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MARBLE SARCOPHAGI OF ROMAN DALMATIA MATERIAL – PROVENANCE – WORKMANSHIP¹

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Abstract

The sarcophagi of the Roman province of Dalmatia are very interesting. They comprise: 1. imports of completely executed marble sarcophagi from the three centres of production (Rome, Athens and Dokimeion), 2. sarcophagi executed locally from imported roughly cut chests and lids made of marble from Proconnesus, 3. sarcophagi executed from half-finished examples from Proconnesus, with various decorations, and 4. local sarcophagi made of local limestone, with different representations. The new finds of 2007 in Salona, e.g., a sarcophagus with Eros, fragments of huge garland sarcophagi, a well carved lid of the “mixed” type and a huge roof-like lid, all made of marble from Proconnesus, cast new light on the art of sculpture in Dalmatia in the 2nd and 3rd century AD. In addition, the marble sarcophagi from Dalmatia enrich our knowledge about the production of marble sarcophagi on the island of Proconnesus in general.

Keywords

Dalmatia, Roman province, marble, commerce, sarcophagi, Roman

In Roman imperial times many people who could afford it spent a lot of money on their graves, on gardens with houses or small temples, funerary statues and busts, grave reliefs, altars, ash urns, ostothecae and so

on, and, last not least, sarcophagi.² Extant are some sarcophagi from the late 1st century BC and 1st century AD;³ the main group started in the early 2nd century, while in the late 3rd and early 4th century there was a change from pagan to Christian themes.⁴

Various materials were used for sarcophagi: wood, lead, terracotta and various kinds of stone, depending on the region, i.e., limestone, sandstone, granite, volcanic stone, and the everywhere much in demand marble.⁵ In Dalmatia marble was not found, but limestone was used for a large number of locally made sarcophagi.⁶ Persons who did want a marble sarcophagus had, in general, two possibilities. First: they could order a sarcophagus with completely executed reliefs, imported from one of the three centres of production, or – the second possibility – they could buy or order

- a roughly cut chest and lid (“Rohling”) or

- a half-finished sarcophagus (“Halbfabrikat”) from one of the marble quarries elsewhere in the Empire.

Concerning the first possibility, the three centres of production in the 2nd and 3rd century AD were Rome, Athens and Dokimeion.⁷ Rome used not only marble from Carrara (Luna – Luni),⁸ but also from Pentelikon, Thasos, Proconnesus and other quarries even further

1 Hearty thanks are due to the organizers of the meeting in Split, above all to Prof. Dr. Katja Marasović and her collaborators. Together with our friends Maja and Nenad Cambi they made our stay in Split again highly enjoyable. RUSSELL 2013 will not be cited here, even if several sarcophagi from Dalmatia and Salona are mentioned; but in all the passages dealing with Roman sarcophagi there seems to be nothing new; there are repetitions of many out of date views; much of the literature and material published in the last half century are unknown to the author; the distribution maps (171-174, fig. 5.4-6) are totally out of date, and many times he obviously does not have any well founded idea about Roman sarcophagi.

2 Overviews are given, e.g., by: TOYNBEE 1971; BOSCHUNG 1981; HESBERG 1982; KLEINER 1987; SINN 1987; KOCH 2010, 67-71, 94-97 (ostothecae).

3 BRANDENBURG 1978; HERDEJÜRGEN 1981; KOCH, SICHTERMANN 1982, 36-41; KOCH 1993, 62-66; AMBROGI 1990; AMBROGI 2008; KOCH 2010, 37. 77 F.; CANDILIO, BERTINETTI 2012; PALMENTIERI 2013; GASPARRI 2013.

4 KOCH, SICHTERMANN 1982, 258 F.; KOCH 2000.

5 KOCH, SICHTERMANN 1982, 20-23; KOCH 1993, 11-17.

6 KOCH, SICHTERMANN 1982, 314-322; CAMBI 2010 (many pieces).

7 KOCH, SICHTERMANN 1982, 35-275, 366-475, 497-509; KOCH 1993, 62-122; KOCH 2010, 38-46, 78-81.

8 Marble from Luni – Carrara, e.g.: WALKER, MATTHEWS 1990; KEUREN 2011, 149-187, esp. 155-158.

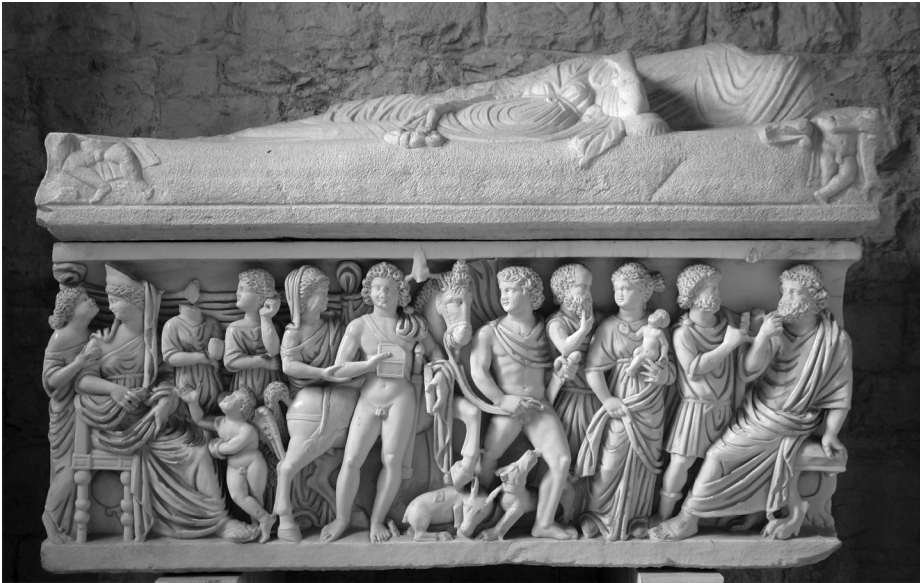


Fig. 1.
Split, AM, Inv. 129 D:
Hippiolytos sarcophagus
made in Rome from
Proconnesian marble
(photo: G. Koch)

away;⁹ in Athens, marble from Pentelikon was used,¹⁰ and in Dokimeion, marble from the quarries in its surroundings, the *marmor Phrygium*, *marmor Synnadicum* or *marmor Docimium*.¹¹

From these centres, sarcophagi were exported, to different regions and in various numbers. From Rome about 6,000 pieces are preserved, of which about 200 were exported, above all to the west, but also, in some examples, to the east.¹²

From Athens, about 1,500 pieces are preserved, about 1,000 of them having been exported, maybe even as far as to Britannia in the north-west and to Africa in the south-west, to Myrmekeion on the Crimea in the north-east and Palaestina, Arabia and Alexandria in the south-east.¹³

9 Some remarks on the situation in Rome: STOWELL PEARSON, HERZ 1992; KOCH 1993, 13 f. with n. 53-58; KEUREN 2011, 149-187.

10 KOCH, SICHTERMANN 1982, 374; KOCH 1993, 12 with n. 50-52.

11 KOCH, SICHTERMANN 1982, 498; KOCH 1993, 12 with n. 45-49.

12 KOCH 1977 (with a list of the exports); KOCH, SICHTERMANN 1982, 267-272 (with a distribution map); KOCH 1989, 163-168; KOCH 1993, 94 f. with n. 419-420; KOCH 2006 (with an updated list of the exports to the eastern part of the empire); KOCH 2008, 2 (with an updated list of the exports to northern Africa); LAUBE 2012, 317 no. 171 (Alexandria).

13 KOCH, SICHTERMANN 1982, 461-470 (with a list of the exports and a distribution map); KOCH 1982, 167-186; KOCH 1989, 183-209; KOCH 1993, 111 f. with n. 453-462 (there are new finds in several regions, e.g. in Ephesos, Pamphylia, Tyrus; some are mentioned in

Extant from Dokimeion are about 600 pieces, about 60 of which were exported outside of Asia Minor, about 40 of them to Rome and 20 to other regions.¹⁴

In Dalmatia there are few imports from Rome.¹⁵ Excellently preserved is the Hippiolytos sarcophagus from Salona (Fig. 1),¹⁶ while all the other pieces are more or less small fragments. The Hippiolytos sarcophagus, including some of the pieces, preserved only in fragments, was produced in a period in which Attic sarcophagi were no longer available, that is, the late 3rd and early 4th century AD.

Two tiny fragments are the only remains of two large and richly decorated columnar sarcophagi from Dokimeion, one a part of a kline-like lid and the other the upper edge of a chest (Figs. 2-3).¹⁷ A third fragment, which was previously thought to be part of an imported sarcophagus from Dokimeion, once in Knin, cannot be an original from Dokimeion, but must be a product of the “late antique group” from Rome.¹⁸

KOCH 1993, KOCH 2012, 3 and 2015, 1). – Britannia: ROOK *et al.* 1984. – Africa: KOCH 1983. – Alexandria (or Aegyptus): LAUBE 2012, 316 no. 170.

14 KOCH, SICHTERMANN 1982, 507-509; KOCH 1982, 186-194; KOCH 1989, 169-175; KOCH 1993, 121 with n. 487-489; KOCH 2010, 44-46. 80 f.

15 CAMBI 1977: 11 pieces; a fragment of an acroterion of a lid in the garden of the Archaeological Museum in Split seems to be also an import from Rome (height 0.22, length 0.32 m); CAMBI 2013, 93 fig. 70.

16 Split, AM, Inv. 129 D: KOCH 1984; KOCH 2013, 104. 115. 136 fig. 32.

17 CAMBI 2005, 137 fig. 200-201.

18 KOCH 2013, 103 f. 123 fig. 2 (with older lit.).



Fig. 2-3. Split, AM: fragment of a columnar sarcophagus imported from Dokimeion (photo: N. Cambi)

In contrast to the fate of imports from Rome and Dokimeion, an extremely large number of Attic sarcophagi are preserved in Dalmatia, above all in Salona. In 1988 109 pieces were published.¹⁹ Later on even more were identified, and there are some new finds; thus we have now about 130.²⁰ Unfortunately there are only two examples – out of the 130 – which are completely preserved. Of these two, one, a Meleager sarcophagus, is much damaged (Fig. 4),²¹ while the other, with very rare decorations showing Erotes collecting grapes in flat relief, is extremely well preserved (Fig. 5),²² and from a third a bit more than a half is preserved.²³ All the other fragments are more or less small pieces, remains of large sarcophagi, which were smashed to pieces for burning into lime, and only some fragments of them survived by chance.

19 CAMBI 1988; CAMBI 2013, 93 fig. 71-73.

20 CAMBI 1993; CAMBI 2000, 1; CAMBI 2000, 2; RENDIĆ-MIOČEVIĆ 2004; CAMBI 2007. Cf. the fragments in Pietas Iulia (Pula; regio X): CAMBI 2009.

21 CAMBI 2005, 149 fig. 221; CAMBI 2013, 93 fig. 74.

22 CAMBI 1993, 77-90 pl. 29-33; CAMBI 2005, 153 fig. 226.

23 CAMBI 1988, 99-105 no. 1 pl. 1-5; CAMBI 2005, 148-150 (further lit. in n. 548-554).

There are now about 130 Attic pieces – but how large was the number of imported Attic sarcophagi originally? There are many hints that today less than 2% of the original production or – in the case of Dalmatia – the original imports are preserved.²⁴ That means that, from 7,000 to 10,000 Attic sarcophagi might have been imported to Dalmatia, mostly to Salona, in the period from about 140/50 to 250/60 AD, that means, on average, 60 to 90 pieces every year.

The second way in which customers in Dalmatia could obtain a marble sarcophagus was to import a roughly cut chest and lid or a half finished sarcophagus. In both cases it was intended that sculptors in local workshops should finish the imported pieces. But in many cases the sarcophagi were used in the condition in which they had been imported.²⁵ In other cases the local sculptors smoothed the surface a little bit and cut some details, but did not finish the whole sarcophagus.²⁶ Sometimes

24 Some considerations of that problem e.g.: KOCH 2012, 3; KOCH 2015, 2 (with further lit.). – The totally different claim of RUSSELL 2011, 127 f., is written without any proofs and assertions, and obviously without any knowledge of the material.

25 e.g. KOCH 2013, 132 fig. 23; KOCH 2015, 2, 369 fig. 14.

26 e.g. KOCH 2013, 133 fig. 24.



Fig. 4.
Split, AM, Inv. A 1076/D
121: Meleager sarcophagus
imported from Athens
(photo: G. Koch)



Fig. 5.
Split, AM: Eros
sarcophagus imported from
Athens (photo: G. Koch)

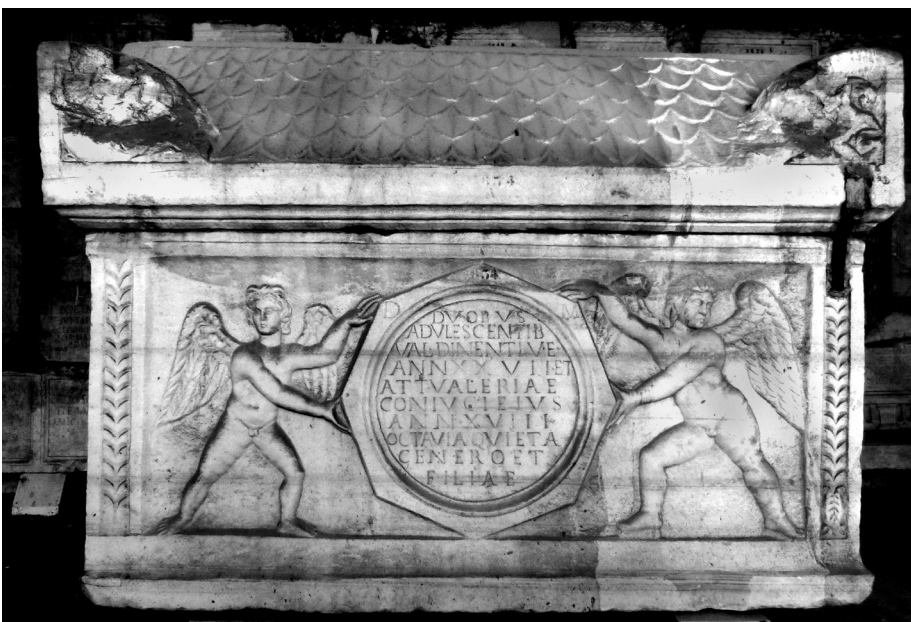


Fig. 6.
Split, AM, Inv. 1634 A:
sarcophagus with Eros
holding an octagonal tabula
made of Proconnesian
marble (photo: G. Koch)

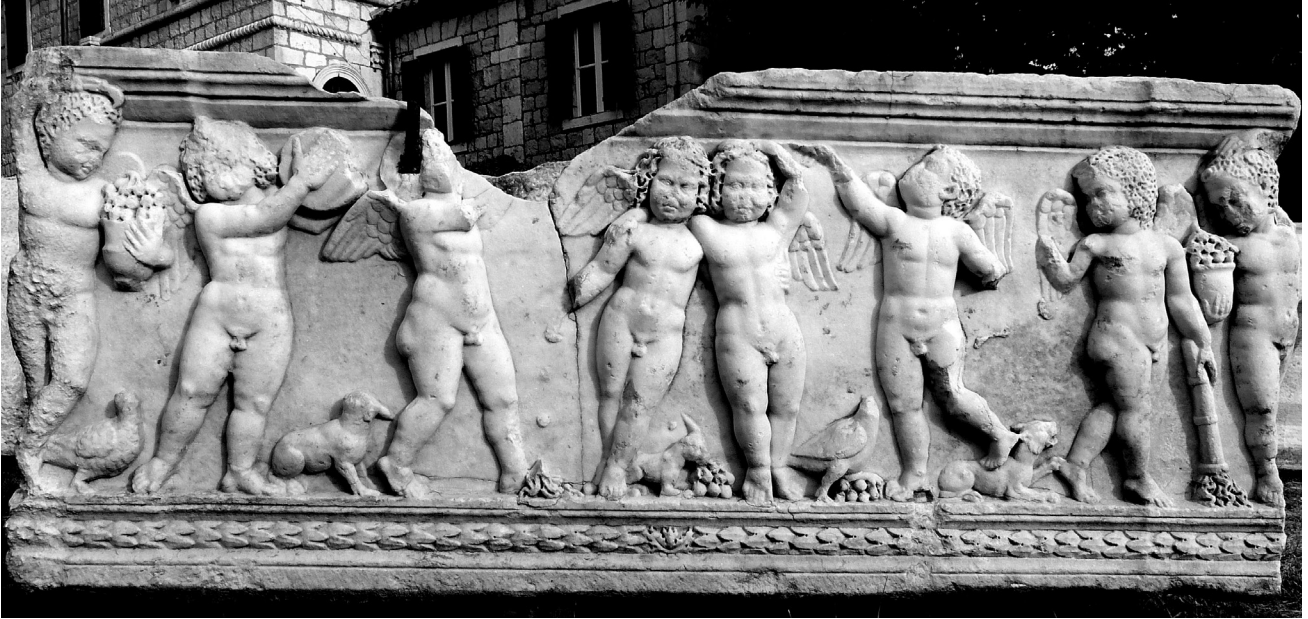


Fig. 7. Salona – Manastirine: sarcophagus with Erotes, presumably made of Proconnesian marble (photo: G. Koch)

the chest was more or less finished, but the lid remained in quarry condition.²⁷

Roughly cut chests and lids were produced for export on the islands of Thasos and Proconnesus. Examples from Thasos can be found, for example, in Rome, Campania and Thessaloniki, where the reliefs were executed.²⁸ In Dalmatia such examples have not yet been identified. A huge number of roughly cut chests and lids were produced on the island of Proconnesus and exported to many regions of the Roman Empire, in various numbers.²⁹ Perhaps a roughly cut chest and a lid from Proconnesus were used for a sarcophagus with the representation of two Erotes holding an octagonal tabula, with pilasters at the sides. The decoration of the front, the tiles on the lid and the figures on the acroteria were all executed in Salona by local sculptors (Fig. 6).³⁰ A sarcophagus with Erotes, found in 2007, seems to have

used a roughly cut chest from Proconnesus (Fig. 7).³¹ It was carved in a local workshop at Salona, and is a rather good copy of an imported Attic sarcophagus. The workmanship is closely connected with original Attic works; this would tend to suggest it might have been made by sculptors who came from Athens to Salona in the later 2nd century AD.³² Such sculptors can be recognized, e.g., in Sparta, Nikopolis, Beroia, Thessaloniki, Crete, Aphrodisias, Tyana, Cilicia, Syria, Rome and other sites.

Marble from the quarries of Pentelikon was used, for instance, for some sarcophagi in Rome, Beroia, Thessaloniki, Nikopolis and perhaps even in the province of Roman Syria. In Rome imported blocks of this marble were obviously used or re-used, even for sarcophagi with typical city-Roman decorations and representations.³³ But examples in Thessaloniki, Beroia, Nikopolis and Syria may have been roughly cut chests and lids, which were finished in local workshops.³⁴ Obviously the

27 e.g. CAMBI 2010, 128 no. 156 pl. 90 f.; KOCH 2013, 149 fig. 48-49.

28 HERRMANN 1990; KOCH 1993, 14 with n. 60-64; WURCH-KOZELJ, KOZELJ 1995, 39-47; HERRMANN, NEWMAN 1995; HERRMANN 1999; WURCH-KOZELJ, KOZELJ 2009; KEUREN 2011, 149-187 esp. 164-166.

29 e.g. ASGARI 1978; KOCH, SICHTERMANN 1982, 484-492; WALKER 1985; KOCH 1993, 15 (with n. 71-73); KEUREN 2011, 149-187, esp. 159-162; KOCH 2013; 110-118.

30 CAMBI 2010, 126 f. no. 150 pl. 87.

31 CAMBI 2013, 94, fig. 76.

32 KOCH 2012, 1; KOCH 2015, 2, 16 f.; KOCH (in print).

33 KOCH, SICHTERMANN 1982, 374 with n. 5; KOCH 1993, 12 f. with n. 50-52; KEUREN 2011, 149-187, esp. 163 f.

34 Thessaloniki: KOCH, SICHTERMANN 1982, 350 with n. 57-60; s. also "Register" 666; PAPAGIANNE 2007; PAPAGIANNE 2008; STEFANIDOU-TIVERIOU 2014, 50-54. 149-155 (Y. MANIATIS, D. TAMBAKOPOULOS). 255-257 Nr. 175. 176 pl. 82-83., Beroia: KOCH, SICHTERMANN 1982, 347 pl. 373; STEFANIDOU-TIVERIOU 2001, 117 f. 120 f. pl. 30, 1. 3., KOCH (in print).

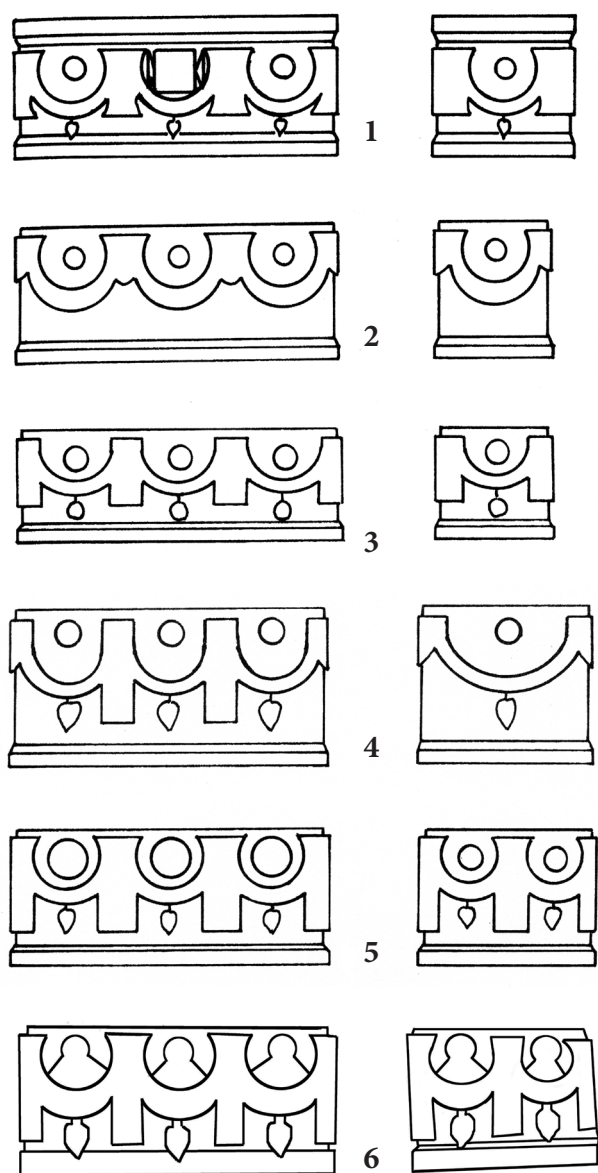


Fig. 8. Half-finished sarcophagi produced in Asia Minor: 1. Proconnesus – 2. Ephesos – 3. Hermos valley – 4. Caria – 5. Aphrodisias – 6. Hierapolis (drawing: H. Koch)

sculptors were, at least in part, Athenians, who went to the mentioned sites and produced *in situ* atticising sarcophagi for local customers using imported roughly cut chests and lids of Pentelic marble.³⁵ But unfortunately, no such roughly cut piece has been found in the quarries at Pentelikon, on the way down to Athens or in Athens. In Rome sarcophagi made of marble from Paros were also detected.³⁶ It would seem that the sculptors used or – more probably – re-used blocks of this precious material only for outstanding objects. In Dalmatia we have had no

finds in which marble from Pentelikon, Paros and Luna³⁷ was used for local sarcophagi.

Half-finished sarcophagi were produced in presumably six marble quarries in Asia Minor (Fig. 8).³⁸ Pieces from the Hermos valley, Hierapolis and Aphrodisias were not exported. But from Ephesos, Caria and above all from Proconnesus half-finished examples were exported over great distances.

Half-finished garland sarcophagi from Ephesos were exported to Aquileia, Rome and southern Italy.³⁹ In Augusta in Cilicia and in Berytus, e.g., garland sarcophagi were found, which seem to have been executed in local workshops that used half-finished examples from Ephesos.⁴⁰ In Dalmatia we have as yet been unable to identify a half-finished piece from Ephesos.

From Caria a very small number of half-finished garland sarcophagi were exported, to Adana, Laodikeia and Tyrus in Syria and to Alexandria, perhaps to Gallia too, but not to Dalmatia.⁴¹

On Proconnesus a huge number of half-finished sarcophagi and lids were produced, in various shapes

37 Even in Rome the percentage of Luna marble is relatively small, e.g.: KOCH 1993, 13 with n. 54-56 (pieces at London, Baltimore and New York); KEUREN 2011, 155-158 and *passim* (of the analysed 25 pieces in the MNR at Rome 14 are made of Proconnesian, 7 of Carrara and 4 of Pentelic marble).

38 ASGARI 1977; KOCH, SICHTERMANN 1982, 484-497 fig. 9; KOCH 1993, 162-168 with n. 649-662; KOCH 2010, 51-55. 83 fig. 18-22.

39 ASGARI 1977, 335-343 and *passim*; KOCH, SICHTERMANN 1982, 492-494 fig. 13; KOCH 1993, 165 f. with n. 654-656; KOCH 2010, 51-55 fig. 18, 2; 21.

40 ASGARI 1977, 340 fig. 25; KOCH, SICHTERMANN 1982, 493. 552 pl. 542 (Augusta, in Adana; it is still a problem, where it has been carved); KOCH 1989, 182 (Berytus).

41 ASGARI 1977, 343-345; KOCH, SICHTERMANN 1982, 494 f. fig. 15; KOCH 2010, 51-55 fig. 18,4., Adana: ASGARI 1977, 344 fig. 31; 358. 360; KOCH, SICHTERMANN 1982, 495. 552 with n. 18., Laodikeia (Tartous, Museum): KOCH – SICHTERMANN 1982, 495. 567 pl. 572; KOCH 1989, 181 f. fig. 27., Tyrus: KOCH 2015, 2, 151, fig. 15., Alexandria: ASGARI 1977, 343 f. fig. 32; 360; KOCH, SICHTERMANN 1982, 494 with n. 81., Lyon: DARBLADE-AUDOIN 2006, 176 no. AI.029 pl. 202, 1 (there is only an old drawing of the fragment in existence; therefore it is difficult to decide, if the piece was imported half-finished or – more likely – fully executed; the same problem exists with a large fragment in Modena, which perhaps came from Caria: KOCH, SICHTERMANN 1982, 492 with n. 65).

35 See n. 34.

36 KEUREN 2011, 168 f. with n.70.

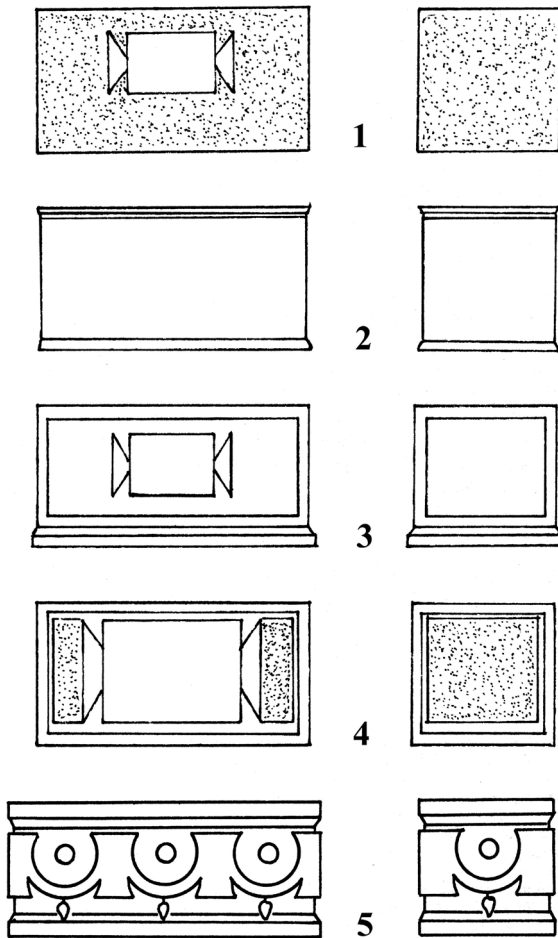


Fig. 9. Half-finished sarcophagi produced on Proconnesus (drawing: H. Koch)

and with different decorations (Figs. 9-10).⁴² In Salona a chest with a projecting base and a large *tabula ansata* made of Proconnesian marble have been found (Fig. 11),⁴³ as well as a chest and fragments with a projecting base, a *tabula ansata* and parts at the left and right side, which were only roughly cut in the quarry and executed in Salona.⁴⁴ Both decorations are otherwise unknown in marble, but there are parallels in the local production of limestone sarcophagi typical for Dalmatia.⁴⁵

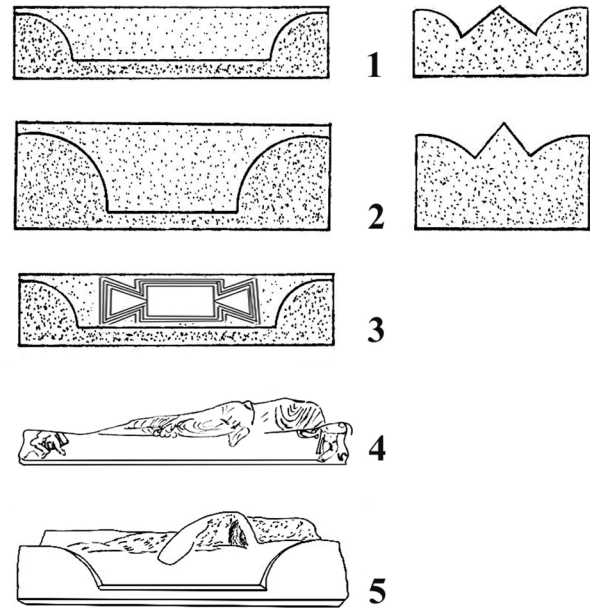


Fig. 10. Half-finished sarcophagus lids produced on Proconnesus: 1. roof-like lid, 2nd c. AD – 2. roof-like lid, 3rd c. AD – 3. roof-like lid with *tabula ansata* – 4. kline-lid – 5. lid of the “mixed” type (drawing: H. Koch)

Until a few years ago – which was very strange – in Dalmatia no half-finished garland sarcophagus with a roof-like lid from Proconnesus was known, while elsewhere this type is preserved in hundreds of examples (Fig. 12).⁴⁶ It is widespread from the Crimea, Moesia Inferior, Thracia, the northern, western and southern coast of Asia Minor, Syria, Palaestina, Kyrenaika to Macedonia in the east, and in exceptions there are pieces in southern Italy and Gallia in the west.⁴⁷

But in 2007 in Salona several fragments of at least one – perhaps two or even more – garland sarcophagi were found, obviously made of marble from Proconnesus, presumably executed in Salona from imported half-finished garland sarcophagi (Fig. 13).⁴⁸ This piece – or these pieces – is/are unique. Half-finished garland-sarcophagi from Proconnesus usually have a length of about 2 m to 2.20 m, a height of about 1 m and a depth of about

42 ASGARI 1977, 329-335 and *passim* (a map with the distribution in Asia Minor p. 355 fig. 53); KOCH, SICHTERMANN 1982, 484-492; ASGARI 1990; KOCH 1993, 163-165; KOCH 2010, 51-55 fig. 18, 1; 19-20. 22. 28; KOCH 2013, 110-118 fig. 20-31.

43 CAMBI 2010, 107 no. 52 pl. 32, 1; KOCH 2013, 117. 141 fig. 44; CAMBI 2013, 93 fig. 64.

44 CAMBI 2010, 104 no. 36 pl. 23, 2; 114 no. 88 pl. 50; CAMBI 2013, 93 fig. 67.

45 CAMBI 2010, pl. 26, 1; 28, 2; 37, 1 (and several others).

46 ASGARI 1977, 329-335 and *passim*; KOCH, SICHTERMANN 1982, 488 fig. 11; KOCH 2013, 111-113 fig. 20-22; KOCH 2015, 2, 366 fig. 11.

47 KOCH, SICHTERMANN 1982, 489-492; KOCH 1993, 163-165; KOCH 2013, 110-122; KOCH 2015, 3, 365-370., Crimea: IVANOVA 1976, 143 f. nr. 453-454 fig. 196-197; KOCH 2013, 110 n. 54., Southern Italy: TODISCO 1994; KOCH 2013, 110 n. 54., Gallia: GAGGADIS-ROBIN 2005, 232 f. nr. 80; KOCH 2012, 2, 103 pl. 50, 3-4; KOCH 2013, 110 n. 54.

48 Salona – Manastirine: unpubl.

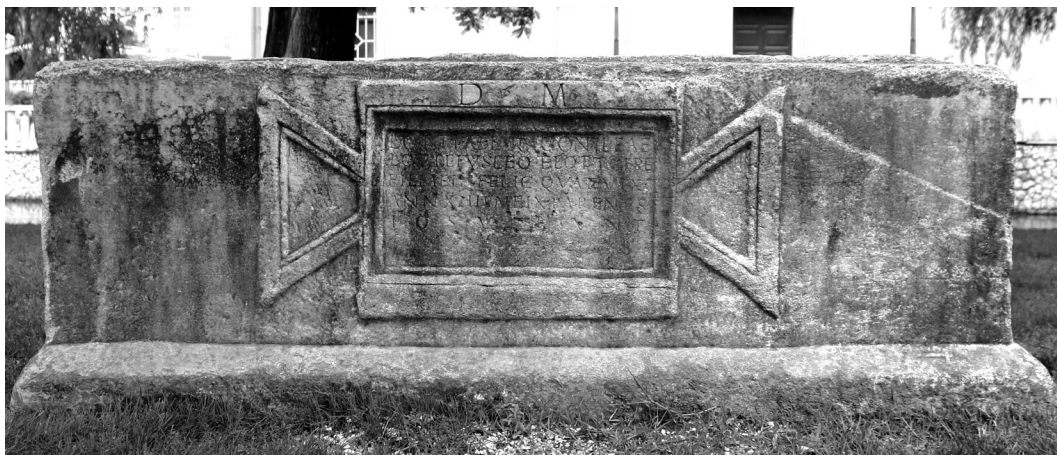


Fig. 11. Solin: sarcophagus made of Proconnesian marble (photo: G. Koch)

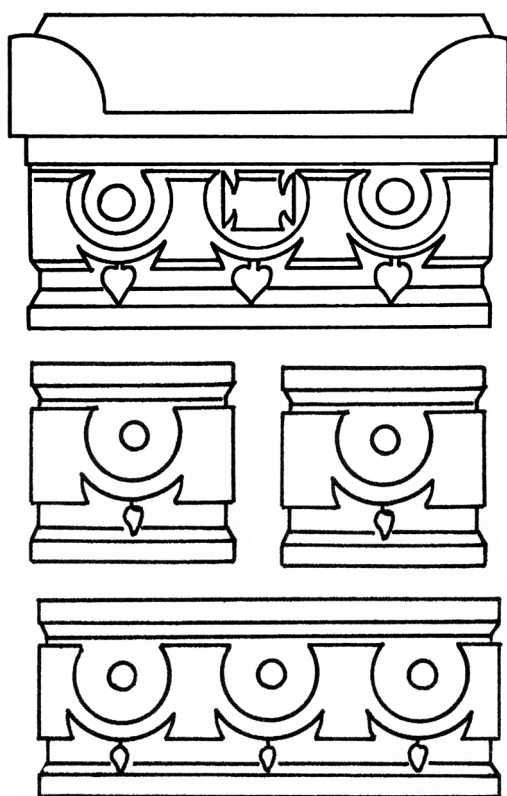


Fig. 12. Half-finished garland sarcophagus typical of Proconnesus (drawing: H. Koch)

1 m. With the fragments from Salona we are not yet sure at this moment, but the height may have been about 1.70 m, the depth also about 1.60 m, and the length about 3 m. As far as is known, there is no other such large half-finished garland-sarcophagus from Proconnesus in the whole Roman Empire. This means that the piece must have been executed on Proconnesus on special order by a rich person from Salona, probably in the first half of the 3rd century AD. Also in the local production of Salona the piece is unique, and we do not have any parallel for

the workmanship.⁴⁹ There must have been a workshop specialized in the execution of half-finished garland-sarcophagi from Proconnesus, and of the large number that must have been produced the fragments found in 2007 are to date the only preserved example/s.

Still lying in the church in Manastirine is a small lid, made of marble from Proconnesus, also a unique piece in the whole production of sarcophagi (Fig. 14).⁵⁰ Perhaps it belongs to the chest in the shape of a bathtub, *lenos*, also preserved in Manastirine as a fragment (Fig. 15).⁵¹ These two pieces show that on Proconnesus small *lenoi* were also prepared, destined for children, and lids with rounded sides in the so-called mixed type, with one or two reclining persons on a roof-like lid. Parallels exist only in Rome, and nowhere in the whole east of the empire.⁵² Perhaps it might be possible to identify in Rome too small sarcophagi destined for children, executed from imported half-finished pieces from Proconnesus.

Sarcophagus lids prepared on Proconnesus usually have the shape of a roof, lower in the 2nd and higher in the 3rd century AD.⁵³ A well-preserved example, found in Salona in 2007, is, at first sight, an example typical of Proconnesus (Fig. 16). The Erotes and palmettes on the acroteria, the tiles and the Gorgon heads in the pediments were executed in Salona. But the measurements are amazing, the length is 3.07 m, the height 1.22 m. Usually the length is 2 m to 2.20 m – here more than 3

49 Until now only one garland sarcophagus from Salona was known; see the text below, with n. 72.

50 CAMBI 2010, 100 no. 18 pl. 11; KOCH 2013, 151 fig. 63; CAMBI (in print) pl. 26, 4.

51 KOCH 2013, 120 f. 152 fig. 64.

52 e.g. KOCH 2013, 121 with n. 106; 152 fig. 65.

53 KOCH, SICHTERMANN 1982, 486 fig. 10, 1; KOCH 2010, 108 fig. 20, 2; KOCH 2013, 136 fig. 31, 1-2; KOCH 2015, 3, 365 fig. 10, 1.



Fig. 13.
Salona – Manastirine: fragment of a
huge garland sarcophagus made of
Proconnesian marble (photo: G. Koch)

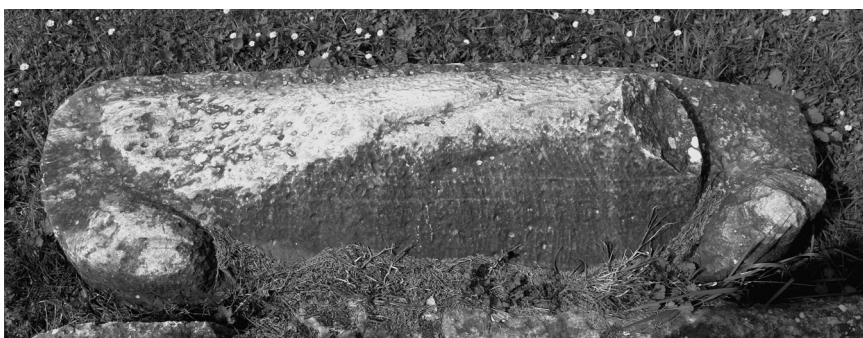


Fig. 14.
Salona – Manastirine: lid of a
sarcophagus with reclining figure
made of Proconnesian marble
(photo: G. Koch)



Fig. 15.
Salona – Manastirine: fragment of
a small *lenos* made of Proconnesian
marble (photo: G. Koch)



Fig. 16.
Salona – Manastirine: huge lid of a
sarcophagus made of Proconnesian
marble (photo: G. Koch)



Fig. 17.
Salona – Manastirine: lid of a child's sarcophagus made of Proconnesian marble (photo G. Koch)



Fig. 18.
Split, AM, Inv. 29 D: "Good Shepherd Sarcophagus" from Salona made of Proconnesian marble (photo: G. Koch)

m. This means that the lid and the lost sarcophagus were especially commissioned in Proconnesus for a customer in Salona. Until now there seems to only one parallel of such a big roof-like lid with its chest from Proconnesus in the whole Roman Empire, in Izmir.⁵⁴

As exceptions, not only huge chests and lids were produced on Proconnesus for export, but also small

pieces, destined for children. One example is the fragment of a lenos and the rounded lid of the mixed type in Manastirine (Figs. 14-15). Also in existence are a few rectangular chests and roof-like lids with acroteria. For instance one is in Izmit (Nikomedia), while one was even imported in Pantikapaion on the Crimea.⁵⁵ Two fragments adjoining each other, were found in 2007 in Salona; they may belong to this type, too (Fig. 17).⁵⁶ Presumably, a small chest destined for a child must have

54 Izmir, AM, Inv. Inv. 17053; unpublished (chest: height 1.78, length 3.13, depth 1.72 m; fragment of the lid: height 1.60 m). – I thank Dr. N. Asgari for the information, that there are pieces of a comparable size still on Proconnesus, which will be included in her publication.

55 KOCH 2008, 1, 170 with n. 34. 36; 180 fig. 5-6; KOCH 2013, 121 f. 154 fig. 68-69. – Two examples are in Tekirdağ, Museum: unpublished.

56 Salona, Manastirine: KOCH 2013, 121 f. 153 fig. 67.

been carved to order in the quarries on Proconnesus; unfortunately, no piece together with a low roof-like lid is preserved, or yet been found, in Salona.

The lid of the well-known “Good Shepherd Sarcophagus” from Salona was thought to be a unique combination of a roof-like combined with a kline-like lid (Figs. 18-20).⁵⁷ But it is possible to identify some more examples of this mixed type in Dalmatia,⁵⁸ and one example in Rome can be added,⁵⁹ while one piece is still on Proconnesus.⁶⁰ Thus we can be sure that this strange shaped lid was produced half-finished on Proconnesus, above all for export to Dalmatia (Fig. 10,5).

The lid of the “Good Shepherd Sarcophagus” was used in the state in which it arrived from Proconnesus. But another half-finished lid of that type, a find of 2007, was executed in Salona by an excellently trained sculptor (Fig. 21).⁶¹ The lid of the “Good Shepherd Sarcophagus” has a length of 2.53 m, while a lid at the south side of the Tusculum in Manastirine has a length of 2.55 m.⁶² The third one, which is rather well preserved, is much smaller (2.07 m).⁶³ But the newly found lid has a length of 2.68 m. Therefore the three big pieces must have been produced on Proconnesus to special order from wealthy customers in Salona. In Salona two of them were executed by skilled artists, who are not known to us by other sarcophagi or other works of sculpture from the town or even the whole of Dalmatia. The artists of the newly found lid and, as far as it seems, also of the “Good Shepherd Sarcophagus” obviously came from Athens and Dokimeion in the later 3rd century AD.⁶⁴

The Hippolytos sarcophagus was produced in Rome about 300 AD, using a roughly cut piece from Proconnesus, and after that exported to Salona (Fig. 1).⁶⁵ It has a kline-like lid, half-finished, whereas the chest is excellently finished. There are some hints, that this type of lid was also prepared in the quarries of Proconnesus, as examples from Viminacium in Moesia Superior, Tyrus or Rome may show (Fig. 10, 4).⁶⁶

Among the finds of 2007 in Salona are fragments of the base of a huge architectural sarcophagus, comparable to the “Good Shepherd Sarcophagus”. The marble is obviously Proconnesian, and it seems that at least parts are unfinished.⁶⁷ Typical of Salona is a small group of sarcophagi with an architectural decoration, of which there are no close parallels in any other region of the Roman Empire.⁶⁸ The “Good Shepherd Sarcophagus” is the richest sarcophagus from the whole of the Roman Empire, and is absolutely unique. All sarcophagi in Salona with architectural decoration seem to be made from marble from Proconnesus. Especially on Proconnesus, half-finished sarcophagi with a special architectural decoration were produced for northern Italy, for example, found only in that region and different from the examples in Salona.⁶⁹ That means, that – or so it would seem – on Proconnesus sarcophagi with architectural decoration prepared especially for Dalmatia were also produced, obviously of two or three or even more different types.⁷⁰

Nearly all marble sarcophagi in Dalmatia can be distributed to one of the categories already known, even if several pieces are unusual or even outstanding. It is possible to discern pieces that were imported with completely executed reliefs and pieces that were carved in Dalmatia. Examples with completely executed reliefs came from Rome, Athens and Dokimeion. All the roughly

57 Split, AM, Inv. 29 D: KOCH, SICHTERMANN 1982, s. „Register“ 665, pl. 351; DRESKEN-WEILAND 1998, 105 f. no. 297 pl. 97; KOCH 2000, 550. 552 fig. 80; s. „Register“ 659; KOCH 2009, 123 f. 137 fig. 9-10; CAMBI 2010, 128 no. 156 pl. 90 f.; KOCH 2013, 119-121. 149 fig. 58-59; KOCH 2015, 3, 370; CAMBI 2013, 95 fig. 82; CAMBI (in print) pl. 26, 5-6; 27, 1.

58 MARIN 2002, 16 f. pl. 37; KOCH 2009, 123 f. 138 fig. 11-12; CAMBI 2010, 97 no. 1 pl. 1; 97; KOCH 2013, 123. 138 fig. 11-12; KOCH 2015, 3, 370; CAMBI (in print) pl. 25. 26, 1-3.

59 SANTA MARIA SCRINARI 1995, 124 fig. 146; KOCH 2009, 123 f. 138 fig. 14; KOCH 2013, 120. 150 fig. 60; KOCH 2015, 3, 370.

60 ASGARI 1992; KOCH 2013, 97; KOCH 2015, 3, 370.

61 CAMBI 2013, 93 fig. 66.

62 CAMBI 2010, 102 f. no. 29 pl. 18 f.; KOCH 2009, 138 fig. 11-12; CAMBI 2013, 93 fig. 65; CAMBI (in print).

63 CAMBI 2010, 97 no. 1 pl. 1; 97; CAMBI (in print).

64 They seem to be parallels for the „late antique group“ of sarcophagi in Rome: KOCH, SICHTERMANN 1982,

152. 258 f. 266. 474 f.; KOCH 1993, 76. 78. 94. 96. 110. 120; KOCH 2000, 259 with note 40; 346 f. with note 144-147; 418 f. with note 119.

65 See above note 16.

66 KOCH, SICHTERMANN 1982 pl. 185. 207. 213; KOCH 1993, 77 fig. 47; KOCH 2009, 124-126. 139 fig. 16. 18; KOCH 2013, 114-116. 134-136 fig. 27-30. 31, 4; 32.

67 Salona – Manastirine: unpublished (preserved height ca. 0.55, length ca. 3.00, depth 1.63 m).

68 CAMBI 2010, 29 fig. 18; 266 pl. 13-15. 16, 1-2; 88, 1; 89-91. 101, 2; 103. 109, 2 (?); 112; CAMBI 2013, 95 fig. 83.

69 GABELMANN 1973; KOCH, SICHTERMANN 1982, 283-288 fig. 5; KOCH 1993, 125-128; CAMBI 2010, 29 fig. 19.

70 CAMBI 2010, 29 fig. 18, could discern five different types; it is not sure, if for all of them were produced half finished pieces on Proconnesus.

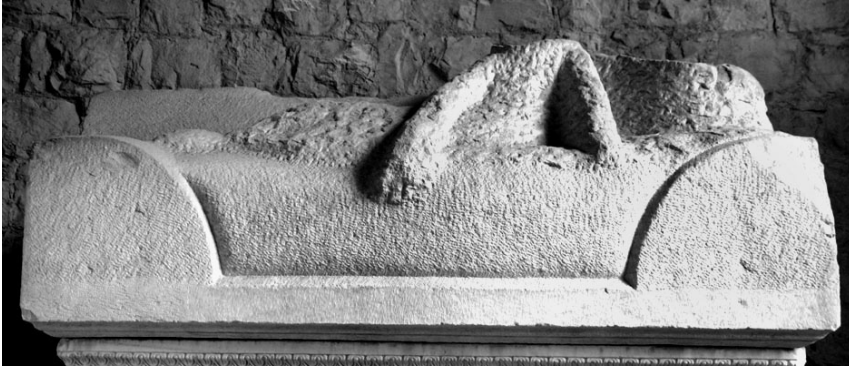


Fig. 19-20.
Lid of the sarcophagus of fig.
18 (photo: G. Koch)



Fig. 21.
Salona – Manastirine: lid of
a sarcophagus of the “mixed”
type, made of Proconnesian
marble (photo: G. Koch)



Fig. 22.
Split, AM, Inv. 782 A: fragment
of a sarcophagus with strigils and
tabula made of Proconnesian
marble (photo: G. Koch)



Fig. 23-24. Split, AM: fragments of the sarcophagus of Lucius Artorius Castus made of Proconnesian marble (photo: N. Cambi)

cut chests and lids that were finished in local workshops in Dalmatia came from Proconnesus. The half-finished sarcophagi, of various types, that were carved in local workshops, came also from Proconnesus. Two problems remain open. The first are the fragments with vertical strigiles, obviously made of marble from Proconnesus (Figs. 22-24):⁷¹ were roughly cut chests used, and was the decoration carved in Salona? Or were half-finished chests produced for this type too on Proconnesus?

The second problem is a relatively large fragment of a child's sarcophagus, which, among the nearly 200 local sarcophagi in Dalmatia, is the only one to be decorated with garlands (Figs. 25-26).⁷² Obviously the front was decorated with two garlands, each supported by two Erotes, and at the only preserved left small side

is a garland hanging on pilasters. The decoration of the front is unique not only in Salona, but in the whole of the Roman Empire.⁷³ But the motif of the small side is not uncommon in Dalmatia.⁷⁴ The marble has not yet been analysed. At this moment one can only say that the piece cannot be an import from one of the centres of production or from one of the provinces, and also, that it was not executed from an imported half-finished chest. It must have been carved in Salona, that is, in a workshop previously unknown to us, which was active in the second half of the 2nd century AD (if one compares city-Roman sarcophagi, one could suggest a date of about 170 AD).

Summary

Concerning the sarcophagi – and only this group of sculptures is dealt with in this paper – the Roman province of Dalmatia is highly interesting. There are:

- imports of completely executed marble sarcophagi from the three centres of production,
- sarcophagi executed locally from imported roughly cut chests and lids made of marble,
- sarcophagi executed from half-finished examples from Proconnesus, with various decorations and
- local sarcophagi made of local limestone, with different representations, in a large number.

The new finds of 2007 throw totally new light on the art of sculpture in Dalmatia in the 2nd and 3rd century AD. This is demonstrated, for instance, by the sarcophagus with Erotes, the fragments of huge garland sarcophagi, the well carved lid of the mixed type and the huge roof-like lid. These pieces show that in Salona there were some excellently trained sculptors, who could work with marble from Proconnesus, who could produce works of good quality, with unusual representations and decorations and in outstanding sizes, all according to commissions from wealthy customers in Salona. The locally produced marble sarcophagi in Salona can give a further hint, that most – or (nearly) all – pieces were carved to special order. Therefore the situation was the same in Dalmatia as it was in Dokimeion, Athens, Rome and most of the provinces. Sarcophagi were made – as a rule – to special order, not to stock.

In addition Salona and Dalmatia are highly interesting for another aspect, that is, concerning the production of sarcophagi in the quarries on the island of Proconnesus. It is difficult to understand, how it might have worked, but there must have been some amazing

71 CAMBI 2010, 104 no. 37 pl. 24, 1; 122-125 no. 129. 130. 140 pl. 75, 2; 76, 1; 81, 3; CAMBI 2013, 93 fig. 69; CAMBI 2014, 32 f. fig. 8-9., Cf. the examples made of limestone: CAMBI 2010, 130 no. 164 pl. 95; 134 no. 181 pl. 106; CAMBI 2013, fig. 68.

72 CAMBI 2010, no. 141 pl. 82.

73 Unfortunately the projecting part at the right of the column could not yet be identified.

74 CAMBI 2010, pl. 12, 2-3; 20, 2; 49.



connections between Salona and Proconnesus, making it possible to order pieces in special sizes – normal, huge, small – with special shapes, for example lids of the ‘mixed’ type, even with rounded sides for children’s sarcophagi, and with various half-finished decorations, a large tabula ansata, a tabula with roughly cut fields at the sides, an architectural decoration with one or three arcades and so on. Thus the marble sarcophagi from Dalmatia enrich our knowledge about the production of marble sarcophagi on Proconnesus in general.



Fig. 25-26. Split, AM (without inv.): fragment of a child’s sarcophagus made of marble (photo: G. Koch)

REFERENCES

- AMBROGI A. 1990: "Sarcofagi e urne con ghirlande della prima età imperiale", *RM* 97, 163-196.
- AMBROGI A. *et al.* 2008: *Sculture antiche nell'Abbazia di Grottaferrata*, Roma, 182-184, no. 101-102.
- ASGARI N. 1977: "Die Halbfabrikate kleinasiatischer Girlandensarkophage und ihre Herkunft", *AA* 1977, 329-380.
- ASGARI N. 1978: "Roman and early Byzantine marble quarries of Proconnesus", in *Proceedings of the X International Congress of Classical Archaeology*, Ankara – Izmir 1973, Ankara, 467-480.
- ASGARI N. 1990: "Objects de marbre finis, semi-finis et inachevés du Proconnèse", in M. WALKENS (ed.): *Pierre éternelle du Nil au Rhin: Carriers et préfabrication*, Bruxelles, 106-126.
- ASGARI N. 1992: "Prokonnesos: 1991 Çalışmaları", *Araştırma Sonuçları Toplantısı* 10, 487-509, esp. 491 f. 506 fig. 18-19.
- BOSCHUNG D. 1981: *Antike Grabaltäre aus den Nekropolen Roms*, Bern.
- BRANDENBURG H. 1978: "Der Beginn der stadtrömischen Sarkophagproduktion der Kaiserzeit", *JdI* 93, 277-377.
- CAMBI N. 1977: "Die stadtrömischen Sarkophage in Dalmatien", *AA* 1977, 444-459.
- CAMBI N. 1988: *Atički Sarkofazi u Dalmaciji*, Split.
- CAMBI N. 1993: "New Attic Sarcophagi in Dalmatia", in G. KOCH (ed.): *Grabeskunst der römischen Kaiserzeit*, Mainz, 77-90 pl. 29-35.
- CAMBI N. 2000, 1: "Ulomci antičkih sarkofaga s Koločepa", in A. MILOŠEVIĆ (ed.): *Oltarna ograda s Koločepa*, Split, 5-8 fig. 2-3.
- CAMBI N. 2000, 2: "A Strange Sarcophagus Fragment in the Archaeological Museum Split", in T. MATTERN (ed.): *Munus. Festschrift H. Wiegartz*, Münster, 67-70 pl. 15.
- CAMBI N. 2005: *Kiparstvo rimske Dalmacije – The Sculpture of the Roman Province of Dalmatia*, Split.
- CAMBI N. 2007: "Neue attische Sarkophag-Fragmente aus Dalmatien", in G. KOCH (ed.): *Akten des Symposiums des Sarkophag-Corpus*, Marburg, 2.-7. Juli 2001, *Sarkophag-Studien* 3, Mainz, 165-171 pl. 56-59.
- CAMBI N. 2009: "Fragmenti atičkog sarkofaga iz Pule (Fragments of an Attic Sarcophagus from Pula)", *HistriaAnt* 18, 1, 305-308.
- CAMBI N. 2010: *Sarkofazi lokalne produkcije u rimskoj Dalmaciji (od II. do IV. stoljeća) – Die Sarkophage der lokalen Werkstätten im römischen Dalmatien (2. bis 4. Jh. n.Chr.)*, Split.
- CAMBI N. 2013: "Pregled razvoja nadgrobobnih spomenika u Dalmaciji – A review of the development of the funerary monument in Dalmatia", in N. CAMBI, G. KOCH (eds.): *Sepulkralna skulptura zapadnog Ilirika i susjednih oblasti u doba Rimskog Carstva – Funerary Sculpture of the Western Illyricum and Neighbouring Regions of the Roman Empire*. *Zbornik radova s međunarodnog simpozija održanog od 27. do 30. rujna 2009*, Split, Split 2013, 17-99.
- CAMBI N. 2014: "Lucije Artorije Kast: Njegovi grobišni areal i sarkofag u Postrani (Sveti Martin) kod Splita – Lucius Artorius Castus' Mausoleum and Sarcophagus at Podstrana near Split", in N. CAMBI, J. MATTHEWS (eds.): *Lucius Artorius Castus and the King Arthur Legend. Proceedings of the International Scholarly Conference from 30th of March to 2nd of April 2012 – Lucije Artorije Kast*. *Zbornik radova s međunarodnog znanstvenog skupa održanog u Postrani od 30. ožujka do 2. travnja 2012*, Split, 29-40.
- CAMBI N. (in print): "Sarkophag-Deckel aus prokonnesischem Marmor im "gemischten" Typus", in G. KOCH (ed.): *Akten des Symposiums des Sarkophag-Corpus*, Marburg.
- CANDILIO D., BERTINETTI M. 2012: "Tutela, conservazione e restauro del sarcofago di Palazzo Baldassini", *Bolletino di Archaeologia on line* 3, 3-4, 146-152.
- DARBLADE-AUDOIN M.-P. 2006: *Lyon. Nouvel Espérandieu*, vol. II, Paris.
- DRESKEN-WEILAND J. 1998: *Repertorium der christlich-antiken Sarkophage II. Italien mit einem Nachtrag Rom und Ostia*, Dalmatien, Museen der Welt, Mainz.
- GABELMANN H. 1973: "Die Werkstattgruppen der oberitalischen Sarkophage", *BjB Beih.* 34, Bonn.
- GAGGADIS-ROBIN V. 2005: *Les sarcophages païens du musée de l'Arles antique*, Arles.
- GASPARRI C. 2013: "Un nuovo sarcofago con Nekya tipo Villa Giulia", *RM* 119, 201-220.
- HERDEJÜRGEN H. 1981: "Frühkaiserzeitliche Sarkophage in Griechenland", *JdI* 96, 413-435.
- HERRMANN J. J. 1990: "Thasos and the Ancient Marble Trade: Evidence from American Museums", in: J. WALSH (ed.): *Marble. Art Historical and Scientific Perspectives on Ancient Sculpture*. *Papers Delivered at a Symposium Organized by the Departments of Antiquities and Antiquities Conservation and Held at the J. Paul Getty Museum April 28-30, 1988*, Malibu, 73-100.

- HERRMANN J. J. 1999: “The exportation of dolomite marble from Thasos”, in C. KOUKOULE-CHRY-SANTHAKI, R. ÉTIENNE (eds.): *Thasos. Protes yles kai technologia apo tous proistorikous chronous os semera – Thasos. Matières premières et technologie de la préhistoire à nos jours*, Paris, 57-74.
- HERRMANN J. J., NEWMAN R. 1995: “The exportation of dolomite sculptural marble from Thasos: evidence from Mediterranean and other collections”, in *ASMOSIA III*, 73-86.
- VON HESBERG H. 1982: *Römische Grabbauten*, Darmstadt.
- IVANOVA A. P. 1976: *Anticnaja Skulptura Chersonesa*, Kiew.
- VAN KEUREN F. 2011: “Multimethod Analyses of Roman Sarcophagi in the Museo Nazionale Romano, Rome”, in J. ELSNER, J. HUSKINSON (eds.): *Life, Death and Representation. Some New Work on Roman Sarcophagi*, *Millennium Studies* 29, Berlin, 149-187.
- KLEINER D. E. E. 1987: *Roman Imperial Funerary Altars with Portraits*, Rome.
- KOCH G. 1977: “Ein Endymionsarkophag in Arles”, *BjB* 177, 245-270.
- KOCH G. 1982: “Östliche Sarkophag in Rom”, *BjB* 182, 167-208.
- KOCH G. 1983: “Ein attischer Meleagersarkophag aus Arethousa in Syrien”, *DaM* 1, 137-148, esp. 145 pl. 35d.
- KOCH G. 1984: “Hippolytossarkophag in Split”, *Disputationes Salonitanae II*, *VjesDal* 77, 1984 (1986), 151-159.
- KOCH G. 1989: “Der Import kaiserzeitlicher Sarkophag in den Provinzen Syria, Palaestina und Arabia“, *BjB* 189, 161-211.
- KOCH G. 1993: *Sarkophag der römischen Kaiserzeit*, Darmstadt.
- KOCH G. 2000: *Frühchristliche Sarkophag*, HdArch, München.
- KOCH G. 2006: “Zu einem Sarkophag-Fragment in Frankfurt”, in H. von STEUBEN *et al.* (ed.): *Mouseion. Beiträge zur antiken Plastik. Festschrift zu Ehren von P.C. Bol, Möhnesee*, 411-421.
- KOCH G. 2008,1: “Kinder-Sarkophag der römischen Kaiserzeit in Kleinasien”, *Adalya* 11, 165-187.
- KOCH G. 2008,2: “Ein Jahreszeiten-Sarkophag aus Nordafrika”, in G. FRANEK *et al.* (ed.): *Thiasos. Festschrift für E. Pochmarski zum 65. Geburtstag*, Wien, 457-466.
- KOCH G. 2010: *Türkiye’deki Roma Imperatorluk Dönemi Lahitleri – Sarkophag der Römischen Kaiserzeit in der Türkei*, Istanbul.
- KOCH G. 2012, 1: “Einige allgemeine Überlegungen zur Problematik “Original – Kopie” bei den kaiserzeitlichen Sarkophagen”, in: KOCH, F. BARATTE (eds.): *Akten des Symposiums “Sarkophag der Römischen Kaiserzeit: Produktion in den Zentren – Kopien in den Provinzen” – “Les sarcophages romains: centres et périphéries”*, Paris, 2. – 5. Nov. 2005. *Sarkophag-Studien* 6, Ruppolding, 1-14.
- KOCH G. 2012, 2: “Zu einigen kaiserzeitlichen Sarkophagen in Arles: Sind sie Importe aus Rom, Athen und Kleinasien oder lokale Arbeiten?”, in KOCH, BARATTE *op. cit.* 95-110.
- KOCH G. 2012,3: “Οι αττικές σαρκοφάγοι και η σημασία τους για την τέχνη της αυτοκρατορικής εποχής”, in T. STEPHANIDOU-TIBERIOU *et al.* (ed.): *Κλασική παράδοση και νεωτερικά στοιχεία στην πλαστική της ρωμαϊκής Ελλάδας, Πρακτικά Διεθνούς Συνεδρίου, Θεσσαλονίκη, 7-9 Μαΐου 2009*, Thessaloniki, 35-56.
- KOCH G. 2013: “Sarcophagi of Roman Imperial Times in the Provinces of the Balkans: Imports, Local Copies and Imitations, Native Traditions”, in N. CAMBI, G. KOCH (ed.): *Sepulkralna skulptura zapadnog Ilirika i susjednih oblasti u doba Rimskog Carstva. Zbornik radova s međunarodnog simpozija održanog od 27. do 30. rujna 2009. Split – Funerary Sculpture of the Western Illyricum and Neighbouring Regions of the Roman Empire. Proceedings of the International Scholarly Conference Held in Split from September 27th to the 30th, 2009*, Split, 101-156.
- KOCH G. 2015,1: “Die attischen Sarkophag und ihre Bedeutung für die Kunst der römischen Kaiserzeit”, in B. POROD, G. KOINER (ed.): *Römische Sarkophag. Akten des Internationalen Werkstattgesprächs*, 11. – 13. Oktober 2012 (Graz). *Schild von Steier, Beiheft* 5, Graz, 8-24.
- KOCH G. 2015,2: “Einige Überlegungen zum Verhältnis der erhaltenen kaiserzeitlichen Sarkophag zur ursprünglichen Produktion”, in B. POROD, G. KOINER (ed.): *Römische Sarkophag. Akten des Internationalen Werkstattgesprächs*, 11. – 13. Oktober 2012 (Graz). *Schild von Steier, Beiheft* 5, Graz, 144-162.
- KOCH G. 2015,3: “Some Considerations on the Sarcophagi of Roman Imperial Times in the Provinces of the Balkans, especially Moesia Inferior”, in C.-G. ALEXANDRESCU (ed.): *Cult and Votive Monuments in the Roman Provinces. Proceedings of the 13th International Colloquium on Roman Provincial Art, Bucharest – Alba Iulia – Constanta, 27th of May – 3rd of June 2013*, Cluj-Napoca, 359-373.

- OCH G. (in print): "Μια «αττική» σαρκοφάγος στο Beit ed-Dine (Λιβανός), (An Attic sarcophagus in Beit ed-Dine [Lebanon])", in P. KARANASTASE *et al.* (ed.): Proceedings of the symposium «Γλυπτική και κοινωνία στη Ρωμαϊκή Ελλάδα: Καλλιτεχνικά προϊόντα, κοινωνικές προβολές», Rethymnon, 26.-28. Sept. 2014 (in print).
- KOCH G., SICHTERMANN H. 1982: Römische Sarkophage. Handbuch der Archäologie, München.
- LAUBE I. 2012: Skulptur des Hellenismus und der Kaiserzeit aus Ägypten. Expedition Ernst von Sieglin. Die Sammlungen in Dresden, Stuttgart und Tübingen, München.
- MARIN E. (ed.) 2002: Longae Saloniae, Split.
- PALMETIERI A. 2013: "Addenda ai sarcofagi romani della prima età imperiale. Nuovi dati dall'area campana," RM 119, 169-199.
- PAPAGIANNE E. 2007: "Der Eroten-Sarkophag Inv. 1248 des Archäologischen Museums in Thessaloniki", in G. KOCH (ed.): Akten des Symposiums des Sarkophag-Corpus, Marburg, 2.-7. Juli 2001, Sarkophag-Studien 3, Mainz, 187-192, pl. 64, 65, 1-2.
- PAPAGIANNE E. 2008: Αττικές σαρκοφάγοι στη Θεσσαλονίκη: οι πρώιμες εισαγωγές και οι επιδράσεις στην τοπική παραγωγή, Εγνατία 12, 179-193, fig. 12-18.
- RENDIĆ-MIOČEVIĆ A. 2004: "Ulomak antičkog sarkofaga iz Bačke na otoku Krku s primorom iz trojanskog rata (Fragment of an attic marble sarcophagus from Bačka on the island of Krk showing a scene from the Trojan wars)", Vjesnik Arheološkog Muzeja u Zagrebu 37, 191-203.
- ROCK *et al.* 1984 = ROOK T., WALKER S., DENSTON C. B.: "A Roman Mausoleum and Associated Marble Sarcophagus and Burials from Welwyn, Hertfordshire", Britannia 15, 143-162.
- RUSSELL B. 2011: "The Roman Sarcophagus 'Industry': a Reconsideration", in J. ELSNER, J. HUSKINSON (eds.): Life, Death and Representation. Some new work on Roman sarcophagi. Millennium-Studien 29, Berlin 2011, 119-147.
- RUSSELL B. 2013: The Economics of the Roman Stone Trade, Oxford.
- SANTA MARIA SCRINARI V. 1995: Il Laterano Imperiale II. Dagli „horti Domitiae“ alla Capella cristiana, Città del Vaticano.
- SINN F. 1987: Stadtrömische Marmorurnen, Mainz.
- STEFANIDOU-TIVERIOU T. 2001: "Kleinasiatische Einflüsse bei römischen Sarkophagen in Makedonien", in C. REUSSER (ed.): Griechenland in der Kaiserzeit. Neue Funde und Forschungen zu Skulptur, Architektur und Topographie, Kolloquium zum 60. Geburtstag von Prof. Dr. Willers 1998, Bern, 115-123.
- STEFANIDOU-TIVERIOU T. 2014: Die lokalen Sarkophage aus Thessaloniki, Sarkophag-Studien 8, Ruhpolding.
- STOWELL PEARSON L., HERZ N. 1992: "Isotopic Analysis of a Group of Roman Gorgo Sarcophagi", in: M. WAELKENS *et al.* (ed.): Ancient Stones: Quarrying, Trade and Provenance. Interdisciplinary Studies on Stones and Stone Technology in Europe and the Near East from the Prehistoric to the Early Christian Period, Acta Archaeologica Lovanensia, Monographiae 4, Leuven, 283-286.
- TODISCO L. 1994: "Un sarcofago semilavorato di fabbrica proconnesia in Apulia", in L. TODISCO, Scultura antica e reimpiego in Italia meridionale I. Puglia, Basilicata, Campania, Bari 173-185.
- TOYNBEE J. M. C. 1971: Death and Burial in the Roman World, London.
- WALKER S. 1985: "The Marble Quarries of Proconnesos: Isotopic Evidence for the Age of the Quarries and for Lenos-Sarcophagi Carved at Rome", in P. PENSABENE (ed.): Marmi Antichi. Problemi d'Impiego, di Restauro e d'Identificazione, Studi Miscellanei 26, 1981-1983, Roma, 57-68.
- WALKER S. 1990: Catalogue of Roman Sarcophagi in the British Museum, CSIR Great Britain II 2, London.
- WALKER S., MATTHEWS K. 1990: "Stable Isotope Analysis of Carrara Marble: Some Questions for the Archaeologist", in J. WALSH (ed.): Marble. Art Historical and Scientific Perspectives on Ancient Sculpture. Papers Delivered at a Symposium Organized by the Departments of Antiquities and Antiquities Conservation and Held at the J. Paul Getty Museum April 28-30, 1988, Malibu, 125-134.
- WURCH KOZELJ M., KOZELJ T. 1995: "Roman quarries of Apse-Sarcophagi of the second and third centuries", in ASMOSIA III, 39-47.
- WURCH KOZELJ M., KOZELJ T. 2009: "Quelques sarcophages rectangulaires d'époque impériale, des carrières thasiennes aux nécropoles de Thasos", in ASMOSIA VII, BCH suppl. 51, Paris-Athens, 289-307.