig. 2 - Will Tipo 1a. Lipari, Relitto della Secca di Capistello (Mus. Arch. Eoliano). Alt., 0.65 m.

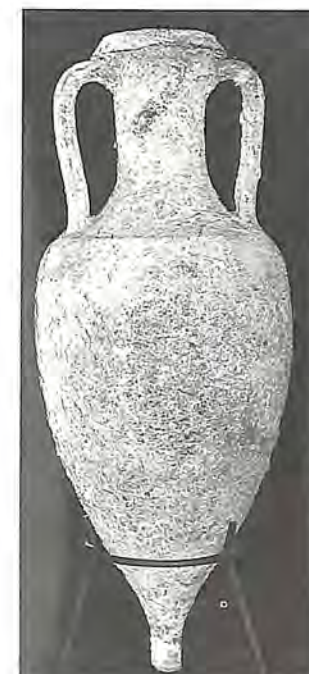


Fig. 3 - Will Tipo 1c. Grand Congloué I. Coll. Pennsylvania State University, USA. Alt., 0.865 m.

attiva nel periodo successivo, sembra essere entrata in qualche modo in crisi, da cui si ricupererà solo con la colonizzazione dell'area pompeiana da parte di Sulla nell'80 a. C. L'industria dei Sestii a Cosa e nel suo porto, da parte sua, conosce in questo periodo un'impressionante crescita, apparentemente frutto della sua più attenta e rapida capacità di adattamento alle mutate condizioni economiche dopo la metà del secolo II a. C.

Quali che siano le cause originali della terza guerra punica, è un fatto che la sua felice conclusione, con la distruzione di Cartagine e di Corinto, significano la consacrazione di Roma come potenza economica assoluta nel Mediterraneo. La svolta economica iniziata con la dichiarazione di Delo porto franco nel 166 a. C., si impose definitivamente nel 146, con la fine della guerra. Il clima economico più sereno portò ad una rapida proliferazione nel numero e nei tipi delle anfore ed ad un generale allargamento di formato e capacità. Tale mutamento è facilmente documentabile nelle aree di Cosa e di Brindisi, un poco meno in Campania, come abbiamo detto poco sopra. A Cosa e nel suo porto, il tipo 1d di greco-italica si evolve in questo periodo in più lunghe e più capaci anfore come il mio tipo 4a (fig. 4), il tipo che Lamboglia chiama «Dressel 1A», antecedente della forma Dressel 1. Le nuove più capaci anfore di Sestius di Cosa dominarono il commercio occidentale di vino comune: i bolli di queste anfore sono i più diffusi e importanti di



Fig. 4 - Will Tipo 4a. Atene, Agorà, no. P 8106.
Alt., 1.055 m.

tutto l'occidente durante questo periodo importantissimo del commercio repubblicano, tra la fine del II e i primi anni del I secolo a. C. Esempari isolati di questi prodotti dell'industria cosana di Sestius si trovano anche in oriente, ad Atene e a Delos; infatti, la precisa cronologia del contesto chiuso di un deposito nell'Agorà di Atene (deposito C 9 : 7) ci permette di datare il tipo 4a alla fine della seconda metà del secolo II a. C., e, con esso, relitti come quello del Grand Congloué II, il cui carico è composto proprio di queste anfore.

Ad ogni modo, in oriente sono numericamente più importanti altre anfore che, come il tipo 4a, sono semplici ingrandimenti delle greco-italiche tipo 1d. Il cambiamento verso anfore di maggior capacità deve essere cominciato in oriente non più tardi del 166 a. C. Al principio, sembrano essere state fabbricate queste anfore per la maggior parte nell'area brindisina, e mentre alcune vennero convogliate verso i porti occidentali, come Cosa, Pompei e Ampurias, il grosso della produzione ebbe per destinazione l'Oriente.

Queste anfore sono di due tipi, per quanto riguarda la produzione di Brindisi; e, come talvolta accade tra figli degli stessi genitori, tra i quali non v'è evidente somiglianza, così queste due anfore brindisine, l'una vinaria, l'altra olearia, sono molto diverse tra loro all'apparenza. L'anfora vinaria (il mio tipo 3; *fig. 5*) è una specie di «ingrandimento fotografico» della 1d, quasi identico e rispondente nelle proporzioni, ma alto quasi 0.95 m, contro i 0.78 m del tipo 1d. Da parte sua, il tipo oleario (il mio tipo 11a; *fig. 6*), che io chiamai a lungo «tipo Brindisi», rispettando sostanzialmente l'altezza e forma del tipo 1d, *li allarga* vistosamente, accorciando allo stesso tempo collo e manici, al modo come il tipo 4a di Cosa ne aumenta la capacità *allungando* il tipo. In altre parole, sembra che a Brindisi si sia pensato a distinguere nettamente i contenitori vinari da quelli oleari. Una tale distinzione appare piena di senso pratico, dal momento che i contenitori dei due prodotti partono dagli stessi porti: senza dimenticare che, fino ad allora, i carichi di anfore nel Mediterraneo erano stati sostanzialmente destinati al vino; i nuovi contenitori oleari dovevano, di conseguenza, essere perfettamente distinguibili. Io credo che tale necessità spieghi la novità nella forma 11a, una forma destinata a rimanere in uso per le anfore olearie per più secoli.



Fig. 5 - Will Tipo 3. Corinto, no. C-47-840. Alt., 0.93 m.



Fig. 6 - Will Tipo 11a. Brindisi, Mus. Prov., no. 3. Alt., 0.78 m.

Questa doppia evoluzione del tipo 1d a Brindisi ebbe luogo, secondo i dati attualmente in nostro possesso, più o meno nello stesso periodo, anche se il tipo vinario ingrandito precedette di poco quello oleario. Su entrambi i tipi appaiono qualche volta gli stessi bolli; ma bolli che siano frequenti sul tipo 3 sono, invece, molto rari sul tipo 11a. Il tipo 3, che si trova più frequentemente a Corinto di altrove, sembra essere cominciato a derivare dal tipo 1d solo dopo che Delo, nel 166, venne dichiarato porto franco. Un maggior contingente di queste esportazioni doveva arrivare a Corinto, mentre contingenti minori arrivavano a Delo, Atene e Cartagine, ed altri pochi centri di minore importanza. Con la distruzione di Cartagine e Corinto nel 146, sembra che il tipo 3 cessi di essere prodotto a Brindisi; dopo tale data, alla esportazione vinaria si sostituisce, a Brindisi, quella di olio. Verso la fine del secolo II a. C., il tipo 11a era il capostipite delle esportazioni italiche verso Oriente. Due contesti, strettamente datati, dell'Agorà di Atene (depositi C 9 : 7, già detto, M 10 : 1) confermano che il suo *floruit* copre la seconda metà del secolo II e i primi anni del secolo I a. C. Metaponto, un probabile centro secondario di produzione del tipo 11a, come lo fu probabilmente per il tipo 1d, ha offerto di recente dati che suggeriscono che l'anfora 11a deriva da 1d a partire dal terzo quarto del secolo II a. C. Ed, infatti, è ben possibile che l'evoluzione sia partita proprio da Metaponto, e che la manifattura del tipo sia passata a Brindisi quando cessò di essere prodotto il tipo 3 in tutta la zona. In ogni caso, è chiaro che verso la fine del secolo II il tipo 11a proviene dall'area brindisiana, e che le esportazioni erano dirette a oriente, in particolare verso Alessandria e Delo, anche se (come abbiamo già detto) qualche esportazione verso Occidente vi fu ugualmente.

A queste prime conclusioni provvisorie sui tipi anforari ben noti in occidente i ritrovamenti orientali aggiungono altri motivi di interesse ancora, in quanto ci permettono anche di isolare ed identificare come significativi diversi tipi anforici poco frequenti in occidente. Esattamente come quelli brindisini, altri tipi appartengono al gruppo o categoria che potremmo chiamare «Adriatico», anche se non assomigliano al tipo 11a. Nè si vede ragione valida per chiamarle «apule», queste anfore, come appaiono nelle pubblicazioni di Baldacci, Buchi ed altri; si tratta di un'errata interpretazione dell'introduzione del Mommsen alla sezione «Amphorae Calabrae» nel *CIL IX*. Con questo nome Mommsen si riferisce solamente al tipo 11a, le cui fornaci, che lo stesso Mommsen descrive, citando Johann Tarantinius, furono da me riscoperte a S. Vito Normanni (Brindisi) nel 1961. Mommsen non fa menzione dell'altro tipo, il mio 10 (fig. 7), simile alla «forma 2» del Lamboglia, che oggi frequentemente viene detta «apula». Tali anfore sono in oriente (specialmente a Delo e Atene) seconde solamente in importanza al tipo 11a, e le si può attribuire la stessa cronologia di base (tardo secolo II, inizio secolo I a. C.), sempre sulla base dei contesti dell'Agorà di Atene ed, in particolare, del deposito M 18 : 1, di poco precedente la distruzione sillana dell'Agorà nell'86. Per quanto riguarda la loro origine locale, se le anfore tipo 10 non sono apule, cosa sono? Credo che i dati che oggi possediamo indicano le sponde settentrionali e orientali dell'Adriatico, forse l'area a nord del Po, dove grandi concentrazioni di reperti sono attestate attraverso le pubblicazioni di Baldacci e Buchi. Aquileia, Istria e Dalmazia sono anche possibili aree di origine. In ogni caso, le molte somiglianze tipologiche con anfore di sicura fabbricazione istriana e con altre che io credo dalmate ci inducono a credere che i tipi 10 e 9 (molto simile in forma, ma

diverso nella pasta) provengono dall'alto Adriatico, piuttosto che dalla Puglia. Non possiamo dire di più, per ora, in assenza di nuove informazioni su ritrovamenti di queste anfore in Jugoslavia.



Fig. 7 - Will Tipo 10. Atene, Agorà, no. SS 11094. Alt., 0.850 m.

Alla stessa classe generica del tipo 10 appartengono anche i miei tipi 6, 7, 8, 13 e 14. In certe pubblicazioni recenti, queste anfore vanno sistematicamente confuse con quelle del tipo 10; eppure esse sono perfettamente distinguibili per pasta, per forma e per la scelta dei luoghi che portano i bolli di fabbrica. Quanto a cronologia, l'arco coperto da questi tipi è abbastanza ampio, essendo alcuni tipi chiaramente predecessori di altri. I tipi 6 (fig. 8) e 13 (fig. 9), come confermai al Dr. Cambi nel 1982, sono (a quanto traspare dall'analisi epigrafica) probabilmente dalmati, ed è per me motivo di rammarico in questa occasione il fatto che altre occupazioni mi impediscano di avere altre informazioni di prima mano su nuove ricerche in Dalmazia. Il tipo 6, predecessore del 13 e identico nella pasta, è contemporaneo del tipo 10, mentre il 13 ha il suo *floruit* verso la metà del secolo

I a. C. Il tipo 7 (fig. 10) proviene anch'esso probabilmente dalle coste dello Adriatico settentrionale o da quelle orientali. Appare molto simile in forma al tipo 10, la pasta, però, è differente; d'altra parte, a differenza del tipo 10, che porta i bolli usualmente sul labbro e qualche volta sulla spalla, il tipo 7 porta sempre lo stesso bollo su entrambe le anse. Frequente a Delo, il tipo era importante nel primo quarto del secolo I a. C., anche se i primi esempi appartengono agli ultimi anni del secolo secondo.

I tipi 8 (fig. 11) e 14 (fig. 12) sono anch'essi adriatici, e il primo è predecessore del secondo; identico al 14 per pasta, e, come esso, molto pesante, il tipo 8 si può datare solo approssimativamente entro la seconda metà del secolo II a. C. Il tipo 14 (forma Dressel 6) trova i suoi primi esemplari verso la metà del secolo I a. C., essendo presente a Delo, non ancora ben attivo porto dopo quella data. Il tipo 14 (e, di conseguenza, il suo predecessore tipo 8) era un prodotto dell'Adriatico settentrionale, come suggeriscono chiaramente le ben note industrie anforarie trovate in Istria e la frequenza del tipo nel Veneto. Mi sembra molto probabile che entrambi i tipi fossero destinati all'invasatura del famoso olio



Fig. 8 - Will Tipo 6. Brindisi, Mus. Prov., no. 1. Alt., 0.92 m.



Fig. 9 - Will Tipo 13. Lipari, Mus. Arch. Eoliano. Alt. pres., ca. 0.87 m.



Fig. 10 - Will Tipo 7. Delo, no. TD 5953. Alt., 0.816 m. Photo: V. R. Grace.



Fig. 11 - Will Tipo 8. Atene, Mus. Naz., no. EM-L 161. Alt. pres., 0.835 m.



Fig. 12 - Will Tipo 14. Corinto, no. CP 2254. Alt. pres., 1.08 m.

istriano che loda Plinio il Vecchio; in qualche occasione, come hanno messo in evidenza Zevi e Baldacci, il tipo 14 venne, però, usato anche per altri prodotti. Infatti, sono dell'opinione che il tipo 10 e tutti gli altri tipi di contenitore che appartengono a questo gruppo generale fossero primariamente concepiti come contenitori oleari. Mi rendo conto che certe anfore tipo 10 de La Madrague de Giens e del relitto di Sant Jordi in Maiorca sono, a quanto pare, protetti con la pece all'interno, e, di conseguenza, dovevano essere destinate a contenere vino o garum. Ma è anche logico pensare che tale copertura in pece poteva rendere l'anfora di olio riutilizzabile per vino o garum, specialmente nella cucina della nave stessa. A questo proposito, è lecito ricordare che i diversi tipi di contenitori trovati isolati o in piccolo numero nei grandi relitti di navi vinarie della tarda repubblica formano parte probabilmente non del carico della nave, ma degli utensili e provvigioni della ciurma durante i lunghi viaggi. In definitiva, casi come quelli che abbiamo citato di contenitori resinati erano probabilmente in riutilizzo come giare di garum. I diversi

tipi di anfore adriatiche a cui ci siamo finora riferiti non portano, di regola, segno alcuno di resine nei loro interni.

Tornando brevemente in Campania, ho suggerito in precedenza che nella seconda parte del sec. II a. C. ebbe luogo un forte declino della produzione di anfore vinarie, quando le greco-italiche del tipo 1d cessarono di essere esportate in grande quantità. Con Silla, però, questo declino cessa, come conseguenza della campagna sillana e in concomitanza con il successivo declino di Cosa e la sua industria vinaria, frutto probabilmente dell'assassinio di Cesare e la proscrizione nel 42 a. C. di L. Sestius. Ad ogni modo, a metà del secolo I a. C. le esportazioni di vino del basso Lazio e della Campania avvenivano regolarmente, e le anfore interessate erano di due tipi. Nel basso Lazio, subito dopo la campagna sillana, le anfore Dressel 1 (il mio tipo 4b; *fig. 13*) venivano regolarmente fabbricate, come già mostrò Mommsen nel *CIL X* («Amphorae Tarracinenses») e come hanno continuato a confermare i ritrovamenti e osservazioni di Uenze, Peacock, Hesnard ed altri. Ho l'impressione che l'evoluzione dal tipo 4a al 4b sia cominciata a Cosa prima del collasso a cui abbiamo prima alluso. Esempolari dall'aspetto molto primitivo si trovano a Cosa e nel suo porto con frequenza, fatti con argilla cosana e stampigliati con quelle che sembrano essere le ultime matrici dell'industria di Sestius. Non siamo ancora in grado di immaginare se furono o no queste nuove forme a influire sulle forme adottate nel basso Lazio, esattamente come (se non sbaglio) le anfore campane tipo 1d servirono da modello nel secolo precedente per le anfore dello stesso tipo fabbricate a Cosa e nel suo porto. È un fatto, comunque, che la produzione laziale del tipo 4b sorpassò di gran lunga quella di Cosa e diventò così, questo tipo, l'anfora per antonomasia per la produzione di Falerno ed altri vini fino alla fine del primo secolo a. C. È ben noto che l'ultima data consolare iscritta su questo tipo d'anfora è, come documentato da Dressel, del 13 a. C., e C. F. C. Hawkes mi informa gentilmente che la revisione cronologica dei ritrovamenti di Colchester obbliga ora a situare gli esemplari ivi trovati (*fig. 14*) verso gli ultimi anni del secolo I a. C., e non, come si credeva prima, agli inizi del primo secolo della nostra era.

Il secondo tipo di anfore nato con il rifiorire della produzione vinaria nell'Italia meridionale è un prodotto campano, e, in particolare, credo, della zona pompeiana. Il meticoloso lavoro di Panella ha ben illustrato le forme delle anfore ad anse bifide del tipo Kos (similari alle forme Dressel 4 e 3, i miei tipi 12a-1 e 12a-2; *fig. 15 e 16*) trovate a Pompei. I ritrovamenti di queste anfore in oriente offrono bolli con nomi di molti cittadini di Pompei, a cominciare da P. Sulla, nipote del dittatore, attestando la fabbricazione di questi contenitori nella zona di Pompei a partire dal secondo quarto del secolo I a. C. e fino al 79 della nostra era. Ma questa industria «koo-italica» pompeiana non ha origine a Pompei. Sappiamo che queste anfore biansate erano in produzione a Brindisi tra fine II e inizio I secolo a. C., vale a dire, una generazione prima che comparissero a Pompei. Nel Mediterraneo orientale, alcune di queste anfore ad anse bifide (o a doppio cordone) portano alcuni dei bolli del tipo 11a e hanno la stessa argilla. Catone il maggiore ci informa che anche ai suoi tempi i romani amavano il «vino di Kos» fatto in casa, e probabilmente dobbiamo immaginare che le forme di queste anfore del tipo Kos, fabbricate prima a Brindisi e poi in Campania, avessero lo scopo di suggerire che tali anfore italiane contenevano un prodotto «tipo Kos». Sembra, dunque, probabile che, allo stesso modo in cui il tipo di anfora di Kos venne usato a Pompei dopo la campagna sillana per il risorgere



Fig. 13 - Will Tipo 4b.
Roma. Museo delle Terme. Alt., 1.165 m.



Fig. 14 - Will Tipo 4b. Museo di Colchester. Alt., ca. 1.2 m.

dell'industria vinaria campana, una generazione prima, a Brindisi, la stessa forma aveva protagonizzato il «revival» dell'industria vinaria pugliese che, come ho notato sopra, era praticamente cessata alla fine della terza guerra punica. Le «anfore di Kos» brindisine raggiunsero a nord a Pompei; ivi vennero ugualmente fabbricate ed esportate in grande numero specialmente verso est, fino alla distruzione della città nel 79 d. C. L'imitazione del tipo Kos è, dunque, un'ulteriore dimostrazione dell'interrelazione tra le zone vinicole italiche; e v'è da dire ancora che tale tipo di imitazione del modello di Kos non si ferma con la distruzione di Pompei. A Cosa, numerosi manici a doppio nastro, ed altri frammenti, con pasta del tipo «di Sestius», sono state trovate, se non nel porto, nella città stessa; il porto, dopo l'amnistia accordata a L. Sestius nel 39 a. C., ritorna all'attività, ma ricade nell'ombra verso la fine del primo secolo a. C. Peacock ha trovato ancora altri pezzi a Albinia, poco a nord di Cosa, e credo si debba concludere che nell'area cosana



Fig. 15 - Will Tipo 12a-1. Atene, Agorà, no. P 11880. Alt., 0.88 m.



Fig. 16 - Will Tipo 12a-2. Coll. Tufts University, Medford, Massachusetts, USA. Alt., 0.878 m.

torna ancora a rinascere l'industria vinaria verso la fine del primo sec. d. C., cioè, dopo la distruzione di Pompei. In tal caso, tornerebbe a comparire la stretta interrelazione, gli stretti legami tra i centri italici di produzione vinaria, anche se ancora non abbiamo la prova che le nuove anfore imitative del tipo Kos siano tornate in forze nel mercato transmarino. Invece, anfore di forma molto simile (le Dressel 2) sembrano aver invaso il Mediterraneo a partire dal nordest della penisola iberica (*Will tipo 12b*; fig. 17), senza meno quelle anfore contenenti la *faex Laletana* di marzialiana memoria (Mart. 1.29.9). Il materiale di Ampurias che io ho esaminato nel 1981 mi dette l'impressione che queste «anfore di Kos» iberiche possano essere lontane discendenti delle greco-italiche a lungo ventre (il mio tipo 2; fig. 18) che Catalogna esportava alla fine del secolo II a. C.

Io spero che queste poche note aiutino a capire i rilievi che ho fatto all'inizio sulle strette relazioni che intercorrono tra principali centri manifatturieri e mercati delle anfore romane, e rendano chiaro che le difficoltà di interpretazione di molti ritrovamenti anforici nelle zone orientali trovano soluzione solamente alla luce di tale interrelazione. Alcuni dei punti trattati qui sono stati più ampi e profondamente esplorati in lavori recenti e altri in via di pubblicazione, ed in particolare nel volume di McCann, Bourgeois, Gazda, Oleson, and Will, *The Roman Port and Fishery of Cosa*, che dovrebbe tro-



Fig. 17 - Will Tipo 12b. Ampurias, Museo Monografico. Alt., ca. 1.10 m.



Fig. 18 - Will Tipo 2. Lipari, Relitto «Filicudi A», Mus. Arch. Eoliano. Alt., ca. 0.90 m.

varsi in distribuzione al momento in cui questo convegno ha luogo. Il mio volume sul materiale dell'Agorà di Atene sarà finito in breve, ed è in preparazione un'altro sui ritrovamenti della collina di Cosa. Questi lavori tratteranno anche i ritrovamenti del Mediterraneo orientale del primo e del tardo impero, un soggetto impossibile da trattare entro i limiti di questo intervento. L'importanza di questi materiali più tardi, comunque, è stata da me messa in rilievo nel mio intervento nel congresso internazionale di Siviglia (*Producción y comercio del aceite en la Antigüedad*, II, Sevilla, 1982).

Ringrazio di cuore gli organizzatori di questo Colloquio per la gentilezza del loro invito, mentre lamento sinceramente che altri impegni non mi permettano di parteciparvi di persona tra tanti vecchi amici.

Elizabeth LYDING WILL

Elizabeth Lyding Will

ROMAN

American School of Classical Studies
54 Swedias Street, Athens 106 76, Greece

May 25, 1989

delivered to the mail
on 2 30A

Dear Letty,

Here are some papers relevant to the dating of Italian amphoras at the Agora. Also notice of something similar found in western Crete.

Do you still date the M 18 : 1 jars (SPE, etc.) as Sullaⁿ? Because in that case the context of these from G 14 # 2 should be actually a little later, maybe about the same as that of the Antikythera one. It is true that the G 14 : 2 Italian amphoras must have dropped into the well at least a little before what was ^{found} found on top of them. I would certainly be interested to see the sequence for you now of the Italian jars from a) M 18 : 1, b) the Antikythera wreck, and c) G 14 : 2.

Congratulations to you on getting out that long commentary on the Port of Cosa amphoras, and on Rickman's review in the ^{ASA} ~~JHS~~, in which he picks out your part of the publication for special praise. And perhaps even more for what you do for your students, one of whom called recently at the Agora, clearly alight at the prospect of working on Roman amphoras.

The Agora is getting ready for a digging season, after quite a while without one. It will be on the north side of Hadrian Street, west of the last part dug, where the west end of the Painted Stoa has been identified. There will be student excavators.

I am probably coming to the US for a few weeks in July and August.

Χαίρετε ποὺς πολλοὺς ἀπὸ τῶν Ἀνδρέα

Liverani seems to command this as a principal objective, and we can look forward to future contributions.

T.W. POTTER

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ENGLAND

LE VIN DE L'ITALIE ROMAINE, by *André Tchernia*. (BEFAR 261.) Pp. xii + 410, pls. 5, figs., with 7 appendices and 9 maps. École Française de Rome, Rome 1986.

THE ARCHAEOLOGY OF THE ROMAN ECONOMY, by *Kevin Greene*. Pp. 192, figs. 73. University of California Press, Berkeley/Los Angeles 1986. \$30

Scholars have been awaiting André Tchernia's book on the Italian wine trade, and the book lives up to its billing. The story that Tchernia has to tell is exceptionally rich in theme and sub-theme, but his broader aim is more easily stated: to bring the numerous literary sources on the wine trade into an intelligible relationship with the rapidly growing body of archaeological evidence for the production, distribution, and consumption of wine within Roman Italy. In order to accomplish this, Tchernia is obliged to reinterpret literary evidence in the light of archaeology, and *vice versa*; but he reaches well beyond this to set the wine trade into the broader historical context of a changing Italian economy and society. Although Tchernia cannot answer every question or settle every doubt, and although the archaeology of the Western Mediterranean doubtless still has surprises in store, nonetheless the book is a model of scholarly patience, ingenuity, and clarity.

Tchernia's analysis is guided by two broad themes. The first is the critical importance of geography in the development of the Italian wine trade. Ancient wines are unlikely to have traveled well by land, and from the outset the diffusion of Italian wines depended heavily on available sea lanes or rivers; but the emphatic division of peninsular Italy by the Apennines meant that the wine producers of the Po Valley and Apulia looked mainly to the East for external markets, while those of the Tyrrhenian coastal plains (from Etruria to Campania) looked initially to the Western provinces.

The second theme is the changing social character of wine consumption. Tchernia posits three distinct types of wines: those intended mainly for consumption close to their point of production (probably always a large portion of total Italian production); the great brands, or "grands crus," produced for the elite (a small but highly lucrative proportion of the total); and finally the immense quantities of export wines, which were generally low in quality but slaked the thirst of the urban masses. Each of the three types has its own history, but the distinction between them is reflected in the chronological development of the wine trade, a development that is clearly represented in the archaeological and literary record.

In broad outline, Tchernia's reconstruction is as follows: In the late third and the second century B.C., traditional

Italian wine production, directed mainly toward local markets, began to alter: the earliest "grands crus" were established, wine consumption became progressively more generalized in Italy, wealthier members of the elite organized vineyards of the Catonian type, and Italian wines began to be systematically exported toward the Eastern and especially the Western Mediterranean. These developments reached a climax in the first century B.C. with the emergence of mass wines. During the reign of Augustus, Spain and Gaul rapidly attained near self-sufficiency in wine production, while the Italian wine-makers of the Tyrrhenian coast reoriented production toward the city of Rome, which developed into a market of staggering size—on Tchernia's estimate, perhaps 150 million liters per year. The early Empire then saw the steady consolidation of this new marketing pattern, which remained more or less intact until at least the beginning of the Severan era.

By and large, Tchernia's reconstruction is easily reconcilable with literary sources. Tchernia knows these sources well, and his interpretations are even-handed and often ingenious; he is able to rescue many from the notoriously over-eager speculations of historians searching for signs of "crisis". Of particular note is Tchernia's discussion of Domitian's attempt to limit vineyards in Italy and the provinces; Tchernia plausibly ties the decree to the eruption of Mount Vesuvius in 79, which caused both short-term decline in Italian wine production and long-term over-investment in vineyards. In general, Tchernia is suspicious of modern theories that posit major disruptions or structural transformations in the Early Imperial economy; a similar view is now advanced by Peter Garnsey and Richard Saller in *The Roman Empire: Economy, Society and Culture* (1987), especially 58–62.

The archaeological sources, and above all the amphorae, present more difficulties. (D.P.S. Peacock and D.F. Williams's *Amphorae and the Roman Economy*, 1986, appeared too late for Tchernia to use.) Although "Greco-Italic" amphorae were produced in Italy at least from the late third century B.C., the fundamental change came with the introduction of the emphatically elongated Dressel Type 1 just after 150 B.C.; this type, in which vast quantities of Italian wine were carried particularly into Gaul, was associated chiefly with producers on the Tyrrhenian coast. In Apulia, it was complemented by the plumper Lamboglia Type 2; Apulia's exports looked mainly to the East. The rise of the wine trade is fairly certainly connected with the spread of slave-operated villas in central Italy; but Tchernia does not deal with the curious chronological lag that D. Rathbone, *JRS* 73 (1983) 163–65, has observed in the organization of new villas.

During the reign of Augustus, both Dressel Type 1 and Lamboglia Type 2 were superseded by the more oblong Dressel Types 2–4 and, in the Po Valley and Istria, by Dressel Type 6. Although Italy's western markets did not entirely end, archaeological evidence shows clearly the emergence and growing importance of provincial wines in Spain and later in Gaul.

However, the interpretation of the amphora evidence has been complicated by the increasingly frequent discovery, in

recent years, of Early Imperial wrecks in which wine was being carried, not just in amphorae, but also in huge, more or less permanently installed dolia; in fact, the Severan jurist Ulpian (D. 47.2.21.5) actually refers to the practice, and indicates that it was very common by his day. This means that amphorae no longer provide a completely reliable index for wine distribution.

In any case, the first century A.C. was undoubtedly a golden age for wine production in Italy; such was the clear impression of literary sources (cf. pp. 209–21 on Columella, 3.3), and Tchernia's treatment of the period broadly resembles Nicholas Purcell's in *JRS* 75 (1985) 1–19. Like Purcell, Tchernia emphasizes the pivotal importance of the Roman market; Italian wine-makers were able to reorient their production toward Rome, but so immense was the demand that even provincial wine-makers competed there successfully.

The interpretation of archaeological evidence from the second century is much more difficult. The literary sources give no sign of decline in Italian wine-making, and Rome is obviously unlikely to have lost its appetite for wine. But the archaeological record seems to tell a different story. By about the middle of the century, Dressel Types 2–4 disappear altogether from Italy and Spain. Did Italian wine production cease with them? Some archaeologists (above all Andrea Carandini) have explained the phenomenon by positing a crisis in the slave-holding mode of production, which is also thought to be connected with archaeological evidence for the decline of wine-producing villas in (especially) Etruria.

Tchernia is skeptical of this crisis theory. As he points out, an explanation along this line faces formidable chronological difficulties. Furthermore, it is possible, and in a few cases now demonstrable, that some of the flat-bottomed, ovoid "Gauloise" amphorae were actually made in Italy, so that Dressel Types 2–4 may have had a successor after all. In any case, wooden barrels, which leave few archaeological traces but are depicted on monuments and mentioned by literary sources, played an increasingly significant role in the later imperial wine trade. Finally, much doubt remains as to whether, during the second century, the villa-system declined uniformly throughout central Italy; and some of the decline that did occur can probably be attributed to the disruptive effect, on both production and markets, of catastrophic events such as the Antonine plague. Although the question is still *sub judice*, Tchernia constructs an impressive case against Carandini.

To the extent one feels any disappointment at all with *Le vin*, it is that Tchernia lays so little stress on the organization of the wine trade, which was surely a phenomenal achievement granted the limits of Roman technology and economic sophistication. But that is a subject for another book. Within its field, Tchernia's book will certainly set the standard for many years hence. It is a striking example of how far archaeology has come during the 15 years since M.I. Finley's scathing criticisms in *The Ancient Economy* (1973). Archaeological evidence, which is receiving ever more sensitive and sophisticated treatment, has become a crucial complement to literary sources in reconstructing important aspects of ancient economic history.

What remains uncertain is whether archaeology can yet provide answers to more fundamental questions about the

Roman economy. Kevin Greene's *The Archaeology of the Roman Economy* is intended as a text for college courses on the material side of Roman civilization; as such it is much more than satisfactory. The book is very well illustrated, the bibliography is extensive and up to date; Greene's discussion is a sympathetic and largely jargon-free exposition of what the "new archaeology" has achieved, particularly with regard to transport (pp. 17–44) and in field surveys (pp. 98–141). The only disappointing chapter is on coinage.

Greene musters his archaeological evidence in an attempt to prove that Moses Finley's primitivist view of the Roman economy is "untenable" (p. 170). Such a claim is undoubtedly exaggerated. To be sure, Finley's position on the backwardness of Roman technology has been somewhat undermined in recent years; see, for instance, Greene's remarks on suspension systems and pivoting axles in Roman carriages (p. 38), or on the complexity of carcass preparation and butchery in Roman cities (p. 79), or on the distribution of Roman pottery (pp. 164–66). But the degree to which the Roman economy was monetized remains very uncertain; and in general archaeological evidence has hardly overturned Finley's central contention, that the Roman Empire saw no appreciable increase in per capita productivity. Greene accepts Keith Hopkins's rather vague "modification" of Finley's model (pp. 14–16); but on this score the pertinent chapters in Garnsey and Saller seem to me a good deal more convincing.

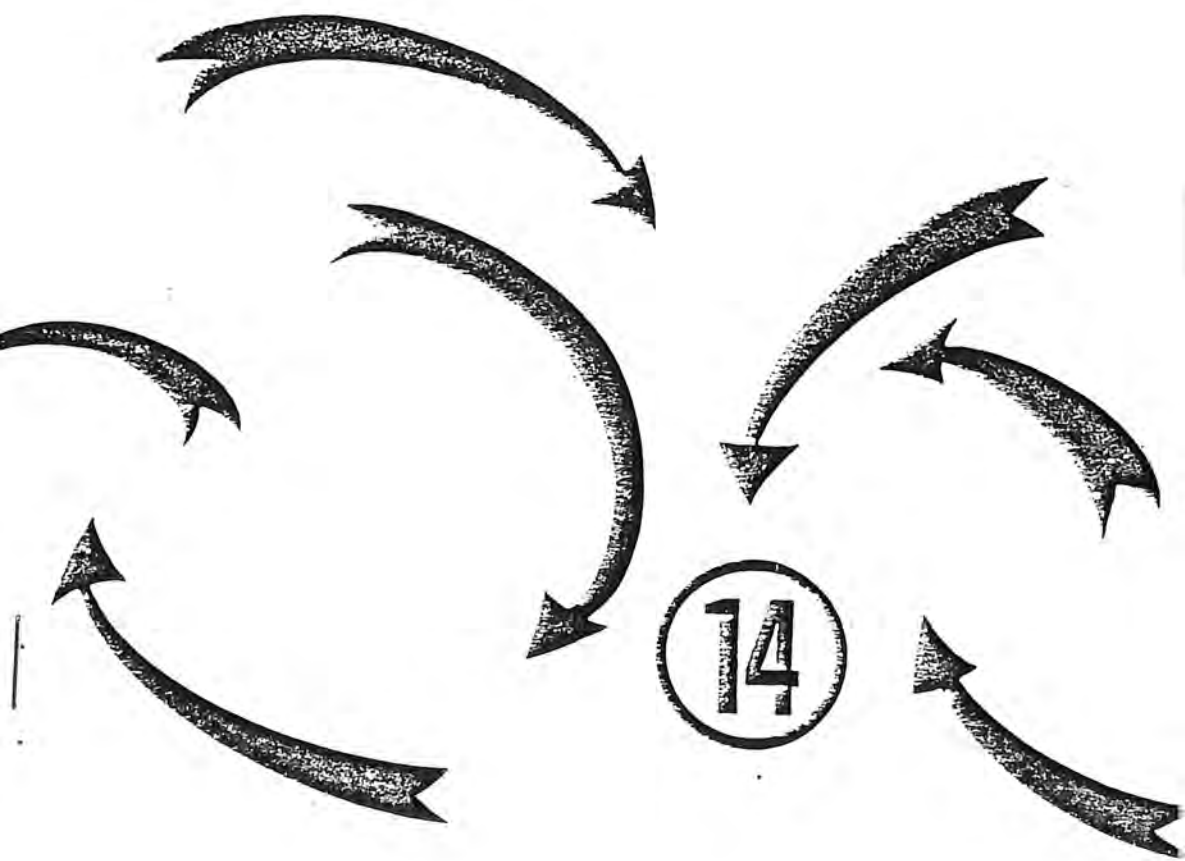
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ANCIENT PORTRAITS IN THE J. PAUL GETTY MUSEUM, VOL. 1, edited by Jiri Frel, Arthur Houghton, and Marion True with contributions by Joachim Raeder, Flemming S. Johansen, Sheldon Nodelman, Klaus Parlasca, Susan Wood, and Siri Sande. (Occasional Papers on Antiquities 4.) Pp. 142, with integrated ill. The J. Paul Getty Museum, Malibu, California 1987.

This volume is not, as the title might imply, a partial catalogue of the extensive holdings of ancient portraits housed at the Getty Museum. It is rather a series of individual studies which vary greatly in scope, intent, and degree of pertinence to the Getty collection. One can but assume from the title (there is neither introduction nor preface) that it is intended to be the first in a series of collections.

Three of the studies are straightforward analyses of single pieces at the Museum. Raeder perceptively recognizes that an ostensibly Late Antique philosopher portrait (71.AA.284) is actually a heavily reworked replica of a type represented by a bust from the Villa Hadriana, presently in the Vatican. This type is shown to blend features from Classical, High Hellenistic, and Late Hellenistic sculptural styles. Its eclecticism indicates to Raeder that it was created in the first century B.C. to represent a philosopher for whom there was no existing iconographic tradition. A specific identification is avoided, but Herakleitos is suggested in a



dialogues d'histoire ancienne
1988

Le mémoire de maîtrise de F. Le Ny (1) mérite pleinement la publication. C'est un sujet difficile par sa nature : la production d'un matériau modeste et trop méconnu, par l'ampleur de son emprise territoriale, même si l'enquête est ici limitée à la France, et par l'irrégularité de l'exploration des vestiges. Le terme de "four de tuilier" est restrictif et recouvre en réalité aussi les fours spécialisés plus largement dans les matériaux de construction et encore les fours dits mixtes, utilisés pour cuire des tuiles et des céramiques. On sent, d'entrée de jeu, que le four n'est qu'un élément inséparable de l'ensemble cohérent que constitue un atelier, une unité de production, et c'est sans doute dans ce cadre globalisant que s'orientera la suite des recherches. Le livre se divise en 4 parties : une approche méthodologique, une étude des fours, la typologie et la chronologie et enfin l'inventaire des ateliers de tuiliers.

L'enquête menée avec rigueur à partir d'une fiche très élaborée ne saurait être exhaustive. Elle réunit cependant 142 sites, dont 79 sont prospectés et 63 fouillés (en partie du moins).

Après une définition de la terminologie, le fonctionnement des fours est présenté en détails, fort bien illustré de photos et de schémas. Je me dois de signaler, à propos des fours dont le laboratoire n'est pas permanent, que l'exemple de Sallèles d'Aude, cité p. 30 et repris p. 33 n'est plus valable. En effet, la reprise de la fouille de ce four a été éclairante : remettant en cause notre première hypothèse, elle offre une interprétation cohérente et définitive : un laboratoire permanent construit en adobe est fermé par une voûte constituée d'urnes emboîtées les unes dans les autres et calées par du torchis, un système original et très novateur pour l'époque (c.f. Fanette Laubenheimer, avec la collaboration de Vincent Serneels et de Michel Perron d'Arc, *Sallèles d'Aude - Un complexe de potiers gallo-romain*, sous presse).

Un des aspects les plus intéressants est la typologie des fours, qui, complétant celle de Ninina Cuomo di Caprio, porte à 16 la gamme des formes différentes. Il apparaît que 81% des fours sont rectangulaires. La datation archéologique est souvent délicate, faute de matériel bien connu. Aussi l'auteur présente-t-elle une solution d'avenir, l'archéomagnétisme, une méthode nouvelle et efficace mise en œuvre à l'Université de Rennes ; une application est montrée. Le bilan chronologique, fondé ici sur des résultats

archéologiques, met en évidence une évolution typologique et chronologique très nette : les fours circulaires sont caractéristiques du 1^{er} s. dans le Sud de la France sous influence italienne. Ils disparaissent au 2^e s. et sont remplacés par les fours rectangulaires IIE" et IIE'. Au 3^e s. les fours IIE en marquent le modèle le plus perfectionné, très répandu dans le Nord et en Grande-Bretagne.

L'inventaire atelier par atelier donne un état de l'exploration de l'officine, une bibliographie et décrit chaque four ; l'illustration graphique des plans de fours est très riche.

Aspect méconnu de la romanisation, les ateliers de tuiliers marquent l'adaptation rapide des populations gauloises à cette nouvelle production, mais aussi leur capacité à perfectionner le modèle.

Fanette LAUBENHEIMER.

- (1) Françoise LE NY, *Les fours de tuiliers gallo-romains. Méthodologie, étude technologique, typologique et statistique. Chronologie. Documents d'Archéologie Française*, n° 12, Paris 1988, 142 p., 73 fig.

* * * * *

DES AMPHORES ET DES HOMMES *1988

* Abrégé DEDA

Le boom des amphores qui explose depuis quelques années se poursuit avec l'incroyable multiplication des publications, voire des chroniques bibliographiques spécialisées, touchant au monde de la production comme à celui de la commercialisation ou de la consommation, et ce pour l'ensemble du monde méditerranéen antique. Les clivages Orient-Occident tendent à s'estomper, tandis que les visions se font plus larges dans le temps. J'en donnerai ici un aperçu, au travers de récentes publications marquantes, sans

toutefois rechercher pour autant l'exhaustivité.

Signalons en commençant, 1 sous la plume de J.-Y. Empereur et de Y. Garlan, le Bulletin Archéologique : amphores et timbres amphoriques (1980-1986) dans *Revue des Etudes grecques*, n° 475-476, 1987, p. 58-109 : premier numéro d'une chronique bibliographique extrêmement utile et intéressante, qui concerne les amphores et les timbres amphoriques de fabrication grecque (à l'exclusion des productions de Méditerranée occidentale) depuis l'archaïsme jusqu'à l'époque byzantine. Le foisonnement des travaux sur les amphores fait regretter que l'on envisage de publier cette chronique "environ tous les cinq ans"... seulement.

A une rubrique très complète de généralités (bibliographie, méthodologie, informatique, analyses de laboratoire, contenu, contenants, standards, tuiles, timbrage, onomastique, ateliers de fabrication, commerce, synthèses chronologiques, amphores archaïques, amphores d'époque romaine et byzantine) succède une large rubrique sur les centres de production et une troisième sur les centres de consommation.

Amphores archaïques

La circulation des amphores archaïques est abordée d'un point de vue historique par exemple par 2 M. Slaska (1986), *Anfore arcaiche greco-orientali e loro diffusione nel Mediterraneo confronto con la situazione nell'area pontica*, dans *Thracia Pontica III*, p. 54-67, ou par 3 M. Gras (1987), *Amphores commerciales et histoire archaïque*, dans *Dialoghi di Archeologia* 2, (1987), p. 41-50. Mais elle est aussi appréhendée par des évaluations quantitatives suivant la méthode fondamentale des comptages sur un site précis, et l'on souhaite voir se multiplier ces points de référence seuls à même de fournir des données quantitatives. L'étude de 4 N. di Sandro, *Le anfore arcaiche dallo scarico Gosetti, Pithecusa*, Naples, 1986, 150 p., 30 pl., fournit un exemple intéressant et méritoire.

Dans la série des Cahiers du Centre Jean Bérard, ce second Cahier des Amphores Archaïques et Classiques est consacré aux trouvailles de l'acropole pithécusaine du Monte Vico. Récolté dans une décharge lors de la construction d'une villa - d'où le nom de décharge Gosetti -, le matériel n'est pas stratifié. Il est constitué de

fragments - lèvres, anses, fonds et panses - dont la classification est malaisée. Le grand mérite de cet ouvrage est de s'attaquer à un matériel modeste d'habitat avec toutes les difficultés inhérentes à l'état fragmentaire des amphores, et à l'absence d'analyses physico-chimiques comme le souligne l'auteur à plusieurs reprises.

Après la publication des amphores de la nécropole par G. Buchner, limitée au matériel choisi pour réutilisation funéraire à une période donnée, celle des amphores de l'habitat revêt un caractère novateur et globalisant, puisqu'elle prend en compte tous les objets qui ont été utilisés dans leur fonction première, sans limite temporelle.

Le catalogue de 354 numéros s'organise en trois parties ordonnées chronologiquement : 1) les amphores grecques (gréco-orientales, gréco-occidentales et leurs imitations) ; 2) les amphores phéniciennes et orientales non grecques, les amphores locales, les amphores étrusques ; 3) les amphores d'origine non définie. L'abondance des importations surprend aux VI et Ve s., lorsque Pithécuse avait perdu son autonomie politique et son caractère de grand *emporion*. Comme dans les fouilles de Lipari (M. Cavalier, même collection, cahier n° 1, voir *DEDA*, 1986, p. 522), à côté des amphores de Marseille apparaissent des imitations de Marseille dont l'origine n'est pas connue. La définition d'un groupe d'amphores locales, proches des productions étrusques, si intéressante et vraisemblable qu'elle soit, demande à être confirmée par des études analytiques de pâte et par une enquête archéologique sur les ateliers.

L'illustration est soignée, mais on regrette l'absence d'échelle sur les planches de dessins, auxquelles il n'est, au reste, pas fait de renvoi dans le texte.

Plus difficile à interpréter est l'analyse proposée par S. Y. Calvet, *Kition-Bamboula I. Les timbres amphoriques*, Paris 1982, 63 p., 30 fig. dessinées, photos, fondée sur les seules amphores timbrées.

Ce premier livre d'une série sur Kition-Bamboula mérite cependant d'être signalé ici, quoique déjà ancien. Dans le quartier oriental de l'antique Kition (aujourd'hui Larnaca) à Chypre, la colline de Bamboula dominant le port a fait l'objet de nouvelles recherches franco-chypriotes entre 1976 et 1981. C'est une colline artificielle élevée à l'époque byzantine ; elle est constituée d'un amas de déblais riches en matériel d'époques diverses. La quasi-totalité des timbres amphoriques présentés ici (135/141) en vient ; 6 seulement appartiennent à un contexte cohérent fouillé au

sud de la colline.

Dans le catalogue se succèdent les timbres de Thasos (8/141), Rhodes (102/141), Cos (3/141) et Chypre (14/141), suivis de rares exemplaires crétois ou samiens, phéniciens, corinthiens, et du groupe de Parméniskos ; quelques-uns sont d'origine inconnue. La forte prédominance des timbres rhodiens est habituelle en Méditerranée orientale et à Chypre en particulier. Rhodes domine à partir du milieu du 3^{ème} s., alors que Thasos régresse. Cependant, et comme toujours lorsqu'une étude se limite à celle des amphores timbrées, on ne peut que regretter l'absence d'une vision globale et d'un comptage de toutes les amphores réellement présentes.

L'étude fait apparaître pour chaque groupe d'amphores une explication concise des caractéristiques des timbres et des problèmes qu'ils posent. Le travail, bien illustré et complété par une bibliographie, est d'une consultation facile grâce à un index des noms grecs portés sur les timbres et un index des attributs, et à un tableau de correspondance entre n° d'inventaire et n° du catalogue. Ce livre constitue un des éléments qui permettent, peu à peu, de construire une synthèse sur les amphores de Méditerranée orientale.

Passionnante pour les échanges avec l'Orient de l'Occident est la publication 6 de *El barco de El Sec (Calvia, Mallorca) - Estudio de los materiales*, Mallorca, 1987, 659 p.

Une centaine de pages, 52 figures, et 10 planches sont consacrées aux amphores sous la plume de D. Cerda qui en donne une analyse et un catalogue largement illustrés.

Publication attendue de cette étonnante épave au chargement composite dont la première richesse est d'affirmer la force des échanges du monde méditerranéo-pontique dont témoignent les synchronismes d'un matériel riche et varié que l'on s'accorde à situer dans le 2^{ème} quart du IV^{ème} s. avant notre ère.

Si les 474 amphores ne sont pas un chargement extraordinaire en quantité, elles le sont par leur variété : on compte près d'une trentaine d'origines diverses. C'est d'abord la Méditerranée orientale et le domaine pontique. Les vins de Samos tiennent la première place, mais, en réalité, toute la mer Egée est représentée avec Corinthe, Cos, Rhodes, Chios, Mendé et Thasos, et les produits de la mer Noire avec les amphores de Sinope. Des amphores proto-gréco-italiques ont été embarquées en Sicile ou en Italie du Sud, des amphores puniques dans la région de Carthage, d'autres à Ibiza...

Les problèmes que pose ce bateau ont été récemment débattus lors du Colloque de Bordeaux, *Greco et Ibères* en décembre 1986 (Actes sous presse).

De nouvelles données sur les productions archaïques intéressent l'Occident et l'Orient. Pour le premier, ce sont les travaux contestés de J.-C. Echallier, L'origine des amphores massaliètes. Le point sur cinq années de recherche, dans *Documents d'Archéologie Méridionale*, 9, 1986, p. 197-199. Pour l'Orient, plusieurs publications : 8 Y. Garlan, *Vin et amphores de Thasos*, Ecole Française d'Athènes, Athènes, Paris, 1988, 34 p. 24 fig. en dépôt aux Ed. de Boccard, Paris.

Ce petit livre alerte présente une mise au point claire, bien illustrée et, pédagogique des recherches sur les amphores de Thasos, dont on sait la progression intense depuis une dizaine d'années.

Du vin de Thasos aux ateliers amphoriques, de la forme des amphores thasiennes au décodage de leurs timbres riches et complexes, l'auteur éclaire, l'une après l'autre, chacune de ces questions pour aboutir aux problèmes fondamentaux de l'organisation du système. Comment s'opère la production sous l'autorité de chefs de poterie, membres des grandes familles aristocrates ? qui vend le vin de Thasos, qui l'achète, qui le consomme et où ?

Certes tout n'est pas résolu, notamment dans ce dernier domaine, mais une recherche si novatrice ne demande qu'à progresser encore.

Toujours sur Thasos, Y. Garlan donne des 9 Prolégomènes à un nouveau corpus des timbres amphoriques thasiens, dans *Céramiques hellénistiques et romaines* 2, 1987, p. 73-84.

Des nouveautés sur les amphores cniennes auxquelles appartient désormais le groupe A de Zénon sont apportées par 10 J.-Y. Empereur et N. Tuma, Zénon et l'épave de Serge Limani, dans *BCH*, CXII, 1988, p. 341-357.

Amphores hellénistiques

Deux synthèses importantes sont parues :
— la remarquable contribution de 11 J.-Y. Empereur et A.

Hesnard, Les amphores hellénistiques, dans *Céramiques hellénistiques et romaines* 2, 1987, p. 9-71 touche à l'ensemble de la Méditerranée ;

— la révision de la classification des amphores puniques Maña C par 12 V. Guerrero Aynso, Una aportación al estudio de las ánforas púnicas Maña C, dans *Archaeonautica* 6, 1986, p. 147-186.

Les amphores italiques Dressel 1

Les recherches sur les amphores vinaires italiques dont on sait l'ampleur du trafic en Occident progressent sans cesse. Signalons pour l'Etrurie la contribution de 13 E.-L. Will, The Roman Amphorae, dans AM Mc Cann, J. Bourgeois, E.-K. Gazda, J.-P. Oleson et E.-L. Will, *The Roman Port and Fishery of Cosa*, Princeton 1987, p. 170-220. Plusieurs études sur de nouvelles épaves sur les côtes française et espagnole : 14 J.-P. Joncheray, L'épave romaine de Taillat, dans *Cahiers d'Archéologie Subaquatique* VI, 1987, p. 127-150 ; 15 L. Long, L'épave antique Bénat 4. Expertise archéologique d'un talus d'amphores à grande profondeur, dans *Cahiers d'Archéologie subaquatique*, VI, 1987, p. 99-108 dont le chargement s'apparente aux amphores du type que j'ai reconnu à Ruscino (F. Laubenheimer, A propos de trois amphores de Ruscino, dans *Ruscino*, supp. 7 à la *Revue Archéologique de Narbonnaise*, Paris, 1980, p. 303-325) ; 16 M.-F. Giaccobi-Lequément, La céramique de l'épave Fos 1, dans *Archaeonautica* 7, 1987, p. 167-191 ; 17 L. Long, Les épaves du Grand-Congloué. Etude du journal de fouilles de Fernand Benoit, dans *Archaeonautica* 7, 1987, p. 167-191, met fin à la longue polémique qu'avait engendrée la confusion de deux épaves en une dans la publication initiale de F. Benoit. Reprise de l'étude d'une épave également sur la côte de Majorque : 18 D. Colls, *L'épave de la Colonia de Sant-Jordi 1 (Majorque)*, Paris 1987, 118 p., 21 planches de dessins ; XI planches de photos.

Sous le n° 16 des Publications du Centre Pierre Paris et le n° 1 des Publications du CERASM, D. Colls publie la fouille de sauvetage d'un petit bateau de faible tonnage (11 à 13 m. de long), échoué dans les années 100/80 av. J.-C. Le chargement avait été en partie débarqué et remplacé par du lest, et, pour le reste, il a été largement pillé ces dernières années. Déjà brièvement étudiée par

D. Cerdá y Juan (*La nave romano-republicana de la colonia de Sant-Jordi, ses Salines, Mallorca*, Palma de Mallorca, 1980), l'épave a fait l'objet de nouvelles fouilles en 1977 et 1978 et c'est une synthèse globale qui est présentée ici.

Une étude attentive du bateau met en lumière l'originalité de la construction de la coque avec un préassemblage des virures. Un glossaire des termes techniques de construction navale facilite la lecture.

Une quarantaine d'amphores vinaires de Campanie (D1A et C) et d'Apulie (Lamboglia 2 dont 7 sont timbrées) témoignent de la prééminence du commerce italien en ce début du 1^{er} s. avant J.-C.

Parmi les céramiques communes, on retiendra ces pots à deux anses, poissés, remplis d'olives, dont la forme se trouve ici associée à une fonction précise.

Toujours en Espagne, une inscription peinte sur Dressel 1 : 19 J. Miro, Une inscription peinte avec date consulaire sur une amphore Dressel 1B de l'*oppidum* de Burriac (Cabrera de Mar, Barcelonne) dans *Documents d'Archéologie Méditerranéenne*, 9, 1986, p. 201-205.

Dans les publications terrestres, nous noterons du nouveau dans une région peu explorée dans ce domaine, l'Alsace : 20 X. Lafon, J. Alexandre - Baudoux, Les amphores Dressel 1 du fossé de Pandours (col de Saverne) dans *Revue Archéologique de l'Est*, n° 151-152, 1988, p. 129-134. A propos du matériel de Manching. 21 E.-L. Will, *The Roman Amphoras from Manching : a reappraisal*, après avoir réexaminé le matériel étudié par W.-E. Stöckli, récuse le classement typologique publié et propose de remonter le début des importations d'un demi siècle avec des arguments typologiques qu'il est difficile de suivre sur un matériel très fragmenté, les références se faisant, en outre, à l'ouvrage inédit de E.-L. Will.

Deux articles de synthèse enfin. Dans le premier, 22 A. Fitzpatrick, The Distribution of Dressel 1 Amphorae in North-West Europ, dans *Oxford Journal of Archaeology*, vol. n° 3, 1985, p. 305-321, tout en donnant une image complétée et renouvelée des cartes de distribution déjà connues, se heurte à deux difficultés : l'ampleur d'une enquête exhaustive irréaliste et la représentation non hiérarchisée des points de distribution, qui donnent une figuration trompeuse dans laquelle le nombre d'individus par site n'intervient pas.

La seconde contribution par 23 M. Bats, Le vin italien en

Gaule au II-I^{er} s. avant J.-C. : problèmes de chronologie et de distribution, dans *Dialogues d'Histoire Ancienne*, 12, 1986, p. 391-420, reprend les données chronologiques notamment dans l'isthme gaulois ; sa réflexion sur les modalités de l'échange, appuyée sur des modèles ethnographiques, nuance la vision de A. Tchernia, développée dans *Le vin de l'Italie romaine*, Paris, 1986.

Les amphores romaines de la Péninsule ibérique

Par la masse de leurs productions elles suscitent, depuis plusieurs années, des recherches continues tant dans la Péninsule que sur les marchés d'exportation.

Au large de Port-Vendres, une nouvelle épave d'amphores vinaires, avec un chargement mixte Pascual 1 et Léétanienne 1 - pour la première fois repérées en mer -, est publiée par 24 D. Colls, Les amphores léétaniennes de l'épave Cap Béar III, dans *Hommage R. Etienne*, Paris, 1988, p. 201-213. P. Gaillou propose une nouvelle carte de distribution des amphores P.1 sur la côte atlantique (malheureusement sans tenir compte des variations quantitatives) : 25 Les amphores Pascual 1 et le commerce atlantique au 1^{er} s. de notre ère dans *Mélanges offerts au Docteur J.-B. Colbert de Beaulieu*, Paris, 1987, p. 379-388.

De nouveaux points d'exportation d'amphores Dressel 20 sont étudiés dans les Gaules : 26 B. Helly, A. Le Bot Helly, B. Liou. Un dépôt d'amphores Dressel 20 à inscriptions peintes découvert à Ste Colombe (Rhône), dans *Archaeonautica*, 6, 1986, p. 121-145 ; 27 R. Billoret, Amphores antiques dans la cité des Leuques, dans *Revue Archéologique de l'Est et du Centre Est*, 147-148, 1987, p. 107-112.

Une importante contribution sur le matériel du *limes* rhénan d'Augst et de Kaiseraugst est apportée par 28 S. Martin - Kilcher, *Die römischen Amphoren aus Augst und Kaiseraugst, 1, Die südsprachen Ölamphoren (Gruppe 1)*, Forschungen in Augst, band 7, Augst, 1987, 311 p., 119 fig., 94 planches, 3 dépliants.

Ce premier volume d'une trilogie sur les amphores d'Augst, est consacré aux amphores à huile d'Espagne du Sud, les deux autres concerneront respectivement les amphores à vin et les amphores à poisson. Saluons cette publication soignée et luxueuse.

Une première partie présente globalement le double site de

Kaiseraugst et d'Augst, la ville haute et la ville basse, qui tient une position clé liée au pont sur le Rhin, et au carrefour routier ouvrant vers les Gaules, la Rhétie et les Champs décumates.

Elle donne aussi une critique utile de l'échantillonnage que compose le matériel étudié. Il a subi en effet, une double sélection : l'une dès l'Antiquité suivant que les dépotoirs ont été conservés ou dispersés en fonction des aménagements architecturaux ; l'autre, lors de la fouille elle-même. On a, à ce moment là, conservé de façon privilégiée les lèvres et les anses timbrées, tout en jetant le reste. L'auteur le démontre en grands détails en ne présentant pas moins de 12 graphes sur ce seul thème !

Un troisième volet développe la chronologie du site à partir de la céramique non amphorique, et ce ne sont pas moins de 253 vases qui sont dessinés !

L'étude des Dressel 20 et Dressel 23 porte sur 2047 objets (105 lèvres ; 649 anses ; 285 morceaux de panse ; 97 fonds et un exemplaire complet) qui représentent une séquence d'importation continue du début du 1^{er} s. jusqu'au 5^{ème} s. Les estampilles (284 ex.) soulignent un *maximum* au 1^{er} s. et au début du 2^{ème} s. Il apparaît que l'importation de l'huile de Bétique à Augst est liée aux conquêtes augustéennes et à la consommation des légions. Les voies de pénétrations commerciales vers Augst sont au surplus jalonnées, par la distribution des inscriptions mentionnant un *diffusor olearius*, qui se répartissent entre Narbonne et Lyon (voir l'article de P. Le Roux *infra*).

S. Martin - Kilcher choisit de développer l'analyse du matériel dans le détail en traitant successivement la technique de fabrication, la morphologie, la pâte, les *graffiti* avant et après cuisson, les estampilles, les marques peintes et les remplois. Chaque rubrique est accompagnée de listes, de catalogues, et de dessins, voire de graphes, extrêmement complets pour donner une vision très concrète du matériel.

Les tentatives d'évaluation sur le rythme des cuissons me semblent discutables : une cuisson par semaine ne laisse guère le temps de remettre le four en état, elle ne tient pas compte d'une production sans doute saisonnière et suppose autour des tourneurs un environnement nombreux et hautement organisé qui prenne en charge toutes les tâches annexes : terre, bois etc...

Les résultats des analyses de pâte sont décevants à cause de l'altération des tessons par le sol. Aussi l'auteur propose-t-elle finalement un simple classement visuel des pâtes illustré par de superbes photos couleur dont l'utilisation reste subjective. Le

catalogue des timbres est précis sur l'origine des amphores, lorsque l'atelier est connu - avec une illustration très astucieuse - et fournit de précieuses indications chronologiques. En revanche, la diffusion des timbres n'est pas indiquée.

L'ouvrage s'achève par le catalogue global des 2029 objets qui occupe la moitié du livre. Près de 2000 dessins de profils de fragments d'amphores D.20 et D.23 marquent un choix imposant (*a fortiori* à une si grande échelle : 1/2 !) confirmé par la reprise de l'illustration des timbres et fragments timbrés, déjà donnée pourtant avec le catalogue des timbres, choix qui grève le prix du livre.

La publication de S. Martin - Kilcher est un outil de travail de base remarquable qui sera largement utilisé dans les synthèses sur la circulation et la consommation de l'huile de Bétique. Sur Augst-même, on attend avec intérêt les deux publications annoncées qui permettront d'évaluer la place des importations de D.20 par rapport aux autres produits.

Toujours à propos des amphores Dressel 20 de Bétique, 29 F. Mayet s'interroge sur l'organisation des ateliers à partir de l'étude du mot *figlina* : les *figlinae* dans les marques d'amphores Dressel 20 de Bétique dans *Hommage Robert Étienne*, Paris 1988, p. 285-305. Signifiant d'abord glaisière, puis produit manufacturé et enfin unité de production, le mot *figlina* n'apparaît sur les amphores que vers 150, reflétant sans doute une concentration des unités de production liée à celle des *fundi*. La *figlina* dont le propriétaire signe des *tria nomina* peut compter plusieurs *officinae*, aux mains des *offinatores* serviles ou d'origine servile, qui signent d'un *cognomen*. Certains propriétaires de *fundi* possèdent une *figlina* ; cependant, le chef de la *figlina* peut être aussi *negotiator*... Toutes les marques ne s'expliquent pas par un modèle unique d'où les divergences d'interprétation...

30 M.-F. Loyance, A propos de Marcus Cassius Sempronianus Olisiponensis, *diffusor olearius* et 31 P. Le Roux, L'huile de Bétique et le prince sur un itinéraire annonaire, dans *Hommage Robert Étienne*, Paris, 1988, p. 273-284 et 247-271, apportent deux contributions complémentaires sur les problèmes de diffusion de l'huile.

C'est de la Péninsule ibérique également que sont venues deux amphores Beltran IIB de Marseille remplies d'olives confites 32 R. Boyer, Conserve d'olives dans deux amphores trouvées dans les fouilles de la Bourse à Marseille, dans *Gallia*, 44, 1986, p. 229-233.

Les amphores gauloises

Les premiers travaux sur les amphores gauloises ont déclenché une multiplication des découvertes et des recherches.

Signalons d'abord la mise au point, déjà dépassée, que j'ai donnée dans 33 *Céramiques Hellénistiques et Romaines* 2, 1987, p. 191-199 : Production et fonction des amphores en Gaule ; elle est complétée par un article sous presse : 34 Les amphores gauloises sous l'Empire : recherches nouvelles sur leur production et leur chronologie, dans *Anfore romane e storia economica, Sienne, mai 1986*.

Une épave chargée d'amphores gauloise 5 et d'amphore à lèvre à double inflexion externe, fabriquées très vraisemblablement dans l'atelier du Pauvadou à Fréjus a été découverte sur la côte provençale : 35 Alex Pollino et collaborateurs, L'épave des Roches d'Aurelle, dans *Cahiers d'Archéologie Subaquatique*, VI, 1987, p. 25-49.

Aux nouveaux ateliers d'amphores de Gaule Narbonnaise (F. Laubenheimer, *op. cit.*, à paraître ; 36 L. Rivet, Un atelier de potiers du 1er s. de notre ère à Mandelieu (A.-M.) dans *Documents d'Archéologie Méridionale* 9, 1986, p. 119-134), s'ajoutent maintenant, et c'est une nouveauté, des officines dans les Trois Gaules. Lyon surprend par la diversité de ses productions comportant des D.1, D.2/4, des H.70 similis, D. 9 similis... 37 C. Becker, Note sur un lot d'amphores régionales du 1er s. après J.-C. à Lyon (Fouille de l'îlot 24) dans *Figlina* 7, 1986, p. 147-150 ; 38 A. Desbat, Note sur la production d'amphores à Lyon au début de l'Empire, dans *Société Française pour l'Etude de la Céramique Antique en Gaule, Actes du Congrès de Caen*, 1987, p. 159-165 ; 39 Becker C., Constantin C., Desbat A., Jacquin L., Lascoux J.-P., Le dépôt d'amphores augustéen de la rue de la Favorite à Lyon, dans *Figlina* 7, 1986, p. 65-89 ; 40 B. Dangreux, A. Desbat, Les amphores du dépotoir flavien du Bas-de-Loyasse à Lyon, dans *Gallia*, 1987-1988, p. 115-153.

L'origine de ces diverses amphores a été attribuée à Lyon par analyse par fluorescence X de plusieurs échantillons dont on attend la publication avec intérêt, mais les ateliers eux-mêmes avec leur cortège de déchets ne sont pas connus. Aussi ignore-t-on si il

s'agit, suivant les cas, d'une production de masse ou limitée à quelques spécimens, développée localement ou régionalement. L'estimation quantitative est un préalable indispensable à la construction de tout raisonnement sur le commerce de ces amphores.

Plus au nord, en Bourgogne, on croit pouvoir lier les premiers indices d'un vignoble du 1er s. à un atelier d'amphores : 41 F. Laubenheimer, J.-C. Notet, Les amphores produites à Gueugnon (S. et L.) et les débuts du vignoble bourguignon, dans *Dialogues d'Histoire Ancienne*, VI, 1986, p. 430-453.

La montée du vignoble se lit également au 1er s. dans les amphores de Mougou-Crouzilles, 42 F. Laubenheimer, La production de deux ateliers du bassin de la Loire moyenne dans *Revue Archéologique du Centre de la France*, 25, 2, 1986, p. 175-187, dont l'étude est complétée par deux articles : 43 D.-C. Schweitz, B. Toulhier, A. Ferdière, X. Fernbach, P.-M. Blanc, L'atelier de potier de Mougou (Crouzilles, Indre-et-Loire), et 44 F. Laubenheimer, A. Sabir, F. Widemann, Analyses par activation neutronique des amphores de l'atelier de Crouzilles, dans *Revue Archéologique du Centre de la France*, 25, 1, 1986, p. 37-73 et p. 74-76.

En Normandie enfin, confirmant les premières évidences fournies par E. Deniaux, une production d'amphores du 2ème s. dans le Calvados est mise en évidence par 45 D. Dufournier et J.-Y. Marin dans *Société Française pour l'Etude de la Céramique Antique en Gaule, Actes du Congrès de Caen*, 1987, p. 23-27. Elle possède ses caractéristiques propres et ne doit pas être confondue avec les Gauloise 1 de Narbonnaise, comme le font les auteurs.

La circulation des amphores gauloises est étudiée avec des données quantitatives précises dans la villa de St-Ulrich en Moselle : 46 J. Alexandre-Baudoux, Nouvelles données sur les importations en Gaule du Nord-Est : les amphores gauloises de la villa de St-Ulrich (Moselle), dans *Revue Archéologique de l'Est et du Centre-Est*, n° 147-148, p. 85-91.

En Italie de nouveaux témoignages de la diffusion des amphores gauloises à Ostie sont attestés par la publication récente, d'une étude déjà ancienne : 47 M. Carta, I. Pohl, F. Zevi, Ostia, La teberna dell' invidioso - Piazzale delle corporazioni, portico Ouest : saggi sotto i mosaici, dans *Notizie degli Scavi di Antichità*,

supplemento al vol. XXXII (1978), Rome 1987, p. 144 *et sq.* ; avec les Gauloises 4 (nommées encore Pelichet 47), apparaît aussi la forme G.3 (fig. 141, 142), nommée Dressel 28 avec une inscription peinte difficile à déchiffrer.

Les évaluations quantitatives

Une évaluation quantitative globale de la circulation des amphores et de la consommation des données est fondamentale pour décrypter aussi bien le message économique dans sa complexité que les habitudes alimentaires des populations.

Cette nouvelle orientation, désormais claire, se met en place progressivement. On se réjouira, de voir se développer ici où là, des études fondées sur une évaluation quantitative du matériel, dont voici quelques exemples en Angleterre : 48 P. Arthur, *Roman Amphorae from Canterbury*, dans *Britannia*, XVII, 1986, p. 239-258 ; en Hollande : 49 J. Van der Werff, *Roman Amphora at Nijmegen. A Preliminary Report*, dans *Berichten van de Rijksdienst voor het Oudheidkundig Bodemonderzoek*, 34, 1984, p. 347-387 ; en France : 50 M. Bonnifay, *Observations sur les amphores tardives à Marseille d'après la fouille de la Bourse (1980-1984)*, dans *Revue Archéologique de Narbonnaise*, 19, 1986, p. 269-305 ; en Italie : 51 J. Boersma, D. Yuntema, J. Van der Werff, *Excavations in the House of the Porch (VII-4-5) at Ostia*, dans *BABESCH*, 61, 1986, p. 77-137.

Une évaluation sur toute une région a été réalisée en Pannonie : 52 Tamas Bezeczky, *Roman Amphorae from the Amber Route in Western Pannonia*, BAR International Series 386, Oxford 1987, 191 p., 49 fig., 13 planches.

Une problématique dynamique : la distribution des amphores suivant une grande route commerciale, celle de l'ambre, entre Aquilée et la vallée du Danube, offre une synthèse très nouvelle dans une zone jusqu'ici peu explorée.

Du matériel de Haut-Empire issu de 8 sites différents est pris en compte - amphores entières ou fragments de lèvres, anses, fonds, à l'exclusion du reste semble-t-il dans un catalogue de 443 objets complété par d'excellents dessins et des photos auxquels il n'y a malheureusement pas de renvoi. Étudiés par types, les objets sont subdivisés en groupes au travers d'analyses pétrographiques, avec, suivant les cas, des indications de distribution et de chronologie. Suit une bibliographie. Dans un supplément sont

présentées en détails les analyses pétrographiques, ainsi que quelques essais en fluorescence X. Une tentative de classification ascendante hiérarchique morphologique, à partir de paramètres mesurés sur un matériel d'Ostie est proposée à titre expérimental.

La circulation la plus forte est celle de l'huile d'Istrie (148/443 amphores) dans des amphores D.6B dont la distribution, très lisible sur les cartes des principaux producteurs, s'étend de la Cisalpine à la vallée du Danube qui n'est pas franchie ; à l'Ouest, elle ne dépasse pas les Alpes. C'est une situation exceptionnelle à une période où l'huile de Bétique se répand tour à tour de ce vaste îlot et notamment par la Gaule vers le *limes* nord (à Augst par ex.), et vers le Sud, elle arrive en quantité à Rome. Ce n'est qu'à l'époque d'Hadrien que l'huile d'Istrie est remplacée par celle de Bétique.

Le vin est moins abondant que l'huile. Il vient d'Italie, peut-être d'Espagne et des îles de l'Egée, celui de Gaule n'apparaît pas. Les sauces de poissons d'origine espagnole sont présentes.

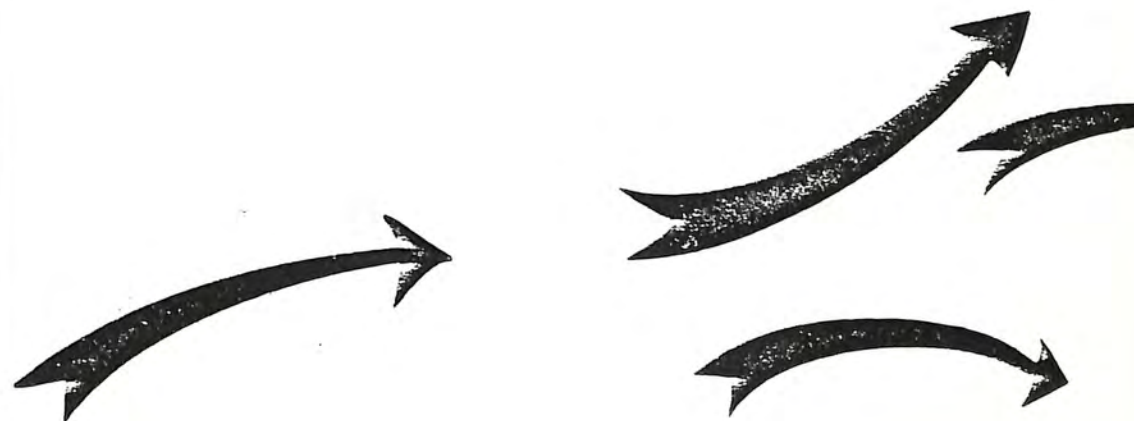
Très intéressantes sont les données sur les amphores dites du type de Portorecanati, proches de la forme Haltern 70 *similis*, mais différentes toutefois par leur col plus court, les anses plus arrondies et sans sillon, comme la lèvre. Cette nouvelle variante et sa diffusion en Pannonie et en Italie rendent plus complexe encore une production qui déjà est reconnue comme faite à Lyon et dans la Péninsule ibérique (cf. n° 39). On ne peut se contenter d'une étude rapide sur des fragments comme elle a été faite jusque là, et seule l'analyse typologique de séries d'objets entiers permettra d'y voir plus clair.

Marques peintes

On observe une dynamique dans la publication des marques peintes sur amphores entreprise en France par B. Liou depuis plusieurs années. La prise de conscience de l'intérêt et de la fragilité des indications peintes joue à plein, si bien que les documents, si rares autrefois, se multiplient aujourd'hui. Deux nouvelles et importantes contributions viennent de paraître : 53 B. Liou, *Inscriptions peintes sur amphores : Fos (suite), Marseille, Toulon, Port-la-Nautique, Arles, St-Blaise, St-Martin-de-Crau, Mâcon, Calvi*, dans *Archaeonautica* 7, 1987, p. 55-139 ; 54

A. Desbat, R. Lequément, B. Liou, Inscriptions peintes sur amphores : Lyon et St-Romain-en-Gal, dans *Archaeonautica* 7, 1987, p. 141-166 ; rappelons aussi la publication des amphores Dressel 20 à inscriptions peintes de Ste-Colombe (Rhône), B. Helly, A. Lebot - Helly, B. Liou, *op. cit.* n° 26.

Fanette LAUBENHEIMER.



10. XI. 88

Review of McCune, et al., The Roman ^{and Fasting} Port of Euse:
a Century of Ancient Trade, Princeton 1987 (\$150).
 see AJA 92, 1988, p. 302. Review by
 G. E. RICKMAN (the grammar man). Laudatory, with
 special praise for E. L. W.'s part (over 50 pages).

24.02
24.01
The Agora,
March 28th, 1983

7. Helen Williams?
Dear Hector,

I've shown your Thracian tomb jar both to Virginia Grace and to Carolyn Koehler, and they both say 1st BC to 1st AD, Virginia adding that it's probably 1st AD.

Mrs Elizabeth Lyding Will is the person working on Roman amphoras of this period -- she is producing an Agora volume on Roman jars which must be very near completion by now. The trouble is that she seldom answers letters..... As far as we can see, your jar is closest to her Type 14, which she dated ~~xxxxxx~~ second half of 1st BC to 1st AD in a reference list drawn up in 1958; of course, she may have modified her dates since then, and I have not been able to find any place where she refers to Type 14 in print. Carolyn says that she suggested that you might find a published parallel for it from Ostia.

If you would like to write to Mrs Will, her address is:

Mrs Elizabeth L. Will,
Classics Department, Herter Hall,
University of Massachusetts,
Amherst, Mass.
01002

Rec 82 Jarre à vin
Fig 52
Yours,

Philippa MW Matheson

To Hector Williams?

The Agora,
March 28th, 1983

Dear Hector,

I've shown your Thracian tomb jar both to Virginia Grace and to Carolyn Koehler, and they both say 1st BC to 1st AD, Virginia adding that it's probably 1st AD.

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Yours,

Philippa MW Matheson



Res. 52. — Şarap küpü
Fig. 52. — Jarre à vin

Carolyn Koehler ~~ACES~~

24.03

HECTOR WILLIAMS

Roman

- 12 -

25

For #26 and #27: I have no information on this stamp. Why write the fourth letter as a Latin r ?

For #28 and #29: M. Empereur knows more than I do about Latin stamps and Roman amphoras. I have recorded some of those things, but seem to have given my records to Mrs. Elizabeth Lyding Will, who is supposed to publish them, those from Alexandria, Delos, Corinth, Athens, etc.. It should be useful to consult her about the text here, but she does not always manage to answer letters. If you use Empereur's information, show him what you are saying, with time for him to make any corrections. His name is not Jean but Jean-Yves. What should come before Visellius? And why is it in two spellings? in your text.

From 1987-8 commentary on SAH
from BEERSHEBA.

American School of Classical Studies
54 Swedias St.
Athens 140
Greece

July 21, 1982

Mr. Bern Dibner
Burndy Library
Electra Square
Norwalk, Conn. 06856
USA

Dear Mr. Dibner,

Thank you for your letter of June 11th. I am interested to have a photograph of your amphora, but, possibly because the photo is not very clear, I have not been able to identify very satisfactorily the kind of jar it is.

I suggest you consult now:

Mrs. Elizabeth Lyding Will
Department of Classics
Herter Hall
University of Massachusetts
Amherst, MA 01003

Your amphora may belong to one of the classes covered by her studies. Mrs. Will is an authority on many kinds of amphoras made, usually further west than Greece, under the Roman Empire.

Yours sincerely,

Virginia R. Grace

VRG/cz

BURNDY LIBRARY

Electra Sq., Norwalk, Conn. 06856
(203) 852-6294



June 11, 1982

Dr. Virginia Grace
Agora Excavations
c/o American School of
Classical Studies at Athens
54 Souidias Street
Athens 140, Greece

Dear Dr. Grace:

We write to you at the suggestion of Dr. Laura Jean Siegel who visited us recently. We had been presented with a fine amphora but could learn nothing of its provenance. It was given to us by an attorney who had received it from another without any record of its source.

We have your booklet "AMPHORAS and the Ancient Wine Trade" but seek a more definite identification, if possible. Your help in this will be greatly appreciated. The amphora stands 32 inches high.

Sincerely,

Bern Dibner

BD:dn

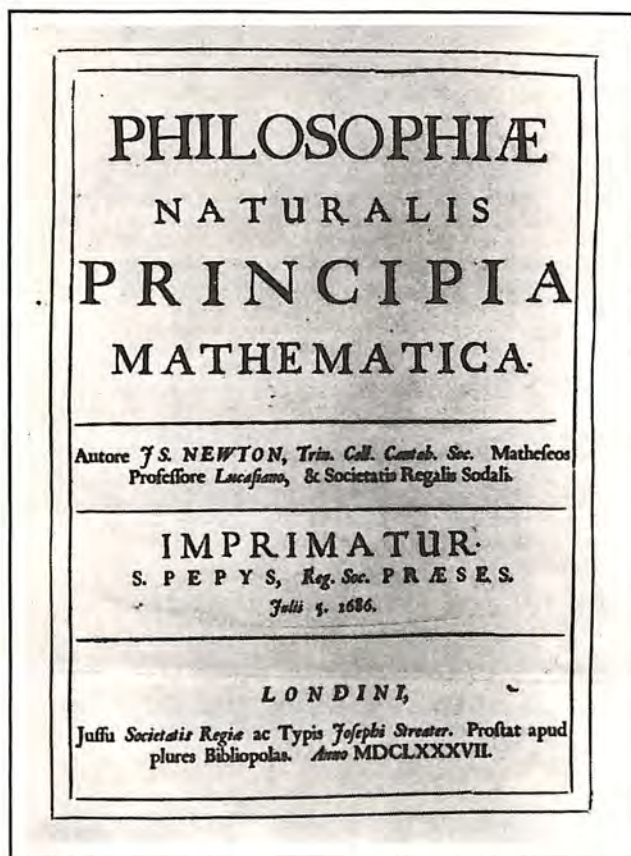
ACQUISITIONS

The "Automobile" and the "Bicicletta" of Leonardo - A gift of extraordinary interest and importance was a slender but large folio presented by the author, Prof. Augusto Marinoni, to the Library. Prof. Marinoni of the Catholic University of Milan and one of the contributors to (and final editor of) The Unknown Leonardo, had discovered some stray pages in the Codice Atlantico showing the silhouette of a bicycle, complete with pedals, driving chain and steering column. The drawing was not in Leonardo's hand but internal evidence indicated it to be the work of Leonardo's wayward pupil Salai. With keen scholarship this theme is presented by Prof. Marinoni in a limited edition of which our inscribed copy is No. 149. A discourse on Leonardo's many designs for a stored spring-energy automobile has been added.



An Amphora from the Aegean - A gift of a Greek amphora was made to the Library by Joseph G. Blum, Esq., of New York. The tall, two-handled clay container of wine was raised from the Aegean sea where it had sunk some 2300 years ago during one of the frequent storms that endangered such cargo during those early years of coastal navigation. The vessel's shape is in the graceful classic form with pointed base for being pressed into a deep sandy surface. Any distinguishing marks of ownership are probably covered by the millennial incrustation of sea life during its submersion. This evidence of ancient food technology and Mediterranean trade takes its welcome place in the Library alongside the advanced technologies of more recent times.

Burndy's Howard Reiter and amphora, gift of Joseph Blum.



Title-page of the first edition of the Principia, 1687, of which only about 250 copies were printed.

NEWTON'S PRINCIPIA

This book has been called "the greatest work on exact science that the human mind has ever conceived." It was based on Newton's lectures at Cambridge and was published by the Royal Society in London in 1687 in an edition of about 250 copies. It revealed the universal law of gravitation and gave Newton's three laws of motion. This Herald of Science was acquired last year to replace the copy we presented to the Smithsonian in 1976. It is of the first issue of the first edition and is from the Prof. Wladimir Seidel collection.

On Ann Lambentheim's letter

9 12.I.82

- 1.) Photos of SS 2475 - with stamp } also test
 " " P 18000 (no stamp) } samples

— These are BLW's to publish, wait for
 ^{See copyright letter}
 her permission. Her type 18.
 (I was not able yet to find P 18000 for
 her b. myself.)

- 2.) P 11936 photos and test sample
 P 11934, etc. series on scale 751

— These are Barbara Johnson's.
 (For the series, contents suggest 2nd-3rd AD
 I don't know where they were made)

C.N.R.S.

I N2 P3

28

original sent to Margot for Agora file
ROMAN
GROUPE D'ARCHÉOLOGIE NUCLÉAIRE D'ORSAY-SACLAY

(LAUBENHEIMER)

C.S.N.S.M. BATIMENT 104

91406 CAMPUS ORSAY

Tél.: 941-52-39

Secrétariat 941-52-33

FL/MV

ORSAY, le 12 Janvier 1982

Miss V. GRACE
American School of Athens
Sovidas 54

ATHENES - GRECE

Dear Miss Grace,

Notre visite à l'Agora d'Athènes a été très enrichissante et nous vous remercions pour l'accueil que vous nous avez réservé.

Je vous serai très reconnaissante si vous pouviez m'adresser une photo du col de l'amphore n° 10747 SS 2475, timbrée T.V.P., et une photo du timbre. D'autre part, j'ai remarqué dans les réserves une amphore complète n° P.18000, qui correspond parfaitement à la forme Gauloise 4. Une photo et des renseignements tels que sa hauteur totale, son diamètre maximum, sa datation me seraient très utiles.

Je ne pense pas que le n° P.11936 soit d'origine gauloise, il serait intéressant néanmoins d'en avoir une photo.

Enfin, j'ai remarqué une série d'amphores à fonds plats, que je ne connais pas : P 11934, 12483, 21147, 9831, 243, 11957, 22112, 11747, 8262, 7590, pourriez-vous me renseigner à leur propos et éventuellement m'adresser une photo à titre d'exemple ?

Il serait très intéressant de pouvoir faire un prélèvement pour analyse par activation neutronique des n° 10747 SS 2475, P.18000 et P.11936 pour les comparer à notre banque de données sur les amphores gauloises et préciser leur origine, si nous pouvons obtenir l'autorisation de faire cette démarche.

J'adresse une lettre à Misses Will pour l'informer du résultat de notre visite à Athènes.

Encore une fois merci de votre accueil.

Recevez l'expression de mes respectueuses salutations.

F. Laubheimer
F. LAUBENHEIMER

Télex : Facors 692 166 F

LAUBENHEIMER

ROMAN

file (19)

American School of Classical Studies
54 Swedias Street, Athens 140, Greece

January 7, 1982

Dear Letty,

I enclose a copy of a letter I received too late to tell the lady not to come. The office was closed on the day she had to come, in fact it was being painted, which made something of a problem since the doorbell can't be heard in my office. M^{lle}. Laubenheimer (pronounce in French) came with her husband; he has another name, which I don't seem to have kept.

Her letter enclosed a lot of offprints, by means of some of which I could identify "Gaulois 4". I offered her P 11936 (not in your list as I have it) and SS 2475 (example of your Type 18). The former she said was an interesting example of an African jar quite closely related to her Gaulish class. It was the latter that really rang the bell, SS 2475. She was sure it is an example of Gaulois 4, and was much excited to find it so far afield. It seems it was ~~John Hayes~~ who had told her there was one here. *No, she says it was Pausanias.*

She and her husband took notes and measurements. They asked if they might take photos, but I said it is in your book, and should await your permission. They want also to have a sample of clay analyzed. I said they should apply to the Agora Excavations for this, and for prints of existing photos. There is now quite a file of sample-taking and the attendant correspondence kept by the Records dep't here, now in charge of Margot Camp (John's sister). Applications to the Archaeological Service for permission to take the samples has to go through Mrs. Sakellarakis, who has her office with us.

I told these people - the French couple - that for anything about SS 2475 to appear in print, it would be necessary for them to have your permission. I think they are in contact with you, have at any rate exchanged offprints. Write to Margot, if you do not want them to have prints, or a sample tested. Write to me, if you would prefer to have some other action on such matters in the future. It is interesting to think of this jar coming from France; but it does take time, and I don't have too much.

Copy to Margot Camp for the Agora.

Also copy to Laubenheimer.

You will have been sad to hear of Jack Caskey's death. He had been here in the summer, but looking very badly. He is much mourned by his stepdaughter; he was a stepchild himself.

Call by F. Laubachman (in French)
and her husband with another name

See the letter of 15. XII . 81

She called this a.m., on 11.30. Calatagan
not in action, but full of painters on their results.
She had a bound-up book.

The Gaulois 4 shape is illustrated ^(more) in one
of the articles of which she has given me photographs
"Analysed a Typogr. study of Gallo-Rom workshop
producing amphora & to one of Narbonne." (group
signature; see fig. 5 & 6.

I see she says Pavella

It seems to have been John Hayes who told
her we had one of these jars. This turns out to
have been SS 2475, top of a stamped jar, which
is an ex. of ELW Type 18. (Kept in top of cabinet
containing Latin stamps.)

I showed them also P 11936 as the vessel,
& she & her husband remarked on its similarity
with Gaulois 4, but said - 9 miles - that it came
from Africa.

They measured SS 2475 roughly, and will
ask for photos, also a bit for letters. I sent
to write to "Agon Excm." I said ELW has this
in her full copy book, & any case I'd want

be permitted by her. (P 11936 is not in the list -)

I left the bank among the anphoras alone. I had also Lili Marangon with a student, Demetris Kokonios. It is holiday for the office here. I am paying 1000 dr. for a car to bring me down & take me home. I was not free of them called before 2:15.

GROUPE D'ARCHÉOLOGIE NUCLÉAIRE D'ORSAY-SACLAY

C. S. N. S. M. BATIMENT 104
91406 CAMPUS ORSAY

Tél. : 941-52-39
Secrétariat 941-52-33

FL/MV

ORSAY, le 15th December, 1981

Miss V. GRACE
American School of Archaeology
at Athens
SOUIDAS 54
ATHENES - GRECE

Miss Grace,

Our group of research is interested in Gallo-Roman amphoras. We have actually discovered about fourty workshops in south of France, Stamps are not very frequent on these amphoras, but the production is composed of several different shapes. A typology is in progress. Neutron activation analysis made in the laboratory help to determine the composition of clay in each workshop. Then, by analytical comparison, amphoras discovered in the Roman Empire, can be connected with their origin. Actually, places along the limes in Germany and Britain, large markets like Ostia are studied.

It is not impossible that Gallic products have been traded in Eastern Mediterranean countries, like Greece. C. Panella in her publication about amphoras from Ostia says that one Gallic amphora (Gauloise 4 type) have been discovered at the Agora of Athens. I would like very much to know your opinion about it, and verify whether such a trade is attested.

I expect to come to Athens during the last week of december. My friend Antoinette Hesnard gave me your address and telephone number. So, if your don't mind, I shall call you in a few days.

Looking forwards the pleasure of meeting you,

I remain sincerely yours,

F. LAUBENHEIMER

known in French
Flaubenhe

Margot

GROUPE D'ARCHÉOLOGIE NUCLÉAIRE D'ORSAY-SACLAY

C. S. N. S. M. BATIMENT 104

91406 CAMPUS ORSAY

Tél. : 941-52- 39

Secrétariat 941-52-33

FL/MV

ORSAY, le 12 Janvier 1982

Miss V. GRACE
American School of Athens
Sovidas 54

ATHENES - GRECE

Dear Miss Grace,

Notre visite à l'Agora d'Athènes a été très enrichissante et nous vous remercions pour l'accueil que vous nous avez réservé.

Je vous serai très reconnaissante si vous pouviez m'adresser une photo du col de l'amphore n° 10747 SS 2475, timbrée T.V.P., et une photo du timbre. D'autre part, j'ai remarqué dans les réserves une amphore complète n° P.18000, qui correspond parfaitement à la forme Gauloise 4. Une photo et des renseignements tels que sa hauteur totale, son diamètre maximum, sa datation me seraient très utiles.

Je ne pense pas que le n° P.11936 soit d'origine gauloise, il serait intéressant néanmoins d'en avoir une photo.

Enfin, j'ai remarqué une série d'amphores à fonds plats, que je ne connais pas : P 11934, 12483, 21147, 9831, 243, 11957, 22112, 11747, 8262, 7590, pourriez-vous me renseigner à leur propos et éventuellement m'adresser une photo à titre d'exemple ?

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J'adresse une lettre à Misses Will pour l'informer du résultat de notre visite à Athènes.

Encore une fois merci de votre accueil.

Recevez l'expression de mes respectueuses salutations.

F. Laubenheimer
F. LAUBENHEIMER

Call by M. Empereur
in connection with
ELW's publs

ELW may certainly keep in her calendar all
the stuff for Delos she has worked on.

M. Empereur is going to prepare a ^{not on publication} Memore
on ~~the~~ all inscriptions found in Delos since 1974
(his visit), also all found in Argos, other
French sites, and Thasos all that are not
Thasian. For April 1982

Many ^{4 or 5 every year} persons from France - Italy - Spain
who visit Delos and ask for permission
to publish the Latin stamps (as well as the
Pompeian). They get permission from the Service
to visit the resources. They are passionnés
de Delos.

It is Picard, as new director, who will reply to
ELW.

We also looked at some photo of jars
he has from Alsip; some we already had
on file; saw nothing special that was new.

HAT joined us before M. E. left
and saw Lally's letter to Amoury, and
heard the above notes in M. E.'s presence.
He was relieved and urged presence.



*Photostats given to me 25-VI-81
after I looked at the original*

The Commonwealth of Massachusetts
University of Massachusetts
Amherst 01003

DEPARTMENT OF CLASSICS
Herter Hall

Telephone:
413/545-0512

June 17, 1981

Dear Homer,

I can't tell you how much I appreciate your taking time to write me in the midst of such a busy time there in Athens. I wish so much that I were there with you all.

I have written M. Amandry, explaining the reasons for my having put off submission of the manuscript in its final form. As you perhaps remember, my uncertainty about Type 1, the Greco-Italic jars, was intensified last summer when I began to get ultimate thoughts in order, not only for the introduction to the Agora catalogue but also for the Greco-Italic article which I am writing for the impending Hesperia issue in honor of Virginia and Dorothy. I wrestled with the topic all summer, during January, and during spring vacation. I am finally satisfied that I have solved the chief problems, but the whole matter has delayed submission of the final form of the manuscript, since an adequate treatment of the earliest type of Roman amphora simply had to precede publication of the book. The Greco-Italic text is now essentially complete, though I need to check some jars I have never seen in Syracuse, Gela, Majorca, and Ibiza before I send the article to Marian in August. I am going to make a short trip to those sites in July and then get the article to Marian by the August 15 deadline.

It will of course be very bad if M. Amandry allows Empereur to publish the Delos material without reference to my work. Not only would my catalogue and plates have to be rearranged but the Delos material would also be presented in an unfavorable light, since it would lack the chronological frame provided by the Agora and to some extent by Cosa, the Portus Cosanus, and Populonia. Except for the most recent finds, there is next to no contextual evidence from Delos that throws light on the dates of the Roman amphoras. It was for that reason that the French agreed to combining the Agora and Delos material. In addition to the chronological problems, Empereur would also be at a disadvantage in that he would not know how I planned to refer to individual pieces. He may not care, as I have heard he is a member of that Marxist group that includes Manacorda and Carandini in Italy. They see history in terms of Marxism, and what they publish is supposed to show the abuses of capitalism. Stamped amphoras, with their preponderance of slave-names in the Roman period, are grist for their mills. (You perhaps recall my distress

- 2 -

over the inaccuracies and distortions in Manacorda's article on the Portus Cosanus.) It seems to give the group particular pleasure to infiltrate American sites and publish finds out from under the excavators. In the case of Cosa, there was even unauthorized use of maps and photos. I mentioned some of those matters to you. I hope I do not misjudge Empereur, whom I have not met, but his tactics seem to parallel those of Manacorda. I would even so be glad for him to refer to any of the Delos pieces in his publications, if he needs to do so. I see no harm in that, as I wrote M. Amandry. But it would be desirable that whatever he said agreed with what I have said. I don't want to have to write another article like the reply to Manacorda in JFA 1979.

M. Amandry is such a nice person, and I do understand his concern, which is doubtless intensified by the pressures brought to bear by Empereur and another amphorist in the same group, someone who may now be in Athens, Antoinette Hesnard. She too, like Manacorda, is a careless scholar. Those pressures aside, I would have thought that the Greek material's publication would be of even more concern to M. Amandry than that of the Roman pieces. Is he threatening withdrawal of permission to publish the Greek pieces? If not, why are the Roman jars and fragments being singled out? *Because there is now a lot of work up Roman stuff.*

Oh dear I have not heard from Virginia about these matters, but will write her in connection with sending her the preliminary text of the Greco-Italic article. I do appreciate, Homer, your never-failing help and interest, which have kept me going more than you can ever know.

With my very best wishes for a wonderful summer to you and to Dorothy, to whom please give my love (also to Alison, if she is there),

Yours,

Litty

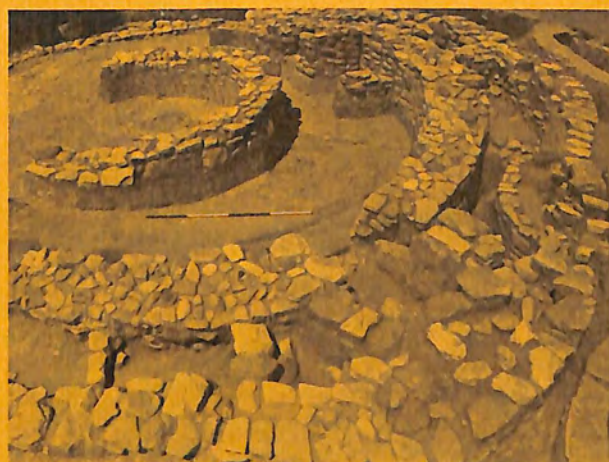
Elizabeth Lyding Will

I think pressure does not come from Empereur.

WILL

35

Journal of Field Archaeology



Volume 6
Number 3
Fall 1979

Published quarterly by
Boston University
for
The Association for Field Archaeology

The Sestius Amphoras: a Reappraisal

Elizabeth Lyding Will

University of Massachusetts, Amherst

The Sestius amphoras, because of their number and variety and the questions they suggest about Roman trade, are increasingly a matter for discussion. The following article first summarizes the work done on the subject since 1952 and then reviews the evidence, both published and unpublished, concerning the provenience of the Sestius amphoras, the persons responsible for their manufacture and distribution, and their importance as sources of information about Roman economic history.

The Background

The middle of the 20th century marked something of a turning-point in Roman archaeology. Trends emerged that were to accelerate in importance during the third quarter of the century; for example, underwater archaeology came of age with the initial work at the Albenga wreck off the Italian Riviera in 1950 and the more thorough excavation, begun in 1952, at the Grand Congloué site off Marseilles. At the same time, and partly as a result of underwater work, coarse wares of several kinds attracted more scholarly attention than had previously been the case. In particular, Roman commercial amphoras, which up to that time had been largely ignored or had at best been viewed as a sub-field of epigraphy (the trademarks on the jars having attracted scattered attention), suddenly became of general, even popular, interest. Shipping amphoras were found by the hundreds at Albenga and off the Grand Congloué, and the story has been repeated again and again with the exploration of other wrecks. Such trends have helped to stimulate Roman field archaeology, which for its part has helped to raise the initially rather low standards of exactitude of underwater archaeology. The Sestius amphoras, first recognized as a group at the Grand Congloué, well illustrate the archaeological value both of underwater research and of the study of mass-produced coarse wares.

Off the Grand Congloué rock, lying 10 miles east of Marseilles at the far end of a chain of islands, divers led by Jacques-Yves Cousteau found a pile of ancient pottery. Among several types of commercial amphoras, far the largest group consisted of well over a thousand wine jars stamped on the rim with what appeared to be the trademark SES (FIG. 1). Cousteau's invention of the Aqualung and the relative mobility with which the

divers were consequently able to pursue the excavation caught the interest of archaeologists and public alike. There were frequent accounts in the press and published comments by both archaeologists and divers on the date of the find (for it was identified as a single wreck) and



Figure 1. Sestius and Sestius-type amphoras (Will Type 4a: Dressel Type 1A). a.) Sestius amphora from the Grand Congloué wreck. H. 1.05 m. Stamped on the rim: SETS anchor. Photo courtesy Fernand Benoit. b.) Sestius amphora from the Ile du Levant (collection P. Mergier, Paris). H. 1.02. Stamped on the rim: SETS anchor. Originally published in Will, op. cit. pp. 228, 234-5 (in note 6). c.) Unstamped Sestius-type amphora from the Agora Excavations, Athens (P 8106). From Deposit C 9:7 (end of the 2nd century B.C.). H. 1.05 m.; see note 25.

on the meaning of the "SES" stamps. The French archaeologist in charge of the excavation, Fernand Benoît, initially assigned a date of about 200 B.C. to the wreck and suggested that the letters SES should be interpreted as an abbreviation of the *nomen* Sestius.¹ Benoît, noting that the Grand Congloué Sestius stamps in all cases included nautical symbols in the shape of an anchor or a trident, sought to argue that "Sestius" was a shipper and that a certain Marcus Sestius of Fregellae, a trader mentioned in an early 2nd century B.C. inscription found on Delos, might have been the owner of the ill-fated ship, which, after leaving Delos, picked up cargo in Sicily and Campania before the disaster off southern France. The Italian archaeologist who had directed work at Albenga, Nino Lamboglia, suggested a date of 160-150 B.C. for the Grand Congloué site, on the basis of the dates of the Campanian ware found in the excavation.² Meanwhile, Cousteau was arguing that the wreck and its cargo should be dated 230 B.C.,³ and an archaeologist on the

diving team, Ferdinand Lallemand, proposed a date of 145 B.C.⁴

Disagreements about the date of the Grand Congloué continued. The French epigraphist and historian, Émile Thevenot, was the first to suggest the reasonable approach of dating the Sestius amphoras by comparing them with similar finds on land. Having done this, M. Thevenot concluded that the Sestius amphoras should be dated, on the basis of similar finds in France and Switzerland, in the 1st century B.C., quite possibly as late as, or even later than, the middle of the century. He felt that juxtaposed wrecks and the ingenious but admittedly unscientific use of the suction pipe in the excavation might explain the wide variety of dates assignable to the Grand Congloué finds. Thevenot further suggested, on the analogy of the frequent occurrence of Sestius stamps on Arretine ware and on bricks, that the Grand Congloué Sestius trademarks probably referred to the potter rather than to the shipper.⁵

My own research corroborated M. Thevenot's. Referring to the closely-dated Roman amphoras found in the excavations of the Athenian Agora, I argued in 1956 that, on the basis of Agora contexts, the Sestius amphoras, which belong to my Type 4a (an early form of Dressel's Type 1, in the well-known typology in *CIL* XV), should probably be dated in the first half of the 1st century B.C., or at any rate not much earlier than the last years of the 2nd century.⁶ Regarding the identifica-

allowed to disappear from the Grand Congloué literature. It is in some ways the most candid and informative report thus far of the excavation. His description of the ship's "entire hull and decks" as lead-plated (p. 16) suggested as early as 1954 that wrecks had been superimposed at the site, the upper hull having been misinterpreted as a deck, which would not require lead-plating.

4. Lallemand wrote a fictional log of the journey of Marcus Sestius, hypothetical grandson of the Marcus Sestius mentioned in the Delian inscription, from Delos to the Grand Congloué: *Journal de bord de Maarkos Sestius* (Paris: Éditions de Paris, 1955).

5. Thevenot's two chief discussions, models of scholarly care and brevity, were, "Les importations vinaires en pays bourguignon avant le développement de la viticulture," *RAECE* 4 (1953) 234-239, and "La marque d'amphore 'Sesti,'" *ibid.* 5 (1954) 234-243. See especially pp. 241-242 of the second article.

6. E. L. Will, "Les amphores de Sestius," *RAECE* 7 (1956) 224-244. The article was written rather hesitantly and not at all in the polemic spirit alluded to by Fausto Zevi, "Appunti sulle anfore romane," *Archaeologia* 18 (1966) 213. On the other hand, if Thevenot and I had not questioned Benoît's theories, it is likely that the Grand Congloué wreck would still today be dated a century too early (as indeed it is by some). I had been consulted by the French in December, 1952, about the date of the wreck and had sought to persuade M. Benoît by letter and by a visit to Marseilles that, on typological grounds and on the basis of a context (C 9:7) at the Agora Excavations in Athens, the

tion of "Sestius," I described five Sestius stamps from Cosa in Etruria and noted that more such stamps had been found at Cosa than at any other site on land. I pointed out that Publius Sestius, the friend of Cicero, defended by him in 56 B.C., owned a villa at Cosa. I wondered if, since his son, Lucius Sestius Quirinus, was known to have manufactured *tegulae*, Publius Sestius himself might also have possessed a pottery in which he made amphoras for the storing and shipping of the produce of his estate. I reiterated Thevenot's suggestion that the Grand Congloué wreck was not a closed context and argued that several wrecks might well have occurred off so dangerous a spot as the Grand Congloué.

Thevenot's and my suggestions received an understandably mixed reaction.⁷ Time is, however, proving

Sestius amphoras were being given too early a date. Zevi is quite wrong to say (p. 213, note 15) that my principal argument about the date was not based on typological considerations. I discussed typology throughout the 1956 article (esp. pp. 232-240), and consider Type 4a to be a later development of the "Greco-Italic" amphoras (Type 1 in my classification). Types 4a and 5 (which Lamboglia called Dressel 1A and 1C) both date from the late 2nd century to about the middle of the 1st century B.C. Both types are well represented at Delos, where Roman occupation had all but ceased by the middle of the 1st century B.C., but are not represented at Corinth (refounded in 44 B.C.). Type 4b, which developed out of Type 4a and can be distinguished from it on various grounds but particularly by the fact that its rim is more vertical in profile, dates from the second quarter of the 1st century B.C. down to the Augustan Age. Lamboglia called this type Dressel 1B. Late Sestius stamps (see below) occur on Type 4b.

7. In addition to the responses of Benoît and Lamboglia (above, notes 1 and 2), scholars from several different countries ranged themselves on one side or the other. The German archaeologist, Otto Uenze, was enterprising enough to visit Cosa, among other sites, and to ascertain at first hand the abundance of "Dressel 1" fragments visible in the area. See his publication, *Frühromische Amphoren als Zeitmarken im Spätlatène* (Marburg/Lahn: N. G. Elwert Verlag, 1958). One might question Uenze's (and Lamboglia's) efforts to overemphasize the chronological implications of rim-profiles. At any rate, Uenze was one of the first to accept the suggestions both of a later date for the Sestius jars and of the likelihood of superimposed wrecks at the Grand Congloué (pp. 10, 14, 16-17). Other scholars also accepted the later date: Michel Labrousse, in Georges Fouet, "Puits funéraire d'Aquitaine: Vieille-Toulouse, Montmaurin," *Gallia* 16 (1958) 124-153; cf. *ibid.*, 20 (1962) 577; though Labrousse felt the new Sestius stamps he presented from Vieille-Toulouse might, since the symbols on them were different from those on the Grand Congloué jars, be later in date for that reason (they were from contexts of 50 B.C. or later); H. T. Wallinga, "De Geschiedenis van de antiekes Koopvaardij en de onderzeese Archaeologie," *Tijdschrift voor Geschiedenis* 71 (1958) 332-348; and Maria Pilar G. Serrano, who summarized Thevenot's and my articles in "Anforas romanas con la Marca 'Sestius,'" *ArchEspArq* 33 (1960) 113-122.

In the mid-60s, a tendency to question the later date asserted itself, especially in the work of Jean-Paul Morel, who, in *Céramique à vernis noir du Forum romain et du Palatin* (Paris: E. de Boccard, 1965) 26-27, noted the disconcerting mixture of dated material in the wreck and diplomatically sought a compromise-date of about 160/150 B.C. He

that our major assumptions were correct. The date for which we argued, the probability of juxtaposed or superimposed wrecks, the likelihood that Cosa was a center of manufacture for the Sestius jars, and that P. Sestius or his father, or at any rate the Sestius family, owned the pottery: all these suggestions grow in strength as time passes. Let us go on to examine the current state of the evidence about the provenience of the Sestius amphoras and the ownership of the pottery where they were probably manufactured.

The Provenience of the Sestius Amphoras

Finds at Cosa, at the Agora Excavations in Athens, and in southern France combine, in the case of the Sestius amphoras, to show the interdependence of un-

added that his date was "un moindre mal" and that the Grand Congloué deposit could no longer be considered securely dated. I have not been able to consult Morel's most recent publication, cited in the Manacorda article mentioned below, p. 126, note 13. Zevi, *op. cit.* (in note 6), also tried to avoid questioning the single wreck theory by suggesting that amphoras of "Dressel 1" could be dated perhaps as early as 129 B.C. and as late as 13 B.C., though he admitted the earliest securely dated dipinto on the type was 102 B.C. (*CIL* I².2.699, 700; XV.2.4554, 4555).

New information about the Sestius amphoras became available in the mid-70s, and on the basis of it Thevenot's and my later date for the upper wreck and my view that Cosa was a major production-center for the Sestius amphoras are being confirmed. My own work at Cosa began in 1974, and meanwhile a number of new Sestius finds were being made in France, especially along the Rhône and in the Gallic isthmus north of the Pyrenees. Two articles by the French scholar Yves Roman are of particular interest: "La place du couloir rhodanien dans la diffusion des amphores de Sestius," *RAECE* 25 (1974) 125-136, and with Guy Rancoule, "Les amphores de Sestius de La Lagasté (Aude) et de sa région," *Revue archéologique de Narbonnaise* 10 (1977) 247-261. Over two dozen Sestius stamps have now been found in the Gallic isthmus; they suggest a date toward the middle of the 1st century B.C., as do several finds in the Rhône valley. Like Labrousse (above), Roman seeks to establish a chronology for the Sestius stamps, making some older than others. I agree that the Sestius firm had a long life, but I am not sure that we can be more specific at this time.

A recent addition to the Sestius literature reports a chance find of Sestius stamps in the Portus Cosanus, near the site of Dr. Anna Marguerite McCann's excavations under the sponsorship of the American Academy in Rome. See Daniele Manacorda, "The Ager Cosanus and the Production of the Amphorae of Sestius: New Evidence and a Reassessment," *JRS* 68 (1978) 122-131. Bulldozing and leveling operations beside the parking lot on the beach at Ansedonia, at the foot of the hill of Cosa, extended the parking area in 1976, and not far from "Puccini's tower," several finds of Sestius stamps were made. Manacorda's article reports one such find, which consisted of 26 stamped pieces. Such chance finds come as welcome corroboration of the discoveries in the excavations done by the American Academy, as reported by me in two papers at the National Meetings of the Archaeological Institute of America, "The Sestius Amphoras from Cosa" in 1974 and "New Light on the Sestius Question" in 1975.

derwater and dry-land archaeology and to prove the "global" (in the sense of the Roman world) scale on which the evidence must be sought.

Study of the Roman amphoras found at Cosa commenced in 1974.⁸ Over 2,300 Roman amphoras and fragments have been found in the town and in the lagoon and outer harbor at the foot of the hill on which the town was built. Analysis of these finds was completed in the winter of 1979. Almost half the finds at Cosa belong to Types 4a, 4b, and 5: Dressel 1A, 1B, 1C (see note 6). "Greco-Italics" (notes 1 and 6) number 215. These figures do not include Stephen Dyson's finds in his survey of the Ager Cosanus.⁹ Whether or not Roman amphoras were regularly stamped (a matter about which we know as yet too little), most of the finds at Cosa are fragmentary; therefore it should come as no surprise that only 312 Roman amphora stamps have been identified (201 on the hill and 111 in the port). A surprise lies, however, in the realization that Sestius stamps account for 43% of the Cosa totals. The figure is twice as dramatic if the port alone is considered, for 86% (95) of the stamps found in the port as of 1978 are Sestius trademarks. While only 20% (41 of 201) of the stamps from the hill bear the Sestius mark, that figure is also a very high concentration for a single site. On land, similar concentrations of a single stamp are found only at great centers of trade (such as Delos or Alexandria) or near areas of manufacture (such as Brindisi).¹⁰ Since Cosa was apparently not an entrepôt, and since the figures for Cosa, and especially for the Portus Cosanus, are so high, we have strong circumstantial evidence that a factory for the manufacture of Sestius amphoras existed near Cosa, quite probably in the area of the port.¹¹ Ninety-five of the 136 Sestius finds at Cosa come from the port; and whereas it might be argued that Sestius

8. Cf. E. L. Will, "The Ancient Commercial Amphora," *Archaeology* 30 (1977) 270. I am greatly indebted for their kindness and interest to Professor Frank E. Brown, who has directed the excavations of Cosa since 1948 and who suggested that I prepare the Cosa amphoras for publication, and to Dr. Anna Marguerite McCann, director of the excavations of the Port of Cosa. The Port publication, an effort of 22 specialists, is nearing completion.

9. See Stephen L. Dyson, "Settlement Patterns in the Ager Cosanus: the Wesleyan University Survey, 1974-1976," *JFA* 5 (1978), 251-268. The amphoras will be discussed in a separate publication of the finds of the survey.

10. See E. L. Will in *Year Book of the American Philosophical Society* (1962) 649-650, and Benita Sciarra, "Ricerche in contrada Apani, agro di Brindisi," *Ricerche sulle antichità romane* (Rome: École française de Rome, 1972), 29-34.

11. As suggested in Will, 1974 op. cit. (in note 7). The limited American Academy excavation, planned for 1975 and announced at that time, of the Sestius deposit subsequently explored by Manacorda (see note 7) did not in fact occur.

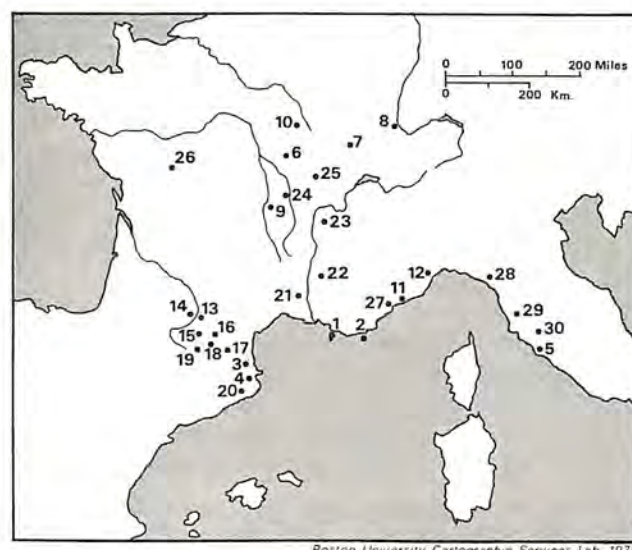


Figure 2. Distribution of verified Sestius amphoras as of 1979. Redrawn from sketch map by E. L. Will (revision of map in Will, op. cit. [in note 6] 226, which contained only sites 1-13). 1. Grand Congloué. - 2. Ile du Levant. - 3. Ruscino. - 4. Ampurias. - 5. Cosa. - 6. Mont Beuvray. - 7. Besançon. - 8. Basel. - 9. Lezoux. - 10. Alise-Sainte-Reine. - 11. Ventimiglia. - 12. Vada Sabatia. - 13. Vieille-Toulouse. - 14. Toulouse. - 15. Pamiers. - 16. La Lagaste. - 17. Peyrepertuse. - 18. Le Carla à Bourège. - 19. Mayné à Bélesta. - 20. Torroella. - 21. Nîmes. - 22. Nyon. - 23. Vienne. - 24. Roanne. - 25. Tournus. - 26. Poitiers. - 27. Cap Roux. - 28. Luni. - 29. Volterra. - 30. Saturnia (?).

finds vis-à-vis finds of other trademarks are higher in the port than on the hill because the hill had a longer life span than the port, which all but ceased to function at some point in the 1st century B.C., the much greater numbers of Sestius stamps in the port are striking.

The likelihood that Cosa was a manufacturing-center for Sestius amphoras is increased if we realize that, as of 1977, only 58 Sestius stamps had been found at other sites on land (FIG. 2) and that these were scattered among some 30 different sites in Italy, France, Spain, Switzerland, and possibly even Germany, Austria, and Greece (see below). Excluding the Grand Congloué, 194 Sestius stamps have been reported, and Cosa accounts for 136 of them, or 70%. The Gallic isthmus north of the Pyrenees has produced another 12% (see note 7). The possibility that the area was a secondary manufacturing-center suggests itself; but if we remember the hundreds of pieces at the Grand Congloué, the relatively few finds in western Europe seem more likely to be imports than exports. Future finds in the Gallic isthmus will be watched with interest.

The striking concentration of Sestius stamps at Cosa suggests that it may have been a major center, and perhaps the only center, of manufacture of the amphoras. There is also epigraphical evidence that points in the

same direction. The letter-shapes and the devices or symbols on the Sestius trademarks show great variety. The subject is a complicated one and will be addressed in more detail in my final publications; but it is important to note here that most of the chief letter- and symbol-variations occur at Cosa. It might be added that, except in the case of the late Sestius stamps to be treated below, no particular chronological conclusions seem capable of being drawn on epigraphical grounds. All varieties seem to occur on Types 4a or 5 (Dressel 1A and 1C), which were contemporary (see note 6).¹²

All Sestius stamps include, except when they are broken or otherwise mutilated, a symbol or device or logogram usually placed after one of several possible abbreviations of the name Sestius (FIG. 3). The anchor and trident symbols occurred on the Grand Congloué stamps and are found at other sites as well, but more than a dozen other devices are known, of which the double axe, palm branch, caduceus, and five-pointed star, in that order, are the most important.¹³ All but one of the devices (the nautical hook, found at Nyon) have been found at Cosa. Some devices occur only at Cosa. Of these, an intriguing and previously unpublished example is shown in Figure 4. I initially interpreted it as a

12. Lists of the known varieties of Sestius stamps are out of date almost as soon as they are issued. For the most complete early listing, see Thevenot, 1954 op. cit. (in note 5) 235-236. That list was brought up to date by Labrousse in 1958, op. cit. (in note 7) 148-151, and by Benoit in 1961, op. cit. (in note 1) 66. Most recently, the task has been attempted by Yves Roman and Guy Rancoule, op. cit. (in note 7) 259-261. That list, however, lacks the new finds reported by Manacorda, op. cit. (in note 7) 127, note 18. It also fails to mention the finds at Ampurias (Will, op. cit. [in note 6] 229, note 4), at La Graufesenque (Benoit, op. cit. [in note 1] p. 66), and the second of two stamps at Ventimiglia (Lamboglia, 1955, op. cit. [in note 2] fig. 14). Roman's close attention to rim heights is valid insofar as it facilitates to some degree the process of distinguishing between Types 4a and 5 (Dressel 1A and 1C). The rim of Type 5 is usually, though not always, higher than that of Type 4a. More important, however, is the diameter of the mouth, the opening measured at the top of the rim. Amphoras of Type 5 have a very narrow mouth diameter (0.10-0.12 on the average), whereas those of Type 4a have wider mouths (ca. 0.14-0.16). In general, diameters or estimated diameters of mouths are perhaps the most useful of all criteria in distinguishing among the various types of Roman amphoras.

13. If the Grand Congloué finds are included in the totals, the anchor and trident symbols outnumber all others, at this writing. Excluding the Grand Congloué, 11 examples of the anchor have been found at Cosa and 6 (if the readings are correct) elsewhere. Fourteen examples of the trident have been found at Cosa; otherwise that device occurs only at the Grand Congloué. If the Grand Congloué finds are not included, the double axe, in various dies, is the commonest Sestius device; 13 examples have been found at Cosa, 10 elsewhere. Some other figures are: palm branch, Cosa 11, elsewhere 12; caduceus, Cosa 14, elsewhere 4; five-pointed star, Cosa 3, elsewhere 9; eight-pointed star, Cosa 6, elsewhere 2. These figures do not include instances where the same symbols are found without the letters of the name Sestius.

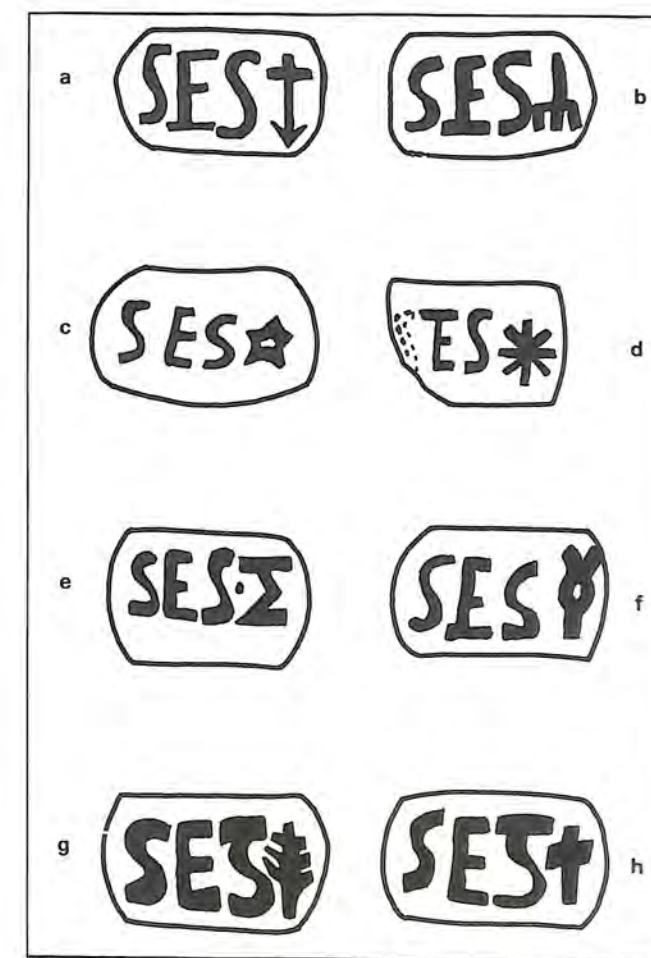


Figure 3. Representative Sestius trademarks from Cosa and the Portus Cosanus, with width and height of stamps. All stamps occur on rims of amphoras of Type 4A (Dressel 1A). a.) (SETS anchor). PC 72-809. W. 0.026 m.; H. 0.015 m. -b.) (SETS trident). PC 76-6. W. 0.025 m. H. 0.015 m. -c.) (SES 5-pointed star). CB 1746. W. 0.026 m. H. 0.015 m. -d.) (SETS 8-pointed star). PC 75-1. P.W. 0.022 m. H. 0.016 m. -e.) (SES sigma, or TIVS?). CG 501. W. 0.026 m. H. 0.017 m. -f.) (SETS caduceus). PC 69-179. W. 0.026 m. H. 0.015 m. -g.) (SEST palm branch). PC 76-1. W. 0.028 m. H. 0.016 m. -h.) (SEST double axe). C 69.214. W. 0.028 m. H. 0.017 m. Scale 1:1

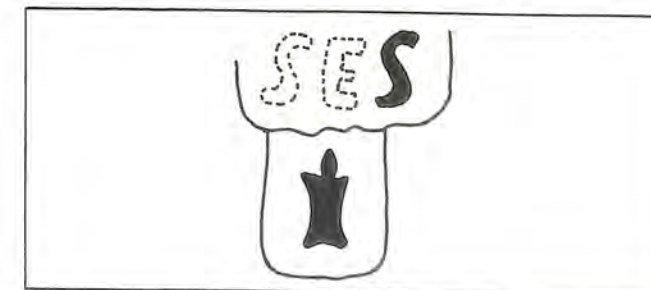


Figure 4. Unique Sestius trademark from the Portus Cosanus. SES lighted altar (?). PC 69-6. W. of upper stamp, 0.028 m. P.H. 0.015 m. W. of lower stamp, 0.018 m. H. 0.023 m. On the rim of an amphora of Type 4a (Dressel 1A). The same device also occurs without the letters on other pieces at Cosa.

lighted altar or a rudder, but I wonder now if it might be the blade of a *sarculum*, a vineyard hoe.¹⁴ The Sestius symbols seem to be important. They perhaps have more meaning than the letters themselves; indeed at Cosa they frequently occur without the letters. They stand alone, apparently readily recognized, like the Mercedes-Benz three-pointed star, the Mobil Oil Company Pegasus, or London Transport's divided circle. Whether the Sestius devices refer to a particular potter or pottery or estate or inspector or year, among other possible interpretations, their variety is best exemplified at Cosa.¹⁵

The abundance of different kinds of devices, which do not seem, at least at present, to be obviously explicable, is matched by variations in the shapes and sizes and ligatures of letters used to abbreviate the name Sestius. Here, again, the chief variations occur at Cosa. Almost all Sestius stamps employ ligatures. Only those with quite small letters, and perhaps not all of those, show the letters SES unjoined in some way.¹⁶ The added

letter is always a "T" (FIG. 3 where, however, the "sigma" in example "e" may be a ligature of "TIVS"). Sometimes we find the "T" added to the second "S" of SES. This always occurs when the device is a double axe or a palm branch. Sometimes the "T" is joined to the "E," extending to the left either its top cross-bar, as when the device is, for example, the eight-pointed star, or its bottom cross-bar, as in the important anchor, trident, and caduceus stamps.¹⁷ Two known anchor-examples also show a ligature of "T" with the second "S," though it is possible that the symbol here is a *bipalium* (long-handled foot-rest spade), not an anchor (see note 14). The chief classes of ligatures, here outlined, all occur with different shapes and sizes of letters, an observation which the number of examples at Cosa makes possible. Such variations doubtless represent the number of different stamping-matrices one would expect to find in a pottery capable of worldwide distribution and capable of producing a shipment of amphoras the size of that found off the Grand Congloué.¹⁸ The variety of shapes, sizes, and ligatures of the letters are also, as in the case of the motifs or symbols, apparently without chronological or geographical significance, as far as our present knowledge is concerned. Proper attention to these matters would require close study of rubbings of the stamps of all known Sestius pieces, as well as analysis of clay-samples. The subject is now so complicated that the attentions of a specialist in Sestius matters seem indicated. Roman amphoras, one hopes, will one day be as rigorously studied as Arretine or terra sigillata.¹⁹ There is little doubt, however, that specialized study of the Sestius amphoras would have to be centered at

Cosa, and the epigraphical evidence would only be one aspect of such study.

In addition to the number and the variety of Sestius finds at Cosa, mineralogical tests of the Sestius clay suggest, albeit in a preliminary way, a connection with the region around Cosa. Further testing is projected for the summer of 1979. Such tests would have to be able to connect the Sestius clay or clays with a clay-deposit near Cosa, in order to prove a connection with Cosa. Clays were, and still are today, imported, for fakery and other purposes, but one can hardly imagine that that would be the case with mass-produced coarse ware. Even clay-testing, however, has some pitfalls, since variations in firing atmosphere and temperature can result in considerable variation in color even on the same clay. It is also apparently true that one clay bed can consist of different varieties of clay, depending on the amount of rainfall when each layer of clay was formed.²⁰ It is, therefore, all the more striking to note that, even to the eye, testing aside, the clay of the Sestius amphoras is of remarkable uniformity. That statement is based on the collection at Cosa (70% of the whole), on some possibly related pieces at the Athenian Agora (see below), and on my memory and notes about the Sestius jars I saw in 1955 at the Musée Borély in Marseilles, where the finds from the Grand Congloué are stored. I have not seen any other Sestius pieces. Sestius clay, on that basis, can be described as coarse, micaceous, very sandy pinkish-buff clay containing conspicuous red pottery bits (Munsell 5YR 6/6). In the sand, black grains are especially obvious. A sandy, lighter colored surface wash covers the outside of the amphora. That surface is sometimes missing, in which case the amphora has a pinkish to reddish color, as did the jars in Marseilles. The clay is identical in appearance with that of the abundant Greco-Italic finds that occur at Cosa (see paragraph 2 of this section and notes 1 and 6) and also with that of a third type of jar, a variant of my Type 16, which is the

equivalent of Dressel's Types 7-14 (see Zevi's article cited in note 6. Dressel's jars apparently brought *garum* (a fish sauce) to Rome from Spain ca. the 1st century A.C., a date with which Athenian Agora contexts agree).

The uniformity of the Sestius clay and its similarity to the clay of other types of jars commonly found at Cosa lends credence to the hypothesis that Cosa may have been in a major amphora-producing region, one in which mass-production was highly organized, as the Sestius stamps also suggest, and had reached the stage of standardization. Mineralogical tests, while not yet conclusive, also suggest methods of manufacture that one would expect to be characteristic of large-scale production and indicate that Cosa could have been a source of the clay used.

Mineralogical tests were performed in late 1975 on a Sestius fragment found that summer on the surface of the Portus Cosanus deposit mentioned in note 11.²¹ Under the reflected light polarizing microscope and the binocular microscope or stereoscan, the minerals in the Sestius fragment proved to be predominantly volcanic in origin. In addition to augite, chromite, volcanic glass sherds, and olivine, the Sestius minerals included an uncommonly large concentration of iron titanium oxides much larger in grain size than the average matrix material. About 1% of the total compositional weight of the fabric consisted of iron titanium oxides, an artificial situation not paralleled in natural environments on earth but closely paralleled in moon rocks. The Sestius iron titanium oxide particles, furthermore, have distinctive characteristics that point to their having been artificially and purposely added to the fabric. First, they are free-standing, not attached to other minerals, whereas in a natural environment other minerals such as olivine would normally be attached to them. Second, they have been uniformly oxidized, whereas normally volcanic material would show a range of oxidation variations. (The uniform oxidation must have been

14. For the lighted altar on coins, cf. M. H. Crawford, *Roman Republican Coinage* (London: Cambridge University Press, 1974) pl. 70, no. 53. For the *sarculum*, see K. D. White, *Roman Farming* (London: Thames and Hudson, 1970) pl. 43. The symbolism of trademarks is often ambiguous, especially to another era, but it is interesting to note that several Sestius symbols could conceivably be interpreted as agricultural rather than (or as well as?) nautical motifs. The trident might be a pitchfork or vine-prop: White, *Agricultural Implements of the Roman World* [Cambridge: Cambridge University Press, 1967] ch. 4. The caduceus might be a mattock hoe: *ibid.* 66-68 and White, 1970 op. cit., pl. 42. The hook might be a vine-dresser's knife: White, 1967 op. cit., ch. 3. The palm branch might be a form of *palus*, or vine-prop: White, *Farm Equipment of the Roman World* [Cambridge: Cambridge University Press, 1975] ch. 2, and 1970 op. cit., pp. 232-237. The double axe could be the *dolabra* or *dolabella*, both of which picks were important in the vineyard (White, 1967 op. cit., 59-66). One form of the anchor resembles the *bipalium* (see text, next paragraph, and *ibid.* 20-23). On the whole, it seems most likely that the Sestius devices trace their ancestry back to coin-types and to the symbols on Greek amphora stamps. The same symbols recur on more modern trademarks. Anchor, caduceus, trident, and star are very common on European porcelain and pottery. Cf. C. Jordan Thorn, *Handbook of Old Pottery and Porcelain Marks* (New York: Tudor, 1947), who makes the point *passim* that the symbols are workmen's marks, though occasionally they identify a pattern (Crown Derby Porcelain, p. 55) or the year of production (in Minton porcelain, the star signifies 1842, the diamond 1857, the arrow 1874, etc., pp. 69-70).

15. See note 14. Devices may also have been used sometimes as inspection-marks, as in the "Tuccius Galeo" series. Cf. E. L. Will, "Two Amphoras from Populonia," in Anna Marguerite McCann, Joanne Bourgeois, Elizabeth Lyding Will, "Underwater Excavations at the Etruscan Port of Populonia," *JFA* 4 (1977) 275-296. On the topic of devices see also Will, op. cit. (in note 6) 240-241. Cf. Crawford, op. cit. (in note 14) 584-589, 878.

16. The smallest, most delicate letters occur with the five- and eight-pointed star and with the sigma. Roman and Rancoule, op. cit. (in note 7) 261, report a five-pointed star with the ligature of "E" and

"T" at Vieille-Toulouse. It might be noted here that the anchor and the trident also regularly occur with delicate, but taller, letters.

17. Many published drawings do not show this ligature, but see the drawings of the Grand Congloué stamps, Benoît, op. cit. (in note 1) 67; cf. Will, op. cit. (in note 6) 229, note 3.

18. There no longer seems to be any reason to question the identification of the Sestius stamps as pottery marks. Cf. Thevenot, 1953 op. cit. (in note 5) 238; *idem*, 1954 op. cit. (in note 5) 238-239; Will, op. cit. (in note 6) 241, etc. The analogies with Roman bricks, dishes, lamps, glass, mortars, and other objects of trade are only too clear. Whether or not the manufacturer of the Grand Congloué jars was also the owner of the lost ship is less certain; the question is addressed in the last section of this article. Whether or not the potter or the potter-exporter was also the winegrower may be called into question by the fact that some of the necks of the Grand Congloué jars contained plaster stoppers stamped L.TITI C.F. (Benoît, op. cit. [in note 1] 52-56). L. Titius is a common signature on Arretine, but the name was not an unusual one.

19. Exact measurements and close comparison of rubbings of the Sestius stamps should make it possible to determine how many matrices were used and thus to estimate, some day, how large the Sestius factory was.

20. On the effects of heat on clay, see Anna O. Shepard, *Ceramics for the Archaeologist* (Washington, D.C.: Carnegie Institute of Washington, 1957) 19-24. See also Frederick R. Matson, "Ceramic Studies," in William A. McDonald and George R. Rapp, Jr., eds., *The Minnesota Messenia Expedition: Reconstructing a Bronze Age Regional Environment* (Minneapolis: University of Minnesota Press, 1972) especially 201-202, 219, and 223. (I would like to take this opportunity to thank Professor Matson for his help and advice over the years.) Heat may even cause the crystallization of new minerals. For a discussion of changes in iron chemistry, and as a result in the colors of ceramics, when clays are fired under controlled conditions, see J. Hess and I. Perlman, "Mössbauer Spectra of Iron in Ceramics and their Relation to Pottery Colours," *Archaeometry* 16 (1974) 137-152. On different kinds of clay in the same deposit, see O. E. Radczewski, *Die Rohstoffe der Keramik, Minerale und Vorkommen* (Berlin, Heidelberg, New York: Springer Verlag, 1968) 103-111.

21. Will, 1975 op. cit. (in note 7). The tests were conducted by Professor Stephen Haggerty of the Department of Geology and Geography of the University of Massachusetts, Amherst. I am indebted to Professor Haggerty for his kindness in performing the tests. For other analyses of Sestius clay, see Thevenot, 1954 op. cit. (in note 5) 238, note 2, where the iron oxide (hematite) percentage is put at 6.60, in the case of a fragment from Alise-Sainte-Reine. From the beginning, Benoît wanted the volcanic minerals in the Sestius clay to prove that the Sestius jars came from Campania, near Vesuvius: cf. "L'archéologie sous-marine en Provence," *Rivista di Studi Liguri* 18 (1952) 254. His position was less clear by 1961; cf. op. cit. (in note 1) 46. But the work of G. Perinet, "Typologie et structure cristalline des amphores de l'épave du Grand Congloué (Marseille)," *Actes du 83e Congrès national des Sociétés savantes* (Aix-en-Provence 1958) 65-67, sought to confirm the Campanian origin of the cargo.

brought about by the firing of the amphora, at a temperature estimated to have been at least 500-600 centigrade.) Third, the Sestius iron titanium oxide particles are aligned in a way that would only result if they were added purposely to the fabric. Their alignment conforms to the overall curvature of the pot, an indication that after being added to the clay they were spun at high speed, presumably on the wheel. These free-standing, uniformly oxidized, artificially aligned iron titanium oxide particles, not paralleled in naturally-occurring terrestrial clays, must represent original magnetite grains purposely added to the fabric. (The magnetite grains would have been changed to iron titanium oxides during firing.)

Both Lucretius and Pliny the Elder make it clear that the Romans knew the elementary principles of magnetism, and the Sestius clay tested indicates that they also knew how to extract minerals magnetically in a selective way and indeed did so commercially on a large scale.²² Why they would have done so in the case of the Sestius amphoras will require further study. The purpose might be to give the baked clay a redder color, which would result when the original magnetite grains changed to iron titanium oxides during firing. If a redder color was desired, why does a lighter colored surface cover so many Sestius jars? The mineralogical tests, in any case, confirm the other evidence in favor of large-scale, highly organized manufacture of the Sestius amphoras. Cosa or the surrounding area could have been the source of the clay used in the manufacturing process, since the magnetite and the other volcanic minerals put into the Sestius clay might well be available near the great extinct volcanoes east of Cosa. Further testing may help to clarify the picture.

Adding to the other evidence in favor of Cosa as a major source of the Sestius amphoras is an unstamped neck fragment of Type 5 (Dressel 1C) from the Agora Excavations in Athens (FIG. 5). Type 5 is contemporary with Type 4a (see note 6) and indeed two known Sestius stamps occur on Type 5. One of them (see note 2) was found by Nino Lamboglia at Vada Sabatia in a context of about 100 B.C. The scale of Lamboglia's drawing may be incorrect, but the Vada Sabatia fragment clearly has, like the Agora piece, the typically high rim and narrow mouth diameter of Type 5.²³ The symbol on the Sestius stamp at Vada Sabatia is a palm branch; and the same stamp occurs on a Type 5 neck fragment of regular Sestius clay found in 1969 in the Portus Cosanus (FIG.



Figure 5. Type 5 (Dressel 1C) neck fragment from the Agora Excavations, Athens (P 6867). P.H. 0.155 m. Dipinto in red on neck under rim: CO / SES. Unstamped.

6).²⁴ The Vada Sabatia and Portus Cosanus fragments prove that the Sestius factory made more than one kind of amphora. The Agora piece, P 6867, the clay of which is also normal Sestius clay, points in the same direction. More importantly, it seems to link Cosa specifically with the Sestius firm. A red dipinto on the neck under the rim clearly reads CO/SES, the last letter being faint but legible.²⁵ The Latin letters may well name Cosa and

24. The fragment, PC 69-177, was found underwater by Richard and Douglas Preston. The rim height of this piece (0.053 m.) is somewhat lower than the average for Type 5, which is often over 0.06 m. and sometimes, as the type develops, surpasses 0.07 m. The estimated mouth diameter of P 69-177 is 0.115 m. (note 12). The ribbed handles, curved in profile, are also typical of Type 5 (width of the handle on P 69-177, 0.067 m. at curve; thickness, 0.038 m.). The preserved height of the fragment as a whole is 0.32.

25. The preserved height of this piece is 0.155 m. The rim height is 0.064 m., and the estimated mouth diameter is 0.11 m. On this piece, see M. L. Lang, *The Athenian Agora XXI. Graffiti and Dipinti* (Princeton: The American School of Classical Studies at Athens, 1976). The context of the fragment at the Agora Excavations is the same closely-dated one (C 9:7) that yielded four unstamped jars of the

Sestius. If that is the case, this dipinto provides the best indication yet that Cosa was a major source of the Sestius amphoras. Time will tell whether or not this interpretation of the dipinto from the Agora is correct.²⁶ At present, the inscription seems to buttress nicely the other evidence, outlined in this section, connecting Cosa with the Sestius amphoras and suggesting the world-wide scope of the Sestius operations, which extended even to Athens,²⁷ although their chief thrust was clearly toward the West.

Sestius type (fig. 1c and note 6 above; Will, op. cit. [in note 6] 237-238, esp. p. 237, note 3, where I pointed out that the amphoras were used as packing around the shaft of a well dug through a cistern in the last years of the 2nd century B.C., according to Knidian amphora stamps closely dated by Virginia Grace. The *terminus post quem* for Types 4a and 5, therefore, seems to be the late 2nd century B.C. See also Zevi, op. cit. [in note 7]). It should be noted here that a badly worn rim fragment at the Agora, found in an undated context, bears a stamp that is almost illegible but may read SES followed by an anchor (SS 7173).

26. Time may also explain why the Agora dipinto and two Sestius stamps occur on amphoras of Type 5. While Types 4a and 4b are known to have been wine jars, there is not much evidence to link Type 5 with wine. A dipinto on a jar of Type 5 from Azaila in Spain reads "VE.IIIII/C," a possible reference to four-year-old wine from Caecubum? Cales? Cumae? Cosa? (see Juan Cabré Aguiló, *Corpus Vasorum Hispanorum* [Madrid: Cons. Sup. de Invest. Cient., 4, 1944] 98, no. 5). It should be noted that some examples of Type 5 at Delos have the distinctively powdery, plastery pale buff clay that is characteristic, at least at Cosa, of Spanish *garum* jars of Dressel's Types 7-10 (Munsell 2.5Y 8/2). Other examples of Type 5 are made of a very coarse, rust-colored clay (Munsell 5YR 5/6) that is covered with a whitish surface, seemingly like the "Iberian" clay of Cabré's jars of Type 5 in Azaila (*ibid.* 98, no. 4). The Sestius clay of PC 69-177 has been noted. Type 5, then, may have been manufactured, as seems to have been the case with many Roman amphoras, in several areas; but if the "garum" clay of some examples points to the use of the type for *garum*, to the association of the unusual spindle-shape of the type with *garum*, have we evidence here (as in the case of the Type 16 jars of Sestius clay referred to in the text) of a *garum* industry at Cosa, one which existed side by side with the wine industry which utilized most of the Sestius jars? 81 examples of Type 5 have been identified at Cosa. A *garum* industry might help to explain the saltery and fishery which the research of A. M. McCann, E. K. Gazda, G. Uggeri, and J. P. Oleson has located in the lagoon of the Portus Cosanus. The forthcoming publication of A. M. McCann's excavations in the Port will discuss these matters in detail. Type 5 may or may not have been used for *garum*, but the mystery of its shape remains.

27. A possible result of P. Sestius' connections with the Aegean area. In 62, he went to Macedonia as Proquaestor under C. Antonius (Cic. *Fam.* 5.6; *pro Sestio* 5.13). He was a Promagistrate in Cilicia in 49-48 (see T. R. S. Broughton, *The Magistrates of the Roman Republic* [New York: The American Philological Association, 1952] II, p. 264) and served under Domitius Calvinus in Asia Minor in 48-47 (*ibid.* 278). The younger L. Sestius also served as Proquaestor in Macedonia in 43-42, under M. Brutus (Appian *B.C.* iv.6.51, where the name is incorrectly given as Publius; cf. Dio lili.32.4). The coins he issued for Brutus at that time, in fact, bear devices similar to the symbols on the Sestius amphora stamps: see Crawford, op. cit. (in note 14) 515, 741, and pl. 61.



Figure 6. Type 5 (Dressel 1C) neck fragment from the Portus Cosanus (PC 69-177). Stamped SEST palm branch. P.H. 0.32 m.

The Ownership of the Sestius Factory

At the same time that the evidence in favor of Cosa as a source of most, if not all, of the Sestius jars becomes less circumstantial, the evidence grows that the Sestius family of Cosa was connected with the manufacture. The task of identifying a particular "Sestius" as the manufacturer, however, becomes both more difficult and perhaps less necessary. More than one member of the Sestius family may have held control of the enterprise. It seems certain, in any case, that Types 4a and 5 were long-lived, spanning two or more generations. We know also that Lucius Sestius Quirinus, the son of Publius Sestius, and *consul suffectus* in 23 B.C., was engaged in the manufacture of *tegulae* in the last half of the 1st century B.C. Brickstamps bearing his name have been found at Rome and recently in the

22. Lucretius vi. 906-1064; Pliny *N.H.* xxxvi. 16, 126-128.

23. See above, note 12.



Figure 7. Late Sestius trademarks from Cosa, on rims of amphoras of Type 4B (Dressel 1B). a.) (SE·LEV·C). C 68.491, which is stamped twice with the same stamp. W. of stamp 0.041 m. H. of stamp, 0.014 m. -b.) (LV·(LVSE)). CF 1863. P.W. of stamp, 0.043 m. P.H. of stamp 0.018 m.

Ager Cosanus.²⁸ It can now be announced that at least two varieties of amphora stamps naming Lucius Sestius have been found at Cosa (FIG. 7).²⁹ The stamps occur on rims of Type 4b (Dressel 1B), which was a development of Type 4a and was in use from the second quarter to the last quarter of the 1st century B.C. (see note 6). These late Sestius stamps serve to tie the pottery interests of the Sestius family still more closely both to Cosa and to the manufacture of amphoras and to strengthen my 1956 proposal that Publius Sestius, the praetor of 54 B.C., might have been involved with the production of one class of amphoras of Type 4a, which seems to have been in use until the middle of the century (notes 6 and 7). Publius Sestius was alive as late as 35 B.C.³⁰ His father, the elder Lucius Sestius, dead by 56 and tribune about 91, described by Cicero as *sapiens, sanctus, and severus*, could also have been active in the business. If one accepts Cicero's description of him, he may have

28. *CIL* XV.1.1444-1445; cf. Will, op. cit. (in note 6) 242. The recent finds in the Ager Cosanus were, according to information kindly transmitted to me by F. E. Brown, reported by Daniele Manacorda during a symposium, "The Seaborne Trade of Ancient Rome in the Late Republic and Early Empire," sponsored by the American Academy in Rome in late 1978 and early 1979.

29. Four examples of the stamp pictured in fig. 7a have been found (CD 857, CE 785, and two impressions on C 68.491), one of them in "SUNY House" (which might have been, in its Augustan stage, a town house of Lucius Sestius?). Fig. 7a reads SE·LEV·C (Euclides the Freedman of Sestius?). Fig. 7b reads LV·(LVSE) (Lucaon [or possibly Lycidas?; see note 39 below] freedman of Lucius Sestius). Its number is CF 1863. The "L·SE," "L·SER·ALB," and "L·SEX" amphora stamps reported in *C.I.L.* XIII and elsewhere may be related.

30. Münzer in *RE*, s.v. "Sestius" (6), p. 1890.

been more suited to business than to a Late Republican political career.³¹ Perhaps an organization large enough to produce a shipment the size of the Grand Congloué cargo and to distribute from one end of the Roman world to the other³² required direction from someone less preoccupied in Rome and abroad than Publius Sestius.

The elder Lucius Sestius married his son Publius to the daughter of C. Albinus, who had become a senator before 60 B.C. Publius was so devoted to Albinus, Cicero tells us, that even after Albinus's death and Publius' remarriage to Cornelia (by 62; *Fam.* 5.6.1), daughter of the exiled Marian and consul of 83 B.C., L. Cornelius Scipio Asiaticus, the two remained close. In 56 B.C. Albinus was in constant attendance at Sestius' trial.³³ In 45 B.C., Sestius asked Cicero (*Fam.* 13.8) to intercede on Albinus' behalf in a dispute over land-ownership. Cicero implies that Albinus was a person of wealth. One wonders, in the light of his curiously close relationship to Publius Sestius and in view of the Sestius pottery interests, whether or not Albinus might have been involved with the Albiniana pottery mentioned on a variety of amphora stamps of the 1st century B.C. (FIG. 8).³⁴ The fact that L. Sestius Quirinus (Quirinalis) preserved an abbreviation of his mother Albinia's name as a cognomen on his brickstamps³⁵ might be an indica-

31. See *pro Sestio* 3.6. On the date of his tribunate, cf. Broughton, op. cit. (in note 27) II, p. 22.

32. In addition to the evidence cited above from the Agora Excavations in Athens, there are unverified reports of Sestius stamps at Carnuntum in Austria (information kindly given me by Elizabeth Solomon) and at Altenburg in southern Germany (see Franz Fischer, "Das Oppidum von Altenburg-Rheinau," *Germania* 44 (1966) note 72 on pp. 303 and 306).

33. On the relationship between P. Sestius and C. Albinus, see *pro Sestio* 3.6. Although Rohden-Dessau, *PIR* III, no. 436, prefer the spelling "Albanus" (and cf. D. R. Shackleton Bailey, rev. of *Senatorial Wealth And Roman Politics* by Israel Shatzman, in *Phoenix* 30 [1976] 210), the several occurrences of the name in *Fam.* 13.8 make the spelling "Albinus" more likely. Cf. Broughton, op. cit. (in note 27) II, p. 487.

34. The stamp pictured is no. 489 in the Benaki Collection, now stored in the Greco-Roman Museum in Alexandria. The fragment was found either in the Fayûm or in Upper Egypt. It belongs to my Type 11 ("Brindisi-type"), which was manufactured in the neighborhood of Brindisi, and perhaps elsewhere, in the first quarter of the 1st century B.C. (see Will, op. cit. (in note 15) 295). Other Albinus stamps occur both on Type 11 and on Type 12 (Dressel Types 2-5). All of these pieces will be published in my forthcoming volume on Roman amphoras in the *Athenian Agora* series. "Vascula Gallica" bearing similar stamps are listed in *CIL* XIII. 10010, 76-86.

35. The name occurs in three different forms on the brickstamps in *CIL* XV.1.1445: L·SESTI·P·F·ALB·QVIRINALIS·A; L·SESTI·ALB·QVIRINALIS; L·SESTI·AL·QVIRINALIS. All the brickstamps of

tion that the pottery (near Rome?) where those bricks were made had originally belonged to his grandfather Albinus. The marriage of Publius Sestius and Albinia could have been either a cause, or a result, of the Sestius pottery interests.³⁶ The merging, if it took place, of two great pottery firms could have created an "empire" strong enough to maintain the apparent monopoly enjoyed by the Sestius amphoras in the West.³⁷ No Republican amphora stamp, in any case, is found with such frequency in the western Mediterranean area, even if one excludes the Grand Congloué shipment.³⁸

We should probably, then, think in terms of the Sestii rather than of an individual member of the family, in considering the ownership of the Sestius factory. Both

Sestius in *CIL* XV seem to come from Rome and vicinity. Since bricks were usually locally made, one would presume these finds were manufactured in Rome. They may be among the earliest brickstamps known, since baking replaced sun-drying of bricks at some time in the 1st century B.C., according to information kindly communicated to me by Herbert Bloch. The locally well-known brick kilns, modern and ancient, on the Albinia River, to the north of Cosa, had, to my knowledge, no connection with the Sestius family in antiquity. Perhaps a connection will some day be discovered. Nor is there any known connection between the Albinia River and the family name of Lucius Sestius' mother. For a recent, brief discussion of a possible ancient kiln near the Albinia, see D. P. S. Peacock, "Recent Discoveries of Roman Amphora Kilns in Italy," *Antiquaries Journal* 57 (1977) 266-268. Detailed publication of the finds from this site will be awaited with interest. On amphoras in the area of the Albinia River and the Gulf of Talamone, see also my forthcoming article (with Vincent Bruno) in *Archaeology*, "Underwater in the Gulf of Talamone."

36. P. Sestius also had a close relationship to his second father-in-law, L. Cornelius Scipio Asiaticus. Immediately after the wedding, Sestius went to Marseilles to visit his new wife's father, in exile there. This marriage, too, may have involved business interests. The amphora stamp L. CORNELI L·F·Q. occurs on jars of my Type 11 (above, note 34) at Alexandria, Delos, and Brindisi. The examples at Alexandria and Delos will be published in my *Athenian Agora* volume. For the stamp at Brindisi, see *CIL* IX. 6079. 18. Study of Roman amphoras makes it very apparent that Roman nobles were heavily involved in business and in trade, however little they might publicize the fact. The involvements of the Sestius family and its connections are just one example among many. I plan to explore the subject more thoroughly in a future article.

37. The connection, if there was one, between the manufacture of amphoras and bricks by the Sestius family and the frequent occurrence of Sestius stamps on Arretine needs to be explored. A. Oxe's *Corpus Vasorum Arretinorum*, edited by Howard Comfort (Bonn: Rudolf Habelt Verlag, 1968), lists (Numbers 1792-1819) many Sestius stamps, the shapes of the letters of some of which closely resemble the letters on the amphora stamps; cf. no. 1793d 1-3, f, and especially g. Stars and palm branches occur *passim* on Arretine Sestius stamps. The amphora "empire" could have included, or been succeeded by (as was apparently the case with bricks), the manufacture of Arretine.

38. Only in the eastern Mediterranean do we find a contemporary parallel. The stamps of Vehilius, Visellius, Betilienus, and others occur by the dozens on jars of my Type 11 ("Brindisi-type") at Athens, Delos, Alexandria, and Brindisi. See above, note 34.



Figure 8. Type 11 ("Brindisi-type") handle stamped, retrograde, ALBINIANA. Benaki Collection, No. 489, now in the Greco-Roman Museum, Alexandria. W. of stamp 0.057 m. H. of stamp 0.013 m.

Publius and his son Lucius exhibited the wealth that accrued from pottery-making throughout Greek and Roman antiquity. Catullus referred to the *sumptuosas cenas* ("costly dinners") of Publius Sestius (poem 44). Cicero mentions in 44 B.C. Publius' villa at Cosa (*Att.* 15.27.1) and on another occasion, in 45 (*Att.* 13.2.2), jokingly called him *parochus publicus* ("official welcomer"). In 62 B.C. (*Fam.* 5.6.2), Cicero sent him a plea for financial assistance as clear as it was indirect, noting that he was ready to join a conspiracy because of his indebtedness for the new house on the Palatine. Cicero may have owed a financial, as well as a moral, debt to Sestius (*Fam.* 13.8.3: *ego illi uni plurimum debeo*—"to him alone I owe most."). There is also the possibility that Augustus' appointment of Lucius Sestius as *consul suffectus* (surrogate consul) in 23 may have been less a startling gesture of good will and admiration toward a militant adherent of Brutus than a desire to add the younger Sestius' financial resources to his own side.³⁹ Finally, another chance reference in Cicero (*Att.* 16.4.4; 44 B.C.), one in which he mentions the *navigia luculenta . . . Sesti* ("splendid ships of Sestius"), may apply either to Publius or the younger Lucius. Scholars disagree,⁴⁰ but it is clear that the phrase indicates that the Sestius family had shipping interests, or at least "naval capabilities," of which the top level of the Grand Congloué pile may be another suggestion. Even if Publius Sestius or his son did not per-

39. See Dio lili.32.4 (cf. above, note 27). It is tempting to read Horace *Odes* 1.4, dedicated to L. Sestius, in this light and in the light of the archaeological evidence. The choice of words in the poem (*carinas*, 1.2; *officinas*, 1.8; *regna vini*, 1.18; *Lycidan*, 1.19, etc.) may tie it closely to L. Sestius.

40. For a summary of the evidence, see Broughton, op. cit. (in note 27) II, p. 326. I am indebted to Professor Broughton for his kindness in discussing this matter with me by letter.

sonally own ships, one of them had the ability to raise the fleet praised by Cicero. Further excavation in the Portus Cosanus might throw more light on this matter.

Literary references thus seem to confirm the wealth and the power of the Sestius family. Whether or not the family was in the shipping business, the archaeological evidence clarifies the literary evidence by pointing to the existence of a large, far-flung and long-lived pottery firm located in the area of Cosa, one which was probably dominant in the manufacture and export of amphoras of Type 4a.⁴¹ Other stamps are found on the same type of jar, but none comes close to the Sestius stamps in frequency of occurrence.

As our knowledge of Roman amphoras and of other coarse wares expands, we are able to probe more deeply into Roman economic history. We achieve a better understanding of Roman antiquity and at the same time a realization of how little we actually know about it. Study of the Grand Congloué excavation and of the Sestius amphoras takes on more meaning in that light. Further study should help to clarify the areas of uncertainty that remain. The Sestius amphoras, however, important as they seem to have been, are just one element in the entire picture. Close study of all classes of Roman commercial amphoras, and of coarse wares in general, will enable us to achieve a level of understanding of Roman economic history that can be only dimly foreseen at present. At the same time, the interdependence of dry-land archaeology, underwater archaeology, and literary scholarship will be underscored.

41. Type 4a may well have been manufactured in several places, although the Sestius firm seems to have been dominant. We know, for example, that Type 4b was manufactured both in Latium, where kilns have been discovered near Terracina (cf. A. Hesnard, "Note sur un atelier d'amphores Dr. 1 et Dr. 2-4 près de Terracine," *Mélanges de l'école française de Rome. Antiquité* 89 [1977] 157-168) and near Brindisi, where the kilns discovered by me in 1961 contained fragments of Types 4b and 11, as well as other types (above, note 10).

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The Sestius Amphoras: a Reappraisal

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The Sestius amphoras, because of their number and variety and the questions they suggest about Roman trade, are increasingly a matter for discussion. The following article first summarizes the work done on the subject since 1952 and then reviews the evidence, both published and unpublished, concerning the provenience of the Sestius amphoras, the persons responsible for their manufacture and distribution, and their importance as sources of information about Roman economic history.

The Background

The middle of the 20th century marked something of a turning-point in Roman archaeology. Trends emerged that were to accelerate in importance during the third quarter of the century; for example, underwater archaeology came of age with the initial work at the Albenga wreck off the Italian Riviera in 1950 and the more thorough excavation, begun in 1952, at the Grand Congloué site off Marseilles. At the same time, and partly as a result of underwater work, coarse wares of several kinds attracted more scholarly attention than had previously been the case. In particular, Roman commercial amphoras, which up to that time had been largely ignored or had at best been viewed as a sub-field of epigraphy (the trademarks on the jars having attracted scattered attention), suddenly became of general, even popular, interest. Shipping amphoras were found by the hundreds at Albenga and off the Grand Congloué, and the story has been repeated again and again with the exploration of other wrecks. Such trends have helped to stimulate Roman field archaeology, which for its part has helped to raise the initially rather low standards of exactitude of underwater archaeology. The Sestius amphoras, first recognized as a group at the Grand Congloué, well illustrate the archaeological value both of underwater research and of the study of mass-produced coarse wares.

Off the Grand Congloué rock, lying 10 miles east of Marseilles at the far end of a chain of islands, divers led by Jacques-Yves Cousteau found a pile of ancient pottery. Among several types of commercial amphoras, far the largest group consisted of well over a thousand wine jars stamped on the rim with what appeared to be the trademark SES (FIG. 1). Cousteau's invention of the Aqualung and the relative mobility with which the

divers were consequently able to pursue the excavation caught the interest of archaeologists and public alike. There were frequent accounts in the press and published comments by both archaeologists and divers on the date of the find (for it was identified as a single wreck) and



Figure 1. Sestius and Sestius-type amphoras (Will Type 4a: Dressel Type 1A). a.) Sestius amphora from the Grand Congloué wreck. H. 1.05 m. Stamped on the rim: SETS anchor. Photo courtesy Fernand Benoit. b.) Sestius amphora from the Ile du Levant (collection P. Mergier, Paris). H. 1.02. Stamped on the rim: SETS anchor. Originally published in Will, op. cit. pp. 228, 234-5 (in note 6). c.) Unstamped Sestius-type amphora from the Agora Excavations, Athens (P 8106). From Deposit C 9:7 (end of the 2nd century B.C.). H. 1.05 m.; see note 25.

on the meaning of the "SES" stamps. The French archaeologist in charge of the excavation, Fernand Benoît, initially assigned a date of about 200 B.C. to the wreck and suggested that the letters SES should be interpreted as an abbreviation of the *nomen* Sestius.¹ Benoît, noting that the Grand Congloué Sestius stamps in all cases included nautical symbols in the shape of an anchor or a trident, sought to argue that "Sestius" was a shipper and that a certain Marcus Sestius of Fregellae, a trader mentioned in an early 2nd century B.C. inscription found on Delos, might have been the owner of the ill-fated ship, which, after leaving Delos, picked up cargo in Sicily and Campania before the disaster off southern France. The Italian archaeologist who had directed work at Albenga, Nino Lamboglia, suggested a date of 160-150 B.C. for the Grand Congloué site, on the basis of the dates of the Campanian ware found in the excavation.² Meanwhile, Cousteau was arguing that the wreck and its cargo should be dated 230 B.C.,³ and an archaeologist on the

1. Fernand Benoît, who died in 1969, published frequent, somewhat repetitious reports about the Grand Congloué excavation. In these, he was increasingly at pains to reply to critics and to justify his chronology, which tried to reconcile the Sestius amphoras with the presence in the wreck of over 400 "Greco-Italic" amphoras dating from as early as the 3rd century B.C., Rhodian amphora stamps closely dated by Virginia Grace to ca. 220-180 B.C., and examples of Campanian A (3rd century B.C.) and Campanian B (mid-second century B.C.). (Over 6,000 pieces of black-glaze pottery were found.) See his last major publication of the wreck, *L'épave du Grand Congloué à Marseille, Gallia*, Supp. 14 (Paris 1961), where references are given to earlier articles. The date assigned by Benoît to the Grand Congloué pile fluctuated between 200 and 130 B.C., a reflection of the uncertainties inevitably caused by the "single wreck" hypothesis, to which he held to the end. In the 1961 publication, he urged that "une datation trop systématique, exclusivement fondée sur la typologie" be guarded against (p. 23). At the same time, he hoped that one day the discovery of coins would permit the assigning of a "rigorous" date to the excavation (p. 25). Benoît continued to identify "Sestius" as Marcus Sestius of Fregellae or one of his relatives (p. 70). I have recently heard an encouraging report that a new publication of the Grand Congloué excavation, one based on Benoît's notes and on re-study of the finds, is being projected.

2. Nino Lamboglia's dating did not show such fluctuations as Benoît's. Based on his study of the Campanian ware found, the date was generally given as 160-150 B.C. or was at least in the 170-150 B.C. range. Lamboglia's published statements about the wreck were as frequent as Benoît's. See especially his articles, "Sulla cronologia delle anfore romane di età repubblicana (II-I secolo a.C.)," *Rivista di Studi Liguri* 21 (1955) 241-270, and "Problemi tecnici e cronologici dello scavo sottomarino al Grand Congloué," *Rivista di Studi Liguri* 27 (1961) 138-154. Lamboglia found three Sestius stamps in his own excavations, one at Vada Sabatia in a context of about 100 B.C. (see the 1955 article, p. 248, note 3, and fig. 6) and the others at Ventimiglia in contexts of about 70 B.C. (*ibid.*, fig. 14).

3. Cousteau's article ("Fish Men Discover a 2,200-year-old Greek Ship," *National Geographic Magazine* CV [1954] 1-36) should not be

diving team, Ferdinand Lallemand, proposed a date of 145 B.C.⁴

Disagreements about the date of the Grand Congloué continued. The French epigraphist and historian, Émile Thevenot, was the first to suggest the reasonable approach of dating the Sestius amphoras by comparing them with similar finds on land. Having done this, M. Thevenot concluded that the Sestius amphoras should be dated, on the basis of similar finds in France and Switzerland, in the 1st century B.C., quite possibly as late as, or even later than, the middle of the century. He felt that juxtaposed wrecks and the ingenious but admittedly unscientific use of the suction pipe in the excavation might explain the wide variety of dates assignable to the Grand Congloué finds. Thevenot further suggested, on the analogy of the frequent occurrence of Sestius stamps on Arretine ware and on bricks, that the Grand Congloué Sestius trademarks probably referred to the potter rather than to the shipper.⁵

My own research corroborated M. Thevenot's. Referring to the closely-dated Roman amphoras found in the excavations of the Athenian Agora, I argued in 1956 that, on the basis of Agora contexts, the Sestius amphoras, which belong to my Type 4a (an early form of Dressel's Type 1, in the well-known typology in *CIL* XV), should probably be dated in the first half of the 1st century B.C., or at any rate not much earlier than the last years of the 2nd century.⁶ Regarding the identifica-

allowed to disappear from the Grand Congloué literature. It is in some ways the most candid and informative report thus far of the excavation. His description of the ship's "entire hull and decks" as lead-plated (p. 16) suggested as early as 1954 that wrecks had been superimposed at the site, the upper hull having been misinterpreted as a deck, which would not require lead-plating.

4. Lallemand wrote a fictional log of the journey of Marcus Sestius, hypothetical grandson of the Marcus Sestius mentioned in the Delian inscription, from Delos to the Grand Congloué: *Journal de bord de Maarkos Sestius* (Paris: Éditions de Paris, 1955).

5. Thevenot's two chief discussions, models of scholarly care and brevity, were, "Les importations vinaires en pays bourguignon avant le développement de la viticulture," *RAECE* 4 (1953) 234-239, and "La marque d'amphore 'Sesti,'" *ibid.* 5 (1954) 234-243. See especially pp. 241-242 of the second article.

6. E. L. Will, "Les amphores de Sestius," *RAECE* 7 (1956) 224-244. The article was written rather hesitantly and not at all in the polemic spirit alluded to by Fausto Zevi, "Appunti sulle anfore romane," *Archaeologia* 18 (1966) 213. On the other hand, if Thevenot and I had not questioned Benoît's theories, it is likely that the Grand Congloué wreck would still today be dated a century too early (as indeed it is by some). I had been consulted by the French in December, 1952, about the date of the wreck and had sought to persuade M. Benoît by letter and by a visit to Marseilles that, on typological grounds and on the basis of a context (C 9:7) at the Agora Excavations in Athens, the

tion of "Sestius," I described five Sestius stamps from Cosa in Etruria and noted that more such stamps had been found at Cosa than at any other site on land. I pointed out that Publius Sestius, the friend of Cicero, defended by him in 56 B.C., owned a villa at Cosa. I wondered if, since his son, Lucius Sestius Quirinus, was known to have manufactured *tegulae*, Publius Sestius himself might also have possessed a pottery in which he made amphoras for the storing and shipping of the produce of his estate. I reiterated Thevenot's suggestion that the Grand Congloué wreck was not a closed context and argued that several wrecks might well have occurred off so dangerous a spot as the Grand Congloué.

Thevenot's and my suggestions received an understandably mixed reaction.⁷ Time is, however, proving

Sestius amphoras were being given too early a date. Zevi is quite wrong to say (p. 213, note 15) that my principal argument about the date was not based on typological considerations. I discussed typology throughout the 1956 article (esp. pp. 232-240), and consider Type 4a to be a later development of the "Greco-Italic" amphoras (Type 1 in my classification). Types 4a and 5 (which Lamboglia called Dressel 1A and 1C) both date from the late 2nd century to about the middle of the 1st century B.C. Both types are well represented at Delos, where Roman occupation had all but ceased by the middle of the 1st century B.C., but are not represented at Corinth (refounded in 44 B.C.). Type 4b, which developed out of Type 4a and can be distinguished from it on various grounds but particularly by the fact that its rim is more vertical in profile, dates from the second quarter of the 1st century B.C. down to the Augustan Age. Lamboglia called this type Dressel 1B. Late Sestius stamps (see below) occur on Type 4b.

7. In addition to the responses of Benoît and Lamboglia (above, notes 1 and 2), scholars from several different countries ranged themselves on one side or the other. The German archaeologist, Otto Uenze, was enterprising enough to visit Cosa, among other sites, and to ascertain at first hand the abundance of "Dressel 1" fragments visible in the area. See his publication, *Frühromische Amphoren als Zeitmarken im Spätlatène* (Marburg/Lahn: N. G. Elwert Verlag, 1958). One might question Uenze's (and Lamboglia's) efforts to overemphasize the chronological implications of rim-profiles. At any rate, Uenze was one of the first to accept the suggestions both of a later date for the Sestius jars and of the likelihood of superimposed wrecks at the Grand Congloué (pp. 10, 14, 16-17). Other scholars also accepted the later date: Michel Labrousse, in Georges Fouet, "Puits funéraire d'Aquitaine: Vieille-Toulouse, Montmaurin," *Gallia* 16 (1958) 124-153; cf. *ibid.*, 20 (1962) 577; though Labrousse felt the new Sestius stamps he presented from Vieille-Toulouse might, since the symbols on them were different from those on the Grand Congloué jars, be later in date for that reason (they were from contexts of 50 B.C. or later); H. T. Wallinga, "De Geschiedenis van de antiekes Koopvaardij en de onderzeese Archaeologie," *Tijdschrift voor Geschiedenis* 71 (1958) 332-348; and Maria Pilar G. Serrano, who summarized Thevenot's and my articles in "Anforas romanas con la Marca 'Sestius,'" *ArchEspArq* 33 (1960) 113-122.

In the mid-60s, a tendency to question the later date asserted itself, especially in the work of Jean-Paul Morel, who, in *Céramique à vernis noir du Forum romain et du Palatin* (Paris: E. de Boccard, 1965) 26-27, noted the disconcerting mixture of dated material in the wreck and diplomatically sought a compromise-date of about 160/150 B.C. He

that our major assumptions were correct. The date for which we argued, the probability of juxtaposed or superimposed wrecks, the likelihood that Cosa was a center of manufacture for the Sestius jars, and that P. Sestius or his father, or at any rate the Sestius family, owned the pottery: all these suggestions grow in strength as time passes. Let us go on to examine the current state of the evidence about the provenience of the Sestius amphoras and the ownership of the pottery where they were probably manufactured.

The Provenience of the Sestius Amphoras

Finds at Cosa, at the Agora Excavations in Athens, and in southern France combine, in the case of the Sestius amphoras, to show the interdependence of un-

added that his date was "un moindre mal" and that the Grand Congloué deposit could no longer be considered securely dated. I have not been able to consult Morel's most recent publication, cited in the Manacorda article mentioned below, p. 126, note 13. Zevi, *op. cit.* (in note 6), also tried to avoid questioning the single wreck theory by suggesting that amphoras of "Dressel 1" could be dated perhaps as early as 129 B.C. and as late as 13 B.C., though he admitted the earliest securely dated dipinto on the type was 102 B.C. (*CIL* I².699, 700; XV.2.4554, 4555).

New information about the Sestius amphoras became available in the mid-70s, and on the basis of it Thevenot's and my later date for the upper wreck and my view that Cosa was a major production-center for the Sestius amphoras are being confirmed. My own work at Cosa began in 1974, and meanwhile a number of new Sestius finds were being made in France, especially along the Rhône and in the Gallic isthmus north of the Pyrenees. Two articles by the French scholar Yves Roman are of particular interest: "La place du couloir rhodanien dans la diffusion des amphores de Sestius," *RAECE* 25 (1974) 125-136, and with Guy Rancecole, "Les amphores de Sestius de La Lagaste (Aude) et de sa région," *Revue archéologique de Narbonnaise* 10 (1977) 247-261. Over two dozen Sestius stamps have now been found in the Gallic isthmus; they suggest a date toward the middle of the 1st century B.C., as do several finds in the Rhône valley. Like Labrousse (above), Roman seeks to establish a chronology for the Sestius stamps, making some older than others. I agree that the Sestius firm had a long life, but I am not sure that we can be more specific at this time.

A recent addition to the Sestius literature reports a chance find of Sestius stamps in the Portus Cosanus, near the site of Dr. Anna Marguerite McCann's excavations under the sponsorship of the American Academy in Rome. See Daniele Manacorda, "The Ager Cosanus and the Production of the Amphorae of Sestius: New Evidence and a Reassessment," *JRS* 68 (1978) 122-131. Bulldozing and leveling operations beside the parking lot on the beach at Ansedonia, at the foot of the hill of Cosa, extended the parking area in 1976, and not far from "Puccini's tower," several finds of Sestius stamps were made. Manacorda's article reports one such find, which consisted of 26 stamped pieces. Such chance finds come as welcome corroboration of the discoveries in the excavations done by the American Academy, as reported by me in two papers at the National Meetings of the Archaeological Institute of America, "The Sestius Amphoras from Cosa" in 1974 and "New Light on the Sestius Question" in 1975.

derwater and dry-land archaeology and to prove the "global" (in the sense of the Roman world) scale on which the evidence must be sought.

Study of the Roman amphoras found at Cosa commenced in 1974.⁸ Over 2,300 Roman amphoras and fragments have been found in the town and in the lagoon and outer harbor at the foot of the hill on which the town was built. Analysis of these finds was completed in the winter of 1979. Almost half the finds at Cosa belong to Types 4a, 4b, and 5: Dressel 1A, 1B, 1C (see note 6). "Greco-Italics" (notes 1 and 6) number 215. These figures do not include Stephen Dyson's finds in his survey of the Ager Cosanus.⁹ Whether or not Roman amphoras were regularly stamped (a matter about which we know as yet too little), most of the finds at Cosa are fragmentary; therefore it should come as no surprise that only 312 Roman amphora stamps have been identified (201 on the hill and 111 in the port). A surprise lies, however, in the realization that Sestius stamps account for 43% of the Cosa totals. The figure is twice as dramatic if the port alone is considered, for 86% (95) of the stamps found in the port as of 1978 are Sestius trademarks. While only 20% (41 of 201) of the stamps from the hill bear the Sestius mark, that figure is also a very high concentration for a single site. On land, similar concentrations of a single stamp are found only at great centers of trade (such as Delos or Alexandria) or near areas of manufacture (such as Brindisi).¹⁰ Since Cosa was apparently not an entrepôt, and since the figures for Cosa, and especially for the Portus Cosanus, are so high, we have strong circumstantial evidence that a factory for the manufacture of Sestius amphoras existed near Cosa, quite probably in the area of the port.¹¹ Ninety-five of the 136 Sestius finds at Cosa come from the port; and whereas it might be argued that Sestius

8. Cf. E. L. Will, "The Ancient Commercial Amphora," *Archaeology* 30 (1977) 270. I am greatly indebted for their kindness and interest to Professor Frank E. Brown, who has directed the excavations of Cosa since 1948 and who suggested that I prepare the Cosa amphoras for publication, and to Dr. Anna Marguerite McCann, director of the excavations of the Port of Cosa. The Port publication, an effort of 22 specialists, is nearing completion.

9. See Stephen L. Dyson, "Settlement Patterns in the Ager Cosanus: the Wesleyan University Survey, 1974-1976," *JFA* 5 (1978), 251-268. The amphoras will be discussed in a separate publication of the finds of the survey.

10. See E. L. Will in *Year Book of the American Philosophical Society* (1962) 649-650, and Benita Sciarra, "Ricerche in contrada Apani, agro di Brindisi," *Recherches sur les amphores romaines* (Rome: École française de Rome, 1972), 29-34.

11. As suggested in Will, 1974 op. cit. (in note 7). The limited American Academy excavation, planned for 1975 and announced at that time, of the Sestius deposit subsequently explored by Manacorda (see note 7) did not in fact occur.

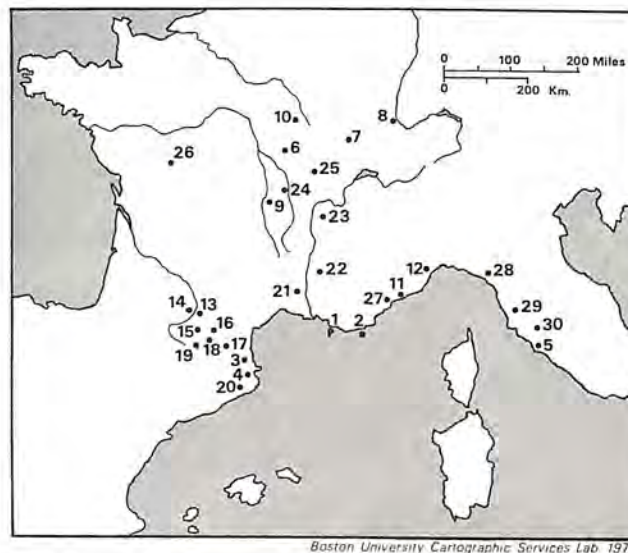


Figure 2. Distribution of verified Sestius amphoras as of 1979. Redrawn from sketch map by E. L. Will (revision of map in Will, op. cit. [in note 6] 226, which contained only sites 1-13). 1. Grand Congloué. - 2. Ile du Levant. - 3. Ruscino. - 4. Ampurias. - 5. Cosa. - 6. Mont Beuvray. - 7. Besançon. - 8. Basel. - 9. Lezoux. - 10. Alise-Sainte-Reine. - 11. Ventimiglia. - 12. Vada Sabatia. - 13. Vieille-Toulouse. - 14. Toulouse. - 15. Pamiers. - 16. La Lagaste. - 17. Peyrepertuse. - 18. Le Carla à Bouriège. - 19. Mayné à Bélesta. - 20. Torroella. - 21. Nîmes. - 22. Nyon. - 23. Vienne. - 24. Roanne. - 25. Tournus. - 26. Poitiers. - 27. Cap Roux. - 28. Lunel. - 29. Volterra. - 30. Saturnia (?).

finds vis-à-vis finds of other trademarks are higher in the port than on the hill because the hill had a longer life span than the port, which all but ceased to function at some point in the 1st century B.C., the much greater numbers of Sestius stamps in the port are striking.

The likelihood that Cosa was a manufacturing-center for Sestius amphoras is increased if we realize that, as of 1977, only 58 Sestius stamps had been found at other sites on land (FIG. 2) and that these were scattered among some 30 different sites in Italy, France, Spain, Switzerland, and possibly even Germany, Austria, and Greece (see below). Excluding the Grand Congloué, 194 Sestius stamps have been reported, and Cosa accounts for 136 of them, or 70%. The Gallic isthmus north of the Pyrenees has produced another 12% (see note 7). The possibility that the area was a secondary manufacturing-center suggests itself; but if we remember the hundreds of pieces at the Grand Congloué, the relatively few finds in western Europe seem more likely to be imports than exports. Future finds in the Gallic isthmus will be watched with interest.

The striking concentration of Sestius stamps at Cosa suggests that it may have been a major center, and perhaps the only center, of manufacture of the amphoras. There is also epigraphical evidence that points in the

same direction. The letter-shapes and the devices or symbols on the Sestius trademarks show great variety. The subject is a complicated one and will be addressed in more detail in my final publications; but it is important to note here that most of the chief letter- and symbol-variations occur at Cosa. It might be added that, except in the case of the late Sestius stamps to be treated below, no particular chronological conclusions seem capable of being drawn on epigraphical grounds. All varieties seem to occur on Types 4a or 5 (Dressel 1A and 1C), which were contemporary (see note 6).¹²

All Sestius stamps include, except when they are broken or otherwise mutilated, a symbol or device or logogram usually placed after one of several possible abbreviations of the name Sestius (FIG. 3). The anchor and trident symbols occurred on the Grand Congloué stamps and are found at other sites as well, but more than a dozen other devices are known, of which the double axe, palm branch, caduceus, and five-pointed star, in that order, are the most important.¹³ All but one of the devices (the nautical hook, found at Nyon) have been found at Cosa. Some devices occur only at Cosa. Of these, an intriguing and previously unpublished example is shown in Figure 4. I initially interpreted it as a

12. Lists of the known varieties of Sestius stamps are out of date almost as soon as they are issued. For the most complete early listing, see Thevenot, 1954 op. cit. (in note 5) 235-236. That list was brought up to date by Labrousse in 1958, op. cit. (in note 7) 148-151, and by Benoit in 1961, op. cit. (in note 1) 66. Most recently, the task has been attempted by Yves Roman and Guy Rancoule, op. cit. (in note 7) 259-261. That list, however, lacks the new finds reported by Manacorda, op. cit. (in note 7) 127, note 18. It also fails to mention the finds at Ampurias (Will, op. cit. [in note 6] 229, note 4), at La Graufesenque (Benoit, op. cit. [in note 1] p. 66), and the second of two stamps at Ventimiglia (Lamboglia, 1955, op. cit. [in note 2] fig. 14). Roman's close attention to rim heights is valid insofar as it facilitates to some degree the process of distinguishing between Types 4a and 5 (Dressel 1A and 1C). The rim of Type 5 is usually, though not always, higher than that of Type 4a. More important, however, is the diameter of the mouth, the opening measured at the top of the rim. Amphoras of Type 5 have a very narrow mouth diameter (0.10-0.12 on the average), whereas those of Type 4a have wider mouths (ca. 0.14-0.16). In general, diameters or estimated diameters of mouths are perhaps the most useful of all criteria in distinguishing among the various types of Roman amphoras.

13. If the Grand Congloué finds are included in the totals, the anchor and trident symbols outnumber all others, at this writing. Excluding the Grand Congloué, 11 examples of the anchor have been found at Cosa and 6 (if the readings are correct) elsewhere. Fourteen examples of the trident have been found at Cosa; otherwise that device occurs only at the Grand Congloué. If the Grand Congloué finds are not included, the double axe, in various dies, is the commonest Sestius device; 13 examples have been found at Cosa, 10 elsewhere. Some other figures are: palm branch, Cosa 11, elsewhere 12; caduceus, Cosa 14, elsewhere 4; five-pointed star, Cosa 3, elsewhere 9; eight-pointed star, Cosa 6, elsewhere 2. These figures do not include instances where the same symbols are found without the letters of the name Sestius.

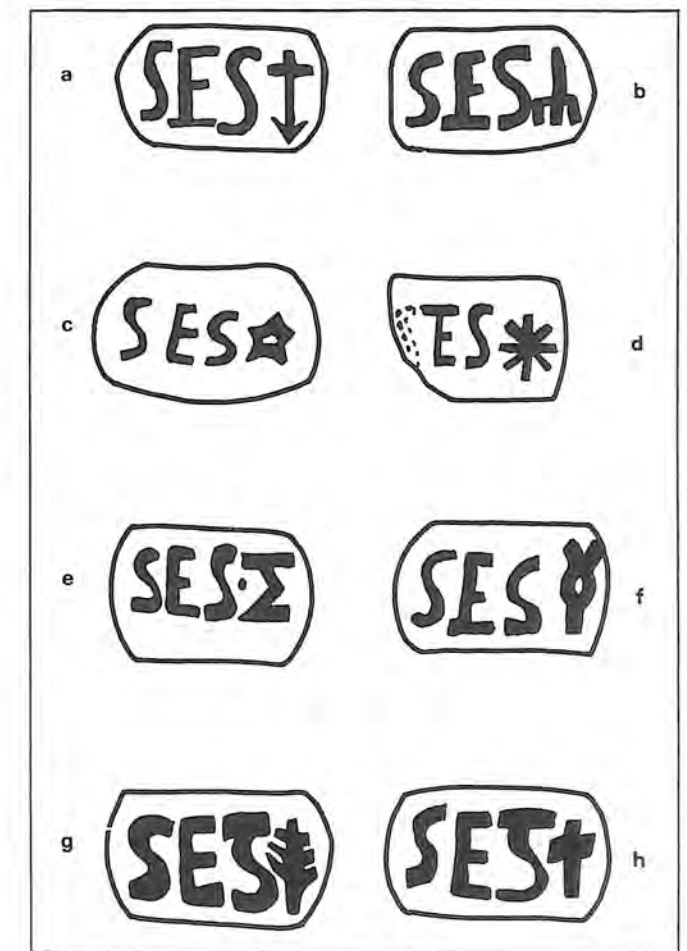


Figure 3. Representative Sestius trademarks from Cosa and the Portus Cosanus, with width and height of stamps. All stamps occur on rims of amphoras of Type 4A (Dressel 1A). a.) (SETS anchor). PC 72-809. W. 0.026 m.; H. 0.015 m. -b.) (SETS trident). PC 76-6. W. 0.025 m. H. 0.015 m. -c.) (SES 5-pointed star). CB 1746. W. 0.026 m. H. 0.015 m. -d.) (SETS 8-pointed star). PC 75-1. P.W. 0.022 m. H. 0.016 m. -e.) (SES sigma, or TIVS?). CG 501. W. 0.026 m. H. 0.017 m. -f.) (SETS caduceus). PC 69-179. W. 0.026 m. H. 0.015 m. -g.) (SEST palm branch). PC 76-1. W. 0.028 m. H. 0.016 m. -h.) (SEST double axe). C 69.214. W. 0.028 m. H. 0.017 m. Scale 1:1

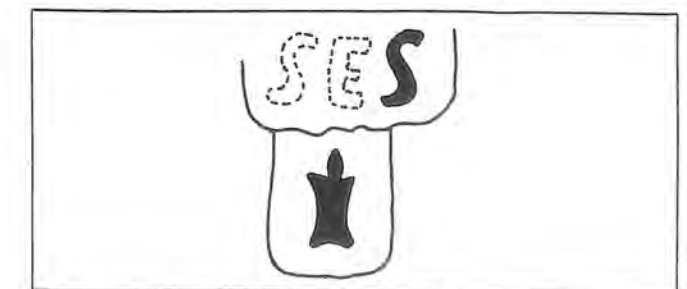


Figure 4. Unique Sestius trademark from the Portus Cosanus. SES lighted altar (?). PC 69-6. W. of upper stamp, 0.028 m. P.H. 0.015 m. W. of lower stamp, 0.018 m. H. 0.023 m. On the rim of an amphora of Type 4a (Dressel 1A). The same device also occurs without the letters on other pieces at Cosa.

lighted altar or a rudder, but I wonder now if it might be the blade of a *sarculum*, a vineyard hoe.¹⁴ The Sestius symbols seem to be important. They perhaps have more meaning than the letters themselves; indeed at Cosa they frequently occur without the letters. They stand alone, apparently readily recognized, like the Mercedes-Benz three-pointed star, the Mobil Oil Company Pegasus, or London Transport's divided circle. Whether the Sestius devices refer to a particular potter or pottery or estate or inspector or year, among other possible interpretations, their variety is best exemplified at Cosa.¹⁵

The abundance of different kinds of devices, which do not seem, at least at present, to be obviously explicable, is matched by variations in the shapes and sizes and ligatures of letters used to abbreviate the name Sestius. Here, again, the chief variations occur at Cosa. Almost all Sestius stamps employ ligatures. Only those with quite small letters, and perhaps not all of those, show the letters SES unjoined in some way.¹⁶ The added

letter is always a "T" (FIG. 3 where, however, the "sigma" in example "e" may be a ligature of "TIVS"). Sometimes we find the "T" added to the second "S" of SES. This always occurs when the device is a double axe or a palm branch. Sometimes the "T" is joined to the "E," extending to the left either its top cross-bar, as when the device is, for example, the eight-pointed star, or its bottom cross-bar, as in the important anchor, trident, and caduceus stamps.¹⁷ Two known anchor-examples also show a ligature of "T" with the second "S," though it is possible that the symbol here is a *bipalium* (long-handled foot-rest spade), not an anchor (see note 14). The chief classes of ligatures, here outlined, all occur with different shapes and sizes of letters, an observation which the number of examples at Cosa makes possible. Such variations doubtless represent the number of different stamping-matrices one would expect to find in a pottery capable of worldwide distribution and capable of producing a shipment of amphoras the size of that found off the Grand Congloué.¹⁸ The variety of shapes, sizes, and ligatures of the letters are also, as in the case of the motifs or symbols, apparently without chronological or geographical significance, as far as our present knowledge is concerned. Proper attention to these matters would require close study of rubbings of the stamps of all known Sestius pieces, as well as analysis of clay-samples. The subject is now so complicated that the attentions of a specialist in Sestius matters seem indicated. Roman amphoras, one hopes, will one day be as rigorously studied as Arretine or terra sigillata.¹⁹ There is little doubt, however, that specialized study of the Sestius amphoras would have to be centered at

"T" at Vieille-Toulouse. It might be noted here that the anchor and the trident also regularly occur with delicate, but taller, letters.

17. Many published drawings do not show this ligature, but see the drawings of the Grand Congloué stamps, Benoît, op. cit. (in note 1) 67; cf. Will, op. cit. (in note 6) 229, note 3.

18. There no longer seems to be any reason to question the identification of the Sestius stamps as pottery marks. Cf. Thevenot, 1953 op. cit. (in note 5) 238; idem, 1954 op. cit. (in note 5) 238-239; Will, op. cit. (in note 6) 241, etc. The analogies with Roman bricks, dishes, lamps, glass, mortars, and other objects of trade are only too clear. Whether or not the manufacturer of the Grand Congloué jars was also the owner of the lost ship is less certain; the question is addressed in the last section of this article. Whether or not the potter or the potter-exporter was also the winegrower may be called into question by the fact that some of the necks of the Grand Congloué jars contained plaster stoppers stamped L.TITI C.F. (Benoît, op. cit. [in note 1] 52-56). L. Titius is a common signature on Arretine, but the name was not an unusual one.

19. Exact measurements and close comparison of rubbings of the Sestius stamps should make it possible to determine how many matrices were used and thus to estimate, some day, how large the Sestius factory was.

Cosa, and the epigraphical evidence would only be one aspect of such study.

In addition to the number and the variety of Sestius finds at Cosa, mineralogical tests of the Sestius clay suggest, albeit in a preliminary way, a connection with the region around Cosa. Further testing is projected for the summer of 1979. Such tests would have to be able to connect the Sestius clay or clays with a clay-deposit near Cosa, in order to prove a connection with Cosa. Clays were, and still are today, imported, for fakery and other purposes, but one can hardly imagine that that would be the case with mass-produced coarse ware. Even clay-testing, however, has some pitfalls, since variations in firing atmosphere and temperature can result in considerable variation in color even on the same clay. It is also apparently true that one clay bed can consist of different varieties of clay, depending on the amount of rainfall when each layer of clay was formed.²⁰ It is, therefore, all the more striking to note that, even to the eye, testing aside, the clay of the Sestius amphoras is of remarkable uniformity. That statement is based on the collection at Cosa (70% of the whole), on some possibly related pieces at the Athenian Agora (see below), and on my memory and notes about the Sestius jars I saw in 1955 at the Musée Borély in Marseilles, where the finds from the Grand Congloué are stored. I have not seen any other Sestius pieces. Sestius clay, on that basis, can be described as coarse, micaceous, very sandy pinkish-buff clay containing conspicuous red pottery bits (Munsell 5YR 6/6). In the sand, black grains are especially obvious. A sandy, lighter colored surface wash covers the outside of the amphora. That surface is sometimes missing, in which case the amphora has a pinkish to reddish color, as did the jars in Marseilles. The clay is identical in appearance with that of the abundant Greco-Italic finds that occur at Cosa (see paragraph 2 of this section and notes 1 and 6) and also with that of a third type of jar, a variant of my Type 16, which is the

20. On the effects of heat on clay, see Anna O. Shepard, *Ceramics for the Archaeologist* (Washington, D.C.: Carnegie Institute of Washington, 1957) 19-24. See also Frederick R. Matson, "Ceramic Studies," in William A. McDonald and George R. Rapp, Jr., eds., *The Minnesota Messenia Expedition: Reconstructing a Bronze Age Regional Environment* (Minneapolis: University of Minnesota Press, 1972) especially 201-202, 219, and 223. (I would like to take this opportunity to thank Professor Matson for his help and advice over the years.) Heat may even cause the crystallization of new minerals. For a discussion of changes in iron chemistry, and as a result in the colors of ceramics, when clays are fired under controlled conditions, see J. Hess and I. Perlman, "Mössbauer Spectra of Iron in Ceramics and their Relation to Pottery Colours," *Archaeometry* 16 (1974) 137-152. On different kinds of clay in the same deposit, see O. E. Radczewski, *Die Rohstoffe der Keramik, Minerale und Vorkommen* (Berlin, Heidelberg, New York: Springer Verlag, 1968) 103-111.

equivalent of Dressel's Types 7-14 (see Zevi's article cited in note 6. Dressel's jars apparently brought *garum* (a fish sauce) to Rome from Spain ca. the 1st century A.C., a date with which Athenian Agora contexts agree).

The uniformity of the Sestius clay and its similarity to the clay of other types of jars commonly found at Cosa lends credence to the hypothesis that Cosa may have been in a major amphora-producing region, one in which mass-production was highly organized, as the Sestius stamps also suggest, and had reached the stage of standardization. Mineralogical tests, while not yet conclusive, also suggest methods of manufacture that one would expect to be characteristic of large-scale production and indicate that Cosa could have been a source of the clay used.

Mineralogical tests were performed in late 1975 on a Sestius fragment found that summer on the surface of the Portus Cosanus deposit mentioned in note 11.²¹ Under the reflected light polarizing microscope and the binocular microscope or stereoscan, the minerals in the Sestius fragment proved to be predominantly volcanic in origin. In addition to augite, chromite, volcanic glass sherds, and olivine, the Sestius minerals included an uncommonly large concentration of iron titanium oxides much larger in grain size than the average matrix material. About 1% of the total compositional weight of the fabric consisted of iron titanium oxides, an artificial situation not paralleled in natural environments on earth but closely paralleled in moon rocks. The Sestius iron titanium oxide particles, furthermore, have distinctive characteristics that point to their having been artificially and purposely added to the fabric. First, they are free-standing, not attached to other minerals, whereas in a natural environment other minerals such as olivine would normally be attached to them. Second, they have been uniformly oxidized, whereas normally volcanic material would show a range of oxidation variations. (The uniform oxidation must have been

21. Will, 1975 op. cit. (in note 7). The tests were conducted by Professor Stephen Haggerty of the Department of Geology and Geography of the University of Massachusetts, Amherst. I am indebted to Professor Haggerty for his kindness in performing the tests. For other analyses of Sestius clay, see Thevenot, 1954 op. cit. (in note 5) 238, note 2, where the iron oxide (hematite) percentage is put at 6.60, in the case of a fragment from Alise-Sainte-Reine. From the beginning, Benoît wanted the volcanic minerals in the Sestius clay to prove that the Sestius jars came from Campania, near Vesuvius: cf. "L'archéologie sous-marine en Provence," *Rivista di Studi Liguri* 18 (1952) 254. His position was less clear by 1961; cf. op. cit. (in note 1) 46. But the work of G. Perinet, "Typologie et structure cristalline des amphores de l'épave du Grand Congloué (Marseille)," *Actes du 83e Congrès national des Sociétés savantes* (Aix-en-Provence 1958) 65-67, sought to confirm the Campanian origin of the cargo.

14. For the lighted altar on coins, cf. M. H. Crawford, *Roman Republican Coinage* (London: Cambridge University Press, 1974) pl. 70, no. 53. For the *sarculum*, see K. D. White, *Roman Farming* (London: Thames and Hudson, 1970) pl. 43. The symbolism of trademarks is often ambiguous, especially to another era, but it is interesting to note that several Sestius symbols could conceivably be interpreted as agricultural rather than (or as well as?) nautical motifs. The trident might be a pitchfork or vine-prop: White, *Agricultural Implements of the Roman World* [Cambridge: Cambridge University Press, 1967] ch. 4. The caduceus might be a mattock hoe: *ibid.* 66-68 and White, 1970 op. cit., pl. 42. The hook might be a vine-dresser's knife: White, 1967 op. cit., ch. 3. The palm branch might be a form of *palus*, or vine-prop: White, *Farm Equipment of the Roman World* [Cambridge: Cambridge University Press, 1975] ch. 2, and 1970 op. cit., pp. 232-237. The double axe could be the *dolabra* or *dolabella*, both of which picks were important in the vineyard (White, 1967 op. cit., 59-66). One form of the anchor resembles the *bipalium* (see text, next paragraph, and *ibid.* 20-23). On the whole, it seems most likely that the Sestius devices trace their ancestry back to coin-types and to the symbols on Greek amphora stamps. The same symbols recur on more modern trademarks. Anchor, caduceus, trident, and star are very common on European porcelain and pottery. Cf. C. Jordan Thorn, *Handbook of Old Pottery and Porcelain Marks* (New York: Tudor, 1947), who makes the point *passim* that the symbols are workmen's marks, though occasionally they identify a pattern (Crown Derby Porcelain, p. 55) or the year of production (in Minton porcelain, the star signifies 1842, the diamond 1857, the arrow 1874, etc., pp. 69-70).

15. See note 14. Devices may also have been used sometimes as inspection-marks, as in the "Tuccius Galeo" series. Cf. E. L. Will, "Two Amphoras from Populonia," in Anna Marguerite McCann, Joanne Bourgeois, Elizabeth Lyding Will, "Underwater Excavations at the Etruscan Port of Populonia," *JFA* 4 (1977) 275-296. On the topic of devices see also Will, op. cit. (in note 6) 240-241. Cf. Crawford, op. cit. (in note 14) 584-589, 878.

16. The smallest, most delicate letters occur with the five- and eight-pointed star and with the sigma. Roman and Rancoule, op. cit. (in note 7) 261, report a five-pointed star with the ligature of "E" and

brought about by the firing of the amphora, at a temperature estimated to have been at least 500-600 centigrade.) Third, the Sestius iron titanium oxide particles are aligned in a way that would only result if they were added purposely to the fabric. Their alignment conforms to the overall curvature of the pot, an indication that after being added to the clay they were spun at high speed, presumably on the wheel. These free-standing, uniformly oxidized, artificially aligned iron titanium oxide particles, not paralleled in naturally-occurring terrestrial clays, must represent original magnetite grains purposely added to the fabric. (The magnetite grains would have been changed to iron titanium oxides during firing.)

Both Lucretius and Pliny the Elder make it clear that the Romans knew the elementary principles of magnetism, and the Sestius clay tested indicates that they also knew how to extract minerals magnetically in a selective way and indeed did so commercially on a large scale.²² Why they would have done so in the case of the Sestius amphoras will require further study. The purpose might be to give the baked clay a redder color, which would result when the original magnetite grains changed to iron titanium oxides during firing. If a redder color was desired, why does a lighter colored surface cover so many Sestius jars? The mineralogical tests, in any case, confirm the other evidence in favor of large-scale, highly organized manufacture of the Sestius amphoras. Cosa or the surrounding area could have been the source of the clay used in the manufacturing process, since the magnetite and the other volcanic minerals put into the Sestius clay might well be available near the great extinct volcanoes east of Cosa. Further testing may help to clarify the picture.

Adding to the other evidence in favor of Cosa as a major source of the Sestius amphoras is an unstamped neck fragment of Type 5 (Dressel 1C) from the Agora Excavations in Athens (FIG. 5). Type 5 is contemporary with Type 4a (see note 6) and indeed two known Sestius stamps occur on Type 5. One of them (see note 2) was found by Nino Lamboglia at Vada Sabatia in a context of about 100 B.C. The scale of Lamboglia's drawing may be incorrect, but the Vada Sabatia fragment clearly has, like the Agora piece, the typically high rim and narrow mouth diameter of Type 5.²³ The symbol on the Sestius stamp at Vada Sabatia is a palm branch; and the same stamp occurs on a Type 5 neck fragment of regular Sestius clay found in 1969 in the Portus Cosanus (FIG.



Figure 5. Type 5 (Dressel 1C) neck fragment from the Agora Excavations, Athens (P 6867). P.H. 0.155 m. Dipinto in red on neck under rim: CO / SES. Unstamped.

6).²⁴ The Vada Sabatia and Portus Cosanus fragments prove that the Sestius factory made more than one kind of amphora. The Agora piece, P 6867, the clay of which is also normal Sestius clay, points in the same direction. More importantly, it seems to link Cosa specifically with the Sestius firm. A red dipinto on the neck under the rim clearly reads CO/SES, the last letter being faint but legible.²⁵ The Latin letters may well name Cosa and

24. The fragment, PC 69-177, was found underwater by Richard and Douglas Preston. The rim height of this piece (0.053 m.) is somewhat lower than the average for Type 5, which is often over 0.06 m. and sometimes, as the type develops, surpasses 0.07 m. The estimated mouth diameter of P 69-177 is 0.115 m. (note 12). The ribbed handles, curved in profile, are also typical of Type 5 (width of the handle on P 69-177, 0.067 m. at curve; thickness, 0.038 m.). The preserved height of the fragment as a whole is 0.32.

25. The preserved height of this piece is 0.155 m. The rim height is 0.064 m., and the estimated mouth diameter is 0.11 m. On this piece, see M. L. Lang, *The Athenian Agora XXI. Graffiti and Dipinti* (Princeton: The American School of Classical Studies at Athens, 1976). The context of the fragment at the Agora Excavations is the same closely-dated one (C 9:7) that yielded four unstamped jars of the

22. Lucretius vi. 906-1064; Pliny *N.H.* xxxvi. 16. 126-128.

23. See above, note 12.

Sestius. If that is the case, this dipinto provides the best indication yet that Cosa was a major source of the Sestius amphoras. Time will tell whether or not this interpretation of the dipinto from the Agora is correct.²⁶ At present, the inscription seems to buttress nicely the other evidence, outlined in this section, connecting Cosa with the Sestius amphoras and suggesting the world-wide scope of the Sestius operations, which extended even to Athens,²⁷ although their chief thrust was clearly toward the West.

Sestius type (fig. 1c and note 6 above; Will, op. cit. [in note 6] 237-238, esp. p. 237, note 3, where I pointed out that the amphoras were used as packing around the shaft of a well dug through a cistern in the last years of the 2nd century B.C., according to Knidian amphora stamps closely dated by Virginia Grace. The *terminus post quem* for Types 4a and 5, therefore, seems to be the late 2nd century B.C. See also Zevi, op. cit. [in note 7]). It should be noted here that a badly worn rim fragment at the Agora, found in an undated context, bears a stamp that is almost illegible but may read SES followed by an anchor (SS 7173).

26. Time may also explain why the Agora dipinto and two Sestius stamps occur on amphoras of Type 5. While Types 4a and 4b are known to have been wine jars, there is not much evidence to link Type 5 with wine. A dipinto on a jar of Type 5 from Azaila in Spain reads "VE.III/C," a possible reference to four-year-old wine from Caecubum? Cales? Cumae? Cosa? (see Juan Cabré Aguiló, *Corpus Vasorum Hispanorum* [Madrid: Cons. Sup. de Invest. Cient., 4, 1944] 98, no. 5). It should be noted that some examples of Type 5 at Delos have the distinctively powdery, plastery pale buff clay that is characteristic, at least at Cosa, of Spanish *garum* jars of Dressel's Types 7-10 (Munsell 2.5Y 8/2). Other examples of Type 5 are made of a very coarse, rust-colored clay (Munsell 5YR 5/6) that is covered with a whitish surface, seemingly like the "Iberian" clay of Cabré's jars of Type 5 in Azaila (*ibid.* 98, no. 4). The Sestius clay of PC 69-177 has been noted. Type 5, then, may have been manufactured, as seems to have been the case with many Roman amphoras, in several areas; but if the "garum" clay of some examples points to the use of the type for *garum*, to the association of the unusual spindle-shape of the type with *garum*, have we evidence here (as in the case of the Type 16 jars of Sestius clay referred to in the text) of a *garum* industry at Cosa, one which existed side by side with the wine industry which utilized most of the Sestius jars? 81 examples of Type 5 have been identified at Cosa. A *garum* industry might help to explain the saltery and fishery which the research of A. M. McCann, E. K. Gazda, G. Uggieri, and J. P. Oleson has located in the lagoon of the Portus Cosanus. The forthcoming publication of A. M. McCann's excavations in the Port will discuss these matters in detail. Type 5 may or may not have been used for *garum*, but the mystery of its shape remains.

27. A possible result of P. Sestius' connections with the Aegean area. In 62, he went to Macedonia as Proquaestor under C. Antonius (Cic. *Fam.* 5.6; *pro Sestio* 5.13). He was a Promagistrate in Cilicia in 49-48 (see T. R. S. Broughton, *The Magistrates of the Roman Republic* [New York: The American Philological Association, 1952] II, p. 264) and served under Domitius Calvinus in Asia Minor in 48-47 (*ibid.* 278). The younger L. Sestius also served as Proquaestor in Macedonia in 43-42, under M. Brutus (Appian *B.C.* iv.6.51, where the name is incorrectly given as Publius; cf. Dio llii.32.4). The coins he issued for Brutus at that time, in fact, bear devices similar to the symbols on the Sestius amphora stamps: see Crawford, op. cit. (in note 14) 515, 741, and pl. 61.



Figure 6. Type 5 (Dressel 1C) neck fragment from the Portus Cosanus (PC 69-177). Stamped SEST palm branch. P.H. 0.32 m.

The Ownership of the Sestius Factory

At the same time that the evidence in favor of Cosa as a source of most, if not all, of the Sestius jars becomes less circumstantial, the evidence grows that the Sestius family of Cosa was connected with the manufacture. The task of identifying a particular "Sestius" as the manufacturer, however, becomes both more difficult and perhaps less necessary. More than one member of the Sestius family may have held control of the enterprise. It seems certain, in any case, that Types 4a and 5 were long-lived, spanning two or more generations. We know also that Lucius Sestius Quirinus, the son of Publius Sestius, and *consul suffectus* in 23 B.C., was engaged in the manufacture of *tegulae* in the last half of the 1st century B.C. Brickstamps bearing his name have been found at Rome and recently in the



Figure 7. Late Sestius trademarks from Cosa, on rims of amphoras of Type 4B (Dressel 1B). a.) (SE·L·EVC). C 68.491, which is stamped twice with the same stamp. W. of stamp 0.041 m. H. of stamp, 0.014 m. -b.) (LVCLVSE). CF 1863. P.W. of stamp, 0.043 m. P.H. of stamp 0.018 m.

Ager Cosanus.²⁸ It can now be announced that at least two varieties of amphora stamps naming Lucius Sestius have been found at Cosa (FIG. 7).²⁹ The stamps occur on rims of Type 4b (Dressel 1B), which was a development of Type 4a and was in use from the second quarter to the last quarter of the 1st century B.C. (see note 6). These late Sestius stamps serve to tie the pottery interests of the Sestius family still more closely both to Cosa and to the manufacture of amphoras and to strengthen my 1956 proposal that Publius Sestius, the praetor of 54 B.C., might have been involved with the production of one class of amphoras of Type 4a, which seems to have been in use until the middle of the century (notes 6 and 7). Publius Sestius was alive as late as 35 B.C.³⁰ His father, the elder Lucius Sestius, dead by 56 and tribune about 91, described by Cicero as *sapiens*, *sanctus*, and *severus*, could also have been active in the business. If one accepts Cicero's description of him, he may have

28. *CIL* XV.1.1444-1445; cf. Will, op. cit. (in note 6) 242. The recent finds in the Ager Cosanus were, according to information kindly transmitted to me by F. E. Brown, reported by Daniele Manacorda during a symposium, "The Seaborne Trade of Ancient Rome in the Late Republic and Early Empire," sponsored by the American Academy in Rome in late 1978 and early 1979.

29. Four examples of the stamp pictured in fig. 7a have been found (CD 857, CE 785, and two impressions on C 68.491), one of them in "SUNY House" (which might have been, in its Augustan stage, a town house of Lucius Sestius?). Fig. 7a reads SE·L·EVC (Euclides the Freedman of Sestius?). Fig. 7b reads LVCLVSE (Lucaon [or possibly Lycidas? see note 39 below] freedman of Lucius Sestius). Its number is CF 1863. The "L·SE," "L·SER·ALB," and "L·SEX" amphora stamps reported in *C.I.L.* XIII and elsewhere may be related.

30. Münzer in *RE*, s.v. "Sestius" (6), p. 1890.

been more suited to business than to a Late Republican political career.³¹ Perhaps an organization large enough to produce a shipment the size of the Grand Congloué cargo and to distribute from one end of the Roman world to the other³² required direction from someone less preoccupied in Rome and abroad than Publius Sestius.

The elder Lucius Sestius married his son Publius to the daughter of C. Albinus, who had become a senator before 60 B.C. Publius was so devoted to Albinus, Cicero tells us, that even after Albinus's death and Publius' remarriage to Cornelia (by 62; *Fam.* 5.6.1), daughter of the exiled Marian and consul of 83 B.C., L. Cornelius Scipio Asiaticus, the two remained close. In 56 B.C. Albinus was in constant attendance at Sestius' trial.³³ In 45 B.C., Sestius asked Cicero (*Fam.* 13.8) to intercede on Albinus' behalf in a dispute over land-ownership. Cicero implies that Albinus was a person of wealth. One wonders, in the light of his curiously close relationship to Publius Sestius and in view of the Sestius pottery interests, whether or not Albinus might have been involved with the Albiniana pottery mentioned on a variety of amphora stamps of the 1st century B.C. (FIG. 8).³⁴ The fact that L. Sestius Quirinus (Quirinalis) preserved an abbreviation of his mother Albinia's name as a cognomen on his brickstamps³⁵ might be an indica-

31. See *pro Sestio* 3.6. On the date of his tribunate, cf. Broughton, op. cit. (in note 27) II, p. 22.

32. In addition to the evidence cited above from the Agora Excavations in Athens, there are unverified reports of Sestius stamps at Carnuntum in Austria (information kindly given me by Elizabeth Solomon) and at Altenburg in southern Germany (see Franz Fischer, "Das Oppidum von Altenburg-Rheinau," *Germania* 44 (1966) note 72 on pp. 303 and 306).

33. On the relationship between P. Sestius and C. Albinus, see *pro Sestio* 3.6. Although Rohden-Dessau, *PIR* III, no. 436, prefer the spelling "Albanus" (and cf. D. R. Shackleton Bailey, rev. of *Senatorial Wealth And Roman Politics* by Israel Shatzman, in *Phoenix* 30 [1976] 210), the several occurrences of the name in *Fam.* 13.8 make the spelling "Albinus" more likely. Cf. Broughton, op. cit. (in note 27) II, p. 487.

34. The stamp pictured is no. 489 in the Benaki Collection, now stored in the Greco-Roman Museum in Alexandria. The fragment was found either in the Fayûm or in Upper Egypt. It belongs to my Type 11 ("Brindisi-type"), which was manufactured in the neighborhood of Brindisi, and perhaps elsewhere, in the first quarter of the 1st century B.C. (see Will, op. cit. (in note 15) 295. Other Albinus stamps occur both on Type 11 and on Type 12 (Dressel Types 2-5). All of these pieces will be published in my forthcoming volume on Roman amphoras in the *Athenian Agora* series. "Vascula Gallica" bearing similar stamps are listed in *CIL* XIII. 10010. 76-86.

35. The name occurs in three different forms on the brickstamps in *CIL* XV.1.1445: L·SESTI·P·F·ALB·QVIRINALIS·A; L·SESTI·ALB·QVIRINALIS; L·SESTI·AL·QVIRINALIS. All the brickstamps of

tion that the pottery (near Rome?) where those bricks were made had originally belonged to his grandfather Albinus. The marriage of Publius Sestius and Albinia could have been either a cause, or a result, of the Sestius pottery interests.³⁶ The merging, if it took place, of two great pottery firms could have created an "empire" strong enough to maintain the apparent monopoly enjoyed by the Sestius amphoras in the West.³⁷ No Republican amphora stamp, in any case, is found with such frequency in the western Mediterranean area, even if one excludes the Grand Congloué shipment.³⁸

We should probably, then, think in terms of the Sestii rather than of an individual member of the family, in considering the ownership of the Sestius factory. Both

Sestius in *CIL* XV seem to come from Rome and vicinity. Since bricks were usually locally made, one would presume these finds were manufactured in Rome. They may be among the earliest brickstamps known, since baking replaced sun-drying of bricks at some time in the 1st century B.C., according to information kindly communicated to me by Herbert Bloch. The locally well-known brick kilns, modern and ancient, on the Albinia River, to the north of Cosa, had, to my knowledge, no connection with the Sestius family in antiquity. Perhaps a connection will some day be discovered. Nor is there any known connection between the Albinia River and the family name of Lucius Sestius' mother. For a recent, brief discussion of a possible ancient kiln near the Albinia, see D. P. S. Peacock, "Recent Discoveries of Roman Amphora Kilns in Italy," *Antiquaries Journal* 57 (1977) 266-268. Detailed publication of the finds from this site will be awaited with interest. On amphoras in the area of the Albinia River and the Gulf of Talamone, see also my forthcoming article (with Vincent Bruno) in *Archaeology*, "Underwater in the Gulf of Talamone."

36. P. Sestius also had a close relationship to his second father-in-law, L. Cornelius Scipio Asiaticus. Immediately after the wedding, Sestius went to Marseilles to visit his new wife's father, in exile there. This marriage, too, may have involved business interests. The amphora stamp L. CORNELI L·F·Q. occurs on jars of my Type 11 (above, note 34) at Alexandria, Delos, and Brindisi. The examples at Alexandria and Delos will be published in my *Athenian Agora* volume. For the stamp at Brindisi, see *CIL* IX. 6079. 18. Study of Roman amphoras makes it very apparent that Roman nobles were heavily involved in business and in trade, however little they might publicize the fact. The involvements of the Sestius family and its connections are just one example among many. I plan to explore the subject more thoroughly in a future article.

37. The connection, if there was one, between the manufacture of amphoras and bricks by the Sestius family and the frequent occurrence of Sestius stamps on Arretine needs to be explored. A. Oxé's *Corpus Vasorum Arretinorum*, edited by Howard Comfort (Bonn: Rudolf Habelt Verlag, 1968), lists (Numbers 1792-1819) many Sestius stamps, the shapes of the letters of some of which closely resemble the letters on the amphora stamps; cf. no. 1793d 1-3, F, and especially g. Stars and palm branches occur *passim* on Arretine Sestius stamps. The amphora "empire" could have included, or been succeeded by (as was apparently the case with bricks), the manufacture of Arretine.

38. Only in the eastern Mediterranean do we find a contemporary parallel. The stamps of Vehilius, Visellius, Betilienus, and others occur by the dozens on jars of my Type 11 ("Brindisi-type") at Athens, Delos, Alexandria, and Brindisi. See above, note 34.



Figure 8. Type 11 ("Brindisi-type") handle stamped, retrograde, ALBINIANA. Benaki Collection, No. 489, now in the Greco-Roman Museum, Alexandria. W. of stamp 0.057 m. H. of stamp 0.013 m.

Publius and his son Lucius exhibited the wealth that accrued from pottery-making throughout Greek and Roman antiquity. Catullus referred to the *sumptuosas cenas* ("costly dinners") of Publius Sestius (poem 44). Cicero mentions in 44 B.C. Publius' villa at Cosa (*Att.* 15.27.1) and on another occasion, in 45 (*Att.* 13.2.2), jokingly called him *parochus publicus* ("official welcomer"). In 62 B.C. (*Fam.* 5.6.2), Cicero sent him a plea for financial assistance as clear as it was indirect, noting that he was ready to join a conspiracy because of his indebtedness for the new house on the Palatine. Cicero may have owed a financial, as well as a moral, debt to Sestius (*Fam.* 13.8.3: *ego illi uni plurimum debeo*—"to him alone I owe most."). There is also the possibility that Augustus' appointment of Lucius Sestius as *consul suffectus* (surrogate consul) in 23 may have been less a startling gesture of good will and admiration toward a militant adherent of Brutus than a desire to add the younger Sestius' financial resources to his own side.³⁹ Finally, another chance reference in Cicero (*Att.* 16.4.4; 44 B.C.), one in which he mentions the *navigia luculenta* . . . *Sesti* ("splendid ships of Sestius"), may apply either to Publius or the younger Lucius. Scholars disagree,⁴⁰ but it is clear that the phrase indicates that the Sestius family had shipping interests, or at least "naval capabilities," of which the top level of the Grand Congloué pile may be another suggestion. Even if Publius Sestius or his son did not per-

39. See Dio lili.32.4 (cf. above, note 27). It is tempting to read Horace *Odes* 1.4, dedicated to L. Sestius, in this light and in the light of the archaeological evidence. The choice of words in the poem (*carinas*, 1.2; *officinas*, 1.8; *regna vini*, 1.18; *Lycidan*, 1.19, etc.) may tie it closely to L. Sestius.

40. For a summary of the evidence, see Broughton, op. cit. (in note 27) II, p. 326. I am indebted to Professor Broughton for his kindness in discussing this matter with me by letter.

sonally own ships, one of them had the ability to raise the fleet praised by Cicero. Further excavation in the Portus Cosanus might throw more light on this matter.

Literary references thus seem to confirm the wealth and the power of the Sestius family. Whether or not the family was in the shipping business, the archaeological evidence clarifies the literary evidence by pointing to the existence of a large, far-flung and long-lived pottery firm located in the area of Cosa, one which was probably dominant in the manufacture and export of amphoras of Type 4a.⁴¹ Other stamps are found on the same type of jar, but none comes close to the Sestius stamps in frequency of occurrence.

As our knowledge of Roman amphoras and of other coarse wares expands, we are able to probe more deeply into Roman economic history. We achieve a better understanding of Roman antiquity and at the same time a realization of how little we actually know about it. Study of the Grand Congloué excavation and of the Sestius amphoras takes on more meaning in that light. Further study should help to clarify the areas of uncertainty that remain. The Sestius amphoras, however, important as they seem to have been, are just one element in the entire picture. Close study of all classes of Roman commercial amphoras, and of coarse wares in general, will enable us to achieve a level of understanding of Roman economic history that can be only dimly foreseen at present. At the same time, the interdependence of dry-land archaeology, underwater archaeology, and literary scholarship will be underscored.

41. Type 4a may well have been manufactured in several places, although the Sestius firm seems to have been dominant. We know, for example, that Type 4b was manufactured both in Latium, where kilns have been discovered near Terracina (cf. A. Hesnard, "Note sur un atelier d'amphores Dr. 1 et Dr. 2-4 près de Terracine," *Mélanges de l'école française de Rome. Antiquité* 89 [1977] 157-168) and near Brindisi, where the kilns discovered by me in 1961 contained fragments of Types 4b and 11, as well as other types (above, note 10).

Elizabeth Lyding Will, a specialist in Roman amphoras, is Associate Professor of Classics at the University of Massachusetts, Amherst.

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The American School of Classical Studies
54 Sw edias St., Athens 140, Greece

February 4, 1980

Dear Letty,

Here enclosed is a copy of a letter to Dr. Rodriguez, whose article may interest you. He publishes drawings of many stamps, and also some profiles of upper parts of amphoras, also of basins considered to be stands for amphoras (during the drying process?), together with ~~xxxx~~ a profile drawing of an amphora in such a basin. Apparently there is a kiln. It all seems interesting, but I have no background for the stamps.

Thank you very much for ~~the~~ your offprint from the J.F.A. 1979, pp. 339-350, which I have read and shall reread; it is surely your best publication, and will be a needed reference on the Marseilles wrecks. Since you say you are using some of this text for your book I make a couple of suggestions.

1.) On my date for the earlier wreck at Grand Congloué, be sure to use what I told you in my letter of Aug. 24-28, 1979, p.2, i.e. late 3rd century, not down to 180 B.C. To me, 180 is not at all the same as, say, 2nd 05-see again that letter. For help in understanding the development of the "Greco-Italic" jar at just a little later than the date of the earlier Grand Congloué wreck, I enclose a photo taken last June in Rhodes of one of the "Greco-Italic" jars from the Villanova deposit (no. 4614 of Maiuri's publication-4614 was stencilled on the jars).

2.) In discussing C9:7 and its amphoras, including the Knidian, you should probably refer to EAD 27, p.332, under E 88. There is there also a bibliography of publications of material from that deposit, including reference to Amphoras, figures 38-40.

I have read your catalogue section with interest, and await with even more interest the "type-discussion" of this class, not yet received. Can you illustrate the "Greco-Italic" amphora from the Cala Rossa wreck off

but
still not
as late as
180

Corsica? Don't forget to have specific permission from Maria to mention material from Pella.

n.b. You sent two copies of the Sestius article, and not the other one. Let me know what you want to have done.

Fraser is here, and he told me last evening that you had said you would give him a list with references and dates of the Greek Brindisi names - references i.e. to any publications there may be. Would you like us to give him what we have here, and have him pass on the list to you for supplementing and correcting?

Carthago delenda est, i.e. there is something I feel I must not omit to say, and that is don't forget that it is more important for your ms. to become a book than that anything be added to it; and that the final work toward the publication is much harder and more time-consuming than one can believe; and that the time comes when one cannot do it - things fall apart, the middle cannot hold. Whereas it is stimulating to leave out something for next time. Correspondence, supplements, nice details that continue to embellish ^{one's} ~~the~~ picture of the pattern.

VG/ mostly CZ

1. Benaki 590 (NB 83). Lengthwise near the upper attachment of a small handle fragment. H.W., 0.047; H.T., 0.027. Coarse, very micaceous reddish-purple clay; worn beige surface.

2. Benaki 596 (NB 89). Lengthwise at a slant near the upper attachment of a handle fragment. H.W., 0.047; H.T., 0.025. Coarse, slightly micaceous reddish-brown clay, greyish at core.

3. Rhodes Archaeological Museum, unnumbered (V.R. Grace record no. 101). Lengthwise at the curve of a small handle fragment of coarse clay. Dimensions not available. Studied from a photograph kindly provided by Virginia Grace.

The three stamps listed above bring to 17 the number of examples known to me of this widely dispersed and much-discussed trademark, traditionally the "earliest Latin amphora stamp." The most complete summaries of occurrences of the stamp are in CIL I².425 (cf. 722 and Callender 1737) and in Atilius Degraasi, Inscriptiones Latinae Liberae Rei Publicae. Imagines (Berlin: de Gruyter, 1965), no. 363. Seven of the stamps listed in those summaries are from Sicily (also listed in CIL X.8051.21. Two of the Sicilian examples are from Drepanum, two from Mount Eryx, one from Licata, one from Syracuse, and one from "Sicily"; in other words, the finds on the island are not localized); five, of which only the three best are listed in CIL, are from Taranto (cf. Luigi Viola, NSc 1885, p. 283, no's. 224-226); and one is from Carthage (CIL VIII.22637.62). Another example from southern Italy is almost certainly listed under tegulae in CIL X.8041.58 (from Monte-leone, Roman Vibo Valentia).

Although Viola reported five pieces from Taranto, only two were in the amphora collection of the National Archaeological Museum there when I examined it in 1955 and again in 1961. These two stamped handles, one of which had become detached, belonged to the same neck fragment, to which I gave the record number 1961.TL-6. The detached handle is apparently illustrated in Degrassi, loc. cit. above. Whether this neck is among the objects described by Viola is at least open to question, since he does not refer to a neck fragment with two stamps. No TR.LOISIO stamp, furthermore, is mentioned in the list of Latin amphora stamps from Taranto in Eph. Epig. VIII. 242. Perhaps by that time the five stamps had been lost or misplaced, and the neck was found subsequently? In any case, it is clear that the largest concentration of TR.LOISIO stamps occurs at Taranto.

The antiquity of this stamp was recognized long before the identification of the "Greco-Italic" type of amphora. Th. Homolle, in BCH 4 (1880), pp. 183-184, published a Delian inscription of 162/1 B.C. in which a Trebios Loisios or Loidios (in Greek letters) was named as owing money to the Temple of Apollo. Cf. Homolle, BCH 8 (1884), p. 94. H. Dessau, Hermes 18 (1883), pp. 153 ff., connected the amphora stamps with the person named in the Delian inscription, suggesting that he was an Italian trader on Delos. The amphoras were therefore as old as the 160's B.C. J. Hatzfeld, in BCH 36 (1912), pp. 142-145, developed Dessau's suggestion by proposing that Trebius Loisius was a grower-potter-exporter in the habit of making frequent trips to Delos, like many other Italians of the same period. More specifically, E.T. Salmon, in Samnium and the Samnites (Cambridge: Cambridge University Press, 1967), p. 321, identified Trebius as one of the Oscan-speaking Sabellians who took

advantage of trading opportunities in the provinces. Confirmation of the Campanian origin of the Trebii is presented by Castrén, who notes (pp. 42, 230-231) the importance of the gens at Pompeii during both the Sabellian and the Roman periods. Indigenous to Pompeii (Castrén, p. 230), the Trebii were prominent both politically and economically in the city. One of two known meddices of Sabellian Pompeii was Numerius Trebius Trebii f. (Vetter 15; Castrén, p. 42). The name also appears in Oscan on brickstamps of the Sabellian period (CIL X.8042.158-160; cf. Vetter 46, 46a, 47, 49, Castrén, pp. 45-46, 270). It is natural to wonder whether the amphoras stamped TR.LOISIO might not also have originated in or near Pompeii during the late Sabellian period. Their coarse, dark clay, quite different in texture and appearance from the clay of the many Greco-Italic jars found in the region of Cosa, closely resembles the clay of the Pompeian jars of Type 12, to be described below (no's. -

). It corresponds, also, to the fabric of the Oscan-stamped fragments of Type 1 (no's. 3 and 4 below), pieces which may very probably have been products of the pottery of the Ovii, another indigenous Pompeian gens, powerful during the Sabellian period. Perhaps the Trebii and the Ovii owed their standing to some extent to the international scope of their pottery businesses, and they may also have owned the vineyards which produced the wine carried in the jars. No TR.LOISIO stamp has yet, to my knowledge, been found in Pompeii, but as earlier levels of the city are explored, more light will surely be shed on the Sabellian period.

2. M.LVR

1. SS 8607. Across the base of a handle fragment, to which

a piece of shoulder is attached. H.W., 0.042; H.T., 0.023. Rather coarse, finely micaceous pinkish-buff clay, greyish at core; scattered reddish and dark bits; beige surface.

2. SS 10096. Across the base of a handle fragment, to which a piece of shoulder is attached. H.W., 0.042; H.T., 0.024. Finely micaceous pinkish-buff clay, lighter at core; frequent dark bits; beige surface.

3. Hermione Magoula. (Found in 1974 by Alan Walker, who kindly permitted me to include the piece in this catalogue.) Across the base of a handle fragment, to which a small piece of neck is attached. H.W., 0.041; H.T., 0.021. Coarse, micaceous pale rust clay, grayish at core; scattered black and white bits; lighter surface.

4. Benaki 165 (M 2). Across the base of a handle-stump, to which pieces of neck and shoulder are attached. P.H., 0.08; H.W., 0.045; H.T., 0.02. Rather coarse, finely micaceous greyish clay, pinkish-buff near surface; scattered light and dark bits; greyish-buff surface.

5. Benaki 166 (M 4). Across the base of a handle-stump, to which pieces of neck and shoulder adhere. P.H., 0.063; H.W., 0.05; H.T., 0.017. Rather coarse, finely micaceous pinkish-buff clay, greyish at core; scattered small light and dark bits; pinkish-yellow-buff surface.

6. Benaki 167 (M 3). Across the base of a handle-stump, to which fragments of neck and shoulder adhere. P.H., 0.08; H.W., 0.049; H.T., 0.017. Finely micaceous greyish-blue clay, pinkish-buff near surface; scattered light and dark bits; pinkish-yellow-buff surface.

The same stamp has been found at Carthage (CIL VIII.22637.65). Both it and the TR.LOISIO stamp from Carthage probably reached the

city before the destruction of 146 B.C. Although the person named in the stamp cannot at present be identified, he may have been an ancestor of the M. Lurius who commanded the right wing of the fleet of Octavian at Actium (Velleius Paterculus 2.85.1; Broughton II, p. 421; PIR 2, p. 307, no. 315).

3. OVI.P (retr., in Oscan).

Benaki 234 (NB 9). Worn and lengthwise at a slant on a small handle fragment. H.W., 0.042; H.T., 0.020. Finely micaceous pinkish-buff clay; scattered tiny dark bits; lighter surface.

A similar stamp was found on a Greco-Italic amphora from the Cala Rossa wreck off Corsica. Cf. W. Bebko, Les épaves antiques du sud de la Corse (Bastia: Fédération d'Associations et Groupements pour les Études Corses, 1971), p. 46, no. 272.

This and the following stamps listed under no. 4 were quite probably products of the pottery of the Ovii, a gens powerful at Pompeii during the Sabellian period and under the Romans (Vetter 18, 26; Castrén, pp. 43, 201, 269-270). Large pots bearing the trademark of the pottery are also reported in Vetter (55, 57) and Castrén (pp. 46, 270). It seems likely that the same pottery produced, during the Roman period at Pompeii, the OVI jars of Type 12 described under no.

below. There may also be a connection with the OVINI stamps on amphoras of Type 4b (no. below; cf. the Pompeian dolium, CIL X.8047.12, stamped SEX.OBINI.SALVI). The widespread distribution of the OVI stamps of Type 1 parallels that of the TR.LOISIO stamps and, like them, suggests the scope of industrial activity in Campania, perhaps particularly in Pompeii, during the Sabellian period.

4. P.OVI (apparently in Oscan but not retr.)

38.06

1. Pella A 1946. On a handle to which a mushroom-shaped rim is attached. Not seen for study. Information on this and the following piece kindly provided by Virginia Grace.

2. Pella A 2201. On a handle to which part of the neck is attached.

3. Benaki 514 (NB 59). Slightly broken and lengthwise at a slant near the upper attachment of a small handle fragment. H.W., 0.042; H.T., 0.023. Finely micaceous pinkish-buff clay; scattered dark bits; beige surface.

4. Benaki 592 (NB 85). Lengthwise near the upper attachment of a handle fragment. H.W., 0.053; H.T., 0.024. Micaceous pinkish-buff clay; sandy greyish-buff surface.

The same stamp has been found at Cosa (C 66.490; and C 65.461, difficult to read, may be the same stamp in another die) and almost certainly at Arentsburg in Holland (CIL XIII.10002.624; cf. the similar stamp, CIL XIII.10002.623, from Aulnay near Troyes in France. The latter stamp is also in Callender, p. 275, no. 53). If the information in CIL is correct, the presence of the stamp on the coast of Holland and in northeastern France helps to illuminate the pre-history of those areas, at the same time documenting the wide distribution of the OVI amphoras. Even the attested examples, at Pella, Alexandria, and Cosa, illustrate the international character of this trademark. Perhaps the non-retrograde form of the stamp answered a need to make it more comprehensible in areas unfamiliar with Oscan. In the Roman period, the stamp occurs in careful Latin letters on amphoras of Type 12 (no. below).

5. PVRG

1. Benaki 538 (NB 63). Broken and at a slant at the curve of a handle fragment. H.W., 0.039; H.T., 0.024. Micaceous pinkish-tannish-buff clay, greyish at core; frequent small reddish and dark bits; beige surface.

2. Benaki 588 (NB 81). Lengthwise near the upper attachment of a whole handle. H.W., 0.043; H.T., 0.02. Slightly micaceous deep pinkish-buff clay; beige surface.

The same stamp has been found at Cosa (C 69.127), and almost certainly at Ampurias (Almagro no. 185; cf. Beltrán, p. 178, no. 390 and fig. 55, no. 216). Although this is clearly another widely-distributed Greco-Italic stamp, its meaning is not yet clear to me. Since other known stamps of Type 1 seem to name individuals, these letters might be an abbreviation for a name such as Plautius Urgulanius (the cognomen Urgulanius occurs at least once with the nomen Plautius, a child who died before 14 A.D. See PIR 3, p. 48, no. 364).

DEPARTMENT OF CLASSICS
Herter Hall

Telephone:
413/545-0512

January 8, 1980

My dear Virginia,

It was so wonderful to talk with you on Saturday. So frustrating, though, not to be able to have a long talk in person. I hope you had a comfortable return trip and found your apartment in good shape. (Is Violetta still working for you? If so, please give her my regards.) I do hope I can get to Athens next summer, MS in hand. I hope to accomplish a great deal on it during this month of freedom from teaching. Specifically, I plan to send you in a few days the type-discussion of the Greco-Italic genre. As background to that, here is the section of the catalogue dealing with Type 1. The pieces with Latin or Oscan stamps are few in the East, but the connections with Campania are tantalising, as is the possible connection with Type 12. I won't say more until I send the type-discussion.// Here *Both* also are two JFA offprints, on which I would be delighted to have *any* and all comments. The core of my type-discussions for Types 4 *which* and 5 is in the article (which, as I wrote you, I put together, *with 8 & 9* took time for, owing to the threat posed by Manacorda's careless and aggressive work). Note that the Agora dipinto, P 6867, on p. 346, is given a different reading and interpretation from that in Mabel's book; in fact, she omits or, in my view, misreads most of the dipinti on amphoras. More later about all that. // Please give my love to Maria and Andreas. I gave Maria's letter to Carolyn, with whom I had lunch on the last day. *With much love to the moment, L.H.*

P.S. A very attractive colleague of mine (and former student of Erdős) at Buffalo) MARIOS PHILIPPIDES was visiting him recently. (He is ...)

American School of Classical Studies
54 Swedias Street, Athens 140, Greece

August 31, 1979

Dear Letty,

P.S. to my letter to you of August 24-28.

The young Englishman, Paul Arthur (see p. 3 of my letter), came again and straightened me out a bit with regard to Mlle. Hesnard's paper that he heard recently. The congress was in June, I believe in Rome and on Roman Delos. It had nothing to do with analyses for distinguishing between real and imitation Koan. Mlle. H. discussed Latin stamps and Roman amphoras found on Delos, and showed slides. Perhaps some such project was discussed in the letter she said she had written to you in September 1977. P. Arthur is taking a doctorate in Italy, under F. Zevi. All this about that congress I have only from him, and I don't know him well.

With regard to Greek Brindisi jars, and related, do you have in mind the one about which I ~~wrote~~ wrote to J.A.Riley 21.XI.77, and sent you a copy of the letter? Something found in Berenice (Benghazi). Baggy body, drip toe, top like the neck of ~~ΦΙΑΗΜΩΝ~~, AVG 1172; and containing a hoard of Ptolemaic coins. Stamp a monogram of Greek letters.

copy to P. Arthur

Copy to
P. E. W.

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the T. E. W.
- Find, also, B. B.

Perlecof, and and
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2) KOAN
3) SPANISH
4) WRECKS
5) TECHN. & M. F. R.
- POTTERIES
41.01
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American School of Classical Studies
54 Swedias Street, Athens 140, Greece

August 24, 1979

Dear Letty,

Lovely surprise to have a letter from you. By now you must have gone to Princeton, perhaps have left again for home. I hope you and Marian had a good talk. I gather you planned to leave the manuscript of the catalogue there. However that may have been decided, let me take up a bit some of the points in your letter.

For the illustration of Type 1: it would certainly be nice if you could find a whole or nearly whole jar of this shape with a Latin stamp impressed on it. Though it would be still nicer if it had been found in the Eastern Med., I would not care so much if I had the whole shape with some Latin stamp. Could you illustrate, in addition to your P.E. jar, the most-preserved fragment that does have a Latin stamp? Do you have a clear distinction between fragments of Types 1 and 3? Perhaps one distinguishes them by clay? Such comparisons need to be clear and specific somewhere for the reader, you can't imagine how much one assumes as a writer that may never have been given to the reader. Maybe you have such distinguishing descriptions as headings for your types in the catalogue. If not, perhaps they could go into the general introduction. As for me, I do not distinguish two series, the "Greco-Italic" and the "Spanish?" - they are 2 names for the same perhaps rather loosely assembled class. Use "Greco-Italic", which is what most people use. Recently we here have identified another one, found in Syria, see P. J. Riis, Sukas VI, Copenhagen 1979, pp. 55-56, figs. 186-188. (He pretends that the actual reading (MEAKA) was his own, but it was Maria's - he was not even ready to accept it at first). The jar is like those in the Lipari wreck, with which I hope you are familiar. Dear me, how much there is to be familiar with. What date do you give the P.E. jar? If PASI is an early ex. of Type 7, what is its type ex.?

I am absolutely fascinated by the Karanis jar in the Kelsey Museum, and so will Carolyn be, when she goes there, as planned, some time around Christmas when she has some time off. She never felt much like accepting as Corinthian P 6796, etc. In her

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dissertation they appear, but dubiously, and rather blamed on Dr. V.G. As for your including the GBs, M. Empereur was quite shocked when I told him I thought you had been planning to omit them. He said, But they were on the same jars as the Latin ones. Do put them in, if it can be done without holding things up again.

August 25

In the case of Greek BRs, the files here may contain additional examples, accumulated since you saw them. There is one of HPAIOZ, for example, from an early Roman period ~~at~~ house at Knossos.

P 11880 has seemed to me a stage in the development of the Koan amphora, cf. P 11880 is top, right end, in the picture. fig.56 of my Picture Bk. When you look at the actual series of jars, there does not seem to be much break in colour and such-like. The new feature in this jar, i.e. apart from the advance in tendencies, is the shoulder stop; if one can compare the break at the shoulder in P 11880 with what happens in the "Greco-Italic", which I point out Hesperia 1963, p. 320, note 4. This ridge between two opposite curves is common on Roman amphoras, so you don't notice it; but it doesn't in fact occur on ^{eastern} Greek jars, so far as I know, only on "Greco-Italic" and ~~perhaps~~ other western classes. Do you not, ^{however} ~~for instance~~, think that any amphoras made in Kos may have been impressed by a Latin stamp? Does not history suggest a time when that might have happened?

We certainly need more clay - analyses for double-handled amphoras. I am not sure if you know Antoinette Hesnard or her work. She is one of the authors of Gallia Suppl. 1978 XXXIV, Roman wreck de la Madrague de Giens (Var) with cargo of Dressel 1 plus a couple of Greek amphoras, including a stamped Rhodian which we identified for her. Seems to have been doing a study of Roman wine amphoras of the Republican period. Told me in September of 1977 that she had written to you. She was then planning to apply to take samples for analysis, to try to distinguish between real and fake Koan. The French School made the application and Dantas granted permission. She will have worked in Rhodes, Kos and Delos, as well as in Athens. At the Agora, she was chaperoned by Maggie Wallace Matheson, who has been working with me off and on for several years now, chiefly concerned with pushing out the Koan volume. (A.H.) She took samples from 12

SS items with double handles, including two with Latin stamps, both of which had already been done by Brookhaven: SS 8257 (CARIO), and SS 11739 (C.L.IV.II). I regret to say, she did not take ^{a piece of} P11880. She promised to send me the results of the analyses. Nothing so far, but I have heard that she spoke at some congress, I think last May, and one supposes the papers will be published. This bit of news came from one Paul Arthur, ^{(about last week),} an Englishman who called, and seemed to have to do with the London Institute. (He seemed to know Manacorda, and agreed about the Marxist line.)

Date of the earlier wreck at Grand Congloué: by "Greek" ^{Grec. in quotes} I suppose you mean "Greco-Italic", and I don't ~~know~~ date them independently at present. But there were some stamped Rhodian amphoras, of which unfortunately the records are scant and confused. But see Benoit, Gallia, Suppl. XIV (the Grand Congloué) (1961), pp. 28-29 (I think - taking from notes). There are some readings which I think came from here via rubbings by Mr. Benachi. The eponym KAEITOMAXOZ is late 3rd century (in my roster, 205 B.C.) The fabricant APIETION about the same: he is known in pairs with ^(Agon) AOPKYAIAAZ (210), OAPZINOAIZ (208), IAZIKPATHZ (204), and perhaps KPATIAAZ (199), as well as KAEITOMAXOZ. ^{B's} Where he has restored M[PAT]O@ANEYZ for another eponym, I would think H[PAT]O@ANEYZ more likely, anyhow its date (201) is better for the group than that of APATO@ANHE (there are 2 of these, one of ca. 178 BC and the other of ca. 100 BC); I observe ^{B's} that in his earlier publication of the stamps from the wreck (Rhodania 1954-5, p. 10, an informal sort of publication which you may not be able to find), he forms his initial alpha entirely in dots. Finally, he mentions a reading AFA@OKA. A potter AFA@OKAHE, or more than one, worked in the late 3rd and early 2nd BC. One who often abbreviates his name like the reading given is known in pairs to be dated 211, 208, 205, and perhaps 195; the only thing is, his name is usually accompanied in the same stamp with that of a month. It is a great pity that this material seems to have been scattered. No doubt it is ornamenting villas of the divers, especially perhaps Cousteaus. At any rate, the only Rhodian amphora from the wreck that I saw when visiting the Borely in October 1955 was marked with its Borely number 8456. This appears with this number in the Rhodania article, the only one with a Borely number, and some letters are read; I was not able to identify the stamps. However the shape of the amphora, which I photo-

These pairs will appear in an of course not for the record.

(27.VIII.79)

41.04

graphed (my 370.25) and its proportions and dimensions, match it with jars of the late 3rd B.C.: of for instance a jar of ΑΡΑΘΟΚΑΜΗ in the term of ΚΑΕΙΤΟΜΑΧΟΣ (Paphos Mus. no.860). And ~~may~~ contrast it with jars of ca. 180 B.C., e.g. a jar of ΑΝΤΙΜΑΧΟΣ in the term of ΑΠΙΕΤΣΟΝ, now Cyprus Museum 1969/V-16. I choose these because they have been as the Gr. Congl. jar, with photographed in the same way, the same lack of tilt. The Borely jar can be seen to be slightly earlier than the Paphos jar; the jar of Antimachos distinctly later than either - not only is the whole jar taller, and the neck and handles in themselves taller, but the neck is wider. Such differences might not mean anything in some series; but in Rhodian at this period they are all parts of trends. M. Benoit was not free to move Borely 8456 down to 180. He might have said that it was an old jar they had from their (in fact he did make some such suggestion in a letter), grandmother, I suppose, but the pieces ~~having~~ ^{being} the stamps mentioned above would have had to go along, also his Knidian jar, which looks very old compared with Knidian jars of about 180 B.C., although the sequence here is much less clear than for the Rhodian. (No stamps distinguished on the Gr. Congloué Knidian.)

28.VIII.

You are not supposed to make use of the foregoing, of course, except as background. I was trying to show you, and myself, how I came to have this view of the date of the earlier wreck; which does not seem to have changed since 1953, when it was already "late 3rd century"; but in correspondence, etc., - I seem never to have put any comment on Grand Congloué into print. (If you have seen one, tell me.) This date, toward 200 B.C., it was my understanding that it was where the experts also put the Campanian ware. Has that changed? So if you want to cite my view, please put "late 3rd century B.C." or "toward 200 B.C." (Dates for individual ^{Rhodian} eponyms are, please, not to be cited, since I must be free to juggle them as necessary, and I won't have time to run around and make corrections in other people's productions))

Will you now, please, in return, tell me where you now date the Sestius jars in the later Gr. Cong. wreck? - or anything else belonging to the later group.

On kilns: Mlle. Hesnard seems to have found ~~known~~ the one published by Manacorda; also another, in Terra Cino (?), of jars of Dressel 1 and Dressel 2. The French have found some very exciting ones in southern Thasos which produced stamped Thasian jars; Carolyn and I went to visit them earlier this month. McCredie has found one in Samo-

29.VIII. Nearly forgot to remind you to be sure to send me a photocopy soon of the DEPOSIT LIST for the Agora which you are going to publish in your volume, i.e. the SUMMARIES which will correspond with those e.g. in Agora XII, pp 335, ff. I have been going over those to appear in Susan Retroff's book on Meg. Bowls. I'm sure you agree it is important that we all sound in reasonable agreement about the same deposits, or nobody will believe us.

84 High Point Drive
Amherst, Mass. 01002
August 8, 1979

My dear Virginia,

I can't tell you how pleased I am to have your recent letter, even though it brings the sad news of Miss Kokoni's death. I was very fond of her, that strange, dark house, the lovely garden that refused to admit the city's existence (but may even now have succumbed to the family's wishes, the duck (Thelma?), the Spe-jar. She was always so lovely to me, from that first summer at the Agora. (I think you were away when I arrived. Lucy put me to work on a study of Roman moulded bowls and made me guide groups of tourists around the Agora. Miss Kokoni was there, and befriended me right away.) I guess I got started calling on her after she lost

silence. It's been a tremendous half dozen books that this volume the same time to come to grips with approaches, scientific data. I never t to write, but get only to brief, of things I have to ask and tell you t I haven't done so; but I'm feeling so ned now that the book is under control, that I think you may find me acting like d 42 Princeton doesn't ne in September. I tters which my detailed vice about.

provincial periodi-
graphy of the last two
ogue more or less
Each handle has e. I will finish
lengthwise near upper this fall. I can
H., 0.729; G.D.,
D., 0.159; H.W.,
(HPAIOC), 0.030;
few bits and
one than the
gish toe, like the
utton can't be
e under very trying
the possibility
that case it would
le, one I made myself,
would be appropriate
profiles of Academy
ars such as P 25797,
eco-Italics and early
was, with P 17046
and PASI early
to you. I am quite

Unstamped
Type 1
Porto Ercole PE-1 (ELW record no.)
(Jar is now in lobby of Le Rocce Hotel, Ansedonia)
Jar entire except for lower toe and chips from rim.
P.H., 0.698; G.D., 0.36; R.H., 0.021; M.D., 0.12; R.D.,
0.165; H.W., 0.041; H.T., 0.019. Coarse, finely
micaceous rust clay; many tiny black and white bits;
yellow-buff surface.
Note: found underwater. I'm sorry I haven't a 1:10
print of this jar. I'm sending you one of the
tacts given me by Frank Brown.
Photo by
Frank Brown.
ELW slides.
1:1 profile.



cal arrangement, to include such a large group of Greco-Italics under Miscellaneous and Unclassified. In describing the type, I am going ahead, as you suggested, to point to a possible analogy with your "Spanish" series, if you still feel that a good idea. It looks to me now as if the type was manufactured all over the Mediterranean, like many types of amphoras in the Roman period.

BATON and HPAIOC

Between P 6796 and
Type 11 ?

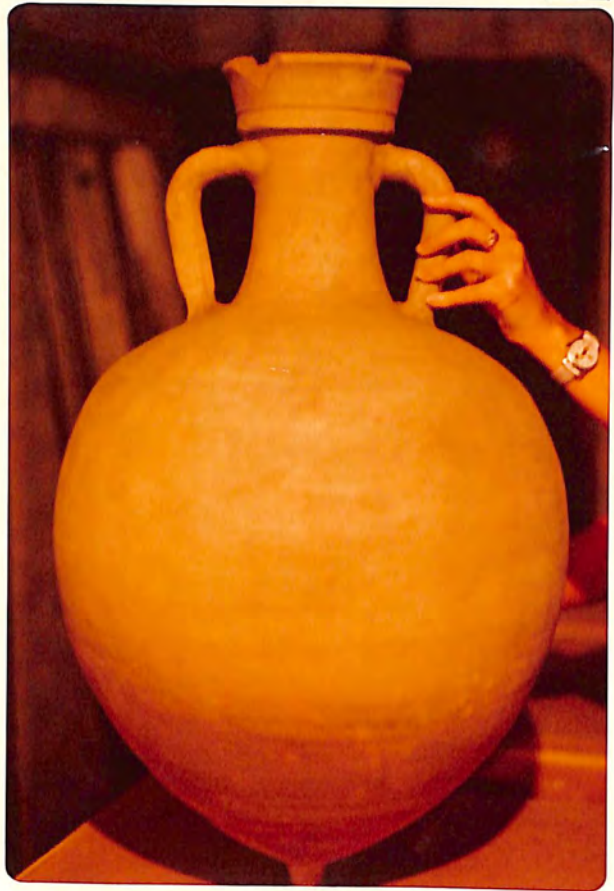
[42.07]
Photos
and ELW
slides

Kelsey Museum, Ann Arbor, no. 8126

From Karanis. Field no. 29-SG-gIII.

Jar entire except for chip from rim. Each handle has a different rectangular stamp set lengthwise near upper attachment. Stamps slightly worn. H., 0.729; G.D., 0.44; R.H., 0.0635; M.D., 0.126; R.D., 0.159; H.W., (BATON), 0.031; H.T., 0.030; H.W., (HPAIOC), 0.030; H.T., 0.027. Fine pinkish-buff clay; few bits and shells; yellow-buff surface.

Toe is a button, but a much smaller one than the button at Brindisi, and it is a longish toe, like the one on P 6796 (unfortunately, the button can't be seen in this print from a slide made under very trying circumstances). Note: I considered the possibility that BATON might be Greek, but in that case it would be spelled with an omega.



Karman 8126

[42.02-6]

Kelsey Museum, Ann Arbor

Stamped: BATON, HPAIOC

Karman 8126

Kelsey Museum, Ann Arbor

Stamped: BATON, HPAIOC

From ELD slide

Unstamped

Type 1

[43.01]
Photo by
Frank Brown.
ELW slides.
1:1 profile.

Porto Ercole PE-1 (ELW record no.)

(Jar is now in lobby of Le Rocce Hotel, Ansedonia)

Jar entire except for lower toe and chips from rim.
P.H., 0.698; G.D., 0.36; R.H., 0.021; M.D., 0.12; R.D.,
0.165; H.W., 0.041; H.T., 0.019. Coarse, finely
micaceous rust clay; many tiny black and white bits;
yellow-buff surface.

Note; found underwater. I'm sorry I haven't a 1:10
print of this jar. I'm sending you one of the con-
tacts given me by Frank Brown.





C75.T, 2P 4302-6

Auphora PEI

(Le Rocas)

Photo by Frank Brown

C75.T 26

84 High Point Drive
Amherst, Mass. 01002
August 8, 1979

My dear Virginia,

I can't tell you how pleased I am to have your recent letter, even though it brings the sad news of Miss Kokoni's death. I was very fond of her, that strange, dark house, the lovely garden that refused to admit the city's existence (but may even now have succumbed to the family's wishes, the duck (Thelma?), the Spe-jar. She was always so lovely to me, from that first summer at the Agora. (I think you were away when I arrived. Lucy put me to work on a study of Roman moulded bowls and made me guide groups of tourists around the Agora. Miss Kokoni was there, and befriended me right away.) I guess I got to know her best when you and I started calling on her after she lost her job. Anyway, I think of her often and always will.

I'm so sorry about my long silence. It's been a tremendous psychological effort to get the half dozen books that this volume really is digested again and at the same time to come to grips with masses of new bibliography, new approaches, scientific data. I never seem to write the letters I want to write, but get only to brief, emergency letters. The number of things I have to ask and tell you makes it doubly unfortunate that I haven't done so; but I'm feeling so much more energetic and determined now that the book is under control, now that the end is in sight, that I think you may find me acting like my old self soon. I'm not, here, going to try to reply to the letters I owe you, since the imminence of my departure for Princeton doesn't allow it, but I'll hope to be caught up by some time in September. I might comment now on just a few of the pressing matters which my detailed reexamination of the MS makes clear I need your advice about.

The Princeton trip will enable me to scan the provincial periodicals and make sure I have caught the chief bibliography of the last two or three years. I hope to go there with the catalogue more or less retyped, and to make final additions to the MS there. I will finish the introduction (a very brief one) and the plates this fall. I can also make any changes you suggest, since I'm sure Marian will be understanding of the complexities involved in getting this thing into shape. I have gone ahead with the catalogue-arrangement we discussed in late 1974, though since I have 12 Greco-Italic Latin stamps I felt I should make that Type 1, even though I have no whole jar from the Eastern Med. to use in the profiles. But I do have a profile, one I made myself, of a jar from Porto Ercole in Italy, and I think it would be appropriate to use that, since I'm also, you'll remember, using profiles of Academy jars of Type 20. Adding Greco-Italics means that jars such as P 25797, 20196, and 23077 (which combine features of late Greco-Italics and early Type 5's) will be Type 2. Type 3 is what it always was, with P 17046 added as an early example. I have also made P 6761 and PASI early examples of Type 7. I hope all of this makes sense to you. I am quite happy with the arrangement, since it would be strange, in a chronological arrangement, to include such a large group of Greco-Italics under Miscellaneous and Unclassified. In describing the type, I am going ahead, as you suggested, to point to a possible analogy with your "Spanish" series, if you still feel that a good idea. It looks to me now as if the type was manufactured all over the Mediterranean, like many types of amphoras in the Roman period.

The Brindisi-type continues to be a massive headache, and not least because of Miss Sciarra's disorganized and careless publication of her finds. I'm glad to report, though, that Barbara Will has catalogued, organized, and alphabetized the finds for my files, so perhaps my catalogue will, after all, be the first systematic publication of them. That would be appropriate, because it was Fred and I, unassisted, who had the energy to find the kilns, and Alex who was close enough to the ground to collect the stamps quickly. Further problems suggested by the BR's are illustrated by the enclosed photo of a jar from Karanis in the Kelsey Museum. Perhaps you have seen it there; in any case, you may remember that I'm including in the catalogue some Karanis stamps. I didn't know about this jar, however, until I went to Ann Arbor and saw it there. It looks to me to be half-way between the Corinthian P 6796 and the "Brindisi jar," and the handles are stamped BATON and HPAIOC; that is, a Latin BR like several in my catalogue and a GB. I feel, then, that I should include in the catalogue under Type 11 such GB's as name persons named on BR's. Of course, there is a category of "Doubtful GB's" which I am ignoring, but I hope you agree that it is appropriate to include the GB's with their Latin equivalents. But then what about HPAIOC, of which I have 40 examples, all in Greek? Its being on the same jar as BATON perhaps solves the problem, but it's awkward, and I'd like to do what you think best. I can retype sections of the catalogue, or simply cross them out, if you feel the GB's should be put in an appendix or mentioned in some other way.

As for Type 12, I have proceeded with the organization we decided on in Athens. Type 12a is the fine-clayed variety, several handles of which bear stamps that occur also on BR's. I know of no whole jar for the series, but am assuming that it was not far in shape from P 11880, which is the earliest Roman (?) double I know; i.e., the long belly and short neck may well have been characteristic of it, though Panella has now proved, in her 1977 publication which I assume you have ("Le anfore con anse bifide conservate a Pompei: contributo ad una loro classificazione," in Méthodes classiques et méthodes formelles dans l'étude des amphores [Rome: École française de Rome, 1977]), that the L.EVMACHI stamps occur on a type like P 3464, or at least close to it. P 3464 is her Type 2, and the single L. Eumachius jar is Type 1. Actually, the Pompeii Eumachius jar is similar to both P 11880 and P 3464, and I used P 11880 in a forthcoming brief article on Pompeian women in ARCHAEOLOGY - one which concentrates on the Building of Eumachia. About all of which more later. In any case, unless you advise otherwise, I will use P 11880 (though it is coarse-clayed and perhaps Campanian) to illustrate the fine-clayed Type 12a, and P 3464 to illustrate the coarse-clayed Type 12b, which now seems pretty clearly Pompeian. Using Castrén's invaluable Ordo Populusque Pompeianus, I have been able to localize several nomina in Pompeii, a great relief, and something even Panella can't do, since she has only the one L. Eumachius stamp. /// For Type 12c, I still have only SS 10072 and a possible parallel at Corinth, C-61-6, the fractionals I saw at Pompeii last summer being quite common but not at all like those two. /// For Type 12d (Dressel 2), the one with vertical toe-stamps, I'm using, as we decided, P 4201. That type looks to be both Campanian and Spanish. /// Those are the three Agora Type 12's I'm using, in addition to SS 10072. All the rest I shall probably omit, even KRA 13-15, which Panella (Type 5) now feels are Greek. The beetles, of course, are Greek. /// It looks

now as if the double-handled Romans were manufactured everywhere. I even saw some Type 4b's (Dressel 1B) with double handles in the Market of Trajan in Rome. Perhaps such pieces marked a pottery's transition from one style to another? I am quite struck, also, by the stamp-overlaps between types: Types 1 (Greco-Italic) and 3, Types 3 and 11, Types 11 and 12a. It may be that some sort of chronology is suggested by such overlaps; that is, a chronology of transitions, since there is no overlap between Types 1 and 11 or 3 and 12a. Perhaps, on the basis of the 11 and 12a overlaps, the area around Brindisi can be suggested as one origin-point for 12a, though I now feel BR's may have been made in several different places. By the way, the fine-clayed 12a handle (from Rhodes?) in your collection, CAVLIENI.C, is now, I see, paralleled by a BR, Benaki 191 (BR 155), which I had misread before. Those fine-clayed doubles, in any case, turn up most frequently at Taranto and at Alexandria, so maybe the kilns should be sought closer to Taranto than to Brindisi. Perhaps Carolyn will make some discoveries about that this summer. (It was very nice to have a phone call from her before she left for Italy, and I hope she'll be able to come here to Amherst in connection with the Christmas meetings. No one has ever visited the Amherst amphora-workshop.)

I have one more question before I stop out of necessity rather than desire (it is such fun to be writing you again, and I hope, trust, we can return to our former communiqués). What date are you now giving the "Greek" jars from the Grand Congloué? Out of necessity, again, I wrote an updated Sestius article, in reply to that outrageous article by Daniele Manacorda in the 1978 JRS. It was so full of errors, and so rude, that I took time to reply. I quoted your date for the "Greek" jars as 220-180 BC, but I can change that on the proofs. The article will appear, probably by the end of the year, in the Journal of Field Archaeology. (I appreciated your sending me the notice of Yves Roman's latest Sestius article, of which I was able to get a copy. It is not too bad, fairly careful, and it's interesting that the Sestius jars got that far inland in the 'Gallic isthmus.' At least Roman does not, like Manacorda, push a Marxist line and distort the truth for political purposes. What nerve. Unfortunately some of those Italians are quite ruthless, though I must say that Panella is an exception, and Zevi was really charming to me a couple of years ago. He has such a grand office now that I suppose he has no more time for amphoras. Miss Sciarra, though, is more like Manacorda. You may have forgotten how she turned against me when I didn't send her a cashmere sweater set, as she had requested. Must scholarship be influenced in such petty ways ??)

I realize that the ARCHAEOLOGY article on amphoras left a lot to be desired. Some time soon I will reply in detail to the matters you brought up about it. Not that it much matters, at this point. The editors of ARCHAEOLOGY, who are very accommodating in most respects, do seem to do what they want, and they left out many pictures which I felt were essential. In fact, I had written the thing with the pictures in mind, including pictures of you, Maria, Andreas, Mr. Benaki, but the thing had suddenly to be squeezed into a small space because something else wasn't ready for that issue. I gather that the "Women in Pompeii" article is going to get rather different treatment: many pictures, even the cover. Women are apparently of more popular interest than amphoras. Though I must say I feel and look more like Type 14 with each passing year.

We are all fine, and I will send more news soon. I leave here for Princeton on the 15th. I hope you will give my love to Maria and Andreas. Nothing would please me more than to see you all soon. Perhaps in Jan.?

With much love for now, Letty

See also Benaki 191 (BR 155) 1952 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 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2782, 2783, 2784, 2785, 2786, 2787, 2788, 2789, 2790, 2791, 2792, 2793, 2794, 2795, 2796, 2797, 2798, 2799, 2800, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2816, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2824, 2825, 2826, 2827, 2828, 2829, 2830, 2831, 2832, 2833, 2834, 2835, 2836, 2837, 2838, 2839, 2840, 2841, 2842, 2843, 2844, 2845, 2846, 2847, 2848, 2849, 2850, 2851, 2852, 2853, 2854, 2855, 2856, 2857, 2858, 2859, 2860, 2861, 2862, 2863, 2864, 2865, 2866, 2867, 2868, 2869, 2870, 2871, 2872, 2873, 2874, 2875, 2876, 2877, 2878, 2879, 2880, 2881, 2882, 2883, 2884, 2885, 2886, 2887, 2888, 2889, 2890, 2891, 2892, 2893, 2894, 2895, 2896, 2897, 2898, 2899, 2900, 2901, 2902, 2903, 2904, 2905, 2906, 2907, 2908, 2909, 2910, 2911, 2912, 2913, 2914, 2915, 2916, 2917, 2918, 2919, 2920, 2921, 2922, 2923, 2924, 2925, 2926, 2927, 2928, 2929, 2930, 2931, 2932, 2933, 2934, 2935, 2936, 2937, 2938, 2939, 2940, 2941, 2942, 2943, 2944, 2945, 2946, 2947, 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3778, 3779, 3780, 3781, 3782, 3783, 3784, 3785, 3786, 3787, 3788, 3789, 3790, 3791, 3792, 3793, 3794, 3795, 3796, 3797, 3798, 3799, 3800, 3801, 3802, 3803

Allen

July 17, 1979

Dear Betty,

You will be sad to hear that Miss
 Kokoris has died. I did not learn it
 myself for over a week after it happened,
 when Andreas Demoulas told me - he
 had heard it from a friend of mine and of
 Miss K. - A nurse brought me the notice
 of the funeral being held on July
 5. The priest told Andreas that some
 weeks before, Miss K. had had an
 operation for an intestinal obstruction.
 I cannot place all this, as she and I
 had been in pretty frequent touch by tele-
 phone, but I was a Plucker from May
 31 for 11 or 12 days. I guess the
 illness she was having tried to reach me,
 and was felt friendless. Now I expect
 little time will be lost before the garden,
 and the house then fallen built, will
 be replaced by an apartment house.
 The family have wanted to do that for
 years, but she said she would live here
 would not give her signature. I think
 you were the first of us to visit her
 there, and meet the family.
 Good news comes to me from Homer
 and from Gail Koehler about the

perhaps I have been
 good luck for Andrew along again
 was to do it.
 Love
 Virginia

letters reach me quickly at home: 84 High Point Drive.



The Commonwealth of Massachusetts

University of Massachusetts

Amherst 01002

DEPARTMENT OF CLASSICS
Herter Hall

April 28, 1979

Professor Homer A. Thompson
Institute for Advanced Study
Princeton, New Jersey 08540

Dear Homer,

Thank you so much for your letter of April 2. I am so submerged by amphoras that correspondence tends to be buried with me. I had heard about Empereur's plan to work at Brindisi. I received a very nice letter from him several weeks ago. Those are the kilns I discovered in 1961, after the most difficult search. I'm so glad that Empereur is interested in taking up where I leave off with Roman amphoras in the eastern Mediterranean. There needs, for example, to be an intensive study of unstamped finds. My own book includes only unstamped whole jars and large fragments, and a sampling of those, I suspect. I estimate, from my study of the Cosa collection, that only 10% of Roman amphoras were stamped. The fact that the Romans stamped every tenth brick makes it logical that they would do the same with amphoras. Since the Agora book is, with the exceptions noted, confined to stamped pieces, I am multiplying my totals by ten in order to reach tentative conclusions about trade-amounts and -patterns. It will be interesting to see how Empereur's eventual conclusions and mine agree.

Feb. 24, his letter was
received by him
Feb. 23, his letter received
by Annabell

111?

Things are progressing steadily here. I cannot say precisely when I will appear with the MS. What are your plans and Marian's for the summer? Would the School apt. be available for me to use for a week or so of the final agony, say in mid-June? At what other times during the summer will it be free? In a rush, but on the all
best regards, Betty

cc V.G. for information

Dear Virginia:

We have just had a good visit from Maggie W.M. whose enthusiasm for the S.A.H. seems to grow ever more ardent. - yours -
Homer

ROMAN

47.01

Whole letter,

6.IV.79

see under

Vg to Tm war

KoAN

PMWM - some LESBIAN information to pass on to B. Clinkenbeard.

7.IV.79

At that moment M. Empereur came in. I had forgotten he was coming. He brought some v. interesting news, various:

1) He brought copies of letters (or, 1 original and one copy) from Letty Will to him and L.W. to Amandry, written about March 22, saying she is hoping to finish retyping her great work by the end of May to be turned in to the editor (Marten). HAT had written me to the same effect. ELW's letters to the French followed one signed by Amandry to her, dated Feb. 22, inquiring about the Delos Roman, as M. Empereur was interested. Perhaps E.'s interest has given her the necessary incentive to push for a finish. E. is the man who is collecting stamped handles in Egypt like Mr. Benaki (E's are from Krokodilopolis), but he can't take any more for the moment. Nowhere to put them. Museums in Egypt won't take them. It seems ELW has a sabbatical this year, but until that moment she may have been favoring another project, the amphipras from ~~Exms~~ Cosa, which are now set to be ready for August. The projects are of course related. She speaks to Homer of an "amphora workshop" she has at the U. of Massachusetts where she is. Do you know anything about this? She has not written to me in some time.



The Commonwealth of Massachusetts

University of Massachusetts

Amherst 01003

March 22, 1979

DEPARTMENT OF CLASSICS
Herter Hall

Telephone:
413 545-0512

Professor Pierre Amandry
École française d'Athènes
6, rue Didot
Athens, Greece

Dear Professor Amandry:

Thank you for your letter of February 23 and for your inquiry about the progress of my work on the Roman amphoras found at Delos. I am glad to be able to report that I am retyping the manuscript and that I hope to take it to Princeton at the end of May. I recently wrote Professor Thompson to that effect. Final work on the manuscript has been greatly facilitated by the fact that I am on sabbatical leave from the university this year and as a result am able to devote all my attention to the completion of this protracted study. *x mark 1*

I remember with pleasure our meeting in 1974. I hope you are continuing to enjoy your stay in Greece.

With very best regards and wishes,

Most sincerely,

Elizabeth Lyding Will

Elizabeth Lyding Will

*The letter for Amandry to F.W.
was brought by Empereur.*

6. IV. 79 for M. Empereur

ROMAN

47.03



The Commonwealth of Massachusetts
University of Massachusetts
Amherst 01003

DEPARTMENT OF CLASSICS
Herter Hall

March 22, 1979

Telephone:
413/545-0512

M. Jean-Yves Empereur
Ecole française d'Athènes
6, rue Didot
Athens 144, Greece

Dear Monsieur:

Thank you for your letter of February 24. I am very much pleased and interested to know of your work on Roman amphoras. I am sorry that the delays suffered by my own study have (as I am sure must be the case) inconvenienced you. I am glad to report, however, that that study is now undergoing a final retyping and will be taken to the publisher at the end of May. I do not know what the date of publication will be. It seems to me that the book, which, in spite of its huge size, represents only a beginning, will put you in a position to carry on from there. So much more remains to be done. I myself found that work in Italy, which I did from 1974 to 1978, was absolutely essential to the proper completion of my task, even though that work caused a delay in the publication of my book on the material from Athens, Delos, Corinth, and Alexandria. After my work at Cosa, I feel much more secure in the conclusions I have drawn in the earlier manuscript, especially about the material manufactured in the western Mediterranean.

Your work on the material from the Fayûm interests me greatly. Quite a few objects from the Fayûm are in my catalogue. The Brindisi excavation resulted, as you probably know, from my finding the site of Apani (then called Lapani) in 1961. I took dozens of pieces to the museum and left them there. I was consequently fascinated to learn about Miss Sciarra's later research on the site, and I wish you well in your publication.

Please keep in touch with me and let me know about the progress of your work.

With all best regards,

Sincerely yours,

Elizabeth Lyding Will

Elizabeth Lyding Will

*Note, no mention
of his previous letter to her
(c) I. 78)*

ROMAN

American School of Classical Studies
54 Swedias Street, Athens 140, Greece

March 22, 1979

Dear Homer,

It's fine if Letty is going to get her manuscript in by June. Give her my congratulations. I forget if you met my young friend Empereur, who has been following in Mr. B.'s footsteps so far as collecting stamped handles is concerned - he has 1500 or so from the razing of Krokodilopolis, which he rescued from going into béton armé. Quite a few of these are stamped in Latin, so he wrote to Letty perhaps a year ago, and naturally got no answer - only you get answers from Letty. He was interested in publishing this class, for instance what about those from Delos? I think Letty may have had a letter from Amandry in this connection; Empereur is now a member of the French School. He told me that the Italians have excavated two kilns at Brindisi (in the past year or so?) and have given him permission to publish their discoveries. This is all quite second hand with me, and perhaps Letty knows more about it. Until I had your letter with its news of a swift completion, I had been wondering a bit whether Letty would like to take on this young man in a collaboration. Much better of course if we can have her book soon to consult.

Carolyn has sent me a bound copy of her dissertation, i.e. I have recently received it, but she sent it in January. Fine that she has her degree and her job.

Thank you for all the news. It is good to think you may be coming at least for a while in the autumn. I enclose some local news. I won't say more at the moment, as I must get uptown to ready myself a little for a 2-day visit from Priscilla - first time she will have seen my Apartment. She is on her way back from a Harvard trip to the Middle East - Egypt and Israel. just like a diplomat.



WILL, EL
The Commonwealth of Massachusetts

University of Massachusetts

48.02

Amherst 01002

DEPARTMENT OF CLASSICS
Herter Hall

March 1, 1979

Professor Homer A. Thompson
Institute for Advanced Study
Princeton, New Jersey

Dear Homer,

I appreciate so much your letter of February 23. I am still hoping that you and Dorothy can get up to see the amphora workshop. Things are going very well with the book, and I hope to have the manuscript completely reexcavated and retyped by the end of May. I hope to have the Cosa manuscript finished by August. Study of the Cosa material has taken time but has been of the greatest possible benefit to the Agora book. Going to the source is what I should have done in the 1950's rather than the 1970's.

Please give my regards to Marian, to whom I will be sending or bringing the manuscript ahead of the plates, as she requested.

With all best regards from us both
to you and Dorothy,

Letty

Elizabeth Lyding Will

COPY

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY 08540

March 12, 1979

SCHOOL OF HISTORICAL STUDIES

Dr Virginia Grace
American School of Classical Studies
Athens 140, GREECE

Dear Virginia:

You will be interested and, I hope, cheered by the enclosed note from Letty, Marian says she will not budget for this book within the current year but will welcome the MS at any time!

We saw Dick Burgi not long ago (at the King Tut Exhibition in the Metro. Mus.) and were cheered by his news of you. It was also good to be assured of Mary Zelia's state; this was comforting also to Mary Moore who now looks forward to a fine stretch of unbroken time for the Agora B.F.

Yesterday we called on Eleanor Folinsby von Erfa in New Brunswick. Helmut died a couple of weeks ago, having handed in the MS for his catalogue of the works of Benjamin West on which he had labored much of his lifetime. Eleanor will live on in the one pleasant suburb of that dreary, old city. Their one daughter, Lilly, + husband and three children now live at Los Alamos.

We see Dick and Celia quite frequently. Dick appears to have come to terms with his eye problem which in any case now seems to be stable. We gather that Theo and Pierre are enjoying the year.

Dorothy and I think to spend the summer in Princeton this year, perhaps going over for a month in the autumn when we would hope the city might be a little less populous and polluted. I'm appalled to read that Greece had more than 5 million tourists in 1978.

Very best wishes in which D. B. T. joins.

Yours
Homer

Enclosures

ALCUNI BOLLI ANFORARI BRINDISINI

Lo scorso anno raccolsi nella località denominata « Apani » sita a circa 10 chilometri da Brindisi, sulla litoranea per Egnazia-Torre Canne, nel terreno assegnato dall'Ente Riforma al sig. Rocco Stefani — cui si deve la segnalazione — numerose anse di anfora con bollo impresso.

L'interesse della scoperta, o della riscoperta, perchè la località non era ignorata dal Tarantini che, per primo, nel secolo scorso, la segnalò al Mommsen (1), consiste nella varietà dei bolli impressi, molti di essi unici, varietà che mostra come in questa zona doveva svolgersi una fervida attività industriale, considerato anche che i bolli sono da riferirsi, secondo il Frova (2) e il Cozzo (3), a distretti o gruppi di figuli più che a una persona o famiglia.

Infatti la località di Apani, situata tra il mare e la via Traiana — che offrivano entrambi una immediata possibilità per la esportazione del materiale fittile prodotto — costituiva il luogo ideale per tale insediamento (4), tenuto anche conto della presenza, nelle immediate vicinanze, di numerose cave di argilla e

(1) C.I.L., IX, 6079 e segg.

(2) A. FROVA, *Marche di anfore e altri bolli romani del Milanese*, in « Epigraphica », XIV (1952), pp. 49-53.

(3) G. COZZO, *La corporazione dei figuli e i bolli doliari*, Roma 1936, p. 240.

(4) Uno scasso eseguito in un profondo avvallamento dal contadino Noè Elefante il cui terreno è al limite di quello dello Stefani, già segnalato, mise allo scoperto una serie di fori verticali costruiti con frammenti di anfore. Nel luglio 1965 mi fu affidato dal Soprintendente per la Puglia, prof. Attilio Stazio, cui vanno anche in questa sede i miei ringraziamenti, l'incarico di eseguire un saggio di scavo in detta località, saggio che ha permesso d'individuare una fornace di cui ho già dato notizia nel Quaderno n. 1 del Museo provinciale « Francesco Ribezzo » di Brindisi.

di corsi d'acqua dolce, necessaria, quest'ultima, alla lavorazione (5).

Dall'enorme congerie di minuti frammenti fittili di cui il terreno appare ricoperto sono state raccolte — come già rilevato — numerose anse con bollo impresso. Pochi i frammenti più grandi da cui è stato possibile ricostruire la forma di un'anfora databile, secondo la classificazione del Dressel (6), al I secolo d. C.

E' questo l'unico dato cronologico offertoci perchè, per quel che riguarda i bolli, trattandosi di stampi meccanici e non essendoci di aiuto la paleografia, difficile è il problema della datazione. In merito non ci soccorre neppure uno studio stratigrafico in quanto il terreno è coperto di frammenti fittili solo in superficie.

La qualità dell'argilla adoperata è sempre la stessa: essa si presenta in genere di colore giallo-rosa ad eccezione di pochi pezzi in cui è rossastra, tonalità causata dal diverso grado di calore cui i vasi erano sottoposti per la cottura (7).

L'ordine seguito nell'elencare i bolli è quello alfabetico, la maggior parte di essi è espressa con lettere a rilievo più o meno marcato e non sempre molto accurato; imprecisione causata dalla fragilità dell'oggetto che serviva ad apporre i timbri (8).

Accanto a nomi molto comuni nel Salento, appaiono nomi di origine greca: *Apollonius*, *Diodotus*, *Leontiscus*, *Poseidon*, come pure sono presenti alcuni nomi greci.

(5) Si veda a tal proposito il recente lavoro di P. PELAGATTI-E. FIAN-DRA, in « Arch. Class. », XIV (1962).

(6) C.I.L., XV, tav. II; N. LAMBOGLIA, *Sulla cronologia delle anfore romane*, in « Riv. di St. Lig. », XXI (1955).

(7) CH. FABRE, *Les industries céramiques de Lesudoux*, in « Revue Arch. », V (1935), pp. 101-110.

(8) Per il metodo usato nello stampare i bolli, v. NILSON, in « Hesperia », IV (1935); V. GRACE-F. SALVIAT, in « Bull. de Corresp. Hellen. », 1962.

ALCUNI BOLLI ANFORARI BRINDISINI

1. Unico esemplare:

ALEZAN

Impressione retrograda.

Inv. n. 2992; alt. bollo: 0,014; largh. 0,050; alt. lettere: 0,009.

Inedito.

2. Due esemplari:

a)

ANTIOXOY

Ἀντίοχος

Inv. n. 2887; alt. bollo 0,013; lungh.: 0,073; alt. lettere: 0,008.

b)

ANTI....

Inv. n. 2888.

Inediti.

3. Unico esemplare:

AFELLAIS

Impressione retrograda.

Inv. n. 2889; alt. bollo: 0,018; lungh.: 0,048; alt. lettere: 0,010.

Foto Soprintendenza Taranto n. 14113/E.

Inedito.

4. Sette esemplari:

APOLONI

Inv. nn. 2890-2896; alt. bollo: 0,012; lungh.: 0,070; alt. lettere: 0,008.

Foto Soprintendenza Taranto n. 14136/E.

Cfr. C.I.L., IX, 6079,5.

5. Tre esemplari:

APOLLONI

Inv. nn. 2897-2899; alt. bollo: 0,015; largh.: 0,060; alt. lettere: 0,008.

Foto Soprintendenza Taranto n. 14137/E.

C.I.L., IX, 6079,6.

6. Quattro esemplari:

a)

AFOLLONI

Impressione retrograda.

Inv. n. 2901; alt. bollo: m. 0,020; lungh.: 0,050; alt. lettere: 0,008.

b)

AFOLL...

Impressione retrograda.

Inv. n. 2903; alt. bollo: m. 0,018; lungh. 0,050; alt. lettere: m. 0,005.

Foto Soprintendenza Taranto 14139/E.

c)

AFOL....

Inv. n. 2902.

d)

AFO.....

Inv. n. 2900.

Inediti.

7. Otto esemplari:

APPVLEI

Inv. nn. 2904-2911; alt. bollo: m. 0,013; largh.: 0,070; alt. lettere: 0,009.

Foto Soprintendenza Taranto n. 14133/E.

Cfr. C.I.L., IX, 6079,7.

8. Unico esemplare:

CTESO

Inv. n. 2912; alt. bollo: m. 0,013; lungh.: 0,05; alt. lettere: 0,011.

Cfr. C.I.L., IX, 6079,19.

9. Due esemplari:

a) DAMA

Inv. n. 2914; alt. bollo: m. 0,013; lung.: 0,049.
Cfr. C.I.L., IX, 6079,20; 4798; 4799; 1978; 2688; 4799.
A. FROVA, *Marche di anfore e altri bolli romani del Mi-
lanese*, in « Epigraphica », XIV, 1952, p. 49.

b) DAM.

Inv. n. 2913.
Foto Soprintendenza n. 14119/E.

10. Tre esemplari:

a) DIODOT.

Inv. n. 2915; alt. bollo: m. 0,014; lung.: m. 0,050;
alt. lettere: m. 0,007.
Cfr. C.I.L., IX, 6079,21; G. SUSINI, *Fonti per la Storia
greca e romana del Salento*, Bologna 1962, p. 172.

b) DIODOLI

Inv. n. 2916; alt. bollo: m. 0,010; lung.: 0,051; alt.
lettere: 0,006.

c) DIODOLI

Inv. n. 2917; alt. bollo: m. 0,014; lung.: 0,060; alt.
lettere: 0,007.
Foto Soprintendenza n. 14124/E.

11. Unico esemplare:

EIKADI

Impressione retrograda.
Inv. n. 2918; alt. bollo: m. 0,012; lung.: 0,042; alt.
lettere: 0,007.
Inedito.
Foto Soprintendenza Taranto n. 14132/E.
L'ordinale εικαδι si riferisce, con molta probabilità, alla
numerazione delle partite di anfore a ventine.

12. Unico esemplare:

EPICADVS

Inv. n. 2919; alt. bollo: m. 0,012; lung.: 0,055; alt.
lettere: 0,008.
Foto Soprintendenza n. 14122/E.
Cfr. C.I.L., IX, 6079,24; 4373; 6111; 6259.

13. Unico esemplare:

EVTVCHI

(Eutychi)

Inv. n. 2920; alt. bollo: m. 0,012; lung.: m. 0,055;
alt. lettere: m. 0,008.
Cfr. C.I.L., IX, Eutuches 183-389.

14. Unico esemplare:

GORGIA

Inv. n. 2921; alt. bollo: m. 0,013; lung.: 0,060; alt.
lettere: 0,010.
Foto Soprintendenza n. 14128/E.
Cfr. C.I.L., IX, 6079,31, b; SUSINI, *op. cit.*, n. 173,
n. 146.
Il nome *Gorgia* è sempre accompagnato da *VEITILI* po-
sto sull'altra ansa; nel Museo Provinciale di Brindisi è
catalogata, con il n. d'inv. 512, un'anfora con i sopracitati
bolli impressi sulle anse.

15. Unico esemplare:

HPAIOC

Ἡρακλῆος

Inv. n. 2922; alt. bollo: m. 0,012; lung.: 0,045; alt.
lettere: 0,019.
Cfr. SUSINI, *op. cit.*, p. 173, n. 144.

16. Unico esemplare:

L. FANN(i)

Inv. n. 2923; alt. bollo: m. 0,013; lung.: 0,055; alt. let-
tere 0,008.

Foto Soprintendenza Taranto n. 14117/E.
Cfr. *C.I.L.*, IX, 6079,28; SUSINI, *op. cit.*, p. 173, n. 145.

17. Tre esemplari:

a) L. ANIN.

Inv. n. 2924; alt. bollo: m. 0,010; lung.: m. 0,060;
alt. lettere 0,007.
Cfr. *C.I.L.*, IX, 6079, 3 b; SUSINI, *op. cit.*, p. 172, n. 141.

b) L. ANINI

Impressione retrograda.
Inv. n. 2925; alt. bollo: m. 0,010; lung. m. 0,056; alt.
lettere m. 0,008.
Foto Soprintendenza 14120/E.
Inedito.

c) L. ANINI

Impressione retrograda.
Inv. n. 2926; alt. bollo: m. 0,017; lung. m. 0,055; alt.
lettere m. 0,009.

18. Cinque esemplari.

a, b, c, d) LEONTISCVS

Inv. nn. 2927-2930; alt. bollo: m. 0,010; lunghezza:
m. 0,070; alt. lettere: m. 0,008.
Foto Soprintendenza n. 14117/E.
Cfr. *C.I.L.*, IX, 6079,33.

e) ... ONTISCV.

Inv. n. 2931; alt. bollo: m. 0,012; lung.: m. 0,065;
alt. lettere: m. 0,008.

19. Unico esemplare:

LVCRIO · AV

Inv. n. 2932; alt. bollo: m. 0,016; lung.: m. 0,065;
alt. lettere: m. 0,008.
Foto Soprintendenza 14144/E.

Foto Soprintendenza n. 14114/E.
Cfr. *C.I.L.*, IX, 6079,36.

20. Due esemplari:

a) L. PVBLICI
L(uci) Publici

Impressione retrograda.

Inv. n. 2933; alt. bollo: m. 0,012; lung.: m. 0,045;
alt. lettere: m. 0,007.
Inedito.

b) L. PV.....

Inv. n. 2934; alt. bollo: m. 0,014; lung.: m. 0,030;
alt. lettere: m. 0,008.

21. Nove esemplari.

a, b, c, d, e, f) MENECRATES

Inv. nn. 2935-2940; alt. bollo: m. 0,010; larghezza:
m. 0,065; alt. lettere: m. 0,009.
Foto Soprintendenza Taranto n. 14118/E.
Cfr. *C.I.L.*, IX, 6079,40; 6078,112.

g) MENECR....

Inv. n. 2941.

h) MENECE....

Inv. n. 2942.

i) MENECE...ES

Inv. n. 2943; alt. bollo: m. 0,012; largh.: m. 0,070;
alt. lettere: m. 0,008.

22. Tre esemplari:

a, b) MENOPILVS

Inv. n. 2944; alt. bollo: m. 0,009; lung.: m. 0,063;
alt. lettere: m. 0,008.
Foto Soprintendenza Taranto n. 14116/E
Cfr. *C.I.L.*, IX, 6079,41.

c) ..NOPILVS

Inv. n. 2946.

23. Unico esemplare:

MENA

Impressione retrograda.

Inv. n. 2947; alt. bollo: m. 0,011; lung.: m. 0,064;
alt. lettere: m. 0,008.

Inedita.

Cfr. *C.I.L.*, IX, 6079,37 (non retrograda).

24. Quattro esemplari:

a, b, c) M·EXSONI

Inv. nn. 2948-2950; alt. bollo: m. 0,010; larghezza:
m. 0,050; alt. lettere: m. 0,007.

Foto Soprintendenza n. 14122/E.

Il SUSINI, *op. cit.* p. 174, lo riporta come unico e ir-
reperibile, trovasi invece catalogato, sino a tuttoggi, al
n. 2289 del Museo Provinciale di Lecce.

d) .·EXSONI

Inv. n. 2951.

25. Unico esemplare:

NHMHYOV

Impressione retrograda.

Inv. n. 2952; alt. bollo: m. 0,011; lung.: m. 0,035;
alt. lettere: m. 0,006.

Caratteri piuttosto evanidi.

Inedito.

26. Due esemplari:

a, b) NOYMHNIO

ΝΟΥΜΗΝΙΟ[ν]

Inv. n. 2953; alt. bollo: m. 0,013; lung.: m. 0,006;
alt. lettere: m. 0,009.

Inediti.

f. 212 v. p. 613

27. Unico esemplare:

N·MACCIVS·L·F·Q

Impressione retrograda.

Inv. n. 2954; alt. bollo: m. 0,012; lung.: m. 0,009;
alt. lettere: m. 0,007.Cfr. SUSINI, *op. cit.*, p. 172, n. 140.

28. Unico esemplare:

ORESTE · LENV

Inv. n. 2955; alt. bollo: m. 0,016; lung.: m. 0,074;
alt. lettere: m. 0,009.

Inedito.

29. Unico esemplare:

PHILONIC · ÆV

Inv. n. 2956; alt. bollo: m. 0,012; lung.: m. 0,073;
alt. lettere: m. 0,073.Cfr. *C.I.L.*, IX, *Brundisium*, 6079, n. 36.

Foto Soprintendenza n. 14115/E.

30. Unico esemplare:

PHILARETE

Inv. n. 2957; alt. bollo: m. 0,015; lung.: m. 0,003;
alt. lettere: m. 0,006.

Inedito e sconosciuto nel Salento.

31. Tre esemplari:

a), b) P·CLAVDIVS·P·N·Q

Impressione retrograda.

P(ublius) Claudius P(ublius) N(umerius) Q(uintus).

Inv. nn. 2958-2959; alt. bollo: m. 0,013; lunghezza:
m. 0,008; alt. lettere: m. 0,007.

Inedito.

c)P·N·Q

Inv. n. 2960.

32. Cinque esemplari:

a, b, c, d) PERDICAS

Inv. nn. 2961-2964; alt. bollo: m. 0,012; lunghezza: m. 0,004; alt. lettere: m. 0,008.
Cfr. C.I.L., IX, 6079,44.

e) ...DICAS

Inv. n. 2965.

33. Unico esemplare:

IIOCIAONIO

Inv. n. 2966; alt. bollo m. 0,011; lung. m. 0,071; alt. lettere m. 0,007.
Inedito e sconosciuto nel Salento.

34. Dieci esemplari:

a, b, c, d, e, f) PTOLEMÆ
Ptolemae(us)

Inv. nn. 2967-2972 compreso; alt. bollo m. 0,012; lunghezza m. 0,055; alt. lettere m. 0,010.
Cfr. C.I.L., IX, 6079,47: PTOLEMA.
Foto Soprintendenza Taranto 14131/E.

g) PTOLEM.

Inv. 2973.

b) . TOLEM.

Inv. 2976.

i) .. OLEMÆ

Inv. 2974.

l) .. OLEM.

Inv. 2975.

35. Unico esemplare:

P. VEBAL
P(ubli) Ve(...) Bal(...)

Inv. n. 2977; alt. bollo m. 0,018; lung. m. 0,046;
alt. lettere m. 0,006.
Cfr. SUSINI, p. 174, n. 152.

36. Tre esemplari:

a, b, c) Q. OBV
Q(uintus) Obu...

Inv. nn. 2978-2980; alt. bollo m. 0,009; lung. m. 0,046;
alt. lettere m. 0,008.
Foto Soprintendenza 14130/E.
Cfr. C.I.L., IX, 6079,42.

37. Due esemplari:

a) STRATONIC
Stratonice

Inv. n. 2981; alt. bollo m. 0,01; lung. m. 0,074 alt. lettere m. 0,010.
Foto Soprintendenza 14129/E.
Cfr. C.I.L., IX, 5464 l.

b) STR

Inv. n. 2992; alt. bollo m. 0,013; lung. 0,018; alt. lettere 0,008.
Cfr. C.I.L., IX, 6079,53.

38. Dieci esemplari:

a, b, c, d, e, f, g, h) VEHILI

Inv. nn. 2982-2989; alt. bollo m. 0,012; lung. m. 0,031;
alt. lettere m. 0,010.

Cfr. n. 14.

i) C. VEHLI

Inv. n. 2990; alt. bollo m. 0,013; lungh. m. 0,052; alt. lettere 0,010.

Foto Soprintendenza 14140/E.

l) VEH/EHL.

Inv. n. 2991; alt. bollo m. 0,013; lungh. 0,055; alt. lettere 0,008.

Foto Soprintendenza 14141/E.

Timbro ripreso o ristampato.

BENITA SCIARRA

C. PACCIUS AFRICANUS AT SABRATHA

The Temple of Isis at Sabratha is the easternmost monument of the excavated city proper; the amphitheater lies approximately a half mile farther to the east. The temple, the second on the site, dates to the latter part of the first century A. D. Several centuries later, the east end of the courtyard was cut off from the remainder of the temple by the building of a defensive wall.

This wall made use of sandstone blocks of unknown provenience. One block, inscribed with part of a monumental inscription, was published as *IRT* 15 (1). The text reads as follows (I also reproduce the footnotes):

...]l

... i]mp(eratori) XVII[...

...Ve]spasiano A[ug(usti) l(ilio)... 2

1. There are clear traces of this line, but no letters legible.
2. Vespasian and Titus, between 76 and 79.

The letters, lapidary capitals eighteen centimeters in height, were inscribed through the stucco and painted in red.

The photographs of the stone in the library of the British School at Rome clearly show part of a letter above the V of the imperial acclamation. This letter is unquestionably an A, and to the right of it can be seen an incision that could be the lowest curve of an S, but this last is too tenuous to be recorded as read.

(1) J. M. REYNOLDS and J. B. WARD PERKINS, *The Inscriptions of Roman Tripolitania* (British School at Rome, 1952).

ROMAN

1976-7

See discussion and corresp. with
Antoinette Hesnard

filed under KOAN; marked LATE KOAN

She is concerned with distinguishing real
Korean (from Kos), of late date, from imitations;
plans to do analyses.

She has found various Pilus in Italy,
including one in Etruria of Sextus gens.

4. IV. 91

See also, ^{among} the ROMAN folders - at the
current sent - a folder ROMAN; HESNARD.

ROMAN

51

Agora Excavations,
American School of Classical Studies,
~~Athens~~ 54 Souidias Street
~~Greece~~. Athens 140

J. A. Riley Esq,
161, High Street,
Cherry Hinton,
Cambridge,
England.

21st November, 1977

Dear Mr Riley,

Your interesting amphora C277 from Benghazi, I see now must be of a class of jars probably made in or near Brindisi (Italy), but bearing stamps in Greek letters. The top of yours closely resembles a fragment (neck, rim, and handles stamped ΠΛΗΜΟΝΟΣ) in the Musée Gréco-Romain in Alexandria, no. AVG 1172. For two stamped handles of a related class but bearing stamps in Latin letters, see H. D. Colt and others, Excavations at Nessana I (London 1962), pp. 127-8, with a note by Elizabeth Lyding Will. I know of no whole jar of this type stamped in Greek except yours: its stamp may be restored (by a more complete impression in Alexandria on MABC 593) as the monogram * . The * see below Latin-stamped jars of this class have been dated in about the first quarter of the 1st century BC. The Ptolemaic coins contained in your jar may be important for dating this class. Please tell me where on the handle your stamp is set. Your amphora is certainly worth publishing with as good a photograph as you can get (one that shows the upper part in good profile). A ~~proper~~ profile drawing would also be helpful.

A copy of this letter goes to Mrs Will, Classics Department, Herter Hall, University of Massachusetts, Amherst, Mass. 01002, USA.

Yours sincerely,

David R. Grace

VG/PNWm

* 

with letter of 4. VI 77
ELW to VC

To appear in the July issue of
Archaeology

52.01

The Ancient Amphora
Elizabeth Lyding Will

For VG from ELW
(opposite to be sent later).
(it was used)
II 77

We like the convenience of disposable cans and bottles, but we feel guilty about adding them to the earth's trash piles. "Empties" (or, as theoreticians of debris would term them, "post-consumer solid waste") are today a universal dilemma. "Bottle bills" have become law in ^{several states} ~~Oregon and Vermont~~, and ^{in other states,} ~~and~~ votes on the disposal of waste containers are pending ~~in other states~~. The problem of what to do with the container after the contents have been used seems typically latter-20th century, but rubbish was not, of course, invented by the modern world. It is an essential part of the human condition. Used containers and rubbish in general are problems of great antiquity; in fact, archaeology itself might in one sense be defined as the collection and study of ancient trash. Ancient "empties" make up a sizeable portion of the material that must be handled by the archaeologist.

Containers and trade are inseparable. Trade is interaction between the haves and the have-nots, the selling by one and buying by the other of products in demand. Once humans began to trade, most inanimate objects of trade had to be packaged. Commodities subject to spoilage (wine, olive oil, nuts, fruits, fish products) had to be processed and then ^{tightly} sealed ~~under pressure~~ in receptacles sturdy enough to stand up against shipment on sea or land. The Greeks and the Romans and the other Mediterranean peoples of antiquity were accustomed, as we are, to transporting choice liquids and perishables in disposable bottles of assorted

standardized sizes and shapes. Like the buyer of today, the ancient buyer of, say, wine, could tell at a glance what kind and quantity of wine a bottle contained. Ancient bottles were made of clay, the most abundant and practical, and therefore the cheapest, raw material out of which to construct such packaging. These "amphoras" were very much larger than our cans, Coke bottles, and milk cartons. The form of the ancient amphora developed in response to a need for a container large enough to hold bulk quantities but small enough to be handled by one person. About ^{not the same} a meter high on the average, and weighing around 40 pounds when empty, it had two thick handles on each side of a long neck. The neck served as a holder for the airtight stopper and as a funnel for pouring out the contents. A rim or "lip" at the top of the neck was an aid in controlling the flow of the liquid being poured. The main part of the jar, the receptacle or "belly," was joined to the neck by a sloping "shoulder." This belly, its walls ^{perhaps two centimeters} ~~about an inch~~ thick, held on the average in Roman times about six gallons. The belly was in turn supported on a heavy base or "toe" that tapered sharply down, giving the jar the appearance of a ^{one-legged} ballerina. The toe permitted the heavy container to be rolled around by one person, as the jar was guided and balanced by the handles. It also helped in the lifting and emptying of the jar. It was the two handles, however, which served as the most distinctive feature of the ancient amphora. The word "amphora" comes, in fact, from two Greek words: amphi ("around, on both sides") and pherein ("to carry"). An amphora is something "carried on both sides."

By their very nature, Greek and Roman clay shipping-amphoras were difficult to throw away. They had to be thick-walled, as a protection against breakage and seepage during the rough and dangerous sea voyages of ancient merchantmen. Obviously, small containers with thick walls were impractical, since too much shipping-space proportionately would have to be devoted to container as opposed to contents. The larger the container, the more of the product reached market. The problem of disposal was likely to be solved simply by breakage, so that each massive container might ultimately produce a very considerable number of broken fragments. We can thus understand how it is that Greek and Roman sites happen to be carpeted by thick pieces of discarded containers, how it is that these pieces make up a large proportion of the finds at such sites. "Empties" were clearly a major problem in the ancient world, a problem hardly hinted at by Greek and Roman writers. Here again the importance of archaeology in filling in the gaps in our knowledge of what life was actually like in classical antiquity can easily be seen.

Humans are, for better or for worse, human, and ancient solutions to trash-disposal were much like modern ones. Broken pieces were either "let lie," like beer cans along our highways or pull-tops in parking lots, or were disposed of in more orderly ways. Organized dumping can, however, cause almost as many problems as it solves, particularly in large cities. In ancient Rome itself, Monte Testaccio, a 150-foot hill of broken "empties," mostly shipping containers that brought olive oil to Rome from Spain and Africa, grew up at the southern edge of the city. It was situated near the Tiber River, at the point where ocean-going

ships unloaded. After the contents had been sold to middlemen or to retailers at the great nearby warehouses, the shipping jars were broken and piled in a heap that grew ever higher as time passed. No one yet knows when the process began, but it apparently all but stopped in the 3rd century A.D. The hill is not mentioned in ancient literature, but we know that in the Middle Ages its looming mass developed a certain sanctity and was the site of religious "stations" and of solemn celebrations of other sorts until the fifteenth century. Today the area is public property. Gypsy squatters, wine-grottoes, and several well-kept houses rub shoulders around the base of the hill. Across the street to the west, the Mattatoio, the modern slaughter-house, occupies the space between Monte Testaccio and the bed of the Tiber. To the south, the British Military Cemetery bears witness to the futility of war. With its manicured lawns and lovely British flower-plots, it contrasts sharply with the gaunt, dusty, windblown bulk of Testaccio. Across the street to the east, between Testaccio and the Pyramid of Caius Cestius, the Protestant Cemetery is another Anglo-Saxon oasis, a crowded, fascinating clutter of Victorian and modern tombstones and crypts, famous as the final resting-place of Shelley and Keats. Poetry and pottery seem to coalesce here, for many graves are decorated with baroque arrangements of discarded ancient amphoras that certainly came from Monte Testaccio. The aura of death, of reality either gone stale or transformed (depending on one's point of view), seems to cling to the whole region around Testaccio, as it does to modern dumps.

There are other ancient piles like Monte Testaccio, in Rome itself and elsewhere, but reuse and recycling were also practised in antiquity as alternatives to dumping. Some amphoras were, for example, kept for storage purposes, in shops or in private houses. On farms, they were regularly reused as containers for the produce of the farm. Whole jars or pieces of jars were reused in building, either as fill or (for example) behind the walls of wells and cisterns or to relieve stresses in domed structures. The use of amphoras in domes ^{helps to reduce structural stress and} was probably also suggested by the obvious acoustical properties of the large jars, which led as well to their being placed in the walls of theaters ^{and in stadia} and under the floors of forums. They were also sometimes used as containers for cremation burials and, especially in Christian times, for inhumations, especially of children and babies. The olive oil jars made in North Africa reached a height of about four feet by the 3rd century A.D. Broken in half either horizontally or lengthwise, they were ready-made coffins for those who could not afford something more elaborate for children or other small relatives. ^{Amphoras also served sometimes as covers for bodies about to be cremated} The more cylindrical jars, especially the long, narrow necks, were also regularly used as sewer-pipes ^{and as perfect conductors from bellum into draft passages} and in drainage ditches. Small pieces of amphoras might be used in making walls or pavements or, broken into tiny bits, as components of cement or concrete. Recycling, archaeology proves to us, must have preoccupied the peoples of antiquity, and their solutions to the problem were both inventive and practical.

As if our own current "bottle problem" were not enough, the archaeologists among us are still, today, looking for practical ways in which to cope with the "post-consumer solid waste" of

antiquity. Specialists who study amphoras want them stored in accessible places; yet most museums lack the space to house them properly. Some jars find a place in museum displays, others are consigned to museum basements. Underwater wrecks studded with amphoras vastly complicate the storage problem. When Cousteau discovered the so-called "Grand Congloué wreck" off Marseilles in 1952, storage had to be arranged at Marseilles' Borély Museum for hundreds of jars. All the finds could not be accommodated, and some jars even found their way to the United States. Some museums, like the Stoa of Attalos Museum of the Agora Excavations in Athens, now arrange the amphoras in floor-to-ceiling tiers that resemble the closely-knit, herringbone arrangements of jars in the holds of ancient ships. In other museums, like the one now being completed at the site of Cosa in Italy, jars not on display inside the museum are used as decorations in the courtyard or on the tops of walls. Reconstructions of ancient shops, like the ones in the Stoa of Attalos Museum or in the House of Neptune and Amphitrite at Herculaneum, use amphoras as part of the display. Increasing numbers of restaurants and hotel lobbies in Greece and Italy use the graceful jars as decoration or as flower pots. In modern Tunisia, an important source of olive oil in Roman times, the disposal of the thousands of ancient containers found in excavations there takes a wry twist. Similar modern clay containers are still used for transport and for storage in Tunisia today, resulting in a twofold clay container problem. X

Ancient amphoras are not to be thought of, however, as simply a headache for archaeologists and for museums. Much more

importantly, they serve as the basis for a branch of classical archaeology that has come into its own in recent years, stimulated by the increasing emphasis on economic, social, and anthropological perspectives. The more strictly political, military, and artistic approaches which used to dominate our thinking about antiquity are slowly giving way to research that seeks to reconstruct the background of events and to explain why they happened, what underlying factors brought them about, to bring to life what was going on behind the scenes in antiquity. The commercial amphora clearly plays a large role in such an approach, for not only are these containers abundantly represented at archaeological sites but they can also be divided into categories and quite closely dated (to within a generation or so of manufacture). My own research is concerned, for example, with some thirty distinct types of Roman amphoras, ranging in date from the early 2nd century B.C. to the late 3rd century A.D., a span of about five hundred years, and manufactured at a variety of sites throughout the Roman world. Although these utilitarian jars were mass-produced, likely to be broken or recycled when empty, the careful standardization of each type is remarkable. Capacities seem to have been closely controlled, and dimensions (heights and diameters) of the jars themselves and of component parts such as handles and rims are precisely similar within each category. A small fragment can, after dimensions have been computed or estimated, enable the practised eye to identify and date the jar-type from which it came originally.

Amphoras can thus provide the archaeologist with help in dating the individual contexts, both on land and underwater, in

which they are found and in sketching the general histories of particular sites. They provide the economic historian with valuable information about trade routes, centers of exporting and importing, production methods, economic rivalries, even monopolistic practices. They restore to history the names of long-forgotten individuals who were active in business and trade. Roman amphoras, for example, like our modern glass and metal containers, were often stamped with the name of the manufacturer. They also frequently bore painted or scratched inscriptions naming other persons responsible for manufacture, inspection, or distribution. These jars also tell us more than we had known before about ancient life-styles, for we can now suggest that this or that wine or oil or other food product was favored, and to what degree, at a given time and place. As described/ ^{above,} such ancient ecological problems as waste disposal and reuse are also clarified for us by study of the amphora. We are now in a position to make these deductions for many of the chief eras of classical antiquity.

Study of the commercial amphora as a class could not proceed seriously until the present age of "total retrieval" at archaeological sites. Earlier approaches to archaeology had emphasized the study of rare or valuable finds. Coarse wares were not recognized for their intrinsic worth. We know now that every fragment from antiquity is meaningful. Coarse pottery of all kinds is now an acknowledged historical source. For calling attention to the importance of amphoras, the work of the American archaeologist Virginia Grace has been decisive. Forty-five years ago

*note
quite*

Specialized studies of certain classes of Greek amphoras, had already been made by the great Swedish scholar, Martin P. Nilsson, and by the Russian archaeologist, B.N. Grakov. Virginia Grace 52.09

she perceived the important results to which a study of ^{Greek} commercial amphoras would lead. ^{AS is not an archaeologist} She was able to construct a typology and a dating system for Greek amphoras on the basis of the impressive number of closely dated wells and cisterns found in the excavations of the Athenian Agora. Her archives, housed at the Agora Excavations in Athens, now include massive documentation of the types of amphoras manufactured and used by the chief Greek centers of antiquity. Her filing-system, painstakingly cross-referenced, ^{contains hundreds of thousands of items. It} is not only the basis for the many studies which she has herself written but is also useful to scholars from all over the world. Assisted by the Greek archaeologists Maria Savvatiannou-Petropoulakou and Andreas Dimoulis, Virginia Grace continues to record finds and to study the various important classes of Greek amphoras. It is a Herculean, not to say Sisyphean, task. The abundance of evidence is such that specialization in any single category of jar would be a lifetime's work, yet Virginia Grace has somehow managed to make thorough studies of all the chief categories. Carolyn Koehler, a young archaeologist from Princeton, also works on Greek amphoras at the Agora Excavations and at the excavations of ancient Corinth. Concentrating on amphoras manufactured at Corinth, she represents the current trend ^{back} toward specialization in amphora studies, a trend which the masses of evidence make inevitable. Two French archaeologists, A.-M. and A. Bernand, had in 1957 published a study of the amphoras from the island of Thasos. The same tendency toward specialization can be seen in the research presently being done on Roman amphoras, which are distinct from Greek amphoras in most important respects. They comprise, ^{A sentence two was inserted here to make the distinction clearer. What is it in part} in fact, a separate field. Research in Roman amphoras is being

actively carried on all over the world. Two of the most informed and energetic specialists are the Italian archaeologists Clementina Panella and Fausto Zevi, who carry on in the tradition established earlier by the work of ^{the late} Nino Lamboglia. They have published helpful studies on various classes of later Roman jars manufactured in the provinces of the Empire, especially in Africa, and found at Rome and at Ostia, the port of Rome. In England, the ^{pioneering} work of Maurice Callender in the years immediately after the second world war served the useful purpose of summarizing previous research and presenting important new material on a major class of oil amphora manufactured in Spain. Three other British scholars, Anthony Parker, D.P.S. Peacock, and J.A. Riley, are currently engaged in research on various classes of Roman jars. In France, André Tchernia has been a vigorous publisher both of reports of finds and of perceptive analytical studies of certain types of amphoras. His work was preceded by the important contributions of his countrymen ^{The Swedish archaeologist Paul Aström has made useful contributions to the study of Roman} Emile Thevenot and Fernand Benoit. In Spain, the amphora finds have been summarized in the comprehensive recent book by Miguel Beltrán Lloris. ^{R. Pascual Guàsch also studies amphoras in Spain, and} Another Spaniard, Emilio Rodríguez Almeida, has undertaken the incredible task of studying the surface of Monte Testaccio, adding to the information carefully and painstakingly collected and published by the great German scholar Heinrich Dressel. Dressel's catalogue of amphora stamps and analysis of amphora shapes, published in 1899, still provides a framework, though an increasingly shaky one, for current specialized studies.

My own work has been an odyssey in search of clues which

would allow me to bring Dressel up to date and to structure in terms of current archaeological methods the outlines of the history of Roman amphoras. My research ^{has always been broadly based. It} ~~which~~ began at the

This has been taken out by the editor and put in a box at the end.
Agora Excavations twenty-five years ago under the sponsorship of Homer Thompson, who was for many years Field Director of that dig. of Virginia Grace, ~~has, like her work, always been broadly based.~~

Using an important series of closely-dated contexts at the Agora, I was able to construct for Roman amphoras a chronology covering the five hundred years of Roman commercial activity in the

eastern Mediterranean area. Before long I added to the Agora

from other important Roman sites in the eastern Mediterranean:
Roman amphoras the finds ^{from} the French excavations at Delos, from

the American excavations at ancient Corinth, and the extensive collection of ~~the~~ ^{the late} Lucas Benaki in Alexandria. Other Egyptian

collections followed, notably those housed at the Greco-Roman Museum in Alexandria and at the British Museum. Pieces stored

at the National Museum in Athens and ^{others} found in the German excavations of the Kerameikos in Athens also enriched the catalogue,

which by the late 1960's included some 4000 objects. These were

just the choicest pieces which I had studied, pieces bearing

stamped trademarks or notable for their particularly good state

of preservation. The material actually available for study was

and still is limitless, and progress toward tenable conclusions

is correspondingly slow. A single find can still alter basic

premises. As my files grew, my awareness of the complexity of

the questions raised and of the ultimate uselessness of partial

answers became stronger. I also felt the need of confirmatory

evidence from other parts of the Roman world, since my own

experience had been almost entirely with the eastern Mediterranean.

At the same time, publication pressures were increasing. In the

early 1950's, Maurice Callender and I had been almost alone in the field, Dressel ^{and others} being long since dead. The field was a new one, unstructured and lacking in definition. By the 1960's, other scholars were taking an interest in Roman amphoras, and underwater archaeology was greatly increasing the pool of finds. Excavators both of land and of underwater sites were becoming aware that Roman amphoras provided valuable help in dating contexts. ^{Historians such as T.R.S. Broughton were drawing conclusions from the finds.} The need for an up-to-date, comprehensive study grew.

Expansion of my files to include the finds from a major site in Italy has just been completed. The opportunity came when Frank Brown, the American excavator of Cosa, invited me to work on the Roman amphoras from that central Italian dig. My previous research in Italy had involved only a series of hurried trips ~~some fifteen years previously~~, during one of which I had had the good luck to locate in the neighborhood of Brindisi some kilns in which an important class of Roman olive oil jars had been made. Such trips had been sporadic. Now, after two seasons of work on the Cosa material, I have secured the reinforcing evidence I needed and the basic framework for my comprehensive study of Roman amphoras seems secure. A volume on the eastern Mediterranean material, to appear in the Athenian Agora series, is in the final stages of preparation, and a study of the 2000-odd pieces from Cosa is waiting to be written. Taken together, the two works ought to provide an inclusive survey of the field and pave the way for future specialized studies. Plans for the computerization of both catalogues are also being made. ^{The work is to be done by Steven Sargent an historian who is also a computer programmer} Electronic study should mark a significant step in the digestion of the mountains of material. Commercial amphoras, the throwaway bottles of the ancient world, should help us see that world, and our own, in better perspective.

There is more about this in the final version

The Ancient Amphora: Select Bibliography in English

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- ✓ 3. Cousteau, J.Y. "Fish Men Discover a 2200-year-old Greek Ship," National Geographic Magazine 105 (1954). Excellently-illustrated report on the excavation of amphoras at the site of the Grand Congloué wreck (or wrecks).
- ✓ 4. Fraser, Peter M. Ptolemaic Alexandria. Oxford: Clarendon Press, 1972. Chapter 4 shows compellingly the importance of amphoras, and particularly of the research of Virginia Grace, to our knowledge of economic history in antiquity.
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9. Riley, J.A. Sections on the "quantification" of amphora finds from Carthage, in Humphrey, J.H. (ed.), Excavations at Carthage 1975, I. Tunis, 1976, pp. 108-120. (Forthcoming).
10. Taylor, Joan du Plat (ed.). Marine Archaeology. New York: Thomas Y. Crowell Co., 1966. A collection of reprinted reports of major underwater excavations, with many references to amphoras.
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Two Amphoras from Populonia

Elizabeth Lyding Will
University of Massachusetts, Amherst

Forthcoming in the Journal
of Field Archaeology. (this issue)

JFA 4, 1977, pp. (293-294)

(- see also something in S
in the Greco-Roman context)

Two Amphoras from Populonia

Elizabeth Lyding Will

The commercial amphoras found underwater off Populonia in 1970 are stored temporarily in the museum at Cosa, where they were studied by the writer in 1974 and again in 1975. All of the amphoras are fragmentary, but most of them can be assigned to known, and datable, categories. They therefore help us reconstruct the outlines of trading activity at Populonia during the Roman period.

The pieces studied divide into earlier and later groups. The earlier, Republican, group (49 of the 78 pieces studied) goes back to the late 4th or early 3rd centuries B.C. and is particularly rich in 2nd century B.C. fragments. The later group (30 pieces) comprises material dating from the last half of the 1st century B.C. through the 3rd century A.D. Seven centuries of commercial activity are thus reflected in the Roman amphoras, which brought to Populonia choice wine, olive oil, and garum from other parts of Italy as well as from production centers abroad.

Two pieces will be described here, as examples of the interest attaching to this group of fragments, a more detailed publication of which is in preparation. The first piece, a neck fragment. (P 70-67) ^(fig. 1) belongs to the so-called "Greco-Italic" type, which is represented by 23 examples at Populonia, almost one-third of the entire 1970 collection. The piece, which is unstamped, preserves the rim (entire except for chips), both handles, the neck, much of the shoulder, and a piece of the

belly. The preserved height of the fragment is 0.26 m. A line is incised around the middle of the neck, and a finger-tip impression is at the base of each handle. Both the incised line and the finger-tip impressions are characteristic of this type of jar. The clay is coarse, micaceous orange-buff in color, with many dark, light, and reddish inclusions. The color of the surface of the fragment, visible under the marine deposit, is yellow-buff. This type of amphora, the origin of which is still a matter for discussion, has been found throughout the Mediterranean area. It is usually unstamped but has been found with Iberian, Greek, and Latin stamps. It may have been manufactured at several different sites. The type seems to have been enormously popular in the 2nd century B.C., and probably in the latter 3rd century as well. Several early villa-sites at Cosa (founded as a Latin colony in 273 B.C.) are carpeted with "Greco-Italic" fragments.

The second piece (P 70-84) is a whole stamped handle, to which bits of the rim and upper neck still adhere. The handle (0.041 m. wide x 0.03 m. thick at the center of the stamp) comes from an amphora numbered Type 11b in the writer's forthcoming volume on Roman amphoras in the Athenian Agora series. Seven other examples of the stamp, which reads

M. TVCCI. L. F. TRO

CALEONTVS

(fig. 3)

have been found at sites in Italy, France, and Egypt. The Populonia example is apparently the first one displaying a ligature of N and T in the second line. The second line reads CALEONTVS in the other examples, a word usually explained as an "archaic genitive" (see bibliography cited in note 2). Not completely

clear is the relationship to another, also widespread, stamp, without ligatures, which reads

M. TVCCI. L. F. TRO

GALEONIS

This stamp is usually thought to refer to Cicero's friend, Galeo, named in Att. 11. 12. 4 and probably also in Fam. 8. 8. 1, where Caelius mentions an M. Tuccius. The TRO is thought to be an abbreviation for the tribe, Tromentina. This second stamp is frequently accompanied by a small, separate stamp in the shape of an anchor.³ André Tchernia reports that a number of examples of the "Galeonis" version of the stamp were found on fragmentary amphoras in wreck 3 at Planier.⁴ The only unbroken amphora known to bear the stamp is in the museum at Agde.⁵

Tchernia would like to classify all the "Tuccius" pieces as examples of the "Brindisi-type" of Roman amphora. That term was coined by the writer years ago as a nickname for Type 11a, the most frequently occurring type of Roman amphora in the eastern Mediterranean. It is not, however, the type to which the "Tuccius" pieces belong. They may very well be a late development, or a late imitation, of the "Brindisi-type," but they differ from that type in two important respects. Their coarse clay (difficult to see in the Populonia piece, which is damaged by an oily deposit on the surface) is markedly unlike the uniformly fine "Brindisi" clay, and the handle-dimensions are in every case so massive as to remove them definitively from the type, the handles of which are regularly small, delicate, and circular in section (average dimensions about 0.033 x 0.033). A final difference is that of date. Type 11a has a firm date, based on contexts at the Agora Excava-

tions in Athens, in the first quarter of the 1st century B.C.⁶ The type is very frequent at Delos, where Roman occupation had all but ceased by the middle of the 1st century B.C., but it does not occur at Corinth (refounded in 44 B.C.). Type 11b, on the other hand, to which the "Tuccius" pieces belong, does not occur at Delos but is found at Corinth. It is also reminiscent of Augustan amphoras found at such sites as Haltern and Oberaden in Germany.⁷ A date no earlier than the last half of the 1st century B.C. seems strongly indicated. The outward similarities between Types 11a and 11b are readily recognizable; thus the writer's inclusion of them under one number and use of the nickname "Late Brindisi" for Type 11b. The distinctions between the two categories, however, need to be carefully drawn, and important questions remain to be answered. Is there a possible relationship between Type 11b and the early examples of Dressel's Type 20 (C.I.L. XV), the Spanish amphora of which Monte Testaccio in Rome seems largely to be composed?⁸ What connection is there, also, among the "Brindisi," the "Late Brindisi," the so-called "Corinthian" amphoras,⁹ and Dressel's Type 25? Must we postulate manufacture in Brindisi for the "Tuccius" jars? The vicinity of Brindisi and Lecce was undoubtedly a center (but perhaps not the only center) of manufacture for Type 11a. Remains of what must have been kilns were discovered near Brindisi by the writer in the summer of 1961. Similar finds from Brindisi and from Lecce were subsequently reported by others.¹⁰ The mass production (for such it was) of Type 11a may not, however, have been confined to the area of Brindisi, or even to Italy. Nor need we look to Brindisi as the sole source of the "Tuccius" amphoras, if indeed they had any connection with Brindisi.

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Notes

1. For a recent discussion of "Greco-Italic" amphoras, see W. Culican and J.E. Curtis, "The Punic Wreck in Sicily, 2: the Pottery from the Ship," International Journal of Nautical Archaeology 3 (1974), 44-47.
2. For a summary of bibliography on the stamp, see André Tchernia, "Premiers résultats des fouilles de juin 1968 sur l'épave 3 de Planier," Études classiques 3 (1968-70), p. 60. To Tchernia's list can be added two unpublished examples from Alexandria, Benaki Collection no. 276 and Alexandria Museum no. AVG 800 (both stamps now stored in the Alexandria Museum).
3. Cf. Tchernia's summary (above, note 2), to which can be added seven examples in the Alexandria Museum (three of them probably published in C.I.L. I. 2. 2654h), two in the Cairo Museum, and two (from the "Near East") in the British Museum. My Athenian Agora catalogue will give full details. How are we to explain the forms CALEONTVS, CALEONVS, and GALEONIS? Are they related to a possible fourth version of the same name, M. TVCCI. PROCALPONIS, apparently not an amphora stamp, cited by Mommsen in C.I.L. X. 4691, as from Cales? Were these all versions, or misspellings, of the same name? What was that name? In the process of stamping amphoras, mistakes seem often to have occurred. Producing a positive impression necessitated having the letters backwards in the stamping instrument. These instruments, matrices, which were made of wood, clay, and metal, seem to have employed sometimes permanently affixed, and sometimes movable, letters. In either case, the process of reversing letters led to errors, which we find most often in the early amphora stamps (2nd and early 1st centuries B.C.).

4. See above, note 2.
5. Fig. 10 in Tchernia's article (above, note 2).
6. Cf. E.L. Will, in H. Dunscombe Colt, Excavations at Nessana (Auja Hafir, Palestine), I (London, 1962), p. 128; also E.L. Will, "Latin -stamped Amphoras in the Eastern Mediterranean Area," Year Book of the American Philosophical Society (1962), pp. 649-650. ed.,
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7. Haltern, Type 71 (S. Loeschcke, "Keramische Funde in Haltern," Mitteilungen der Altertumskommission für Westfalen 5 (1909); Oberaden, Type 83 (S. Loeschcke, ⁱⁿ Veröffentlichungen aus dem Städt. Museum für Vor- und Frühgeschichte Dortmund. II: Das Römerlager in Oberaden, herausgegeben von Christoph Albrecht. 2: Die römische und die belgische Keramik).
8. See note 7 above, and Miguel Beltrán Lloris, Las Anforas Romanas en España (Zaragoza, 1970), pp. 464-472.
9. A publication on "Corinthian" transport amphoras is being ^{prepared} completed by Carolyn G. Koehler.
10. For the evidence from Brindisi, see E.L. Will in Year Book of the American Philosophical Society (above, note 6). Those finds, deposited in the museum at Brindisi, were the basis for subsequent publications by B. Sciarra; for example, "Primo saggio di scavo ad Apani," Museo Provinciale di Brindisi, Quaderno I (1964), 112 ff. On finds from Lecce, see Cosimo Pagliara, "Bolli anforari inediti da Fellingine, (Prov. Lecce)," Studi Classici e Orientali 17 (1968), 227-231.

ROMAN

She had the strength and the will to go to the American School of Classical Studies at 54 Swedias Street, Athens 140, Greece. He actually had his coat of arms left on that final trip. He was delighted with it, those being his favorite part of his collection. (I remember

55.06

mostly late Rhodian, as far as my knowledge allows me to judge. There are about a hundred late Rhodian fragments, and there is a mended late Rhodian jar.

I feel very genuine sorrow about Mr. Panachi, and the sorrow is not unmingled with guilt. I understand that guilt feelings generally give rise to hostility, but I feel only a very real loss, a vacuum, and wish that my own problems, and

(X) This was certainly a coincidence as she came to see me with only a few for Delos. I did call the French in, and found it was M. and Mme. George who helped her if she had wanted anything. I did not go to the houses that are accessible, and did not see Peter von Blanckenhagen for spreading this P. I say to him if he were here (as we are old

Delos, but Peter von Blanckenhagen, recently arrived here, says that the French are now barred from the museum and from the excavations at Delos, and he fears it may not be easy for her to see any houses except as a tourist. I knew you were just the person to advise her about the situation there and about how she can most easily look at the walls she needs to see. She is willing to play a tourist's role if need be, since, though she would like to make measurements, she has been to Delos before and made measurements then. She particularly wants, now, just to look and think. I'll be most grateful for any supportive advice you can give her. Love, Betty

Please give my very warm and Andress and to any one I know who is there this summer.

With much love for the moment,

Betty

54-6

in Delos because the Service NO ROOM in the apothekes other day with more records both going to dig in Delos the three sites of excav- that place, I read then to you, as it did to us; I wrote to tell you about it, now he died in Lausanne, did not notice that you did from us that you would this with Christmas cards.)

4 Neophytou Vamva, Kolonaki, Athens), I did to want to see; and 2) to Miss check for, say, what a wreath would collecting money to buy something

to and to the Museum in his memory. Lila was a great friend of his, and I expect he helped a lot to launch her in archeology, in which she is certainly well launched.

P.S. She is also a B.A. I.

June 4, 1977 54-a

My dear Virginia,

The bearer of these letters is Anne Laidlaw, a professor at Hallam College and a Fellow of the American Academy. She is a close friend and colleague of Betty Forte. She is a specialist, as you may know, in First Style painting and, in connection with that study, is excavating the House of Sallust at Pompeii. Her present visit to Greece is being made in the hope of examining certain First Style walls at

Delos, but Peter von Brandenbagen, recently arrived here, says that the French are now barred from the museum and from the excavations at Delos, and he fears it may not be easy for her to see any houses except as a tourist. I knew you were just the person to advise her about the situation there and about how she can most easily look at the walls she needs to see. She is willing to play a tourist's role if need be, since, though she would like to make measurements, she has been to Delos before and made measurements there. She particularly wants, now, just to look and think. I'll be most grateful for any supportive advice you can give her. Love, Betty

P.S. She is also a Thayer Fellow B.A.!

Rome, June 4, 1977
ROMAN 55.01

My dear Virginia,

This long silence surprises, I know, any part such fasting of mine. I have constantly been intending to write, but the demands of my job, and the increasing number of things to say, have worked against each other. A note would have done, I know, but in the case of this letter I felt I needed to spend more time. I guess what is chiefly on my mind is Mr. Benacchi's death, which I learned about from Homer. I just didn't know, and don't know, what to say about it. I am, in my neurotic way, so much more involved with you all than you realize. The fact that I don't write is, in my case, no indication of uninvolvedness. I work very slowly and carefully at whatever I do, and, though I ultimately finish everything, it takes me longer than it does most people. I also try to do more than I should, probably, but one job at U. Tenn. has been such a boost to my confidence and my ego, both of which had reached a low point by 1971, that it will ultimately prove to have advanced my work, I know. I feel I am, finally, firmly based professionally, and bit by bit I finally see myself in perspective and am becoming more productive. The

two enclosed short articles are indication of what pasted - together ago. I had been intending to send you the Archaeology piece for months. I brought it along to Rome, thinking I would have time, finally, to write and send it from here. Peasey Laidlaw's impending visit to Greece gives me just the opportunity I wanted. There is still time for you to suggest any changes ^{you may feel necessary} in the article. I felt better about it after I had sent it to Homer and gotten certain ^{very useful} suggestions from him. Those are written in on this version of the manuscript. The final version has a few further changes, notably the shifting of my indebtedness to you and Homer from p. 11 to a note at the end. (Phyllis Katz felt it was "too personal" for the text.) (Anne Benjamin, on a visit to me in the spring, also read the text and made good suggestions.) Phyllis Katz asked me to do a popularized thing, understandable to the Archaeology audience, and this was the result. I felt doing it might be of immediate benefit to my tenure - decision at U. Mass. (pending this summer), and

- in any case it didn't take a great deal of time to write. I also felt that it might be easier to get funds for the computerization project (p. 12) if the article had appeared. [That project is in the initial stages. The young man who is doing it (a former student of mine, now a graduate student in medical studies at Penn but with an M.S. from Purdue in computer programming) has already begun ^{typing} ~~posting~~ statistics onto computer cards.]

The second short article also was written quickly. There was a kind of emergency publication of Populonia material, things collected by Anna McCann in her various surveys (I believe you saw her at the store last winter when she "dropped by.") I'll be interested in your reactions to what I say about "Greco-Italic" (your "Spanish") jars. There are so many at Cosa, and a number of Latin stamps. They have the same clay as the Sicilian pieces, ^{and} I believe the Cosa area was one of the production-centers for

book types of jaws. The Bucco - Stolic jaws may in fact have been ancestors of Type 4.

I came to Rome suddenly. Had ^{on 3?} decided not to come. Then in May Miranda Marini phoned to say the Academy had given her an apt. for June. Would I like to share it? I was struggling with type - descriptions for Type 16 (the garum jaw) and Type 21 (the long African ones). Both types are massively represented at Cosa, so I decided to kill two birds by finishing up what I still have to do here (only ^{Cosa} things stored in Rome) and studying Types 16 and 21, both of which are poorly represented at the Agora. Such complicated types. I have numerous subdivisions for both. Here, I can study all the rim - and handle - variations, and be less apprehensive that Zevi and Penella will pounce on me when the Agora volume appears. (I haven't seen Z. or P. but may do so before I leave.)

|| I'll be here until June 23. Then back to Amherst. I'm teaching a course at Tufts during July. The

possibility has been in my mind of going to Greece in August, after the Tapos things, but it might be better to wait until the following January. Even if the MS has been sent off by that time, there will be some final details to check, especially at Corinth. I will then proceed to the typing of the Cosa volume, the catalogue of which is in order again. I regret to report that my 4x6 Cosa cards were stolen ^{ten days ago} from me, in connection with the theft of my camera here, and I have had to spend the last ten days reconstituting the cards. Fortunately, most of the notes I used in making them existed in two large notebooks. I have worked very hard here since my arrival, and the catalogue has now taken shape again. I would anticipate that the Cosa volume would be primarily a catalogue, since the type-descriptions will be in the Agona volume, as will the introduction. A very few types that occur here are not in the E. Mediterranean. So the prose in the Cosa volume ought to concentrate on what information amphorae give about the history of the site.

What plans do you have for the Greek stamps from Cosa? As you may or may not know, there is a massive amount of unstamped Greek stuff here:

mostly late Rhodian, as far as my knowledge allows me to judge. There are ^{about a} hundred late Rhodian fragments, ^{in other hands} and there is a mended late Rhodian jar.

I feel very genuine sorrow about Mr. Benacki, and the sorrow is not unmixed with guilt. I understand that guilt feelings generally give rise to hostility, but I feel only a very real loss, a vacuum, and a wish that my own problems, and distance, had not prevented my appearing to be a better friend. The feelings were there, though. Some day, I hope to take my place in the world again. As life goes on, and the children get older, things seem to sort themselves out. Fred's absence in Tunisia was a further complication for me last year. But he is back, and fine, with a distinguished grey beard. Alex now, ^{is and} about 6'4" and a rushman at U. Mass. (journalism? chemical engineering?). Barbara, 13 and 5'10" (!), has just finished the 8th grade. My mother is still in Amherst.

Please give my very best regards to Maria and Andrew and to any one I know who is there this summer.

With much love for the moment,

Kelly

ROMAN
 1. 7. 79
 9. 1. 79

American School of Classical Studies
 54 Swedias Street, Athens 140, Greece

July 6, 1977

Dear Letty,

Not much could be done for Miss Laidlaw, as she came to see me with only a few hours before her departure (already arranged) for Delos. I did call the French School, to see who might be working there then, and found it was M. and Mme. George Roux, very nice people who would I'm sure have helped her if she had wanted anything. But it seems she only wanted to go and look at houses that are accessible, and did not have time to socialize. I am sorry for Peter von Blanckenhagen for spreading this kind of talk, almost like Dietrich, I would say to him ^{P.} if he were here (as we are old friends). The French have for some years cut down their digging ^{in Delos} because the Service has not managed to finish the new museum space, and there is NO ROOM in the apothekes for any more finds. However M. Etienne, who was here the other day with more records of his stamps from Tenos, tells me that he and Siebert are both going to dig in Delos this coming summer, the Ecole having chosen Delos as one of the three sites of excavation that each School is allowed in any single season.

For Mr. Benaki, we knew that this would matter a lot to you, as it did to us; and at my suggestion but entirely in her own words, Maria wrote to tell you about it, within a few days of our hearing about it ourselves; you know he died in Lausanne, having got so far in his usual autumn trip to Europe. We did not notice that you did not reply, as this usually happens; would there be letters from us that you would not open until you found time to answer them? (I have done this with Christmas cards.) I suggest now that you write 1) to Mrs. Benaki (4 Neophytou Vamva, Kolonaki, Athens), as you were the only archeologist that she ^{seem} seemed to want to see; and 2) to Miss Lila Marangou at the Benaki Museum, enclosing a check for, say, what a wreath would have cost if sent to the funeral. The Museum is collecting money to buy something to add to the Museum in his memory. Lila was a great friend of his, and I expect he helped a lot to launch her in archeology, in which she is certainly well launched.

She had the strength and the luck to finish her book on his bone carvings, so that he actually had his copy before he left on that final trip. He was delighted with it, those bones being I guess his favorite part of his collections. (You remember they used to hang on the wall in his flat in Alexandria.) This was certainly a solace to Lila, who was very fond of Lucas and greatly upset. They had a memorial session at the Benaki Museum, at which she spoke, and had arranged an exhibition of things he had given to the Museum, or left to it. No doubt when they buy the new object, they will publish a notice of it, and may well print a selection of comments on from letters received. This in case you want to say a few words about what he meant to you. This is not easy, but more an act of friendship, perhaps, than just having feelings, not communicated. As for me, I had been thinking, Will Mr. Benaki and I ever say goodbye to each other? What would be the occasion that would bring us to this point of recognition? A final departure to America on my part? But it did not happen. In fact, rather few people manage to say goodbye to each other.

bring both your letters 7. vi. 77 Miss Ardhan

Thank you for sending me copies of your two short articles, ⁽²⁾ one for the Journal of Field Arch. for June and the other for Arch'y for July; both must be out now, or nearly so, though not to be found here for some time. Without pictures, I read them rather superficially - also being much pressed by having to read Carolyn Koehler's dissertation as fast as possible, without omitting to send the final corrections right away on a Festschrift piece, etc., etc. - as age creeps upon one, one does things even more slowly. For your Populonia piece, I am wondering if you have not included somehow a picture of the full shape you call "Greco-Italic." I must look up the article you cite on this class by Culican and Curtis. Does it mention my remarks on the shape, Hesperia 1963, pp. 320-321, with notes #4 - 6, and see also my reference, though not so acknowledged, in Hesperia 1962, p. 38, under no. 44? If not, it might have been good for you to mention this contribution, in particular because it looks at the type from the outside, giving more perspective. Also, of course, there are a number of citations gathered together. Refer to it on your next occasion. On your note 9, I would think the quotation marks are not really any more in place when referring to Corinthian amphoras. For descendants of

the "Greco-Italic" jar, perhaps also your Type 3, anyhow so far as shape is concerned.

A few exceptions to the Arch'y article: Greek amphoras are nothing like a meter high on the average. The exhibition in the amphora room at the Stoa of Attalos is not a reconstruction of an ancient shop. Many Greek amphoras or stamped fragments can be dated much more closely than "within a generation or so." On p. 9, I am one of those who need that "sentence or two to make the distinction clearer". What is the distinction? Are we sure we are not ^{just} looking at things differently? In your bibliography, if you cite (no.6) our chapter in EAD 27, you should say that its detailed chronology has been revised, for the 3rd century only, by my article in Ath.Mitth 1974, pp.193-~~222~~ 200. Did you not illustrate ^{your} ~~this~~ article? No pictures of the gaunt dusty windblown bulk of Monte Testaccio? None of the jollier amphora shapes or stamps? I am not, alas, happy about staking any of my reputation, such as it is, on P.M.Fraser's Ptol. Alex., chap.4, in which he has kept erroneous statements twice protested by me in his ms., without of course any specific documentation, as there could not be any, but with the general indication that he got his info on amphora stamps from me.

Well, my dear, you must be pleased to have those two articles finished. They will surely add to the current attention to amphoras, and I hope they fix you up at your institution, though we really need the book for that (and for other purposes). It's good to have the news of all your family. Incredible that Alex is already at the university, thinking about a career. My news is that my sister Emily, the one who lives in Moscow, has managed to get a holiday in the US, and even now is there. So of course I am planning to get over for part of her visit, and hope to leave late in July or at the beginning of August, on one of those 21 to 45 day tickets. I have not seen her since 1949.

Love,

Clumsy Fool! Careful With That Amphora

By RAY VICKER

ATHENS—Archeology is a learned profession, not generally accepted as a spectator sport. Except in Greece.

This is a country where any backyard spade might strike a pre-Christian era relic. Within hours this can bring an archeological crew on the run from the Department of Antiquities, and in its wake a gang of sidewalk experts large enough to fill the stadium at a fairly important soccer match.

Such was the case on a recent sunny afternoon as workers were tearing down an old four-story house at the corner of Veikon and Missaralotou Streets, almost at the base of the Acropolis. As the workers burrowed down, seeking bedrock for the new structure that was to replace the old house, they were being watched by the normal complement of sidewalk superintendents, shouting occasional words of advice. In Athens, everyone is an expert in everyone else's business. The Greeks are activists, natural-born participants.

Suddenly the digging stopped. Instead of the rough serrated configurations of bedrock, the workmen had unearthed what appeared to be large slabs of limestone that had been smoothed by chisels. The workers hastily conferred with the foreman. He telephoned the lot's owner. As required by law, the owner notified the Antiquities Department.

It needed only a quick inspection by an expert from the Antiquities Department to establish that this site indeed was worth investigating. The building workers departed. A guard was posted. Arrangements were made for sifting through the dirt of the excavation the next day.

When the archeological crew appeared the next morning in a three-wheeled truck, several score people already had assembled along the shaky barrier. What would the team find? Another Winged Victory of Samothrace? A Venus de Milo?

A slender, muscular archeologist directed the operations. He started in shirt and shorts and soon doffed the shirt as the sun grew hotter. There was no question about his competence. Nevertheless he drew the inevitable coaching from the spectators.

"Why don't you start over there?" one spectator shouted, pointing to a far corner. The archeologist shook his head.

"The soil is softer over here," counseled another. Again the archeologist shook his head. If there was annoyance beneath his moustached smile, he didn't show it.

Workers scooped and shoveled away. The crowd gasped when an arch took shape. A murmur of excitement ran through the mob, augmented now by most of the customers from the tavern down the street, when a stairs appeared. It was almost as if the workers were building this ancient structure under the eyes of the spectators.

As the hours went by the archeologist began to show signs of strain. By now the crowd was shouting questions at him. No, he wasn't going to identify this structure for anybody before all the dirt had been removed. Yes, it probably was a pre-Christian structure.

The crucial period occurred in early afternoon after about six hours of straight digging and clearing. Under the arch a sort of cellar became apparent. It was a trench about 30 feet long, six feet wide, perhaps four feet in depth within those limestone walls. Around it were other walls, like the foundations of some sort of building. And, as one of the workers in the trench swung his pick, he struck something. He cried out and pointed down.

The crowd along the rail leaned forward, threatening to tumble en masse into the excavation. Alarmed, the archeologist gestured and shouted words of warning. Then, he bent down and examined the place in the brown dirt where the worker's pick had hit the obstruction. The side of a clay pot appeared, an amphora, one of those yard-long, egg-shaped clay vases with a narrow bottom which the ancients used for holding oil, honey or wine. The worker's pick had shattered it.

An angry mutter went through the crowd.

"Clumsy fool," someone shouted.

The archeologist took a closer look and ordered the workers to scrape away the surrounding soil carefully, an inch at a time. Another amphora appeared beside the first, then another and another. The crowd cheered.

"It is 4th Century B.C.," somebody in the crowd said. He had overheard something the archeologist had mumbled to one of his assistants.

One of the tavern patrons peered into the hole. "A bar. It's a winebar," he said happily.

"Yes," another man cried out. "A 4th Century B.C. winebar." A consensus seemed to be developing.

"No," shouted somebody else. "It's an oil shop."

A fierce argument developed. The participants called down to the archeologist to settle the argument. He shook his head irritably.

Tension began to build in another quar-

ter. All the amphorae lay there in perfect condition, except the first one. But when a workman tried to pry loose a second vase from the soil in which it had been imbedded for so long, the neck snapped.

The crowd groaned. One man shook his fist at the worker.

"Butcher," shouted another.

More care was expended on the third vase. It was removed intact from its bed by a stalwart worker. But then, horrors, as he lifted it from the trench, he slipped and the vase crashed to the ground, splintered into a dozen pieces.

"Clown!"

"Jackass!"

"Stupid bungler!"

Suddenly, it was too much for one of the spectators. He leaped over the barrier and scrambled down into the excavation toward the vases. He was going to show these idiots how it should be done. His friends shouted encouragement. The archeologist lunged at the interloper, but before he could reach him two of his crew grabbed the man and escorted him none too gently out of the hole.

Red-faced and breathing heavily, the archeologist turned again to the task at hand. With the amphora score standing at 3-to-0 against them, his crew men hung back, unwilling to try again. The archeologist personally tackled the fourth vase, scooping away the dirt carefully with his fingers. In a few moments, he lifted an intact amphora and handed it to a worker. Carefully, the fellow carried it up the ramp to the three-wheeled truck.

The crowd cheered.

Then, when another and another were removed in perfect condition, everybody clapped. Turning and facing the onlookers, the archeologist flashed a huge smile and he held both hands aloft in the manner of a victorious prizefighter.

The honor of Greek archeology had been restored.

Mr. Vicker is the Journal's senior international correspondent.

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«Η ΒΡΑΔΥΝΗ», Τρίτη 22 'Ιουνίου 1976

ΑΘΗΝΑΪΚΑ ΚΑΙ...ΑΛΛΑ

ΚΑΙ ΕΑΦΝΙΚΑ

ΒΡΕΘΗΚΑΝ

ΥΔΡΙΕΣ...



Βρέθηκαν άγνωστες έπιστολές του Κοραή

ΒΙΕΝΝΗ, Τρίτη.—

ΑΓΝΩΣΤΕΣ αυτόγραφες έπιστολές του Κοραή και έπίσημα έγγραφα που τον άφορούν ήρθαν σε φώς από τα άρχεία της Βιέννης, του Μονάχου και του Στρασβούργου. Τα νέα εύρηματα καλύπτουν την περίοδο 1817 — 1826 και όφείλονται στις τελευταίες έρευνες του καθηγητού του Πανεπιστημίου της Βιέννης κ. Πολυχρόνη Ένεπεκίδη.

Ή καταστροφή της Χίου, τον Άπρίλιο του 1822, αναστάτωσε την εύρωπαϊκή συνείδηση και τραυμάτισε τον Κοραή ψυχικά. Καί τα νέα ιστορικά ντοκουμέντα άποκαλύπτουν την κατόπιν έκδηλη

Σε νέα άρχαιολογικά εύρήματα «σκόντιαρε» χθές όχι ή άρχαιολογική σκαπάνη αλλά ό κοσμός και το φινάρι των εργατών που έσκαβαν τα θεμέλια για να παραμορφώσουν με μία άκόμη πολυκατοικία το άθηναϊκό τοπίο.

Το οικόπεδο δρισκεται σιη συμβολή των δρόμων Βείζου και Πετιμεζά και τα άρχαία που θεόθηκαν είναι άκόμη μιá απόδειξη για το θησαυρό που έχει κορυμμένο στα σπλάχνα της ή αττιική γη.



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INTERNATIONAL HERALD TRIBUNE, SATURDAY-SUNDAY, JUNE 26-27, 1976

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DISCOVERY—Workmen at building site in Athens residential area found part of a wall dating to 5th century BC, with amphorae. Excavations have begun.

United Press International.

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LONDON

Directing Shakespeare

By John Walker

LONDON, June 25 (IHT).—While it is too early to make judgments about Peter Hall's reign as a director of the National Theatre, it is time enough to worry about the National's treatment of Shakespeare.

"Troilus and Cressida" at the Young Vic, the first production of a season planned for the still uncompleted Cottesloe, the smallest of the National's three theaters, is a production that confirms all the concern felt after the Hall-Finney treatment of "Hamlet."

In both, the text used is a full one and is played without any particular emphasis. That is, the text itself is not investigated or, in some of the indifferent performances, even understood but, simply, played.

The final effect depends not upon any unifying conception of the director—indeed, his role seems to be to ensure that the actors do not bump into one another—but on the power of the individual actors. With careful



Alan Tilvern
...in O'Neill play

creakingly melodramatic masterpiece needs American actors to

These objects were found as covers over a drain (Not antiques, but to wall which is empty) 60-d

INTERNATIONAL HERALD TRIBUNE, SATURDAY-SUNDAY, JUNE 26-27, 1976



United Press International.

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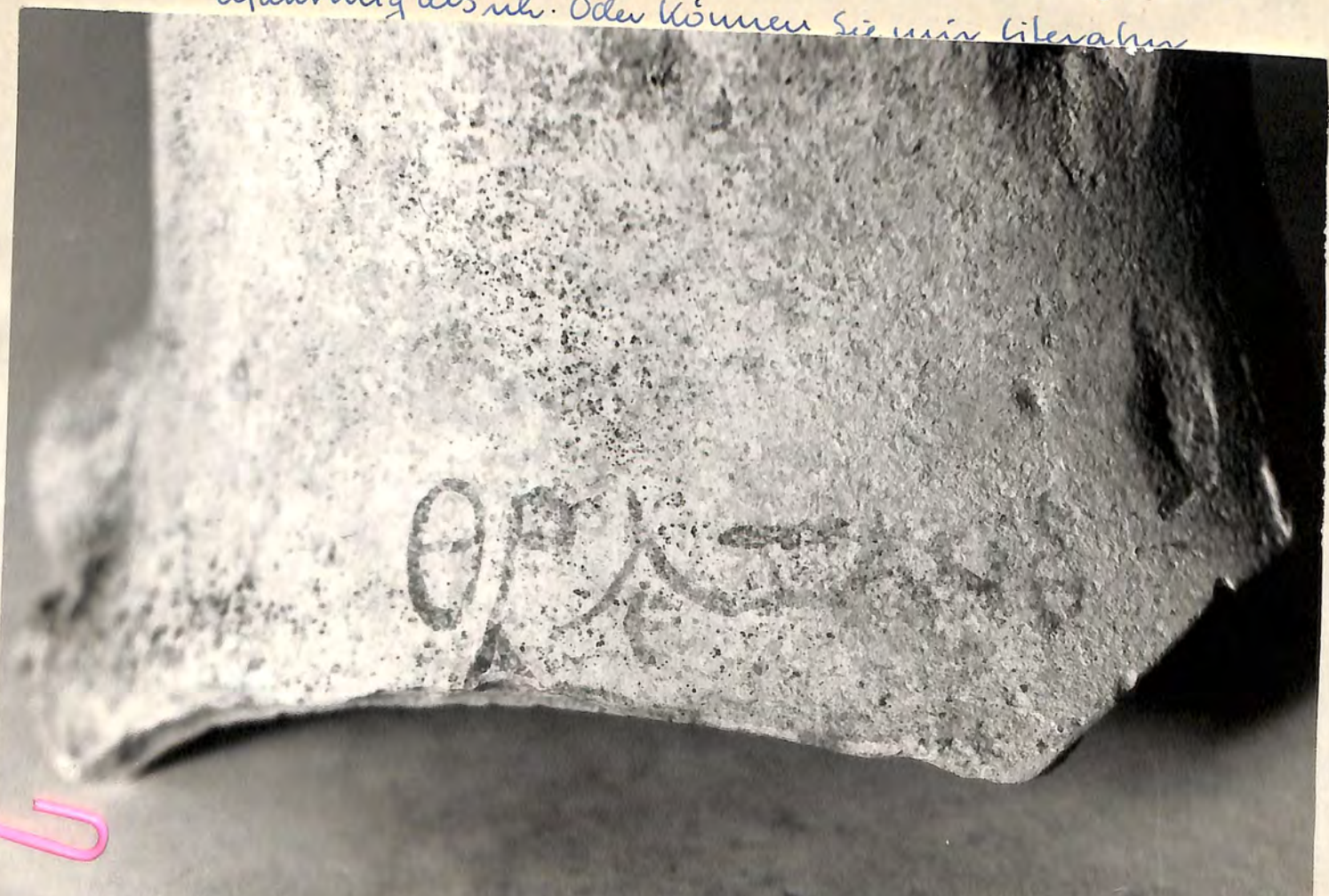
Verehrte Miss Grace,

seit drei Wochen bin ich hier in Thessaloniki,
wo ich Vorlesungen über Numismatik halte, für
2 Monate. Ich habe eine grosse Bitte an Sie.

Im römischen Kadell bei Duisburg in
Deutschland wurde dieser Kupferdenar gefunden,
unter röm. Keramik. Auf ihm ist aufgemalt
eine Inschrift

ΘΡΑΙΑΝΘ

Ich komme damit nicht weiter. Können Sie sich
etwas dazu denken? Sie haben ja eine viel grössere
Erfahrung als ich. Oder können Sie mir Literatur



ΘΡΑΙΑΝΘ

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28-3-76

Verehrte Miss Grace,

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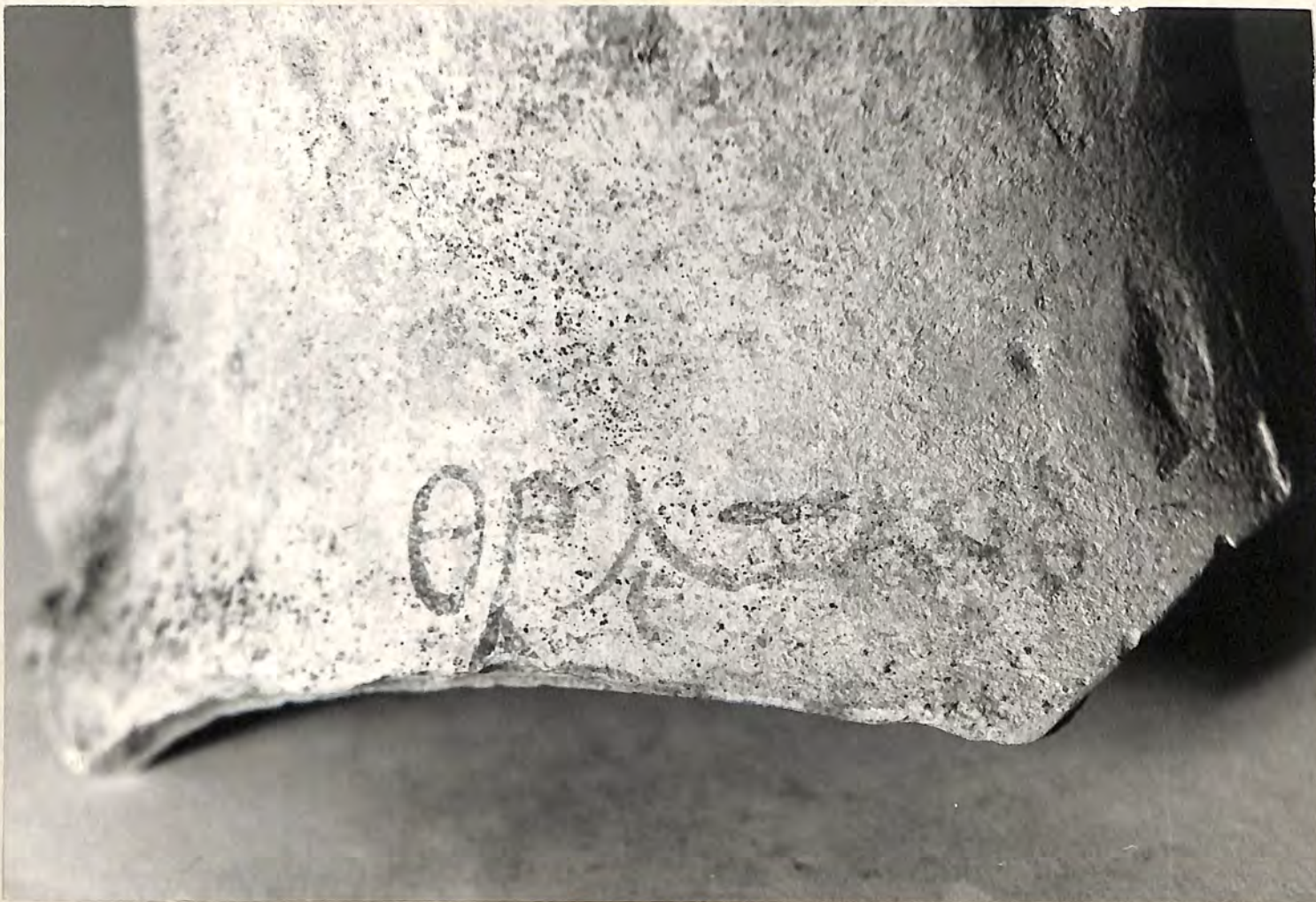
Ich komme damit nicht weiter. Können Sie sich
etwas dazu denken? Sie haben ja eine viel grössere
Erfahrung als ich. Oder können Sie mir Literatur
nennen? Ich wäre Ihnen sehr dankbar.

Bis zum 8. Mai bin ich hier. Bitte senden
Sie mir das Foto wieder zurück, ich habe nun
dieses eine.

Mit herzlichem Dank und gruss

Ihr

P. R. Franke.



62-6



B. L. Johnson
c/o Hannah Katzenstein
14 Behov David Marcus
Jerusalem, Israel

Miss Virginia Grace
American School of Classical Studies
Odos Souidias 54
Athens 140, Greece



65-d

JALAME

P98 J65

64

63

September 28, 1976

Dear Miss Grace,

I am enclosing a drawing (1:1) of a jar from Jalame (the glass factory dug by Gladys Weinberg near Haifa) which might be of interest to you in light of the cards and photos you showed me when I was in Athens in September. The context is 4th c. A.C. I will send along a photograph when I can have one made which may be a little while, since I think the piece and the negatives are both in Missouri.

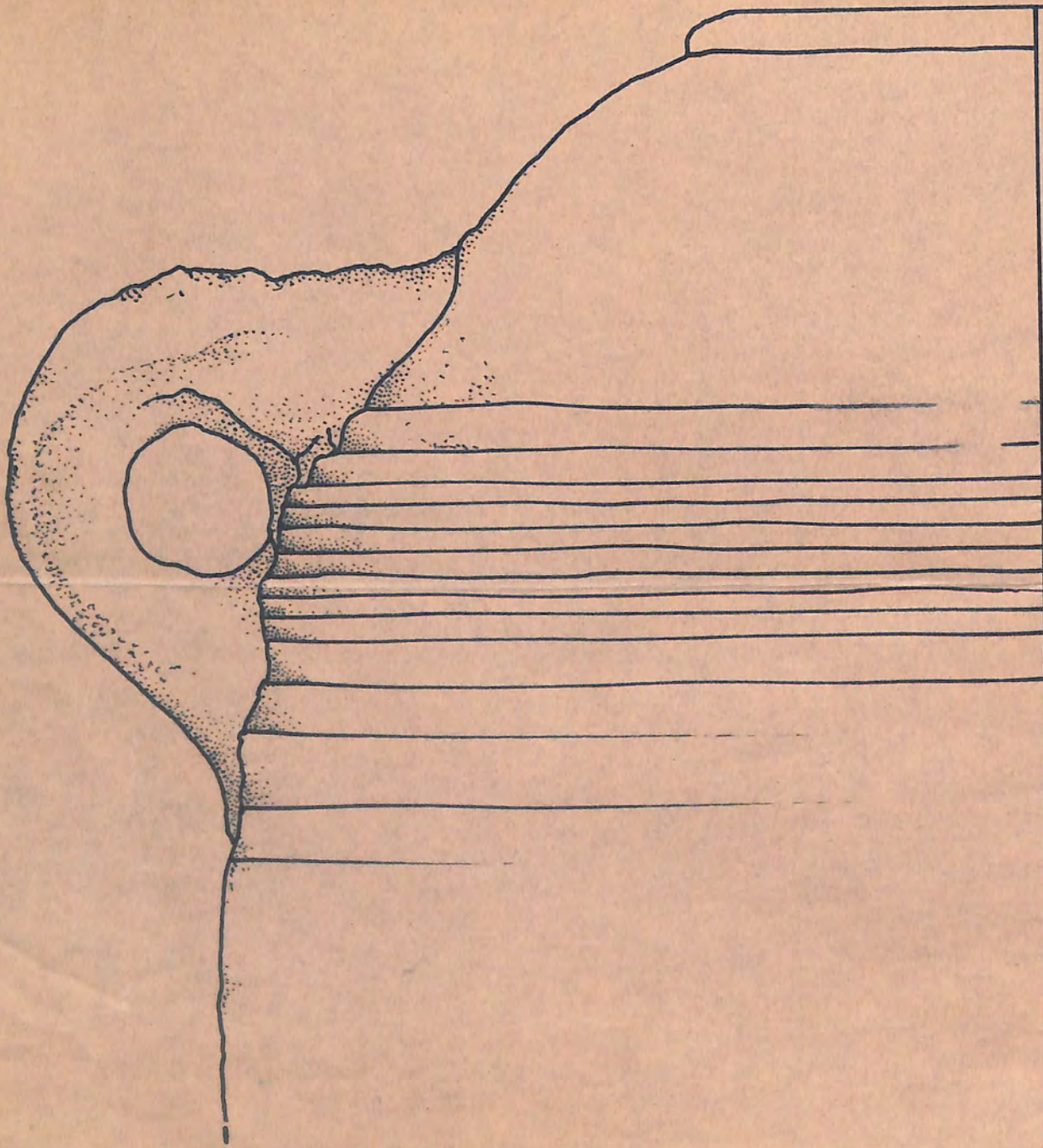
I apologize for not getting down to see you before I left but life was very hectic. This is a fact of life which never seems to change, however, for things are the same here.

I am going to ~~Mix~~ Haifa to the Maritime Museum in the next few days to see the masses of pottery which Mr. Avshalom Zemer says he has. He rang up and was very eager that I come and look at his material. I shall let you know what it is like once I have been there. Things are a bit difficult here right now with all the holidays, October seems to be one long holiday, and business suffers.

Fondest regards to all those left at the Agora, and I hope to see you all next summer.

Sincerely,

Barbara



JALANE
p98 J65

65-d
B. L. Johnson
c/o Hannah Katzenstein
14 Rehov David Marcus
Jerusalem, Israel



Miss Virginia Grace
American School of Classical Studies
Odos Souidias 54
Athens 140, Greece

11



65-6



ROMAN

September 16, 1976

Dr. Gregorios Konstantinopoulos
Director of Antiquities
Ministry of Culture and Sciences
Aristeidou 14, Athens

Dear Dr. Konstantinopoulos:

I refer to your letter to me of September 4, 1976, on the subject of ancient amphoras offered for sale in Germany, and the papers you enclose which I herewith return, that is, 2.60418/1.6.76 of the Office of Interpol, Greece, with attached correspondence. The papers include 6 photographs, which I also return.

I agree with Dr. Philippaki (in her letter of August 20, 1976) in assigning several of the amphoras in the enclosed photographs to the same class as the one to the right in fig.31 of my booklet Amphoras. I think perhaps 4 out of the 5 jars belong to this same category, deriving from Spain or Italy, leaving only the one in photograph no. 3, with its short neck and button toe. This also seems to be of a class produced not in Greece but further west, and may be compared with Dressel Type 25, in the generally used classification of Roman amphora shapes (H.Dressel, Corpus Inscriptionum Latinarum, XV, Pars 1, Berlin, 1899).

In the letter of 13.5.76 from Interpol in Wiesbaden, paragraph 3 is not entirely clear to me. But if it can be read that the local authorities in Croatia disposed of the contents of an ancient ship found sunk off the Yugoslav coast, then there is certainly no reason to assume that these amphoras had ever been in Greece.

If you wish, I could give you the names of persons more qualified than

I on the subject of amphoras made in the western Mediterranean countries.
My own expertise is chiefly for those from ancient Greek production centers.

Yours sincerely,

Virginia R. Grace

Encl. 7 papers
6 photographs

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Let's intercept
their eggs near 2000 then 2500.

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24

Conversely:

- 1) at 24.XI.75, presumably was in Germany, & on her copy of W. & G.
- 2) 30.I.76 letter to L. - L. of Harbor Police in Pirene, Ministry of Merchant Marine, signed by a H. D. A. P. Kypoukos, addressed to BEY INTERPOL, asks & what extent to items in the ad for the German ship YACHT (and) are from Greece.
- 3) 13.V.76 got trans. of letter from INTERPOL of W. Germany, Wiesbaden, to Greece. Says the head of the (firm) is Adolf Buch (add. - age), and to (A.B.) confirms he inserted the ad. Our info is that the jars are genuine, and are datable 2000 - 2500 years ago (from artifacts). Other evidence suggests that the jars are a chain of a ship in the Adriatic near to Yugoslavia, this question initiated by the local government in ZUCURAY, Croatia, and to ampelous by

These letters are always
in office (except to last)
but from an individual

found were sold to private individuals
incl. the A. Buch Photo. were taken
by them in poss. of " and are included.
The jars were sold in Yugoslavia for 200
to 300 German marks acc. to this preservation
But the sales price in W. Germany was
500 to 2000 German marks. The
original permit of export, and the customs
papers, have been submitted.
Acc. to our activities, Buch has not so
far occupied the Police. TENDS

DEMA
subject
to the
archaeological
for sale

4) letter of 1. VI. 76 from INTERPOL, Athens,
to Harbour Police, Piraeus, signed by
Φωτεινός Παπαγεωργίου Art/pays xap/kys,
addressed to Ministry of Culture and
Heritage, 101. Haditisk. Kai
Επιστολή, Διευ. Αρχαιοτήτων
enclosing 1-3 above. The Archael
Service is asked to furnish relevant
info, esp. as to origin of the jars, and
whether it is a question of theft or
other illegal act.

DEMA
rep. of
archaeological
papers

5) letter of 20. VII. 76 from the Ministry of Culture,
Arch. Museum, to the " " "
Director of Antiquities, signed by B.
Philippakis. She says to give the

numbers (1) looks like *Vg Amphioxus*, fig. 31,
right, and so perhaps from Spain, in
Roman times. The one with it might be same
kind. For the rest *oússiv súvama*
vá eítta. No knowledge of type of
this kind of thing from any museum. If
from Greece, likely from the sea. *Tá pódogy*
mas. Suggests referring to *Vg*.

6) Letter of 4. IX. 76 from Ministry of Culture,
etc., Director of Antiquities, T. Konstantino-
poulos. (No signature) Please give
what info you can to the Interpol
office

Azma - Hərbi Tədr. işi
 Dəniz m. Kom.

I refer to _____ with attaching
correspondence.

I agree with Miss P. in assigning several
of the amphioxes in the photo. rec'd to the
~~same~~
same class as the one I think is Amphiox fig. 31

68-α

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
ΥΠΟΥΡΓΕΙΟΝ ΠΟΛΙΤΙΣΜΟΥ
ΚΑΙ ΕΠΙΣΤΗΜΩΝ

Αριθ. Πρωτ. 45307

Αριθ. Διεκτ.

Πρ

For Mrs. VIRGINIA GRACE
Προς της Βιρτζινίας Γρας
Κυβερνήτη Ενωσών
Στοι Αμερικής



Σε εκδ



68-6



ROMAN

75?

63.01

22.8.77

OK up bag posted
GELW

From notes enclosed in a letter of 18.X.75 to Hugh Sackett at Groton School, on handles from the Unexplored Mansion at Knossos in Crete.

From jar made near Brindisi in Italy (?)

27. HPAIOΣ. This seems to make 35 examples we have of this type, of which about 2^{stamp}
4/5 were found in Egypt, especially in Alexandria. The handles belong to a class (with stamps in Greek letters) which by their fabric seem to be associated with handles - and at least one whole amphora - that bear stamps in Latin, often Greek names in Latin; what evidence we have in the way of pairs suggests that these amphoras had a Latin name on one handle and a Greek name, which is often in Latin letters, on the other handle. I have published a Latin stamp of this class from Tarsus: see Tarsus I, p.147 and fig.118, no.

100. On the same figure (118) there is a photograph at small scale of a stamped amphora (Latin stamps) in the Brindisi museum. The dating of no. 100 in the general introduction to Tarsus I (see p. 31) is ^{its} too late even for ~~the~~ context at Tarsus, which should be well earlier than 50 B.C. Other examples of this class are published Nessana I, pp.127-128, where they are dated by Mrs. E.L. Will in the first quarter of the 1st century B.C. I should suppose your no. 27 to date about the same time, despite its later context. Note that a duplicate of 27 has been published from Brindisi: see IG XIV, 2393, 264.

Amphoras of this class that bear Latin stamps are to be included by Mrs. Will in her comprehensive publication of Roman amphoras and their stamped handles that have been found in the eastern Mediterranean area. My remarks on ~~this~~ ^{this class} (p.3 above) are largely drawn from information from her ~~in~~ ⁱⁿ 1955. At one time she planned to include the Greek stamps that apparently should be associated with the Latin ones of this class. I would suggest that you write to her about your 27, and also your 10 and your 28. I am sending her a copy of my remarks on these three. Her address:

Professor Elizabeth Lyding Will
Classics Department, Herter Hall
University of Massachusetts
Amherst, Mass. 01002

You might even go and see her, as I imagine you are not too far apart.

Both also Roman? and to be inquired about from Mrs. Will:

10. Combined letters TE AT ? The letters need not be Latin, but we do not find it in our files here, and I think I recall similar stamps among those studied by Mrs. Will. I see that the stamp is on a handle, not a rim, according to your description.
(retr.)
28. MBF incuse on shoulder. The F seen clear.

Unidentified class

25. None of us has recognized this.

April 19, 1976

My dear Virginia,

I'm collecting the usual long list of things to tell you, but I'm afraid it won't get off to you till mid-May, when classes end here. The final amphora - effort taken place this summer (yes, I'll be here, and no, I won't go to Italy). I'm sorry that my silence keeps me from getting news of you all. Fred still in Tunisia (till late June) and sending many pictures from there of current war and production of amphoras. I didn't want to wait to share this poem, a copy of which I've recently to Micromegas, Fred's magazine. Much love to you, Mr. Bouché, Antinea, Phine, Bill, Anna (if she is there). Letty. Also, if you can, Margie, Elia, Eleni, Kiki.

Robert Lima is Professor of Spanish and Comparative Literature, as well as chairman of Comparative Literature, at Pennsylvania State University. He has written books on Lorca, Borges and Valle-Inclan.

too soon
we will be one
with all the universe
and cease to be
the one
that we have barely
known

AMPHORA

The vessel that I am contains all things
Nothing has been that is not in my hold

My clay facade looks individualized
(distinct, distinguishable, apart in mode)
yet I'm an old repository filled with other times

I am everything inside this mold, everything
that has been in time, beyond it even,
lived, suspected, known, revealed or loved
all that has been or could . . .

Because nothing that has existed somehow
has been deprived from me or will
everything is also in me in potentiality
(or now beyond time's sequiturs)

Even when I'm dead I will be filled

16. 7. 75
 16. 7. 75
 16. 7. 75

August 9, 1975

Dear Letty,

A few days ago I had a visit from a couple of Catalans from Barcelona, M. and Mme. Riccardo Pascual (Guasch). He is he said an industrialist, in metals, but seems to spend a lot of his time on underwater archaeology, from the quantity of little offprints he gave me. They asked (she mostly interprets, as her French is better than his) if they might see our amphora collection and make for themselves a little catalogue for reference: but after I took them downstairs they thought better of this plan, being, as he said, "demoralise par la quantite." I said I often feel the same. They did ask for a picture of one of those things I call Dewdrops, the massive drop-shaped jars shelved at the end of the East Basement series, i.e. the supplementary items found after the selection as a whole had already been placed. Barbara Johnson and I believe you are including this class, as of your last visit here. I found a print for him of P 25724, and B.J. stamped it with that stamp that says not to publish it. M. Pascual (the Guasch seems to be an optional addition) said that similar objects have been found in Carthage, and this should be of interest both to us and to those who work in Carthage. I told him to write to you about it, so when he does, see if you can answer him. He is quite a charming man, speaking wonderfully bad French, and one of his offprints, on wrecks off Andalusia, shows drawings of some wonderful

I wrote to you on April 4, with a good deal of requested information, Phoenician or Punic jars like one recently excavated at Olympia, where it had and some time between April 10 and 19 posted to you context of the 1/2 of the 5th B.C.

that Andreas should make for you of P 4201. There has been no acknowledgment of either letter or drawing. Did you receive them?

There is something I would like you to send me, and that is photocopies of the pages of your definitive list of deposits and their dates. All I have is one that I am sure is superseded. I need this, both to check and to be checked.

As we have corresponded about the jar from the Marion tomb (Cyprus), you might be interested to hear that a little gold statuette (0.028 high) from that tomb has been brought to Athens in the current Cyprus exhibition, and appears in the published catalogue thereof. I cannot lay hands for the moment on my copy of that, but I think they refer to the figure as Isis. It is a draped female wearing a polos (?) and carrying a cornucopia.

Barbara Clinkenbeard got a chance to come over this summer for a while and work on her Lesbian amphoras: the American Express, in which her husband is, sent her over at their expense along with David who is here on business, also their son Stevie, 16, who worked in the mail room of the Am. Exp. and dealt out letters to all those hippies. (They now are supposed to pay a fee for this service if they are not Am. Exp. clients.) They leave tomorrow. Barbara has done some profile drawings, and some capacity measurements (what she bought, and used, was birdseed), and some new photography. She has decided to write an introductory short article on the class, not to attempt a corpus at the moment.

Mary Zelia stumbled and fell and broke her hip; this happened in Aigina, on the way to the bathing beach. They have given her a metal ball and socket, and she is coming along now promisingly I believe. Luckily Dia her daughter was here at the time. In the hospital at the same time was Professor Kondoleon, whom many of us knew well in the '50s. He had cancer of the intestine, and fortunately died without too long a siege. A hundred people, mostly his former students, are said to have stood by at the hospital at the time of the operation; his funeral was enormously attended, with rank on rank of wreaths.

We had heard some rumor that Charlie Morgan had died. We can't see how this could happen without our knowing. Please reassure us on this score.

Amplius ~~proposed~~ for Enc. Italian

See notes of today filed under Bluxin

Prosopographical Publication, since both

matters were discussed today with Pugliesi

Caratelli.

EXPÉDITEUR - SENDER - השולח

Miss Virginia P. Grace, Applebaum,

The American School, 54 Swedias Street,

Athens 140

Tel Aviv, Israel.

69.201

אירט שהושם בה דבר חישלח לפי תעריף של סכתב בדואר אוויר.
 UN AÉROGRAMME CONTENANT UN OBJET QUELCONQUE SERA ENVOYÉ AU TARIF D'UNE LETTRE - AVION.
 AN AEROGAMME CONTAINING ANY ENCLOSURE WILL BE SENT AT AIRMAIL - LETTER RATE.

SECOND FOLD קפל שני



EMAS

Miss Virginia P. Grace,
 The American School,
 54 Swedias Street,
 Athens 140.

PAR AVION • AÉROGRAMME • אירט אוויר

not ready
no to 26/11/75

Dear Miss Grace,
It was most kind of you to send me
the xeroxes of your own letter and Mrs. Will's note,
and allow me to express my thanks and
once gain my apologies for imposing this
small angaria.

I see from your letter
that you inquire of the ancient sources. Those
immediately available ^{to me} are Yishmael, Avodah
Zarah (Idolatry), II, 3 (Danby's translation,
438), in which among things belonging to gentiles ^{for}
Gideon to Jews is Hadrian's exultation - Danby thinks
the word could also be 'Adriatic'; *The Babylonian Talmud
comments that these pots were called after Hadrian.
The first is not later than the 2nd cent. A.D.
You will of course know Pliny's reference (H.N., xxxv,
(12) 16) to the pottery industry of Hadria. It is pos-
sible that the Jews of Judea simply misinterpreted the
stamp; or the Men house may very well be a
Jewish house which was redacted have forgotten the real sig-
nificance of the stamp and given it their own inter-
pretation. The Yishmael prohibition is from immediately
after the prohibition of gentile wines so that the Hadrianic
vessels may be amphorae. That would cause difficulties
for Re'Chien's solution.

Many thanks for Mrs Will's address.

With best wishes and thanks,

Shimon Applebaum

*The Hebrew word is 'Hadriani' (הדריאני)
which is indeterminate.

EXPÉDITEUR - SENDER - השולח

Miss Virginia R. Grace, Applebaum,
 The American School, 54 Swedias Street,
 Athens 140,
 Tel Aviv, Israel.

79/6 Reh. Aachmessaika,

NAME

ADDRESS

CODE

69.201

מיקוד

שם

מען

ישוב

איגרת שהושג בזה דבר תישלח לפי תעריף של סכתב בדואר אוויר.
 UN AÉROGRAMME CONTENANT UN OBJET QUELCONQUE SERA ENVOYÉ AU TARIF D'UNE LETTRE - AVION.
 AN AEROGRAMME CONTAINING ANY ENCLOSURE WILL BE SENT AT AIRMAIL - LETTER RATE.

SECOND FOLD קפל שני



EMAS

Miss Virginia R. Grace,
 The American School,
 54 Swedias Street,
 Athens 140.

PAR AVION • AÉROGRAMME • איגרת אוויר

74

Professor S. Applebaum,

'79/8 Rehov Ha-Universita
Tel Aviv, Israel
1/11/85

12. A. 75
Gund
Schubert
W. 17
x 17
ch

Dear Mr Tracy

By some mistake

your kind answer to my enquiries
about the stamp which I thought
to be from Fanum and Hadria
has gone as long, and with it the
name of your friend who was
so good as to give me her opinion
on the matter.

All I need is his name,
to acknowledge in my article.
Could I trouble you for this,
with apologies for having to irk
you. Yours sincerely,
Shimon Applebaum

75-a



Greece

11

Miss Virginia Grace,
The American School of Classical Studies,
Pnykias St., 54,
Athens, 140.

Professor S. Applebaum, 79/ii Rehovot Ha-Universita,
Tel Aviv, Israel, 69201

75-6

BE-21XX-

9-21X

[ELW]
{script}

76

1.XII.74
COL. HADR seems definitely to refer to
"Colonia Hadriana".

FAN. FORT seems to refer to the name
of the potter, Fan (ni? nia?)
Fnt (unati? unatre?). Cf. the stamps

IUNI. QVINTI
COL. HADR

CIL XV. 3376

FAN. FORT
COL. HADR

CIL VIII. 62 and
10477. 2

CIL XV. 3375

Both Dressel & Thompson say FAN. FORT
does not = "Fannus Fortune".

by Dressel

Type of jar not certain. Called "amphora pavia".
I would guess it might be n. to the Maus. Caes.
Jars, no Type 18.

ROMAN
STAMPS

AGORA EXCAVATIONS
AMERICAN SCHOOL OF CLASSICAL STUDIES
ATHENS, 140, GREECE



December 6, 1974

Dear Professor Applebaum,

Thank you for your interesting letter of November 17, on the jar handle with Latin stamp found last year at Jaffa.

I myself have no background for interpretation of such a text. But it happens we are having a visit from Mrs. Elizabeth Lyding Will, who is finishing her volume on Latin stamps found in the eastern half of the Mediterranean area. She has given me the enclosed chit for you, with some parallels for your stamp. As you will see, she does not agree with the interpretation you propose for the abbreviated words.

Mrs. Will is leaving Athens tomorrow. If you want to write to her in America, the address is:

Mrs. Elizabeth Lyding Will
Classics Department, Herter Hall
University of Massachusetts
Amherst, Mass. 01002, USA

or Professor

Mrs. Will is acquainted with Peter Fraser.

I am rather interested in finding out what your ancient sources were thinking of when they mentioned "Hadrianic pottery." Could it be for instance something archaistic? We have for instance an amphora of the 2nd century AD that is a remarkable imitation of a Chian amphora of the latter 5th century B.C., while having some 2nd A.D. features that they probably did not notice they included.

Yours sincerely,

Virginia R. Grace

Virginia R. Grace

Copy to Mrs. Will
(carbon)



78-a

EMAS

Greece.

— flll

Σ

Miss Virginia Grace,
The American School of Classical Studies,
Puedias Str, 54,
Athens 140.

Professors S. Applebaum, Dept. of Classics,
Tel Aviv University, Israel

78-6



Professor Shimon Applebaum



אוניברסיטת תל-אביב

TEL-AVIV UNIVERSITY

Dept. of Classical Studies

17/11/1974

Dear Miss Grace, I am writing to you at the suggestion of Peter Drasar of All Souls College, Oxford, with whom I spent 1972-3 as visiting fellow of the College.

Dr Yakov Kaplan found in his last year's excavations in the Tell of Jaffa a jar-handle stamped ~~FANCOLHADR~~ FANFORCOLHADR. The stratum from which it came was not later than the 2nd century A.D. I have no hesitation in expanding this stamp as "Fannum Fortunae Colonia Hadriana," referring respectively to Fano and Adria, both on the Adriatic coast of Italy. I suppose either joint manufacture or joint export is implied.

The great interest of this find is that "Hadrianic pottery" is mentioned several times in Jewish sources, and the interpretation of the term has been a matter of controversy; most of what has been written

² on the topic has been wide of the mark. Actually the [73-6]
pattern of Anna is pointed by Riny, clearly in the
later 2nd century, when some references to the mite-
size occur in 'talmudic' literature, the real origin
of the name had been forgotten by those circles.

I wonder whether you can tell me of
any other parallel finds to the above stamp, or if
not, to whom I might refer among Italian
(or other) authorities who might furnish further
information?

Naturally we should greatly appreciate
your assistance which would help to clear up
a long-standing problem and add a new item
of information reflecting on trade and distribution
in the eastern Mediterranean at the time.

Yours sincerely,

Shimon Applebaum

Athens, April 28. 1975

Dear Bob,

Thank you very much for your two offprints, "Oil-producing Estates in Southern Spain" (1972) and "Some Notes on Trade and Traders in Roman Spain," (1974), which I am glad to be able to keep for reference and for later study. I can see that your studies are important for Letty Will. I note that you are concerned with the Mahdia wreck - "Some Notes", p.16 - and I see that I have not sent you my article on the Antikythera wreck which publishes also the 5 amphoras from the Mahdia one, so I am about to post you an offprint thereof. (Trans.Am.Phil. Soc. 55, 1965, pp.5-17.) I do not know of any other published pictures of these jars, do you? You will see that Fuchs and I are in agreement about the date of the wreck. One of the jars (p.13, fig.5, I) is of the series common in the Titan wreck which I think Parker attributes to Spain (in his review of Beltran), which would suit your other evidence; maybe the Punic jar also comes from there?

Yours as ever,

10.IV.75

Writing to Lethy,
 possibly to announce posting of
 drawing
 ask her for photographs of the
 pages of her deposit card
list of deposits & their date
 (I had an old one, to make my
 deposit cards (you))

When I got the list,
 got out all deposit cards of these
 deposits, and check her
 text (which I was unable
 to do when she was here,
 as my info was not assembled)

(inc. to photographs) (19.IV.75)
 Note to drawing was posted, all rolled up
 in cardboard and wrapped by Yanni postal obs.
 by Yanni, some time ago - as much as a week!

28.IV.75 The little figure of Isis from
 the tomb was brought to Allen and is in
 the collection of Cyprian antiquities in the N. Mus.
 See its catalogue.

ROMAN - PERIOD AMPHORAS
PUBL. OF AGORA TARS

April 8, 1975

Dear Barbara:

Many thanks for sending me the little notice signed by you and John Hayes about the agreement you have made on the plan and order of publication of the Agora Roman pottery. I am interested that apparently you plan a joint volume with Henry Robinson. I suppose Alison Frantz was added to the list of those concerned as someone

82

of the 8th century and later?

My friends will be sorry to

be postponed, but I don't see how

as you know I have published

in for instance my Pamphylian

the possibility that I may need

you will not grudge this possi-

and effort given by me to the

Eugene V. jr. has made a couple

the shelves, and I have prints

if he has not yet given you prints,

don now, and Anna Benjamin at

Sincerely,

2.5.75

I today, and we are

in accord. I told her of my subsequent idea of doing a short piece on the amphora collection in the basement and how it is shelved. (She thought the J. J. Field and would be more suitable in a small room.)

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY 08540

SCHOOL OF HISTORICAL STUDIES

April 1, 1975

To Whom It May Concern:

As a result of discussions on March 31, 1975, the undersigned have come to the following agreement concerning the Agora volume on Roman Pottery now being prepared by Mr. H. S. Robinson, Mr. J. W. Hayes and Ms. B. L. Johnson.

The eastern Mediterranean amphoras of the Roman period will not be included in the current Roman pottery volume. These amphoras will be published at a later date by Ms. B. L. Johnson.

The chronological cutoff date for the Roman pottery to be included in the present volume is round about the 8th century AC or when the various types cease to appear.

J. W. Hayes
John W. Hayes

Barbara L. Johnson
Barbara L. Johnson

cc T. L. Shear, Jr.
E. Will
H. A. Thompson
V. Grace ✓
a. Frantz

THE INSTITUTE FOR ADVANCED STUDY

PRINCETON, NEW JERSEY 08540

SCHOOL OF HISTORICAL STUDIES

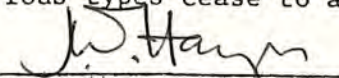
April 1, 1975

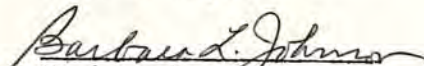
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John W. Hayes


Barbara L. Johnson

cc T. L. Shear, Jr.
E. Will
H. A. Thompson
V. Grace ✓
a. Frantz

April 8, 1975

Dear Barbara:

Many thanks for sending me the little notice signed by you and John Hayes about the agreement you have made on the plan and order of publication of the Agora Roman pottery. I am interested that apparently you plan a joint volume with Henry Robinson. I suppose Alison Frantz was added to the list of those concerned as someone who will or may publish the pottery of the 8th century and later?

Our French and Italian amphora friends will be sorry to learn that the amphoras are being postponed, but I don't see how you could do so much all at once. As you know I have published some of them, in my picture book and in for instance my Pamphylian article. I think you and I took up the possibility that I may need to use others in future articles. You will not grudge this possibility, in view of the amount of time and effort given by me to the classified shelving of these jars. Eugene V. jr. has made a couple of fine photos of the later part of the shelves, and I have prints pinned up here where I am writing; if he has not yet given you prints, I'm sure he would.

We look forward to seeing you soon now, and Anna Benjamin at about the same time.

Yours sincerely,

2.4.75

a little talk with B.J. today, and we are in accord. I told her of my subsequent idea of doing a short piece on the amphora collection in the basement and how it is shelved. (She thought the J.G. Field and would be more suitable in the middle.)

April 4, 1975

Dear Letty,

Andreas is doing the profile of P 4201. It has some holes in it which make a problem about bits of the outline, but on the other hand they permit him to take thicknesses more easily.

It seems that Miss Andreiomenou is now in Thebes, to be addressed as Ephor of Antiquities, Archeological Museum, Thebes, Boiotia, Greece. If you want to publish her finds, do you have her permission? For that or for information on the present whereabouts of this material, better write directly to her. Maria does not recognize what this lot could be; I don't remember anything about it myself, not that that proves anything. As far as I know, I have no pictures of any of it.

I am interested to know what made you associate that Ostia jar with Thios.

Now that you give more details about that Marion tomb, I remember what happened. I had made notes on the pots etc. during W.W.II when I was there and it was suddenly found accidentally or perhaps by robbers, I forget. In 1955 Mr. Karageorghis had prepared a publication of the finds as a whole, and asked me to do an appendix on the amphoras, which dated from the 5th century BC to the 1st. I prepared it, but later heard that they had given up the idea of making any sort of full publication, and were just coming out with one of those lists that they do. I am not sure that this was ever done, anyhow I don't find a reference to it. You might look through the output of the Cyprus Dep't of Antiquities after 1955, in case possibly there might be a photograph. What I have here is a photograph of a large group photograph, in which, sure enough, is one of your things, SP3-like but with a long toe; I had forgotten there was one of those in it. Too bad the

stuff did not come out so one could refer to it, though my text (of which of course I have a copy, and it does quote you) is not altogether what I would write today.

Your a. You have my photos of the stamped handle in Rhodes with TR.LOISIO. That's the extent of my knowledge thereon. I am not familiar with Mr. B.'s Romans. The best would be to illustrate that neck in Taranto which really shows the shape, at least of the top of the jar.

Your b. I enclose a photocopy of the page of our Delos duplicates that has TD 5620. We have no photo of this, I'm sorry to say; relatively few of the unclassified of that first great lot have been photographed - only ad hoc if one wanted to publish something.

Your c. Sorry, no context for TD 1863.

The weather has turned nice. According to Bill Dinsmoor, it always does just as Leslie Shear arrives, which he just has, so he can't believe we have all that rain and cold. I look forward to Anna's return which has been postponed but is now supposed to be at the end of this month. She may stay with me, as she seems prepared to share the guestroom with Mary.

Good luck to your efforts, may Victory crown your banners, as it says I think somewhere in Little Women.



The Commonwealth of Massachusetts
University of Massachusetts
Amherst 01002

DEPARTMENT OF CLASSICS
 Herter Hall

March 26, 1975

Dear Virginia,

It was such a pleasure to have your letter of February 25, and I am most grateful for your answers to my various queries. I know what masses of things await your attention there, and how "behind" my being there, with all the attendant interruptions, must have made you. At this end, there is real tension, which I suppose is good, as I can't afford to waste a moment. I hope I survive it in fairly good condition. Several people, including Alex, who is very good at it, are helping, typing is going along well, and though some photos haven't yet reached me I feel "programmed" to finish.

Here are some comments on your replies to the numbered paragraphs in my letter of February 17:

1. I would be extremely grateful if Andreas could make a profile of P 4201, though P 9833 might be more convenient, as it is upstairs, and I now have a print of it from Effie. Whichever he prefers, as the two jars seem very close. I can then have the photocopy inked. (Inking is being done here now.) I discovered after my last letter to you that I brought along a profile of P 21671. That was why Andreas thought we had discussed it.

3. New Phila. is "8 km. from Athens, near Patission." A group of jars and fragments from there was stored in the National Museum in 1961, having been excavated in May of that year by Miss Angelica Andriomenou, whom Maria introduced me to. The pieces were very interesting, as being midway between Types 10 and 14. Since I last wrote I have been able to extract from one of my negatives a dim but publishable actual-size photo of the Latin stamp I mentioned.

4. I don't have the height of the Ostia "carrot-jar" but will get it next summer. You didn't mention that it might be Chian; I just made the guess myself. I haven't heard from Zevi, though I did write him after I returned from Italy.

6. I was so relieved and glad to have the missing p. 42.

7. On Marion, Tomb 104: I have a 1955 note to the effect that it was to be published soon, at least Jar no. 15 was, in an article by you to appear in the Report of the Dept. of Antiquities, Cyprus. I don't have a photo of the jar, but you were going to

3.10.75
 The jar is a large group, said to be
 from the same site as the one in the
 report of the Dept. of Antiquities, Cyprus.
 I have a photo of the jar, but you were going to

quote me as dating it approximately mid-1st BC. Like the New Phila. pieces, it seemed midway between Types 10 and 14.

8. Thank you for checking the reading of SS 7173. I am suggesting very strongly that it is a Sestius stamp. If it is, it is the first one to turn up in the eastern Med, not counting the dipinto on P 6867, CO/SES. No, I won't go to Italy before the MS has been sent to Princeton.

Three additional headaches:

a. My Taranto notes say that the stamp TR.LOISIO, long known as the "oldest" Latin stamp, occurs on a Greco-Italic neck. I do have two examples of the stamp in my catalogue: one in Mr. Benaki's collection and the other from Rhodes. *deliberate made* What shall I do? Put the stamps under the Unclassifieds, with a statement to the effect that the handles probably come from Greco-Italic-type jars? Actually, I have not seen either the Benaki or the Rhodes handles, the Benaki one having been found after my 1957 visit to Egypt. But I did see the neck in Taranto.

b. Could you possibly send me a description and photo of TD 5620, which I think is probably a monogram of some sort, a stamp not obviously either Greek or Latin. Apparently we decided not to include it with the Latins, but I have a note saying that the piece has the same shape as TD 5955, which we did decide was Latin. I probably ought at least to refer to TD 5620, even if I don't list it, particularly since TD 5955 is the only example at Delos of what I used to call "Ostia-type". Since the floruit of the type is 2nd-3rd AD, it is odd to find it at Delos, and the presence there of another possible example assumes more significance. (I found TD 5955 myself, not far from the Museum.) *sent back*

c. Do your Delos notes list a context for TD 1863? *no*

I am surprised that Charles Morgan mentioned my Sestius paper. I saw him recently at an archaeological dinner at Mount Holyoke, and he didn't seem to recognize me. He was very nice, though, especially after I told him I had met him through you. Probably he just didn't connect me with the person who gave the paper. My own feeling about your most recent publications is: they are the best you have ever done, just fantastically good. And all three are very different from each other.

I didn't mean to write this much. Good wishes to Maria, Andreas, Caroline.

Love, Betty

(x) new 1st - 4th century, many 1st - 4th century 1st

(also 421.11, 422.42, 423, diff. legibility)

421.43, 424, 425

*See how I have printed just the
Then I am done - in handwriting*

*Stamp from
the same
as I drew*

February 25, 1975

Dear Letty,

I have your letter of Feb. 17, and here goes for some answers:

1. We have a profile of P 21671, both the original 1:1 and a 1:2 made by that mathematical system which Piet de Jong taught us. Both are on a sort of wrapping paper, not transparent, so they cannot be photocopied by Helen Besi's machine, but will have to go to Priovolo. I observe that the rim (for instance) is more accurate in the ~~LXX~~ 1:1. No profiles of P 9833 or of P 4201. I am glad to have you use any of these jars, if worth your time now to extend further/

2. I am not wild about quite so thick a line for outline, as e.g. in P 6761 it perhaps does not distinguish easily between section and outline; and if the walls were thinner, this might be even more of a problem. But if you have started that way, certainly go ahead with it.

3. Maria is not here today. I'll try to remember to ask her about "the New Phila. series", which I don't identify. They were not those whole Roman jars that you gave numbers to? L 129-169? *26. Th. Neth of us recognize "the New Phila. series."*

4. For your "carrot-jar" in the Ostia museum, I'm glad to have the photo. Do you have a record of its height? Did I mention to you that it might be Chian? For the idea of this kind being Rhodian, I might be responsible (though I do not think it is), because years ago somebody showed me the top of one of these jars, the rest of the shape not being known, and I said the only kind I know that has that kind of side view of handles is 3rd B.C. Rhodian. This got into print I fear; or something derived from it.

5. I have entered in your Ker. list GA 1147bis.

6. What must indeed be p. 42 of your manuscript - photocopy thereof - did indeed

*R. Filed
under
KAPITAN
CLASS
(in ROMAN
section)
SHAPES
file)*

turn up, and I am delighted to get rid of it. I had feared it indicated something I was supposed to attend to in some more difficult way.

7. The only SPE-type jar I recall publishing is the Agora one in Picture Book 6, fig. 36. Please give me your reference for Marion, Tomb 104, as I do not find such a tomb in the Swedish publication. Is it in one of the latest volumes?

8. We have got out the rim fr. SS 7173, and think your reading is possible; I assume the anchor is vertical. I assume again that you will not go to Cosa this summer unless you have turned in your book to the editor.

9. Thank you for the reference for Prof. Applebaum's stamp. He has not written to me again, either.

To return again to (1): it seems that what Priovolos would do to get a photocopy of a drawing on opaque paper would be to photograph it, which now comes and perhaps subject to distortion? noticeably expensive, [^](Our handling of such a drawing would be to trace from the half-size version on to transparent paper, making right then the ^{inked} drawing to be (reduced by the printer from 1/2 to 1/10 and) published, and retaining a photocopy from this finished inked drawing for the files here.) If you like to choose one jar of those you mention in this para, Andreas can make a full-size pencil profile of it on transparent paper, and from this Helen Besi's machine can make a photocopy - still full-size - and we can send that to you. I am sorry this did not get done while you were here, as of course it would have been better for you to control the result yourself, details of rim, etc. (Andreas thinks you and he discussed the drawings of P 21761 when you were here.)

Those are lovely pictures of Alex with his W that is not for Will, and of Barbara in the wood. For reaction to my article, there was I guess more than usual. Among those you were kind enough to post for me, Charlie Morgan said reading it gave him a nice background for listening to your paper. Dick Howland did rather better, he said it was important, something I think he has not said before, and I am glad to have the handle.

You may think I write immediately because I have nothing else to do, but the reverse is true. It will not always have the same effect.

On ELW's letter

Discuss with AD. We find that is
 a project of P 21671 (not of P 9833). It is on
 wrapping paper, and can't be duplicated on Eleni's
 machine. Exist 1:1 and 1:2, & which 1:1
 is more accurate. AD thinks he and she
 had discussed these drawings, i.e. of this jar, when
 she was there.



The Commonwealth of Massachusetts
University of Massachusetts
Amherst 01002

DEPARTMENT OF CLASSICS
 Herter Hall

February 17, 1975

Dear Virginia,

It doesn't seem possible that so much time has gone by since I last wrote you. Meanwhile you must have returned from Naxos and are doubtless trying to get something done before warmer weather brings the annual influx. I have been wondering how Mary and Soso have adjusted to each

91-a
 4 to 1
 ave you been getting to the Ath. Mitt. article? deep gratitude all you did to make my weeks in t. The book is going to be infinitely better rking very single-mindedly since I got back from ay I had that interruption, but they were very only for four more days in Princeton in the n Michels' retirement-celebration at BMC on finished by the March 23 meeting of the Publi- f the catalogue is starting at the end of this you might have heard that the Publications eting in Chicago, to keep my volume in the Agora old me that Charles was present at the meeting, with his approval. To revert to the Meetings at quite well, I think, at least Betty Caskey ough the mill, and then some, herself, she knows gement can be.

t of questions for you, typically, but will limit pressing;

of your supplying me with copies of the profiles I? I imagine you have on file profiles of both to me to be close enough to Dressel 2 that Zevi, ll of whom will doubtless review my book, will t included in a study of stamped Roman amphoras ilarly, P 21671 is very close to Pompeii Form XII ssel 2 and Pompeii XII occur with Latin stamps. 54) and Dressel 4 (P 11880), but I have profiles e jars, which we long ago decided should be part of my ctually, a profile of P 4201 might be preferable to one nce I have a photo of 4201 but none of 9833. Perhaps quest one from Effie when I write to ask where the prints re. I haven't yet had the other profiles inked (see could have all four done at the same time. Homer tells profile-plates need not be completely ready when the tted, so there is plenty of time for you to let me know ink I ought to do about illustrating the double-handled occur with Latin stamps. Even if, for example, you now 11880 is a late Coan, it still occurs with Latin stamps (CIL XV.3428, 3433, 3458, 3491). Maybe because Cos was under Roman domination? I would feel less concerned about all this if Zevi didn't have photos of the Agora material. He is also, I find, rather prone to carp and criticize in print. (The above paragraph reflects my having spent about a week thinking chiefly about "Type 12.")

30-a

83-a



The Commonwealth of Massachusetts
University of Massachusetts
Amherst 01002

DEPARTMENT OF CLASSICS
 Herter Hall

February 17, 1975

Dear Virginia,

It doesn't seem possible that so much time has gone by since I last wrote you. Meanwhile you must have returned from Naxos and are doubtless trying to get something done before warmer weather brings the annual influx. I have been wondering how Mary and Soso have adjusted to each other. And what reactions have you been getting to the Ath. Mitt. article? I keep remembering with very deep gratitude all you did to make my weeks in Athens rewarding and pleasant. The book is going to be infinitely better as a result. I have been working very single-mindedly since I got back from the Meetings (too bad in a way I had that interruption, but they were very useful too), taking time off only for four more days in Princeton in the middle of January and for Nan Michels' retirement-celebration at BMC on Jan. 18. I still hope to be finished by the March 23 meeting of the Publications Committee. Typing of the catalogue is starting at the end of this week. I don't know whether you might have heard that the Publications Committee decided, at its meeting in Chicago, to keep my volume in the Agora series. Marian McAllister told me that Charles was present at the meeting, and I hope the decision met with his approval. To revert to the Meetings themselves: my two papers went quite well, I think, at least Betty Caskey told me so. Having been through the mill, and then some, herself, she knows how helpful words of encouragement can be.

I have a horrendous list of questions for you, typically, but will limit myself here to what is most pressing:

1. Is there any chance of your supplying me with copies of the profiles of P 9833 and P 21671? I imagine you have on file profiles of both jars. P 9833 seems to me to be close enough to Dressel 2 that Zevi, Parker, and Hayes, all of whom will doubtless review my book, will wonder why it was not included in a study of stamped Roman amphoras from the Agora. Similarly, P 21671 is very close to Pompeii Form XII in CIL IV. Both Dressel 2 and Pompeii XII occur with Latin stamps. So do Dressel 3 (P3464) and Dressel 4 (P 11880), but I have profiles of both those jars, which we long ago decided should be part of my typology. Actually, a profile of P 4201 might be preferable to one of P9833, since I have a photo of 4201 but none of 9833. Perhaps I should request one from Effie when I write to ask where the prints I ordered are. I haven't yet had the other profiles inked (see below) and could have all four done at the same time. Homer tells me that the profile-plates need not be completely ready when the MS is submitted, so there is plenty of time for you to let me know what you think I ought to do about illustrating the double-handled types that occur with Latin stamps. Even if, for example, you now feel that P 11880 is a late Coan, it still occurs with Latin stamps (CIL XV.3428, 3433, 3458, 3491). Maybe because Cos was under Roman domination? I would feel less concerned about all this if Zevi didn't have photos of the Agora material. He is also, I find, rather prone to carp and criticize in print. (The above paragraph reflects my having spent about a week thinking chiefly about "Type 12.")

*I'm sending this
 letter today.*

2. I received from Marian McAllister vandykes at 1:10 of the inked profiles of P 6761 and P 17046. She felt, and I think you'll agree, that the weight of the line is OK. She questions only the line indicating the shoulder-joint, which may have to be changed. (I enclose xeroxes of the prints sent by Marian.)
3. Does Maria know, or do you, what ever happened to the New Phila. series that was once at the National Museum? Were the pieces ever numbered? I have pictures of everything, taken in 1961, and can refer to it as a group, but it would be good to know where the pieces now are. There was one very interesting Latin stamp, M CORELI, of which I have a faint photo. You wouldn't by any chance have a publishable picture, would you?
4. Here is a picture of the carrot-jar (Chian?) about which Zevi so wanted your opinion. As I note on the back of the photo, I saw a neck of this type in the museum at Fishbourne in 1968.
5. GA 1147 bis (EVNVS : Type 13) was omitted by error from the Kerameikos list I left with you.
- ✓ 6. Is there a chance that I left p. 42 of my catalogue on your desk? It has totally disappeared. What I had with me was a xerox copy of the original, which I have here (you have a copy too), but on that page were comments about two Agora fragments, and it would be good, though it isn't crucial, to know what those comments were.
7. Did you ever publish a Spe-type jar from Cyprus (Marion, Tomb 104, #15)? If so, can you give me the reference?
8. Could you or Andreas look at the rim frag. SS 7173 and confirm my feeling that it may read SES anchor? The reading comes out quite clearly in a slide I made, though I had not suspected it when I last looked at the stamp "in the clay." Slides seem sometimes to be very helpful; for example, a slide I made of the dipinto on P6867 (North Basement frag.) looks compellingly like CO / SES. The final S I hadn't seen until I looked at the slide. Frank Brown says that if the "CO" meant "consul" it would occur after the name rather than before it. He therefore agrees with my notion (hallucination?) that the "CO" may refer to Cosa. Homer thinks it a possibility too. P 6867 belongs to Type 5, but SES stamps do occur on jars of that type (also called Dressel 1c) at Ventimiglia and Vada Sabatia. I now have over 60 Sestius stamps from Cosa, and Frank Brown (whom I saw at Bryn Mawr, where he gave one of the papers) is going ahead with the "Sestius-dig" I mentioned to you, the excavation of the mini-Testaccio that has produced several Sestius stamps, on the beach at Cosa. He is going to sponsor me for another summer there, and I hope to leave here at the end of May. Addendum: the latest issue of RAE has another long Sestius article, reporting several new finds in Gaul.
9. I couldn't remember, when we discussed Fan. Fort. Col. Hadr., where I had seen a discussion of the stamp. It is in the Zevi-Tchernia article in Antiquités Africaines 3 (1969). The stamp occurs on the long "African" jars, my Type 21. So Professor Applebaum's weird interpretation is all the more mysterious. "Hadr" seems definitely to refer to Hadrumetum. *I have not heard from Applebaum*

Here are two recent pictures of Alex and Barbara.

For now, much love from

Ketty

83-a



It would be
a good idea to
make a
drawing of
the object

89-6

P 6761

1:10

90-a



Revised 10 to 1

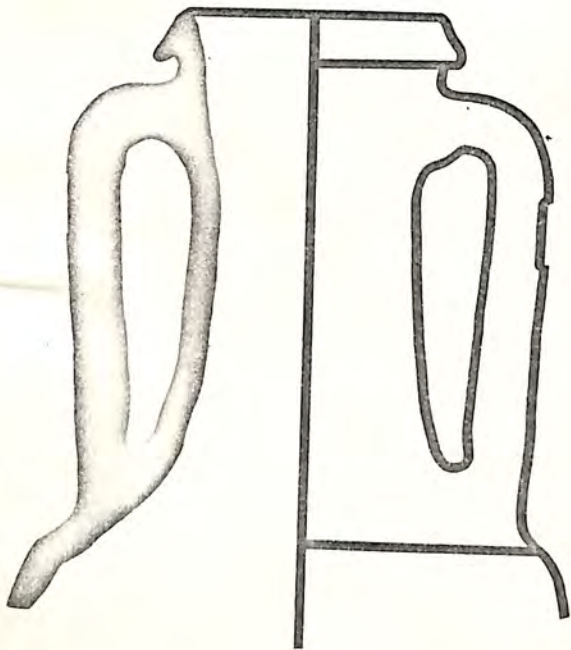
90-6

P17046

1:10

91-a

Reference — 4 to 1



91-6

C-47-80

1:4

December 21, 1974

92-a

Dear Virginia,

I was so pleased to have your letter of December 9, enclosing the correspondence about the Fox-Fort Col. Hall stamps. The plebiscite-reminder is most interesting to have: perhaps the most subtle example of the blanketing - approach, saturation by air.

Today is the day Anna leaves, as I recall, and I'm sure you are going to miss her. I look forward to seeing her at the Meetings and to hearing about the reaction to her talk on the 11th.

It was a relief to know that you decided to move Mary home and also that her trouble is less decisive than it had seemed might

be the case. I wonder whether she and Soso are now aware that you have been leading a double life.

The offprints were sent off, and you should be starting to receive reactions soon. Fred was able to find, for 12 of them, envelopes that fitted exactly. The other 9 were sent in envelopes that were a bit larger, but still all right, I'm sure.

I finally mailed off to the other members of the panel my talk on Roman women (the consciousness-raising one) and am now at work on the final Festin-text. I will go to Chicago on the afternoon of the 27th. Fred has to go to other meetings in NYC, and my mother will stay with the children.

I don't need to repeat here how continually grateful I am for everything you did for me during those five brief weeks. My presence was probably a great

train on your time, and I am the more grateful for your help and encouragement. Each time I would send Christmas greetings.

December 6, 1974

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 999
 1000

Here is the key ring I mentioned.
 It is so kind of solid and there that I
 think it may be as useful to you as it
 has been to me this month.

I'm leaving with great regret,
 mixed also of course with a desire/need
 to get home. We had so little time really
 to talk. I will try to write more
 conscientiously, and I look forward so
 much to the possibility of being here
 next summer.

You know, of course, how grateful
 I am for your kindness, attentiveness,
 thoughtfulness. More than I can ever
 tell you. With love, Letty

15. XI. 74

11. XI. 74 94.01

ELW is taking 4 shapes cards
which I have just made for
CP 2265, 2266

and C 48 236, 237

(6 449 - 452

Closing with ELW

Corinth material

See on list of 24. III. 69, the Roman in Corinth

I read this (installation) list, and find she
has some additional items, unstamped:

CP 2254 } unstamped necks
2264 }

2264 } 3 inst. jars
68 } other type XIV
69 }

most of
them are
GRE pieces

C 29 74 (~~TA~~ TAIDY - with undress.)

C 47:137 unstamped neck

47 839⁸⁴⁵ - unstamped neck or jar

C 48 232 inst. jar or neck of type 3
235 " " " " " "

[C 48 238, 241-243]

(2)

On my list of Roman, but not in ELW's list:

C 48 230 "JAP (SPANISH ORIENTAL)"

in the ^{23. VII. 74} ~~general~~ list for Corinto us.
it is under ROMAN, and then
is us ~~Co~~ number.

C 48 ~~238~~, 239, ~~241-3~~

C 62 33

C 63 675

C 63 680

(at same time,
C 63 708)
(and several 64)

C 65 111

190

C 66 64

C 66 166

67 212

68 257

(X) Not in list
by Corinto ind.
us (10. II. 69)
12. XI.

These were
wrongly listed
on this page,
they belong with
those Lally has
but we have
not (must).

Try to find out why she did not con-
tributions of those, those of the list are stopped
First, get out kartrulas.

She wrote from Am VII. 69

Both of the letters addressed
to 1925 Baruch Ave
Dorset City

(X) Sent by MERT in letter of 26. II. 69

For the next, of MERT's letter of 21. IX. 69, mention "on rubb-
ing of Latin script from Corinto" "Latin last spring" but not sent to Am

Errors on Corinthian cartonnages

1. C-63-680 reads IVLI palm branch not IVLI amphora
PAVLINI PAVLINI
2. The jar listed as C-66-116 should be listed as C-66-166, acc. to the number on it. Pottery catalogue card also checked. (C-66-116 is a Neolithic incised lid.)
3. C-73-283 is not Roman. Its stamp is]AEYK[, and it is apparently from a very thin-walled pot.

12.XI.74

34.04

ΑΔ

οτι.

να βγαδεις
τας καρτοιδας
αυτας της
κοριναθου
(για τη λειψυ)

34.05

~~N. to the center~~

is actually a

~~the same~~

N. to

an inverted delta

a. strong type

to this is to

but
with no driver

5. Jul 76

35

BLW

material covered
from Corinth

Tuesday. 96
[19.8.74]

Dear Virginia

Many thanks in what could
be an ordinary note — It may be
an ordinary note, but the thanks
are sincere and enthusiastic
for an evening of warm and
extremely pleasant hospitality.

With appreciation — much
of it,
Yours,

Charles W.

(Dinner for ELW and Charles,
John Camp came also.)

AMERICAN SCHOOL OF CLASSICAL STUDIES
54 SOUIDIAS STREET, ATHENS, 140
CABLES: AMSCHOOL ATHENS



ΑΜΕΡΙΚΑΝΙΚΗ ΣΧΟΛΗ ΚΛΑΣΙΚΩΝ ΣΠΟΥΔΩΝ
ΟΔΟΣ ΣΟΥΗΔΙΑΣ 54, ΑΘΗΝΑΙ, 140
ΤΗΛ. 736-313

Thursdy [14. 8. 74]

Dear Eugenie,

Enclosed is the copy of a letter that I have sent to Mr. Thompson. If anything has been misstated we should probably get it straightened out as soon as possible. I sent about the same sort of letter to Leslie, with a slightly less urgent tone, telling him to consult with Thompson.

Looking forward to seeing you Monday morning around 7:30 -

I remain,

Yours,

Charles W.

14 November 1974

Professor Homer A. Thompson
Institute for Advanced Study
Princeton, New Jersey 08540

Dear Professor Thompson,

On November the eleventh I had the opportunity to discuss Roman amphoras with Miss Grace and Mrs. Will. We have agreed that the stamped amphoras of the Corinth Excavations recovered up to 1974 should be published by Dr. Will. We have further agreed that the Corinthian amphora material will be available as well to any student working on Roman material for his dissertation, when and if he needs the material.

A question arose during our discussion. I therefore am writing this letter to you and one to Leslie. I gather that plans have been made to publish the Will work in an Athenian Agora volume. From the economic point of view the plan is most pleasing to me and my excavation budget. On the other hand, however, I have reservations. Persons who are so inclined have grounds upon which to criticize Corinth for making the Athenian Agora pay for the publication of a large bulk of Corinth material. As well, the implication will be made that we cannot get qualified scholars who are willing to publish our excavation material. Personally, I find an attractive solution to the above criticisms in the publication of all the amphora material in some School publication that might indicate Corinth's part in your endeavours for complete publication of material. Might not the publication of the Will manuscript be done in an Hesperia supplement? Or would it be best to consider a new series for excavation materials that are collected from numerous sites? The Will manuscript is not the only one which will present the above problem. We will have the same situation with a manuscript from Miss Koehler, when and if she produces a publishable work. And there are other units that will cause the same problems in the future; I can think now of coins.

Mrs. Will and Miss Grace appear to have been rather surprised by my strong reactions concerning the amphoras. I do not mean to be difficult, but I do want to try to establish a policy by which we all might work and operate most effectively. I do hope to see you at the Chicago Christmas Meetings, where we might be able to discuss the subject. If, however, you have time to write to me before then, your letter will be most appreciated.

I remain,
yours,

Charles Kaufman Williams, II

CKW II is being written
18. XI. 74 and ELW
is 8 & can be 12. XI.
for 2 days -

12. XI. 74 33.01

Discussion of CKW II and ELW
+ VG on material for
Committee to be included in the volume

Yesterday at lunch time Charles called on us at
the Store. I suggested ~~that~~ he and Betty should
have the discussion alone, but he preferred that I
stay.

He said he had thought (when?) that what was
involved was mention of Committee items as parallels.
But now it was actual publication, so it must be
discussed. (In ~~the~~ his letter to Betty (recent) he
had said that material assigned before 1966, the
permission stood, while more recent finds would
be discussed.) He had observed that in the list
of Committee items she had sent him, 3 items had no
Committee inv. nos., and this must be rectified. We
agreed, of course; but when ELW and I checked these
claims later, it turned out that they were all missing
from the SAH
in modern times; in fact some I think I have seen
in other drawers, as they are not from ampoules at all.
He said there were various other persons interested
in ^{some of} this material; but it turned out she knew
them and ~~that~~ was in harmony with them: Katherine
Wright, Barbara Johnson, Madeline Andreousi.
In fact, of course, with M. A. much more so than

he is. He said he had planned - as might wish - to give some things for use in a dissertation; also agreeable to E.C.W.

About photographs, he did not say that the negatives had to be all Corinthian. He did say that V.G.'s photos of jars against an old wooden door would not be satisfactory, however sharp; new photos would have to be made; otherwise the Agora photos, all with white backgrounds, would seem better than the Corinthian photos.

On the subject of what would be the series in which this would come out, as he evidently wanted Corinthian material appearing in an Agora vol. (as though, he said, Corinthian scholars could not present just as well), I suggested it might be a Corinthian vol.; but that wd not be acceptable, with all that outside material. E.C.W. enumerated the various sites whose products are included; and said that over half is from Alexandria, which is certainly OK with Mr. B. and with Phad etc. at the Musée Gr. R. Charles said, and what about the Germans and the French, do they know it is an Agora vol. in which their stuff is to appear? E.C.W. said yes, and

either they are pleased, or they couldn't care less. Charles still thought I ought to do another series, not a special die series, for general studies; and he would prefer supplements to Hesperia. I reminded him that other volumes were supposed to follow, also with miset promises: Knia, Platina, Korn, and. He said he would write, I think to Homer and to the Public Committee (head of this, now Mary White) with copy also to TLS ^{or} at ELW's suggestion. We ascertained that the plate-sizes of the Agora vols and those of the Suppl.s are about the same; I think he found the Suppl. plates slightly larger.

As to more recent finds in Corinth, he learned from ELW that everybody's finds would be up to date (Agora, Kerameikos, Delos); so he wanted Corinth to be the same.

13. XI. 74

afternoon, Liff and I checked over her list of Corinth items against my list of Roman figs. installed in 1969, and found a number of items she did not have, although apparently ^{most of them} were all sent by late 1969. A lot got out in cartons, which Liff's mabbings she will have the addition when she goes to Corinth.

26.XI.74

KERAMEIKOS

List of Roman amphoras and stamped fragments included in ELW catalogue

GA 374. VEHILI	Type 11
GA 450. BARNA (retr.)	Type 10
GA 463. LICAS	Type 14
GA 481. C CARMINI	Type 14
GA 489. DIADV MENVS	Type 4
GA 816. Unstamped. Dipinto M N	Type 15
GA 1031. SARA (retr.)	Unclassified
GA 1048. KH	Type 4
GA 1057. C.ENT (retr.)	Type 7
GA 1098. QLEF (retr.)	Type 4
GA 1133. Unstamped. Graffito]B	Type 4
GA 1147. FEROCISTI	Type 16
GA 1147 bis. EVNVS	Type 13
GA 1148. APELLA.TREBEL	Type 13
GA 1149. RVFIO ND	Type 14
GA 1150. PHALL	Type 10
GA 1151. ART.	Type 13
GA 1181. M HE PICEN (N retr.)	Type 14
GA 1375. EPITHYM.P	Type 17
GA 1376. PAPIA (retr.)	Type 10
GA 1377. H	Type 14
GA 1378. PAPIA (retr.)	Type 10
GA 1660.]DIONCAR	Type 4
GA 1778.]ERENNI	Type 14
GA 1980. AT	Type 10
GA 2117. SALVI	Type 10
GA 2122. N (retr.)	Type 5

(see letter 17.11.75
for ELW)

-2-

GA 2265.] M.FVSI.SC.H

Type 14

GA 2266. IVLI palm branch
PAVLINI

Type 15

RA 1. Unstamped.

Type 16

RA 2. Unstamped.

Type 14

RA 3. Unstamped. Graffito M ... N

Type 14

RA 4. Unstamped.

Type 14

RA 5. Unstamped.

Type 14

RA 6. Unstamped.

Type 14

RA 7. Unstamped.

Type 10

RA 8. Unstamped. Graffito D

Type 16

RA 9. Unstamped.

Type 14

RA 10. Unstamped.

Type 14

RA 11. Unstamped.

Type 14

RA 12. Unstamped.

Type 4

RA 13. Unstamped.

Type 12

RA 14. Unstamped.

Type 12

RA 15. Unstamped.

Type 12

RA 16. Unstamped.

Type 12

KERAMEIKOS : new numerical list of pieces in catalogue (ELW)

		Type
KGA 374.	VEHILI	11
450.	BARNA (utr.)	10
463.	LICAS	Sim. to 14
481.	C CARMINI	14
489.	DIADV	
	MENVIS	4b
816.	Unstamped { Dipinto M N	Sim. to 15
1031.	SARA (utr.)	Unclassified
1048.	KA	4b
1057.	CENT (utr.)	7
1098.	QLEF (utr.)	4b
1133.	Unstamped { Ruffito JB	4b
1147.	FEROCIST!	16 14 (utr.)
1148.	APELLA TREBEL	13
1149.	RVFIO ND	14
1150.	PHALL	10
1151.	ART.	13
1181.	M HE PICEN (N utr.)	14
1375.	EPITHYM.P	16 c
1376.	PAPIA (utr.)	10
1377.	H	14
1378.	PAPIA (utr.)	10
1778.	FRENNI	14
1980.	AT	10
2117.	SALVI	10
2122.	N (utr.)	5
2265.	M FRISI SC.H	14
2266.	IVLI palmbanch / PAVLINI	15
2267.	Unstamped	16 d
2268.	Unstamped	14
2269.	Unstamped	14
2270.	Unstamped	14
2271.	Unstamped	14
2272.	Unstamped	14
2273.	Unstamped	10.
2274.	Unstamped { Ruffito ?	16 d

to be
supplemented

22.XI.74
 Fr. Krugz did not
 work & give 9 A
 nos. & then unstamped
 Roman gals, also
 Unstamped 9 A is "Greece"
 amphora
 but greece meant it to be
 "Gestempelte Amphora"

5. XII. 74

Roman amphora, falling apart

Basement

P 8108

21132

21134

SS 7283

7305

South Workroom

SS 7316

7379

7381

7447

Dear Pip,

I leave a nice letter for you ~~about~~
 about your day in Athens. ^{March 24}
 Dec 13¹ which ^{will} answer it -- & so long --

Jan. 1-2, post for 2. You promised in return,

"if you post this, I'll get it!" so I feel you

must have got this. I don't know exactly

what I said ^{in it}, except to ask if you would

be pleased to meet some of my friends, esp. to

Dimmocks (Director of the Sch), say at dinner

on the 24th. Possibly you would like to

call at the Agassiz & see some of that day,

and see how the landscape has changed.

We can do whatever you like during the

day, possibly visit to Agassiz & see the

25. XI. 74

by

1) State that the description not documented in public most during for K.T.

2) Vg ref. is not on nature of dep.

3) I consent now on those for which I have cards in new-girl file
may be a find more to consent on

A 14:2

(Not a complete copy file) (i.e. said dossier at. of old girl in.)

WILL - DEPOSIT LISTS

Note for ELW, on her deposits list of 18. XI. 74

102.01

A 16:4

The given ref. does not document with the nature of the deposit nor the date just as stated

But to put the given ref. with what is in last of, I.e. chronology

To about mid-2nd B.C. See from, Dato XXVII, p. 381; but Miss G. inclines now to the slightly earlier date quoted here

would say rather

- "containing much earlier material, especially of 3/4 of 2nd century"

(coins agree - Kleiner)

ELW Century

31. OCT. 76

102

See request (again) from = deposited reason of her list is letter to her of 9. VII. 75. No reply

25. XI. 74
by

1) State that the description not documented
in publ. ^{30. XI. 74} most likely from L.T.

2) Vg ref. 5 not on
nature of dep.

3) I comment now on
those for which I have
cards in new-gold file
may be a
few more
to comment
on

WILL - DEPOSIT LISTS

Note for F.W., on her
deposits list of 18. XI. 74

102.01

A 14:2

(Noting ^{complete} card file.) (i.e. card does not
at. of old gold no.)

A 16:4

The Green ref. does not document
with the nature of the deposits
nor the date just as stated

But to put the Green ref. into
what is a last of, I.e.
chronology.

To about mid-2nd B.C. - See
Green, Delt. XXVII, p. 381;
but Miss G. inclines now to
the slightly earlier date
quoted here

A-13 19-20 : 1

I would say rather

(but I
am not
certain)

- "containing much earlier
material, especially of 3/4
of 2nd century"

(congrat. - Kleiner)

C 9: 7 Agn. ref. & Delos 27 p. 381
certain does not doc. "nature of
deposit."

Discussion of ^{last of the} deposits, with bills,
on Delos 27, p. 332, under E 88.

26. XI. 74

B 20: 2

Agn. v. ref. is to chron., not nature,
~~and ref. bills~~

B 21: 1 (Not in my card file)

B-C 10-11: 1

Agn. v. ref. is to chron., so far as
it goes.

C 14: 4 (Not in my card file)

C 17: 5 " " " " "

D 11: 1 " " " " "

→ D 11:4 * must say which fell
(lower, middle, upper)
again, any say to Dela shot to
rt. col.)
Dela & Fry. is a middle fall 1st
P. 1st
D 18:2 (Not in my card file)

D-E 15:1 " " " " "

28.87 74

E 17:1 " " " " "

→ E 18:7 " " " " (1st 2nd - 3rd)

F 11:1 (not in my card file)

F 13:3 (w/ing) So the desc. for LT?
It does not give the impression that
the word magnified of Jdr. anthon pro.
are 2/2 2nd, not late.

F 15:3 (not in my card file)

102.04

F 19:3 Vg ^{is not for "step"} ~~date~~ is purely for Sullam
date. In print, does not even say
"close group")

→ Should we say something more
specific than "early, etc"?
? in Sullam date? ?

G 8:1 (not in my card file)

*

G 14:2

wrongly dated

(See below card)

30.87.74

(not to be dated) (note to Ag. 4)

Ag. 4 ~~Ag. 4~~ lists the end date of the upper
filling (where the Roman pieces are) as
"late 2nd c. B.C." However, this filling
includes a ~~small~~ kind amphora SS9464,
~~fragments~~ but having its two stamps.
~~The stamps~~ ~~which~~ belong to the post-Sullam group
described Dilos 27, under E 180, circular
types on with piece the other with grape-
cluster. The shape of ~~SS~~ to go SS9464
with relatively short neck - handles, compare
a post-S. date

G 19 : 20 : 1 (not in in and fol) 102.05

→ I 16 : 5 " " " " but still b? "2nd B.C."

J 12 : 2 " " " "

M 18 : 1

(she was born as I suggested, but
the ref. to Delos 27 as usual is in
wrong column)

M 20 : 1

in Delos 27, refer both to the comment under
E 81, and ref. p. 321

M 20 : 2 not in in fol

M 23 : 1

(just got Delos ref. and chess.)

N 15 : 1

if you look up Delos p. 381, you find 2
diff. fells "abandon" &
"up"

old identity (q. also HSR, p. 10)

(6)

(30.81.74)

N 20 : 4

not in any file

102.06

N 20 : 4

OK

N 20 : 5

not in any file

N 21 : 1

OK

Q 8 : 9 (fill on floor)

(OK)

Q 13 : 1 (not in any file)

Q 15 : 1

Q 17 : 2

R 10 : 1

R 13 : 1

R 14 : 2

T 17 : 3

U 22 : 2

5. JUN. 76

ELW Contents

See request (again) for a definite
version of book list in my letter to
you of 9. ^{VIII} JAN. 75. No reply.

ELW - CONTEXTS

103.01

W. have already discussed;

C 9: 7

stays to space, last deced 2nd

M 18: 1

I find it a cell before the lateral
pre - 3 cell. Refer to Dales

M 23: 1

I refer to Dales : a cell after
(this is to AR case)

Now

N 20: 5

52', Well of 74/I

Plum wood; better file; 5024
AD"

SS 11107, for stamp on top of

N.B. she has included ^{understand} with this (see Type
19 now (formerly 22), also P 19398
(7 N: 2) Pand also 21788 (note, see P 19398)

B 20: 2

1/2 2nd BC (achute
P 17046, small jar)~~B 16: 1~~now ~~from~~ A 16: 4 (1)

1111, Cist. at 12/11/14

See analysis.

8. 8. 74

In the, P 25797. This was type VA;
now perhaps Type I (and suppression
of Type V).

(2)

(8.87.74)

103.02

B-C 10-U:1. not listed

late fall, early
R

385298.

(H0, early R fill at 24-40 - ME - ...)
(on Dolos 27)

(N 20:5
(or, well at 74/1))

ELW context

V.6.

5-19-58

19.V.58

106.01

Roman Jars : Context Corrections

105-a

in west branch of Great Drain, filled up
entirely after 86 B.C. but containing much material
104-a Iberia, etc.

ELW's
Dup list 7/18.XI.74
18.XI.74

To be correct

To be decided with
Lilly after see
get back from
Carroll

Important to do this,
since I can't be sure she
got what I tried to
suggest, as I was
in some confusion

This is the corrected
version. (Have destroyed
the other, &
am sending
this one)

May 19, 1958

of 1st century after Christ.

ous places are using our contexts
available to make a concordance as
error: sorry) (vers) to accuse us of
2nd century. Also it is a good
where possible.

ges for deposits containing your
second quarter to end of 1st
well send the list.
ss the jars to be as late as
ned in the context list Roman
book as follows: Roman deposits;
book is now in galley proof.
-25 B.C. quoted by Howland as
printing] covers the bulk
the presence of blown glass
lower limit should be somewhat
difficult to accept, you should
as he now given a slightly wider
at trouble any body.

error: sorry) Fine, and send you

N 21:1

At the beginning, read now, as Robinson:

Accumulated use filling of early 1st to 5th centuries
after Christ; (continue as before).

R 13:1

Robinson now reads: late 1st century B.C. to mid 1st century
after Christ.

LT/ak

FLW's

Dep. list 7

18. XI. 74

18. XI. 74

& be correct

To be decided with
Lolly after she
gets back from
Eminette

Important to do this,
since I can't be sure she
got whatever I tried to
suggest, as I was
in some confusion

5. XI. 74
This one has been
revised to be

TD 7454 - ~~7477~~

7465

7466 - 7477

Τ Ρ Ι Τ Η

24

267 Σ Ε Π Τ Ε Μ Β Ρ Ι Ο Υ 098

Σελήνη 1 ήμ. Ἄν. ἡλίου 6.17—Δ. 6.17
Θέκλης. Ἀνάμν. θαύμ. Μυρτιδιωτίσσης

105-6

ST

~~Handwritten red text, possibly "10.11.11" and "10.11.11", crossed out with a black line.~~

Context lists

for ELW

(see earlier version,
attached, with
● vs comments)

Roman Jars : Context Corrections

This is the corrected
version. (Have destroyed
the other, I
am sure.)

A-B 19-20:1

Sand filling in west branch of Great Drain, filled up probably shortly after 86 B.C. but containing much material of 4th to 2nd centuries; Hesperia, etc.

D 11:1

Robinson now reads: to middle of 1st century after Christ.

M 18:1

Delete "probably".

M 23:1

For well, read cistern (our error: sorry)
V.G. now reads: probably late 2nd century.

N 19:1

Robinson (Group F) now reads: second quarter to end of 1st century B.C.

V.G. notes she should not guess the jars to be as late as that. — This change is explained in the context list appearing in the Roman Lamps book as follows:

The dating of ca. 75-25 B.C. quoted by Howland [Greek Lamps, now ~~in~~ printing] covers the bulk of the material, but the presence of blown glass indicates that the lower limit should be somewhat later.

N 20:5

For cistern read well (our error: sorry)

N 21:1

At the beginning, read now, as Robinson:

Accumulated use filling of early 1st to 5th centuries after Christ; (continue as before).

R 13:1

Robinson now reads: late 1st century B.C. to mid 1st century after Christ.

May 19, 1958

Mrs. Frederick Will
525 West Foster Avenue
State College, Pa.
U. S. A.

Dear Letty:

So many people in various places are using our contexts and context dates that it seemed advisable to make a concordance as a check. We do not want our readers (and reviewers) to accuse us of quoting different dates for the same deposit; also it is a good idea to clear up our own thinking, where possible.

Some of the minor changes for deposits containing your jars, noted on the enclosed list, I think you already have; but Virginia and I thought I might as well send the lot.

You probably know that Henry Robinson, in his Roman Pottery volume, Part I, is including a list of dated Roman deposits; of this he has sent us a copy. The book is now in galley proof, and Henry expects to have finished with the page proof before he leaves for Athens early in August. The book will thus no doubt be in print before the end of the year and his list will be our authorized standard dating. If therefore there are any changes noted here as his which you find it difficult to accept, you should write him at once. In several cases he now gives a slightly wider spread; but that of course need not trouble any body.

We are hoping you are feeling just fine, and send you every sort of Agora greeting.

Yours as always,

Lucy Talcott

Encl.

cc: VRG
HSR

LT/ak

V. G.

5.14.58

106.03

I have exhausted my
imagination as to places
where I might have
stowed Letty's context
list. Since I want very
much to add ~~it to the~~ its
items to the card file

"concordance of contexts
for publication", I would
like to borrow your copy
for a few days if possible.
Later, if mine does not
emerge, I will copy it; but
meanwhile would earnestly

L. F.

Appreciate loan.

Agora Excavations

DATED CONTEXTS OF ROMAN WINE JARS

- A 14:2 Cistern filling 1st c. B.C. - 1st c. A.D.
SS 7539
- A-B 19-20:1 Hellenistic sand filling in the
west branch of the Great Drain;
See LT 19.7.58 (attached)
Hesperia XX, 1951, pp. 262-3
SS 9000 SS 9129
*12.11.57
Hesp XX, 1951, pp.
262-3: Sullan abandonment
mud (RSY). (for LT)*
- B 20:2 Cistern filling 2nd c. B.C., first half,
possibly first quarter,
the latest jar handles being
no later than 188-166 B.C.
P 17046
- B 21:1 Cistern filling; cf. Hesperia XX, Late 1st-early 2nd c. A.D.
1951, pp. 263-4
SS 9638
- A 16:4
B 16:1 Packing in a cistern Before ca. 140 B.C.
P 25797
TTT, cut at T2/14
- C 9:7 Packing in a cistern around the Late 2nd c. B.C.
shaft of a well dug through the
cistern; construction filling.
P 8105 - 8108 P 6867
- C 14:4 Construction packing of a well 1st c. A.D.
P 10757
- C 17:5 Pit filling Early Roman
SS 10896 P 20021
- D 11:1 Filling in an unfinished well Late 1st. B.C. - early 1st
A.D.
P 9140
*See LT.
19.7.38*

- D 11:4 Cistern filling Late 2nd - early 1st c. B.C.
SS 5447 SS 5541
- D 18:2 Dumped filling First half of 3rd c. A.D.
P 18254
- D-E 15:1 Filling in west branch of Last quarter of 2nd c. B.C.
Great Dreaia, northern part
SS 9305 SS 9396
- F 11:1 Dumped filling in a well 1st and early 2nd c. A.D.
P 4501 SS 2475
- F 13:3 Filling in a well 2nd c. B.C. into early 1st c.,
use filling of 2nd c., dumped
P 6761 filling, Sullan debris. The
jar noted here is from an un-
specified level.
- F 15:3 Filling in a well constructed Early Roman (?)
in early Roman times, in use
into the 3rd century A.D.; the
fragment listed comes from the
well filling, but may have fallen
in from the construction packing.
P 3189
- F 19:3 Well filling Early 1st c. B.C.
P 16394
- G 8: 1 Construction packing behind the Augustan period
tiles of a well
P 3464 P 3465
- G 14:2 Filling in a well in use from the Late 2nd c. B.C.
4th century B.C. to the late 2nd
century B.C.: from the upper
filling.
P 498, P 499, P 500

- G 19-20:1 Herulian destruction debris over the floors of a house, A.D. 267 Mid-3rd c. A.D.
P 14618
- I 16:5 Cistern filling 2nd c. B.C. with some later intrusions
P 7702
- M 18:1 Well construction packing behind the tiles. Probably early 1st c. B.C.
See LT 19.7.58
SS 7217-7447 (except 7356)
SS 11094-11106
P 21114-21134
Use filling: P 11691 2nd century A.D.
- M 20:1 Dumped filling in a cistern 1st quarter of 1st c. B.C., debris of Sullan destruction
SS 6807 SS 6814
- M 20:2 Construction packing behind the tiles 2nd c. A.D. (?)
of a well
P 18000
- M 23:1 ~~Well~~ ^{Cistern} filling Late 2nd or early 1st c. B.C. *85 BC or a little later*
See LT 19.7.58
SS 3203
- N 19: 1 Dumped filling in a cistern (Agora V, Group F) *(X, cistern at 84/Net)* Second and third quarters of 1st c. BC.
See LT 19.7.58
P 11880 (F 93) *Coan* *HSR now reads "2nd 1/4" and of 1st B.C."*
- N 20:1 Use filling in a well First half of 1st c. A.D.
SS 9471
- N 20:4 Use filling in a cistern Late 2nd to early 1st c. B.C. (to Sulla)
SS 7930
- N 20:5 Use filling in a ~~cistern~~ ^{well (see LT 19.7.58)} Second half of 1st to early 2nd C. A.D.
SS 11107

N 21:1

See LT
19.7.58

Well filling, gradual accumulation from early Roman to post-Herulian; one of the jars listed here possibly fallen in from the construction packing behind the tiles; SS 9468; the other, SS 9608 from a level of the 1st century.

1st c. A.D.

Q 20: 3

Use filling in a well

First quarter of 3rd c.BC.

P 14180

(Full on floor of Square Parastyle) P20196 ca 200 B.C.

Q 13:1

Dumped filling in a manhole

Early 1st c. A.D.

SS 1890, 1891

P 8484

Q 15:1

Dumped filling in a water-system
(Agora V, Group K)

Mid-3rd c. A.D.

SS 6817 (K 117)

R 10:1

Dumped filling in a well

Late 1st century B.C. to early 1st c. A.D.

SS 11228 P 21786, 21792

R 13:1

See LT
19.7.58

Dumped filling in a well: upper
fill

First half of 1st c. A.D.

SS 5945, 6179 P25734

R 13:2

Dumped filling in a well

Late 1st c. B.C. to early 1st c. A.D.

SS 11012

R 14:2

Herulian destruction debris over the
Library of Pantainos

Mid-3rd c. A.D.

P 21203

U 22:2

Dumped filling in a well

Second half of 2nd c. A.D.

P 21493

DATED CONTEXTS FOR ROMAN WINE JARS

✓ A 14:2 Cistern filling 1st c. B.C. - 1st c. A.D.

SS 7539

✓ A-B 19-20: 1 Hellenistic sand filling in the west
branch of the Great Drain; Hesperia
XX, 1951, pp. 262-3.

SS 9000 SS 9129

* →

✓ B 20:2 Cistern filling 2nd c. B.C.

P 17046

✓ B 21:1 Cistern filling; cf. Hesperia late 1st early 2nd c. A.D.
XX, 1951, pp. 263-4.

SS 9638

* ✓ B 16:1 Packing in a cistern ca. 150 B.C.

P 25797

✓ C 9:7 Packing in a cistern around late 2nd c. B.C.
the shaft of a well dug through
the cistern; construction filling

P 8105 - 8108 P 6867

✓ C 14: 4 Construction filling of a well 1st c. A.D.

P 10757

✓ C 17:5 Pit filling early Roman

SS 10896 P 20021

✓ D 11:1 Filling in an unfinished well Late 1st. B.C. - early
1st. A.D.

P 9140

✓ D 11:4 Cistern filling late 2nd - early 1st c. B.C.

SS 5447 SS 5541

- ✓ D 18:2 ? Dumped filling first half of 3rd c. A.D.
P 18254
- ✓ D-E 15:1 Filling in west branch of last quarter of 2nd c. B.C.
Great Drain, northern part
low fill
SS 9305 SS 9396
- ✓ F 11:1 Dumped filling in a well 1st and early 2nd c. A.D. ✓
P 4501 SS 2475
- ✓ F 13:3 Dumped filling in a well 2nd c. B.C. *on later? under*
P 6761 *(from unperfected depth)* *P 6761 is P.O.V.*
(SS 2679 and 3680, for
Abund. Fill, on early
1st AD)
- ✓ F 15:3 Filling in a well constructed early Roman (?)
in early Herodian times, in
use into the 3rd century A.D.;
the fragment listed comes from
the well filling, but may have fallen
in from the construction packing.
P 3189
- ✓ F 19: 3 Well filling early 1st c. B.C. ✓
P 16394
- ✓ G 8: 1 Construction packing behind the Augustan period ✓
tiles of a well
P 3464, 3465
- ✓ G 14:2 Filling in a well in use from late 2nd c. B.C. ✓
the 4th century B.C. to the late
2nd century B.C.: from the upper
filling.
33 7464
low fill
P 498, 499, 500
- ✓ G 19-20:1 ? ^{Herodian} Destruction debris over the floors mid 3rd c. A.D.
of a house; A.D. 267.
P 14618 ?
2nd AD

- ✓ I 16:5 Cistern filling 2nd c. B.C. with some later intrusions
P 7708
- ✓ M 18:1 Construction packing behind the tiles of a well probably early 1st c. B.C.
SS 7217 - 7447 (except 7356)
11094 - 11106
P 21114-21134, P 11691 — This is listed in POV fill collect 2nd AD
- ✓ M 20:1 Dumped filling in a cistern first quarter of 1st c. B.C.
SS 6807 SS 6814 *Sulla distinct*
- ✓ M 20:2 Construction packing behind the tiles of a well ~~in the first half of the 3rd century A.D.~~ 2nd c. A.D.(?)
P 18000
- ✓ M 23:1 Well filling late 2nd or early 1st c. B.C. X
SS 3203 *(SAH are not listed here - Sulla type)*
- ✓ N 19: 1 Dumped filling in a cistern (Agora V, Group F) Second and third quarters of 1st century B.C. ✓
P 11880 (F 93)
- ✓ N 20: 1 Use filling in a well first half of 1st c. A.D. ✓
SS 9471
- ✓ N 20: 4 Use filling in a cistern late 2nd to early 1st c. B.C. (to Sulla) ✓
SS 7930
- N 20: 5 Use filling in a cistern second half of 1st to early 2nd c. A.D. ✓
SS 11107

- ✓ N 21: 1 Well filling, gradual accumulation 1st c. A.D. (?)
from early Roman to post-Herulian; ^{one}
the jars listed here possibly fallen
in from the construction packing behind
the tiles.
SS 9468 SS 9608
*SS 9608 seems
to come from the
1st AD level
(cf. n.b. p. 787)*
- ✓ O 20: 3 Use filling in a well first quarter of 3rd c. B. ✓
P 14180
- ✓ Q 13: 1 Dumped filling in a manhole early 1st c. A.D. ✓
SS 1890, 1891 P 8484
- ✓ Q 15: 1 Dumped filling in a water-system first half of 3rd c. A.D. ✓
(Agora V, Group K)
SS 6817 (K 117)
*mid 3rd c.
cf. HSR p. 149*
- ✓ ^{R 14: 2} ~~Q R 13-14: 1~~ Destruction debris over the first half of 3rd c. A.D.
Library of Pantainos
P 21203
along with mid 3rd
- ✓ R 10: 1 Dumped filling in a well ^{late 1st B.C. to} early 1st c. A.D. (Augustine) ✓
SS 11228 P 21786, 21792
*contains lots
of 1st B.C.*
- ✓ R 13: 1 Dumped filling in a well: upper latest 1st c. B.C. and
fill earliest 1st c. A.D.
SS 5945, 6179 P 25734
*"1st half 1st AD" HSR
under [M 14]*
- ✓ ^{Dumped} R 13: 2 Filling in a well late 1st c. B.C. to
SS 11012 early 1st c. A.D. ✓
- ✓ U 22: 2 Dumped filling in a well second half of 2nd c. A.D. ✓
P 21493

Discusses with TLW
on return from Corinths

Recent finds in Delos: those from the house
being published by Siebert et Cie. On
the one hand, it seems one would properly
ask permission to include material
somebody else has planned to publish.
On the other hand, they want to be able
to do it themselves, probably.
Anyhow, should be discussed with Amanda,
I suppose.

25. XI. 74

> Took this up with BLW. She did not wish
to ask permission from Amanda. She said she
had Damp's letter of permission. I said, But it
is the same as with Corinths and the Kerameikos.
She said, No, because in those cases I needed
to look again, now, at the material.

> Have made a date with the Amantys &
have a drink with us, 7:30, Wed., Nov. 27.

4. XT. 74

[110-a]

Type 1 Ginter SE Bldg
TP 1704
(small)

Type 3 Passi + P 676
(small)

Type 4 Sestun

FLW now agrees that to above
combinations of 2 jars seen
to be dated, (the 2 small
had previously been combined,
as Type 1.)

5. XT

FLW, Wm & Keranah, all a.m.

11.5.74

110-6

Edu Ospa

altera in unbrum

Pauss

addition should be in middle

"

"

a bit more

shut

seen OK

ELW left for the U.S.
early a.m. 7.XII.74

18.XI.74

111.01

ELW's visit to Greece XI.74

See correspondence beginning with her letter of 24.VII.74.
She is on paid leave of absence ^{for U.S. of Miss.} during the 1st semester of
this academic year, ^{and also from the Univ.} and funds for trip to Greece following
her trip to Rome beginning July 25, to work on ^{and publish} a book
harbor gaps, on invitation from F. Brown. In fact,
the book job would not have been undertaken, perhaps,
had she not expected to be through with the Agnes vol.
beforehand.

at Athens airport?
Letty arrived about 8:00 p.m. on Nov. 1, the
plane being delayed. I had hoped she would
dine with us (incl. Anna Benjamin) at Long Hall, but
she did come in after dinner. Bob Pom. had given
her a room in the "Tower" above the library. She
came to the Agnes for a drink on the following day,
Saturday, having supper the night with Anna B.
Sunday evening I had a party for her (and Anna).
It turned out that a fair number that should have
been there were away — C. Williams, J. McCredie,
M. Petrovskoulou, B. Philippaki, A. Mandy, etc.
However it was a good affair, and included 3 from
Korinth (Williamson, Knigge, von Freytag).

At the Agnes, we have had a good deal of
discussion since her arrival. Notes of 4.XI (Monday)
show a discussion of what are to be the early "Type." I

111.02

queried the combination of P 17046 and P 6761 as a "Type" - but "Type?" since what they have in common seemed to be partly ^{of} ~~the~~ same. She figured out a possible adjustment sequence:

Type 1 ³ { Corinth SE bldg. (see Amples fig. 31)
P 17046 (with earlier context)

Type 2 ⁴ I think is the Corinth with C.CAR

Type 3 { PASI jar, Agou
P 6761 "

But see
below

It is to be pointed out that some of the "Types" are related to earlier or later ones. Further discussion associated Types 1 and 3 with Beunt's "Græco-Italic", which shows how Greek stamps of any. (Magna Graecia, other purposes.)

On Tuesday, 5. XI, she went to the Kerameikos by appointment; I dropped her at the museum gate.

On Wed., 6. XI, and perhaps earlier, she and I discussed Deposits, going over what we had in common. I found my material too scattered and that since assembled it better, and we will make our own checks after she gets back from Corinth, reading right through her (nearly rejected) deposit list.

This has been done in the style of the main HSP's Agou & but we think probably they will want

to be done in a more ~~the~~ style, as in Agnes XII, for economy in printing.

In connection with the deposits, I showed her Price's article. She had a photocopy (I think, I must check this I have it back; I think it is kept in the offprint box, alphabetically.) I showed her also my notes on this article, done for HAT, typescript of 8.VIII.64, in the supp to the folder LISTS OF DEPOSITS. ?

On Thursday ~~to~~ 7. XI, she went again to the Kerameides. And after work 8. XI, Fr. Knigg, took us to tea at her house on Hymettos, with Barbara (Mrs.) Bowen who works with them; all in pouring rain; very good party.

On Monday 11. XI, Charles William came to the Stoa at lunch time, and discussed Lally's publication - coverage, when to come out (he is late to have it in an Agnes vol., and suggests a Supp. suppl. 5), etc. See separate notes of 12. XI. He is living with us tonight, and she is to go to Corinto tomorrow.

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY 08540

SCHOOL OF HISTORICAL STUDIES

October 29, 1974

Dear Miss Grace:

This is just a quick note to bring you up to date, at least a bit, to how things are going with me. First of all, thank you for the copy of the Panella letter and reference which I received a few days ago.

I had several talks with Dr. Will when she was here last week and I think things are squared away on that front. She was able also to give me Zevi's address and so I have just written to him. A copy of my letter is enclosed for your files. I only hope that my original letter gets to him, since I understand that mail service to Italy is still somewhat haphazard.

The work on the pottery goes well and I like it here in Princeton. We are having a lovely fall and very pleasant weather.

Well, that's all for now, do give my regards to all the people at the Agora. See you in the spring or early summer.

Sincerely,

Barbara

Barbara L. Johnson

of publication which you have undertaken and I look forward to meeting you in Italy next year.

cc H. A. Thompson
T. L. Shear
V. Grace ✓
E. Will

112

STUDY

October 29, 1974

so kindly brought to me in I did not have your new his past week I talked with ut your project and who also

he project as outlined in e problem is that I would not r volume until I have finished ent to complete that project ld not have anything ready l said you would like to have and can be postponed, then I am. I had understood from to have set deadlines.

you in light of my comments ny information concerning in your letter that a on was already in print. a better idea of your needs.

ve material in Italy and I spring or early summer of Italy in my travels. I am a Italy which I need to see. k with you about the proposed summer which is a better time arrange my trip accordingly.

this very important program forward to meeting you in

Sincerely,

Barbara L. Johnson
Barbara L. Johnson

to VG
with B. Johnson's
letter 9/15/74
done 10/5/74
rec'd 10/17/74 113

THE INSTITUTE FOR ADVANCED STUDY
PRINCETON, NEW JERSEY 08540

October 29, 1974

SCHOOL OF HISTORICAL STUDIES

Professor Fausto Zevi
Via Panisperna, 207
00186 Roma

Dear Dr. Zevi:

Please pardon my delay in answering your letter so kindly brought to me in Athens by Dr. Andreussi, but until the last few days I did not have your new address and so did not know where to send a reply. This past week I talked with Dr. Will who answered some of the questions I had about your project and who also provided me with your address.

I am certainly interested in participating in the project as outlined in your letter and as further explained by Dr. Will. One problem is that I would not be able to do any preparation of the material for your volume until I have finished the work on the Agora volume, since I have a commitment to complete that project before taking on any new ones. This means that I could not have anything ready for you by next summer which is the time that Dr. Will said you would like to have the material in. If this deadline is not a firm one and can be postponed, then I would be able to participate in your publishing program. I had understood from your letter that the project was not so far along as to have set deadlines.

If you still wish me to work on an article for you in light of my comments above, please let me know. Also I would appreciate any information concerning format, photographs, profiles, length etc. You said in your letter that a fascicle on the stamped ware of late western production was already in print. Perhaps, if I could have a copy of that I might get a better idea of your needs.

I thank you for your offer to look at comparative material in Italy and I hope to do so. I shall be going abroad again in the spring or early summer of 1975 and would like very much to include a visit to Italy in my travels. I am only too well aware of the vast amount of material in Italy which I need to see. It would be a pleasure to have the opportunity to talk with you about the proposed project. If there is some time during the spring or summer which is a better time for me to come, please let me know and I will try to arrange my trip accordingly.

I wish you all the best continued progress in this very important program of publication which you have undertaken and I look forward to meeting you in Italy next year.

Sincerely,

Barbara L. Johnson
Barbara L. Johnson

cc H. A. Thompson
T. L. Shear
V. Grace ✓
E. Will

Athens, Oct.19, 1974

Dear Letty,

A slight revision, in the date of my little party for your arrival. I had put it on Saturday as more possible for the Corinthians; but as Charles, at least, can't come anyhow, I have changed it to Sunday (Nov.3), which is more convenient in some other ways. Gives you more time to get over jet lag, and to think of more people you might like to have invited. Miss Knigge has accepted; but not B. Philippaki, and I learn that she has many troubles at home, the worst being that her brother, who was the prop of the whole rather delicate family, had a very bad accident not long ago. B. goes to her work, though; and anyhow, I expect she could delegate to Maria in an amphora matter.

Mr. Benaki returns from his trip (this time only to Switzerland and Paris) on Dec.10.

October 14, 1974

Dear Letty,

I got yours of Oct. 7 yesterday, after I had posted mine of Oct. 12.

As to Charles Williams: it is not a question of his "wanting" lists from you, but he is in the business of assigning material for publication, and you don't want to find that something you have incorporated in your manuscript is not going to be free. I hope you put in both amphoras and stamped pieces (handles, etc.). I should say that I do not have records of Corinth finds after those of 1970. Charles has not been willing for them to enter our files here, which are accessible to too many people, he apparently thinks. We have not discussed the matter lately, and perhaps things could be brought up to date by this time. But if you expect to have in your book Corinth material of more recent excavations, you must expect to spend quite a bit of time on it. I would suggest that you arrange an appointment with him for very soon after you get here - i.e. arrange it by correspondence now, I suppose, to go to Corinth. He is usually here over the weekend, and I plan to invite him (and others) to meet you at my ap't on Saturday, Nov. 2. So please hold this engagement.

Oct. 15

I had to go home then, and in the evening was the School party to meet the new members. (Much later ^{in the year} than usual.) There I learned that Charles will be conducting one of the School trips, beginning Nov. 1, for a week or ten days. You could arrange to work in Corinth just the same, as Nancy Bookides readily offered to receive ~~you~~ ^{you}. she is the School Secretary for Corinth now, and has excavated there quite a bit. But decisions come from Charles, so you might find it more useful to go there when he is there, or after seeing him.

For the National Museum, Maria suggests you write to Barbara Philippaki (Dr. B. Ph., National Archeological Museum, Tositsa Street, Athens). Yalouris is at present director of the museum, but it is not certain how long he will stay there, there may be some shifting. Apparently Barbara is staying on as (She is an old student of Beazley's.) Curator of the pottery collections there. She is an old friend, who worked for a time with Lucy T. at the Agora, though perhaps not while you were here. Unless you know her well, write to her formally. I suppose what you need is 1) access for checking, and b) confirmation of permission to publish. She won't alone be able to grant these requests, but ask her kind help in getting you on the right track for doing what is necessary in your limited time. In recent years we have had to have specific permission^{even} to enter most apothekes, permission from the Ministry, not the ephor. This is said to have been instituted by Marinatos, who wanted to keep control, so perhaps it will fade out now he is gone. I had a problem just now in Delos, however. Maria tells me she has spoken to Barbara about this your applying to her, B., and she says ok, she will cope, when she gets your letter.

For the Kerameikos, write to Dr. Ursula Knigge, Deutsches Archäologisches Institut Athen, Phidion 1, Athen/ 142. I called her up and she said that Dr. Willemssen will soon be leaving, and she could take care of you, anyhow from the German point of view.

All these people, Ch. Williams too, should understand what it is you are about to publish, ~~ie.~~ i.e. a corpus, otherwise unavailable; and how soon it will be in print. You need tact to let Charles see it that way, and not as Corinth objects appearing in an Agora volume; he should understand that the Agora volume is incidental and i.e. as a volume in some series.) the corpus the basic thing. (Somehow its publication has to be paid for. It would not ~~be~~ have at all the same usefulness if some of the names came out in one excavation catalogue and some in another. See note 1 of our Delos chapter. I do not mean you should write all this to him; but have it in mind before you talk with him. You will see how it is then. Perhaps it will be all right.

I'll plan something of a party for Sat. drink time Nov.2 anyhow.

The paper you outline sounds a good one, and I hope the committee feel the same way.

Don't forget to apply to T.L.S., Jr., for permission to publish finds at the Agora of after 1967. I'm sure he'll be glad to give it to you, but people don't like things taken for granted.

October 12, 1974

Dear Letty,

Miss Andreoussi did bring me your letter of August 16, with its various enclosures. I have written to Professor Brown about work to be done on the Cosa stamps the letter was taken by Carolyn Koehler, who left here for Rome on Sept. 22. (She is doing a thesis on Corinthian amphoras, and will be for some weeks looking at those in Sicily and Italy.)

As you say, it would certainly have been a mistake on your part to miss seeing the material in and near Rome, and especially to miss contact with the people who have made so much progress in isolating series of amphoras as products of at various dates of specific centers in Spain and Africa. Are you in touch with Tchernia as well as with Zevi? I am glad the meetings you had in Rome were such fun as well as so informative. Actually, we can't really say yet that the Agora has profited by kindnesses to yourself, whether from F. Zevi or from the rest of us, over the years. We all hope the profit may soon begin. In the meanwhile, we here do not feel terribly obligated to Dr. Zevi, who in 1967 left the Agora Roman stamped handles in a mess. Andreas had to spend quite a bit of time straightening them out, so that individual handles can be found. (You know what Andreas is like; but he did on this occasion make something of a protest: "One should respect the work of others!") I think, too, that Dr. Zevi should this spring have written to me, or better, to the director of the Agora excavations, explaining about the work on amphoras which he, Zevi, is coordinating, and for which he wanted Miss Andreoussi to collect data. He could even have sent such a letter with her. After hearing from Barbara Johnson, he did write to her (June 25?), giving an account of the Encyclopedia project. He gave the impression that the work on this was still very much in its beginnings. It was in

response to that letter of Zevi's to B. Johnson that Leslie Shear finally himself wrote to Zevi, with cordial comment on the Encyclopedia project, and explaining the Agora plans for study and publication of the Roman coarse wares. (Leslie's letter was held up by the fact that Zevi had said our address for him was out of date, and only by luck had he received Barbara's letter, but he did not give the correct current address, and nobody then at the Italian School could supply it.)

Have you been yet to Princeton, to meet Barbara Johnson, to discuss things with her and with Homer and with Leslie Shear? Although the Agora material you are publishing comes (mostly?) under Homer's jurisdiction (i.e. found before Leslie became director), the setup here is now Leslie's responsibility, and you will want to check with him about using facilities here. I hope by this time you have written to Charles Williams, listing for him the Corinth material you would like to publish. See my letter to you of August 11, 1973, a long letter, written in reply to questions of yours (including one about permission for the Corinth material) in your letter of July 31, 1973; I have never had an acknowledgment of mine. Have you still got it?

From my own experience, I am sure you will find - or have found? - a visit to the Institute in Princeton almost as stimulating as a visit to Rome. Homer makes it so.

There is a word in your last letter that I have not made out, connected with 3rd (?) cent. B.C. Roman amphoras that, you find, match pieces at the Agora. We can talk about it when you come. Maria and Andreas continue to work here on a part-time basis, and we all look forward to seeing you soon. Sad to say, Mr. Benaki will be away from Greece (Florence, Paris, London, I think), but maybe he will see you when he gets back. I would write to him, if I were you.

Yours affectionately,

Copy to HAT.



The Commonwealth of Massachusetts
University of Massachusetts
Amherst 01002

DEPARTMENT OF CLASSICS
 Herter Hall

October 7, 1974

Dear Virginia,

There isn't much to add to my letter of August 16, which I trust Maddalena Andreussi delivered. Having returned to Amherst, I am in the throes of preparing for the trip to Athens, where I plan to arrive late on the afternoon of November 1. I'll get in touch with you either that evening or the following morning. I have written to ask if there might be a room for me at the School. I plan to stay for about four weeks, which I realize seems a very brief time, but the MS just simply has to be finished by the end of the first semester. What I plan to do, as I said before, is to incorporate the post-1968 material and particularly to examine the entire Roman collection with the open not to say startled eyes I acquired in Rome and at Cosa. I haven't yet heard whether or not Tina Panella is still planning to be in Athens in early November. I very much hope she does come, both so that you and she can meet and so that I can have the advantage of discussions with her on (so to speak) my home territory. Maddalena Andreussi must by now have returned to Rome to get married.

Here are some more Cosa Greeks that turned up unexpectedly. I hear that your Caroline Kohler (sp.?) has just been or is in Rome, so these will probably be duplicates by the time they reach you. It isn't too easy to track down all the possible amphora-hiding-places at Cosa and at the Academy, but I think you now have all the Greeks except for the unstamped pieces and for the finds from the harbor, which I will finish working on next summer. Stored with them are finds from Populonia and other underwater sites, as well as a very nice, broken "Corinthian" jar numbered "PC 69." This must be the jar pictured in Archaeology 23 (1970), p. 210, and mistakenly identified there as Dressel Type 25. Ancestral to BR's and to Dressel 25 it may very well be, though. I saw many examples of 25 in Rome. Had a hard time trying to convince Zevi and Panella that BR's and 25 are not the same. I think it very likely that 25 is an Imperial descendant of BR-type, both in turn perhaps descended from Corinthians. You'll remember I've always felt Corinthians were Italian.

I'm sending Charles Williams a list of all the Corinth pieces I've studied. That ought to cover what he wants to know. // Do I need to contact from here anyone about seeing again the pieces at the EM? I'd certainly appreciate any other suggestions you may have about people I ought to contact, either from here or once I get to Athens.

With love for the moment,

Lilly

This is the list of an abstract I submitted to the
 Darkin's Program Committee recently. If it's accepted,
 I will give the paper at the meetings.

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Title: The Sestius Amphoras from Cosa

Name: Elizabeth Lyding Will

Affiliation: University of Massachusetts, Amherst

Time: 15 minutes; one projector (30 slides).

Abstract: "Sestius" is a name that has become associated with the Roman commercial amphoras stamped on the rim with the letters SES or SEST. Hundreds of Sestius amphoras were found 22 years ago in the much-publicized Grand Congloué wreck off Marseilles, and the result was that SES became again an internationally-known trademark, as it must have been in antiquity. Not many Sestius pieces were known from excavations on land, however. A few had been found in France, Spain, and Switzerland, and five had turned up at Cosa by 1955. On the basis of shape, the jars seemed to belong to the latter 2nd or first half of the 1st century BC, but evidence was lacking as to their place of origin and their manufacturer.

The Sestius question was both illuminated and complicated this summer when 34 additional Sestius jars and fragments were discovered in the course of a review of the post-1955 finds of Roman amphoras from Cosa. The total of known Sestius pieces from Cosa is thus now 39, making that group far the largest from an excavation on land, and in addition one of the greatest concentrations of any single stamp-group among Roman amphoras. Such concentrations occur only at great ports or at places of manufacture. It seems increasingly likely that the Sestius amphoras originated in the vicinity of Cosa. Their date might suggest a connection with Cicero's friend, P. Sestius, who is known to have owned a villa at Cosa.

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