

PAPERS AND MONOGRAPHS OF THE FINNISH INSTITUTE AT ATHENS VOL. XVI

# THE SPARTIA EXPEDITION II ENVIRONMENT AND SETTLEMENT PATTERNS



Edited by Björn Forsén and Esko Tikkala

© Suomen Ateenan-Instituutin säätiö (Foundation of the Finnish Institute at Athens),  
Helsinki 2011

ISSN 1237-2684  
ISBN 978-952-67211-2-5

Printed in Finland by Ekenäs Tryckeri

Cover: Megalo Karvounari seen from the northeast. Courtesy of the 32nd Ephorate for  
Prehistoric and Classical Antiquities

Layout: Esko Tikkala

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# Glass from Agios Donatos

Jeanette Lindblom

## Introduction

The amount of glass sherds found during the survey and excavation of test trenches of the Thesprotia Expedition is rather marginal. The only exception is the fortress on Agios Donatos (PS 25), where above all the tower (Trench A) produced a more substantial number of glass fragments. The small amount of glass found is not surprising, as glass until the first century AD was to a large degree a luxury item. It was only then that the evolution and spread of the invention of blowing glass into shapes made the production of glass items quicker and cheaper and also enabled production in larger quantities, eventually making glass a more common household item.<sup>1</sup> Even so, it usually occurs in much lesser quantities than e.g. pottery.

The study of the glass from Agios Donatos was made in the summer of 2007 and this report is based on the information collected up till then.<sup>2</sup> Glass found after that is not included.

## Glass from the tower

The glass fragments found in Trench A in the tower area were mostly relatively small. Usually there were only a few fragments or even just a single piece representing the separate vessels. Around 130 fragments with some sort of diagnostic feature or distinguishable characteristic could be identified. These represent an estimated minimum number of 46 different vessels or glass items.<sup>3</sup> In comparison it can be mentioned that Trench B (the gate) yielded only some 15 fragments from an estimated minimum number of nine items. Neither did the trenches excavated in 2008 and 2009 (C, D, E, F, G and H) produce much glass – according to preliminary notes altogether only some 25 fragments.<sup>4</sup>

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<sup>1</sup> Cf. von Saldern *et al.* 1974, 86.

<sup>2</sup> I am grateful to Björn Forsén and Daniel Keller for commenting on different drafts of this chapter. All illustrations are by the author, but have been prepared for publication by Esko Tikkala.

<sup>3</sup> The estimated minimum number (EMN) represents the amount of vessels which with certainty can be differentiated among the assembly of fragments. This does not indicate that the material might actually represent a larger number of original vessels. But if two fragments come from the same type of vessel and they cannot exclusively be shown to come from separate items, they are only counted as one vessel. Simply put, e.g. a base and a rim in identical fabric and from the same type of vessel would have to be counted as one, even if they originally might have belonged to separate vessels, while two complete base fragments cannot possibly come from one single vessel and are counted as two separate items. For the concept of EMN of vessels and more elaborate use of the method in larger glass assemblages, see e.g. Cool and Price 1995, 9-10, and Keller and Lindblom 2008, 339-345, 349, 352.

<sup>4</sup> During the intensive survey only some 15 glass fragments with any diagnostic characteristics (some from e.g. PS 10 and PS 14 dating to the Late Roman period), as well as 28 fragments of glass windows from an estimated minimum number of 4 window panes (from E 10), were collected.

Most of the glass fragments are relatively small and represent only fractions of the original vessels. Even in the best cases, when several fragments could be connected or assigned to one vessel, they make up no more than an estimated tenth part of the original shape. The majority of the glass items are represented by a single fragment or only a few. This seems to suggest that the glass does not come from complete vessels which were stored in the tower, but rather represents some sort of waste material, or at least was already fragmented when the tower collapsed. Otherwise a larger proportion of each vessel might have been expected to be found.

The glass fragments in the tower were scattered throughout the trench (squares A1-A6), but larger quantities were concentrated around square A2 including the eastern part of A1, the western part of A3, and the eastern part of A4. Connecting pieces were found at least between A1, A2 and A4, as well as between A2 and A3. Therefore it seems that most of the glass must have entered the debris in the tower more or less concurrently. At least no clearly distinct differentiation can be determined among the glass material.

The glass fragments come from both open and closed vessels, or what could be called table ware and storage vessels. For the closed vessel types, the fragments indicate several smaller and larger bottles or flasks. The rim fragments often have folded rims and cylindrical necks. The fragment No. 35 indicates a very small globular flask, maybe some sort of unguentarium. Some fragments seem to come from small jars, while the handle fragment No. 33 indicates at least one small jug among the material.

The open forms seem to be present in a somewhat larger quantity than the closed forms (a very approximate ratio would be 2:1). The open vessels include fragments both from beakers or cups and bowls. There are a few bases with folded tubular rings, which probably belong to beakers. There are several fragments of ribbed bowls and some very thin mould-blown vessels with rib decoration and even lettering.

### *Catalogue*

Separating the glass fragments found in PS 25 Trench A into an estimated minimum number of vessels gives the following catalogue.

It should be emphasized that many of the fragments are very small and therefore, while based e.g. on the glass fabric they can be separated from other fragments as belonging to different glass items, the identification of the exact type of vessel they come from is occasionally only tentative. While a part of a cylindrical neck or a small folded rim easily can be recognized as part of a flask or a bottle (or possibly a jug with a handle), a fragment of a base might belong to anything from a beaker to a bowl or a jar or a flask. A question mark has therefore been added next to many of the vessel types in the catalogue, as the exact shape in these cases has to be considered as an educated guess.

Colourless glass by nature usually has a very pale tinge which mostly leans in some slightly greenish or bluish direction. The shade of such a tinge is mentioned in square brackets [ ]. The intensity of the colour in the fabric is marked by a loose scale going from colourless through pale, light, and plain (meaning no extra brightness attribute), to deep colour at the opposite end. Where an approximation of the diameter of a vessel's rim or foot has been possible this is mentioned, as well as occasionally some other measurements which might give useful information.

1. Small fragment of colourless [blue tinge] ribbed bowl (?) with high slim ribs.

Find context: A5, Loc. 3.

Cf. e.g. Grose 1989, nos. 230, 232, 239; Weinberg and Stern 2009, nos. 45, 50, 52, 53.

2. Fragment of amber coloured ribbed bowl. Diam. ca. 8-10 cm.

Find context: A4, Loc. 4.

Cf. e.g. Caron and Zoītopoulou 2008, no. 22; von Saldern 1980, no. 34; Weinberg and Stern 2009, no. 41.

3. Small fragments of deep blue ribbed bowl, to which possibly belongs a flat base.

Find context: A6, Loc. 5 and N profile.

Cf. e.g. Grose 1989, nos. 234, 235, 238, and fig. 117 on p. 245; Grose 1991, pl. Vb; von Saldern *et al.* 1974, no. 253; Weinberg and Stern 2009, no. 54.

4. Fragments of colourless [greenish blue] ribbed bowl with polished rim, also polished on the outer side of the rim to the level of the ribbing. Diam. ca. 16 cm.

Find context: A1, Loc. 10; A2, Loc. 13 and Loc. 14; A4, Loc. 5 and Loc. 6, possibly a base piece from N profile.

Cf. e.g. Caron and Zoītopoulou 2008, no. 21; Grose 1989, no. 242 and Fig. 120; von Saldern *et al.* 1974, nos. 254-256.

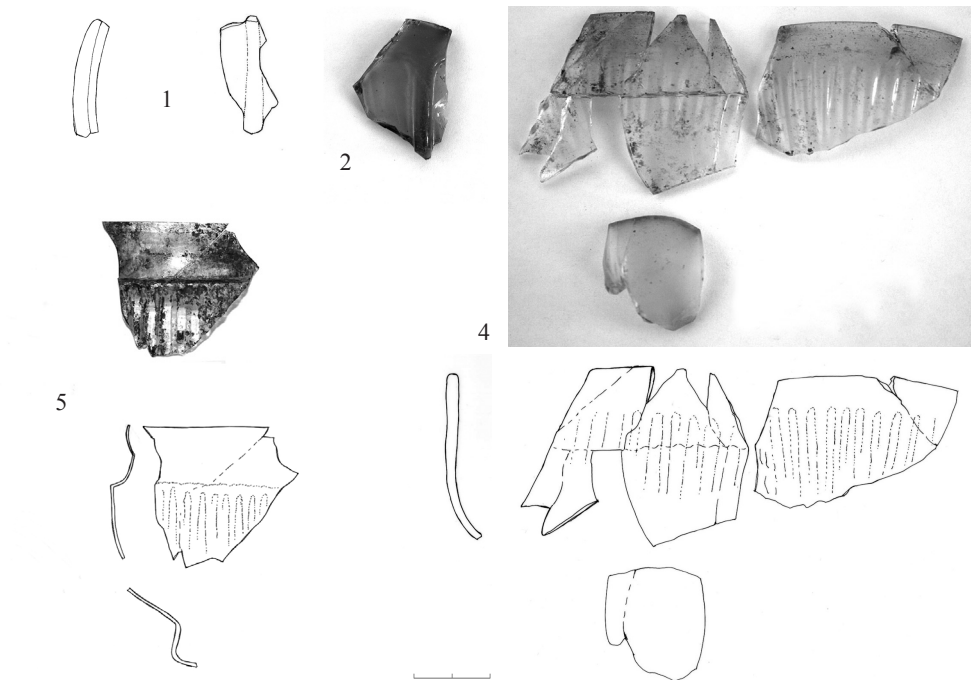


Fig. 1. Glass fragments Nos. 1-2, 4-5. Scale 1:2.

5. Fragments of mould-blown colourless finely ribbed bowl or vase (?) with profiled neck, flaring cracked off rim, and bulging base. Diam. of rim ca. 8.5 cm.

Find context: A2, Loc. 5 and base in A3, Loc. 4.

Cf. e.g. Price 1991, pl. XVIId; von Saldern *et al.* 1974, nos. 450-451; Stern 1995, nos. 13-14, and Stern 2001, no. 55. Compare also Weinberg and Stern 2009, nos. 147-148.

6. Fragment of mould-blown cup or bowl (?) with flute decoration.

Find context: A5, Loc. 4.

Cf. e.g. von Saldern *et al.* 1974, no. 448.



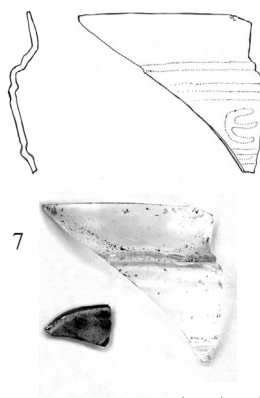


Fig. 2. Glass fragment No. 7.  
Scale 1:2.

7. Fragments of mould-blown colourless profiled (bulbous) cup with inscription (an epsilon visible) and horizontal ridges. Diam. ca. 8 cm.

Find context: A1, Loc. 10; A3, Loc. 4, possible base in A5, Loc. 3. Cf. e.g. Cosyns *et al.* 2005, fig. 2; von Saldern *et al.* 1974, no. 447; Stern 1995, no. 1; cup with inscription also Weinberg and Stern 2009, no. 146; also Recent acquisitions 1996, 229, no.1.

8. Fragment of mould-blown pale olive green cup (?) with inscription (an epsilon visible) and ridge.

Find context: A4, Loc. 2.

For comparisons, see No. 7.

9. Very small fragment of colourless thin vessel with slightly profiled neck and possibly cracked off rim.

Find context: A1-A2, Loc. 1.

10. Fragments of colourless cup or beaker with cracked off flaring rim and broad and shallow wheel-cut band decoration. Diam. ca. 10 cm. Two fragments making up a colourless [turquoise blue] slightly concave base with tubular folded ring might belong to this cup. Diam. of base 3.5 cm.

Find context: A2, Loc. 14; A5, Loc. 3 and Loc. 5, possibly also A1, Loc. 3

Cf. e.g. Caron and Zoiropoulou 2008, no. 90; Demierre Prikhodkine 2005, fig. 4e; von Saldern *et al.* 1974, no. 508; von Saldern 1980, nos. 46-49; Stern 2001, no. 18, and esp. no. 23.

11. Fragments of colourless cup or beaker with cracked off grounded rim (?) and broad and shallow wheel-cut band decoration (diam. ca. 8 cm, height over 6 cm). A slightly concave base possibly belongs to this same cup.

Find context: A2, Loc. 7; A5, Loc. 5, and possibly fragments in A1, Loc. 9; A2 Loc. 4 and Loc 14; base in A4-A5, Loc. 1.

For comparisons, see No. 10.

12. Fragment of colourless cup or beaker (?) with two narrow wheel-cut bands (v-shaped profile) and scratched vertical lines. Diam. ca. 8 cm.

Find context: A4, Loc. 5.

Cf. e.g. Stern 2001, no. 22; von Saldern 1980, no. 53.

13. Fragments of pale yellowish green cup or beaker (?) with both narrow and broad shallow wheel-cut bands. Diam. possibly ca. 6.5 cm. Small fragment of pale yellowish green base with thick tubular folded ring might belong to this. Diam. of base 5.5 cm.

Find context: A2, Loc. 10 and Loc. 14; A3, Loc. 2, and A4, Loc. 5, possible base in A2, Loc. 10.

Cf. e.g. Caron and Zoiropoulou 2008, no. 90; von Saldern 1980, no. 56; Stern 2001, nos. 17, 19-22; Weinberg and Stern 2009, nos. 97-101.

14. Fragments of light green cup or beaker (?) with shallow broad and narrow wheel-cut bands. Diam. ca. 13 cm.

Find context: A1, Loc. 8 and Loc. 10; A2, Loc. 9 and Loc. 14; possibly also A2, Loc. 11.

For comparisons, see No. 13.

15. Fragments of deep blue cup or beaker (?) with shallow but broad wheel-cut band. Diam. > 9 cm.

Find context: A2, Loc. 9 and Loc. 10; A3, Loc. 5, and possible base in A4, Loc. 4.

For comparisons, see No. 13.

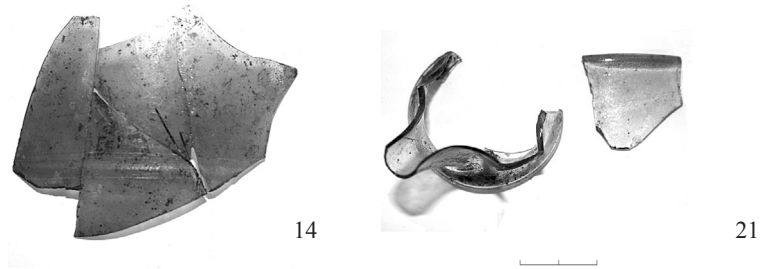


Fig. 3. Glass fragments Nos. 14 and 21. Scale 1:2.

16. Fragments of deep blue beaker (?) with several shallow and narrow wheel-cut bands. Diam. > 7 cm. The fabric is more cobalt blue than the previous one.

Find context: A 2, Loc. 10; A5, Loc. 6, and possible rim A4, Loc. 4.

For comparisons, see No. 13.

17. Small fragment of colourless [bluish] cup or beaker (?) with polished straight rim. Diam. ca. 11 cm.

Find context: A1, Loc. 9.

18. Fragments of colourless [bluish green] small jar or vase with slightly flaring triangular rim and flat base. Diam. of mouth ca. 5.5 cm, diam. of body ca. 7 cm.

Find context: A2, Loc. 9.

19. Fragment of colourless [greenish blue] vessel (bowl/plate/vase?) with attached folded foot.

Diam. of both foot and vessel > 6.5 cm.

Find context: A2, Loc. 10.

20. Fragments of colourless [smoky yellow] cup or beaker with straight rounded rim and almost flat base. Diam. > 4 cm.

Find context: Rim in A1-A2, Loc. 1 and base in A1-A2, Loc. 2.

21. Fragments of pale yellowish green beaker with vertical indents, rounded slightly inward-going rim and slightly concave and bulging base. Diam. of rim ca. 10 cm and of base ca. 4 cm.

Find context: A3&A6, Loc. 1, possible rim fragment in A4-A5, Loc. 1.

Cf. e.g. von Saldern 2004, Taf. 299; Weinberg and Stern 2009, nos. 92-93.

22. Fragments of colourless [green] beaker with vertical indents and slightly concave base with tubular folded ring. Diam. of base ca. 4 cm.

Find context: A3, Loc. 2.

For comparisons, see No. 21.

23. Fragment of light yellowish green flat base with tubular folded rim of beaker or bowl (?).

Diam. of base 4 cm.

Find context: A1, Loc. 10.

Cf. e.g. Stern 2001, nos. 23, 25.

24. Small fragment of colourless [blue] profiled foot with cracked off rim, from a cup, vase, plate or even a skyphos (?). Diam. of foot 7 cm.

Find context: A3, Loc. 5.

Cf. e.g. von Saldern *et al.* 1974, no. 533.



25. Small fragment of pale bluish green vessel with small knob-like base (a very round-bodied amphoriskos?). Diam. of base ca. 2.5 cm.  
Find context: A2, Loc. 13.  
Cf. e.g. von Saldern *et al.* 1974, no. 549.
26. Fragments of light yellowish green conical beaker with slightly inward-turning rounded rim and small flat base. Diam. of rim 10.5 cm and of base ca. 2 cm.  
Find context: Rim in A1, Loc. 3 and base in A6, Loc. 5.
27. Fragment of colourless base of possible conical beaker (?). Diam. of base ca. 2 cm.  
Find context: A5, Loc. 4.
28. Fragments of colourless [green] rounded slightly inward-going rim of cup or beaker (?).  
Diam. ca. 7 cm.  
Find context: A1-A2, Loc. 1 and Loc. 2.
29. Fragment of colourless [green] rounded slightly inward-going rim of cup or beaker (?). Diam. ca. 9 cm.  
Find context: A2, Loc. 11.
30. Fragments of colourless [turquoise] flask with cylindrical neck, rounded slightly flaring rim, and base with small 'kick-back'. Diam. of rim ca. 6 cm.  
Find context: Rim from A2, Loc. 11 and A3&A6, Loc. 1, base in A5, Loc. 5.  
Cf. e.g. von Saldern 1980, no. 175.
31. Fragment of colourless [turquoise] base with small 'kick-back' of flask (?).  
Similar as No. 30, but different vessel.  
Find context: A2, Loc. 13
32. Fragment of colourless [turquoise] base with small 'kick-back' of flask (?).  
Similar as Nos. 30-31, but different vessel.  
Find context: A5, Loc. 4.
33. Fragments of pale yellowish green jug with cylindrical neck, folded outward-turned rim and a slim relatively long handle with two ridges. Diam. of rim ca. 3 cm.  
Find context: Rim in A2, Loc. 9 and handle in A1, Loc. 11.  
Cf. e.g. Stern 2001, no. 30.
34. Fragment of colourless [blue] flask with cylindrical neck and folded outward-turned rim with a triangular profile. Diam. of rim ca. 4 cm.  
Find context: A1, Loc. 11.  
Cf. e.g. von Saldern 1980, no. 156.
35. Fragments of colourless [greenish blue] flask with cylindrical neck and folded outward-turned rim. Diam. of rim ca. 2.5 cm. A part of a very small globular body might belong with it (an unguentarium?).  
Find context: Rim in A1, Loc. 10, possibly also in A1, Loc. 9, and the possible body fragment in A2, Loc. 10.  
Cf. e.g. Caron and Zoitopoulou 2008, nos. 68-72; von Saldern *et al.* 1974, no. 551; von Saldern 1980, nos. 119, 166, 167; Weinberg and Stern 2009, nos. 128-130.
36. Small fragments of pale yellowish green flask or jug with cylindrical neck (?) and folded slightly flaring rim. Diam. of rim ca. 4 cm.

Find context: Rim in A1, Loc. 9, possible neck parts in A2, Loc. 16 and A3, Loc. 5, and possible body part in same fabric in A3, Loc. 6.

For shape cf. e.g. Caron and Zoïtopoúlou 2008, no. 48; von Saldern 1980, no. 170.

37. Fragments of colourless flask with cylindrical neck and flaring rim (actual rim missing). Diam. of rim > 2 cm.

Find context: A2, Loc. 9.

Cf. e.g. Caron and Zoïtopoúlou 2008, nos. 48, 50.

38. Body fragments of light yellow globular flask (?).

Find context: A2, Loc. 9 and A6, Loc. 5.

39. Shoulder fragment of colourless [greenish blue] flask with bulging shoulders and trapezoid body.

Find context: A4, Loc. 6.

40. Shoulder fragments of colourless [greenish blue] flask with trapezoid body.

Find context: A1, Loc. 9 and Loc. 10.

For shape cf. e.g. Caron and Zoïtopoúlou 2008, nos. 34, 37; von Saldern 1980, no. 135.

41. Small fragment of purple coloured base of vessel with opaque white spiralling thread decoration melted into the surface. Diam. of vessel > 7 cm.

Find context: A2, Loc. 9.

Cf. e.g. Weinberg and Stern 2009, no. 119, and notes 334-341.

42. Small fragment of deep blue base with circular decoration from mould-blown vessel. Diam. of base seems to be > 5 cm.

Find context: A6, Loc. 4.

Cf. e.g. Stern 1995, nos. 8-12, 49, 71-83, 139; Stern 2001, no. 51.

43. Small fragments of opaque bluish green non-blown object, flat surface with round ridge underneath, probably from dish or plate.

Find context: A1, Loc. 10 and A2, Loc. 9.

Cf. e.g. Grose 1989, figs. 135, and esp. 141-142; Lierke 1999, Abb. 135.

44. Very small fragments of opaque grayish turquoise green glass of possibly non-blown vessel (?).

Find context: A1-A2, Loc. 1 and A1, Loc. 8.

45. Very small fragment of turquoise seemingly flat object (inlay/window/base of vessel?).

Find context: A2, Loc. 9.

46. Small fragments of colourless (probably non-blown) window pane (?).

Find context: A2, Loc. 15 and Loc. 16.



Fig. 4. Glass fragments Nos. 41 and 43. Scale 1:2.

## Types and dates of the glass from the tower

Though fragmented, the material is chronologically homogeneous. It clearly represents Early Roman glass types. There is neither any clear indication of Hellenistic glass, nor does there seem to be any Middle or Late Roman glass present. The only exceptions are three very small fragments of cobalt blue glass strings in different shapes (found in A2, Loc. 16 and A5, Loc. 6) not separately mentioned in the catalogue, as they could belong to a number of items. One could be part of a small handle belonging to anything from a first century AD jug or aryballos to a fourth century AD vessel.<sup>5</sup> Blue glass strings occur on glass items in several different periods. These three fragments can therefore not with certainty be attributed to any specific period. In general terms, the glass from the tower falls into the period between the first century BC and the early second century AD, but, considering some of the individual more special types, a tentatively narrower framework might be suggested.

The ribbed bowls begin to be produced in the late Hellenistic and early Roman period, occurring in the eastern Mediterranean exactly in the framework mentioned above, that is, from the first century BC to the early second century AD.<sup>6</sup> Fragments found on the Athenian Agora are mostly from the Augustan period or later, and in the east the production of ribbed bowls seems to stop at the end of the first century.<sup>7</sup> The types were general and widely spread, which makes it difficult to determine the provenance of production. This is true for much of the glass types from this period, where glass production spread throughout the Roman provinces and shows very homogeneous characteristics.<sup>8</sup> The fragments found at Agios Donatos (Nos. 1-4) show similarities with vessels which usually are considered of eastern Mediterranean or possibly Italian production and mostly are dated to the first century AD.<sup>9</sup> The blue and amber coloured pieces (Nos. 2-3) can be associated with Roman production from the Augustan period and the mid-first century, after which they seem to cease to be produced. The natural coloured types continue to the end of the first century, where especially the fragments with close-set ribs and the rim grounded on each side (No. 4) seem to belong to a typically eastern Mediterranean sub-type.<sup>10</sup>

Monochrome non-blown glass vessels imitating ceramic or metal table ware (No. 43) belong to the same chronological period. The types made of coloured translucent glass, which are relatively homogeneous, have a distinctively western distribution with regard to sites where they are found, while the production seems to centre much around Italy. The coloured opaque glass, though also typical for Italy, is in addition occasionally connected with the eastern Mediterranean. The opaque types are the earlier, and their production seems to fade out when reaching the middle of the first century AD, gradually being replaced by types made in translucent glass, first coloured, which were in use

<sup>5</sup> Cf. e.g. Caron and Zoiropoulou 2008, no. 37 (first cent. jug) and Stern 2001, no. 14 (first cent. aryballos) and the small fourth cent. amphoras in Stern 2001, nos. 98-100.

<sup>6</sup> Lierke 1999, 51; von Saldern 2004, 188, 190.

<sup>7</sup> Weinberg and Stern 2009, 33.

<sup>8</sup> von Saldern *et al.* 1974, 86; von Saldern 2004, 190-191; Grose 1989, 244-247.

<sup>9</sup> Cf. e.g. Grose 1989, nos. 230, 232, 239; von Saldern *et al.* 1974, nos. 249, 250, 253-255, 257.

<sup>10</sup> Grose 1989, 245-246; von Saldern 2004, 190-191; Weinberg and Stein 2009, 33-36.

during the first three quarters of the first century AD, and then colourless, the production of which started in the mid-first and continued in the second century.<sup>11</sup>

A third vessel type among the find material more or less falling into the same period are the free-blown cups and beakers with ground rims and wheel-cut bands (Nos. 10-16), which appear from the Augustan era and continue to the end of the first century AD. The majority of these types of cups and beakers come from western sites. Findings in the eastern Mediterranean might therefore be considered as imports from the west. The type with a solid or folded ring base, though similarly mostly found on western sites, is more generally known from eastern Mediterranean, as well as from Israelic and north Pontic, sites. The high point of their use seems to fall in the three first quarters of the first century AD. Three beakers connected with burials in Samothrace are, for instance, dated to between the second quarter and the mid-first century. This type of vessels also represents the new technique of glass blowing, which made them easier to mass-produce, cheaper, and therefore also spread and used in larger quantities.<sup>12</sup>

The so-called 'embedded thread' vessels usually in the shape of small bottles or flasks also belong to the first century AD. Parallels from Greece to the fragment found in the tower (No. 41) with opaque white thread spiralling the vessel and melted into the surface are often dated early in the century and the type is considered typical for the first three quarters of the first century AD. They are considered to be either Italian or from the eastern Mediterranean.<sup>13</sup>

The fashion of creating indents as decoration on the vessel seems to start in the second quarter of the first century AD. It then continues in different versions until the fourth century and even later, but in the beginning it is especially used for beakers. This type of vessels seems to have been popular especially in the east.<sup>14</sup> The beakers with indents and tubular folded base rings (Nos. 21-22) have parallels from the Athenian Agora dated to the second half of the first century AD.<sup>15</sup>

After the technique of blowing vessels into a decorated mould was created at some point around the beginning (maybe in the second quarter) of the first century AD, it quickly spread to the entire Roman Empire. The technique made it possible to relatively easily and quickly produce decorative glass items in larger quantity and was popular in the first century, but the use ebbed out before the end of the century. It recurs in later centuries in different shapes and is also used in Byzantine and Islamic glass production.<sup>16</sup> The fragments of mould-blown vessels found in the tower at Agios Donatos (Nos. 5-8, 42) clearly represent the early production belonging to the first century. The blue base fragment (No. 42) could come from anything like a small carinated bottle, a hexagonal or cylindrical jug, or a pyxis. Typical for these are, though, that they usually originate from the Syro-Palestine area and chronologically fall between the second quarter and the end of the first century.<sup>17</sup> The best parallel for No. 6 is also considered to originate

<sup>11</sup> Grose 1989, 254-256; Grose 1991, 1-2; Lierke 1999, 55; von Saldern *et al.* 1974, 86; von Saldern 2004, 182-185.

<sup>12</sup> Dusenbery 1967, 46, nos. 39-41; Stern 2001, 45-47; Weinberg and Stern 2009, 49-50.

<sup>13</sup> Weinberg and Stern 2009, 59.

<sup>14</sup> von Saldern 2004, 351-352.

<sup>15</sup> Weinberg and Stern 2009, 47-48, nos. 92-93.

<sup>16</sup> Price 1991, 56-57, 64, 71-75; von Saldern 2004, 233-26; Stern 1995, 65-66.

<sup>17</sup> von Saldern 2004, 254-261; Stern 1995, 74-75, 83-85, and e.g. nos. 49, 72, 76, 79.

from Syria (or possibly Italy) and to have a first-century date.<sup>18</sup> The profiled ribbed bowl or vase (No. 5) belongs to the first century group of mould-blown vessels often with a variate Syro-Palestine, Italian or Pontic provenance and sometimes even more closely dated to the second and third quarter of the first century.<sup>19</sup> Finally the bulbous cups with mould-blown inscription (Nos. 7-8) are considered a Syro-Palestine type representing the mid-first century. Two fragments of this type of cups have been excavated in Belgium in clearly datable layers predating AD 70.<sup>20</sup>

Taking into consideration that the material from the tower at Agios Donatos seems to compose a relatively homogeneous deposit, the following chronological conclusions can be drawn. It clearly belongs to the first century AD, but a narrowing of the time frame is possible. Though the ribbed bowls occur in the early first century, some of the pieces from Agios Donatos seem to belong to types typical for both sides of the middle of the century. Both the cast vessels imitating ceramic or metal table ware and the vessels with wheel-cut bands mostly seem to predate the last quarter of the century. Also the coloured flasks with trailing more likely belong to the first half of the century than later. On the other hand, mould-blown vessels seem to become common only from the second quarter of the century, while the production probably ceases during the final quarter. The production of bulbous mould-blown cups with inscription seems to concentrate to the middle of the century. Similarly the beakers with indented decoration only occur from the second quarter of the century and become more common during the end half of the century. All in all, this seems to indicate that the material from the tower falls somewhere into the mid-century, or in the second and third quarter of the first century AD. As for the provenance, at least some of the finer or more special items were imports, probably either from Italy or the Near East.

## The glass and the stratigraphy of the tower

The dating of the glass material mostly fits with the general chronology of the stratigraphy in the tower.<sup>21</sup> The lower levels of the squares A1-6, that is, Loci 17-18, were, based on stratigraphy and other material, dated to the late third to second century BC. As they did not contain any glass fragments, there is no conflict with this material and it fits the general picture. Most of the glass fragments came from the framework of the levels represented by Loci 4-16, which, also based on other evidence, were dated to the first century AD. Only a few fragments were found in Locus 3, which anyhow is considered a mixed level and they should therefore not present any problem if dated to the first century AD. Most of the few fragments from the levels corresponding to Loci 1-2 are vague in their character, stemming from relatively general vessel types, such as beakers and cups, which were in use from the first century onwards through the second and third century AD, to which these levels are dated based on other evidence.

There are only a few fragments posing some problems or questions for Loci 1-2. Among them are fragments from A3&6, Loc. 1 and A3, Loc. 2, which belong to beakers

<sup>18</sup> von Saldern *et al.* 1974, no. 448.

<sup>19</sup> E.g. Price 1991, 64-71; von Saldern *et al.* 1974, nos. 448-451; Stern 1995, nos. 13-14, Stern 2001, no. 55.

<sup>20</sup> Cosyns *et al.* 2005, 180; von Saldern *et al.* 1974, 88, no. 447; von Saldern 2004, 248-249; Stern 1995, no. 1.

<sup>21</sup> For the stratigraphy of the tower, see Forsén *et al.*, this volume.

with indents on the side (Nos. 21-22), as well as at least one fragment in A4, Loc. 2 which is from a mould-blown cup with inscription (No. 8). At least the later one belongs to a vessel with a first-century date, and also the two beaker fragments belong to a first-century assembly rather than later. But on the other hand these early fragments may very well just have become mixed into the later layers, as is proven to have happened e.g. with three fragments from A3, Loc. 2 belonging to a vessel with a wheel-cut band (No. 13) which actually fit together with a fragment from A2, Loc. 14. There are two other pieces, belonging to a rounded rim (No. 30), which actually fit together, one from A3&A6, Loc. 1, the other from A2, Loc. 11, clearly indicating that some material from at least A3, Loc. 2 and A3&A6, Loc. 1 belongs together with the first century AD material found further down in the trench.

### Glass from Trench B (the gate)

For comparison, the few items that somehow could be identified from Trench B (the gate) on Agios Donatos are:

- Fragment of light yellow mould-blown vessel with horizontal band and vertical fine flute decoration (compare Nos. 6-8, though this one has straight walls).
- Fragments of colourless dish (?) with tubular ring base (?).
- Fragment of colourless [turquoise] concave profiled foot with cracked off rim. Diam. of foot ca. 7 cm.
- Fragments of colourless [greenish blue] beaker (?) with rounded rim and flat base. Diam. of rim ca. 6 cm.
- Fragments of colourless [turquoise blue] square flask with flat base, cylindrical neck and rounded (possibly folded) outward-turned rim. Diam. of rim ca. 4 cm.
- Fragments of colourless [turquoise blue] globular flask (?).
- Fragment of yellowish green vessel.
- Fragments of pale blue vessel.
- Fragment of colourless [green] window pane (or base of a vessel?).

Of these not much can be said other than that they mostly seem to represent glass from the first centuries of the Christian area. The only fragment which can be dated more precisely is the one of the mould-blown vessel with fine rib decoration with horizontal band and vertical fine flute decoration, which clearly belongs to the first century AD.

### Conclusion

To summarize, only the material from the tower (Trench A) at Agios Donatos (PS 25) rendered any significant amount of glass fragments and such pieces which could more clearly be identified and dated. This material seems to come from a relatively homogeneous collection of vessels probably datable to the second and third quarters of the first century AD. The vessels represent relatively standard and typical types in use during this period. In general, the glass from Agios Donatos seems to come from vessels that are neither earlier nor later than the first Christian centuries. No pieces datable to Late Antiquity were noted among the glass from Agios Donatos.



Based on the fragmentary state of the material from Trench A, it seems unlikely that these items, though representing a chronologically very narrow period, were stored as complete vessels in the tower. They more probably represent some sort of debris of already broken material. On the other hand, the connection between several of the pieces indicates that this material came into the archaeological layers more or less simultaneously at some stage before the final collapse of the tower.

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