

## 1<sup>ST</sup> CENTURY-GLASS FROM TERRACE HOUSE 2 IN EPHESOS

The archaeological excavations in Terrace House 2 in Ephesos (fig. 1) brought to light a number of extraordinary findings concerning the construction periods and equipment of the single dwelling areas. As a result of the scientific research – especially the recent investigations<sup>1</sup> – we can now distinguish some well-dated deposits: The age determination of these assemblages is based on the analysis of coin series and fine ceramic ware. These stratified findings allowed efficient systematic studies and interpretation also of glass finds. Some characteristic pieces of the 1<sup>st</sup> c. AD shall be presented in this paper.

In Ephesos, we find a great amount of so-called ribbed and linear-cut bowls, the most prevalent vessel forms of the Early Imperial period. In Terrace House 2, mainly two different types of ribbed bowls were in use: On the one hand, a deep bowl with long ribs (G 1), which corresponds to Isings 1957, form 3b<sup>2</sup>. The fragment was recovered in dwelling unit 1 and is made of light blue, opaque weathered glass (fig. 2)<sup>3</sup>. On the other hand, the bowl (G 2)<sup>4</sup> that was preserved in dwelling unit 3 shows a more shallow form and smaller ribs (fig. 3). These are characteristics of form Isings 3c<sup>5</sup>. This type is more common in the Eastern Mediterranean area, and similar pieces are known e.g. from Delos and Samos<sup>6</sup>. These findings suggest a local production centre in this region.

Ribbed bowls were generally used as drinking cups from the second half of the 1<sup>st</sup> c. BC to the last quarter of the 1<sup>st</sup> c. AD<sup>7</sup>. In Ephesos, the prevailing majority of the ribbed bowls could be dated to the Augustan period. They seem to have been in use on the site until the Flavian period<sup>8</sup>. Recent investigations indicate that these bowls were manufactured by melting a disk of glass over a domed former. While the glass was still hot, the ribs were made with a metallic or wooden tool, probably on a slow-turning potter's wheel<sup>9</sup>.

From the Augustan period two fragments of linear-cut bowls (G 3–4)<sup>10</sup> have been retrieved in dwelling unit 3 (fig. 3): These strongly coloured cast glass bowls show a characteristic decoration of horizontally cut lines on the inner surface. Their shape can vary from conical to hemispherical, diameters range from 11.0 to 16.0 cm, with most examples centring around 12.0 or 14.0 cm. This type of bowl was common from the end of the 1<sup>st</sup> c. BC to the first half of the 1<sup>st</sup> c. AD<sup>11</sup>. Their predecessors are the Hellenistic »grooved bowls«, thick-walled conical bowls with rounded bases that were produced in the Near East from the 2<sup>nd</sup> c. BC onwards<sup>12</sup>. In Ephesos, the surviving pieces of linear-cut bowls could be dated to the Augustan and early Tiberian period<sup>13</sup>. From the same period of time, a small marbled bead (fig. 4, G 5)<sup>14</sup> was preserved in dwelling

<sup>1</sup> LADSTÄTTER 1998; LADSTÄTTER 2000; LADSTÄTTER 2002; LADSTÄTTER 2005; LADSTÄTTER 2010; THÜR 2005; S. LADSTÄTTER – A. GALIK – D. IRO – M. PFISTERER – E. RATHMAYR – V. SCHEIBELREITER – H. SCHWAIGER – M. TEICHMANN, Die Grabungen des Jahres 2004 im Hanghaus 2 in Ephesos, ÖJh 74, 2005, 247–276.

<sup>2</sup> ISINGS 1957, 19 f.; RÜTTI 1991, form AR 2. 2.

<sup>3</sup> LADSTÄTTER 2010, A.X.18; SCHÄTZSCHOCK 2010, A-G 1.

<sup>4</sup> Inv. 2000/70, unpublished.

<sup>5</sup> ISINGS 1957, 20 f.; RÜTTI 1991, form AR 2. 3.

<sup>6</sup> NENNA 1999, C 275–276; TÖLLE-KASTENBEIN 1974, fig. 275.

<sup>7</sup> ISINGS 1957, 17–21; GROSE 1989, Group C; RÜTTI 1991, form AR 2.

<sup>8</sup> ISINGS 1957, form 3a. b shallow bowl with long, widely spaced ribs – has not been found in Terrace House 2 until now; some pieces were recovered on the Agora (GASSNER 1997, no. 858), in Terrace House 1 (CZURDA-RUTH 2007, no. 72) and on the State Agora in Ephesos (SCHÄTZSCHOCK 2007, G 10–12). All forms occur from Augustan to Flavian times.

<sup>9</sup> STERN – SCHLICK-NOLTE 1994, 72–79; LIERKE 1999, 51–55; LIERKE 2002, 181–186.

<sup>10</sup> Inv. 2000/89; 2000/96, unpublished.

<sup>11</sup> GROSE 1989, Group D; RÜTTI 1991, form AR 3. 2; JENNINGS 2000, 53 Group 5.

<sup>12</sup> GROSE 1989, Group A.

<sup>13</sup> Cf. CZURDA-RUTH 2007, no. 20. 30–32; MERİÇ 2002, G12; SCHÄTZSCHOCK 2005, G 5; SCHÄTZSCHOCK 2007, G 8; SCHÄTZSCHOCK 2010, B-G 6.

<sup>14</sup> SCHÄTZSCHOCK 2005, G 97 pl. 232. 235.

unit 4. The bead has a height of 1.9 cm and a diameter of 1.0 cm. It is made of blue, yellow and white glass and was manufactured in rod-forming technique: hot glass threads of different colours were coiled around a rod and placed in a marbled pattern<sup>15</sup>. This type of bead is rare; single pieces can be found in Delos, Knossos and Carthage, as well as on Magdalensberg<sup>16</sup>. They date from the 2<sup>nd</sup> c. BC to Augustan times. Probably the Ephesian bead was imported from Delos.

A well preserved table ware ensemble came to light in dwelling unit 1 (fig. 5)<sup>17</sup>: It was recovered in a closed group of ceramics and glass vessels that could be dated to the Flavian period<sup>18</sup>. The assemblage shows the characteristic decoration of that time. As vitreous forms we find large plates (G 6–7) with linear-cut decoration, one with a tubular rim; furthermore bowls (G 8–10), beakers (G 11–12) and a lid (G 13). All vessels are manufactured of nearly colourless, partly white weathered, blown glass, except one: the large plate (G 6) with a diameter of approximately 30 cm is made of greenish blue glass. Its rim is double folded and tubular – a kind of decoration that is not too common in the 1<sup>st</sup> c. AD<sup>19</sup>. The conical plate (G 7) shows the characteristic linear-cut decoration of the second half of the 1<sup>st</sup> c. AD. It can be identified as Isings form 47<sup>20</sup>.

Two cylindrical bowls with a horizontal rim (G 8–9) can be reconstructed to form Isings 87 with high base ring. This kind of bowl was used as table ware from the middle of the 1<sup>st</sup> c. until the 3<sup>rd</sup> c. AD<sup>21</sup>. Similar bowls have also been recovered in dwelling unit 4<sup>22</sup>.

Two fragments of a beaker (G 11) also show the characteristic linear-cut decoration on the outer surface: they can be reconstructed as slightly conical with a rounded base, corresponding to form Isings 29. This type of beaker was in use from the second half of the 1<sup>st</sup> to the middle of the 2<sup>nd</sup> c. AD<sup>23</sup>. Furthermore, a single base fragment (G 12) can be identified as a conical beaker form Isings 34 with tubular base ring. These vessels are usually decorated with similar linear-cut incisions<sup>24</sup>.

One of the most interesting vessels in this assemblage is a fragment with a wheel-cut decoration (G 10): It can be reconstructed to a shallow bowl Isings 18 that was common in the second half of the 1<sup>st</sup> c. AD<sup>25</sup>. It shows two characteristic grooves on the outer surface and a new kind of decoration on its base: three lines of oval wheel-cut facets. These ornaments became popular in the Flavian period for the first time<sup>26</sup>.

In comparison to the ceramic pieces preserved in this layer<sup>27</sup>, it can be seen that the amount of vitreous vessels in the Ephesian table ware was relatively low during that period – when glass was still a precious material. These conditions slowly changed by the improving development of local glass production at the beginning of the 3<sup>rd</sup> c. AD.

## Catalogue

G 1: Ribbed bowl  
Inv. 1996/89/70  
Context: H2, SR 8, Sond. 4/96  
DmR 12 cm, ThW 0.2 cm  
Colour: bluish opaque  
Dating: Flavian

G 2: Ribbed bowl  
Inv. 2000/70  
Context: H2/17, SE 018  
DmR 14 cm, ThW 0.2 cm  
Colour: light blue  
Dating: Augustan

<sup>15</sup> Cf. STERN – SCHLICK-NOLTE 1994, 61–64.

<sup>16</sup> Cf. NENNA 1999, E 183–188; FÜNSCHILLING 1999, 202 f. no. 557; PRICE 1992, Pl. 353 no. 11; CZURDA-RUTH 1979, no. 2050.

<sup>17</sup> SCHÄTZSCHOCK 2010, A.XII.5.

<sup>18</sup> LADSTÄTTER 2000; LADSTÄTTER 2010, A.X.18.

<sup>19</sup> Cf. CZURDA-RUTH 1998, no. 790.

<sup>20</sup> ISINGS 1957, 62; RÜTTI 1991, form AR 18.

<sup>21</sup> ISINGS 1957, 104; RÜTTI 1991, form AR 79; cf. FÜNSCHILLING 1999, no. 111. 602.

<sup>22</sup> SCHÄTZSCHOCK 2005, G 16–18.

<sup>23</sup> ISINGS 1957, 24; RÜTTI 1991, form AR 35.

<sup>24</sup> ISINGS 1957, 48 f.; RÜTTI 1991, form AR 37; FÜNSCHILLING 1999, 469 f.

<sup>25</sup> ISINGS 1957, 36 f.

<sup>26</sup> Cf. STERN 2001, 24 f. 41 f. 136 f.; RÜTTI 1991, 93.

<sup>27</sup> Cf. LADSTÄTTER 2000; LADSTÄTTER 2010, A.X.18, complex A-BII/6.

G 3: Linear-cut bowl Inv. 2000/89 Context: H2/17 DmR 12 cm, ThW 0.3 cm Colour: dark blue Dating: Augustan	DmR 11 cm, ThW 0.1 cm Colour: bluish green, opaque white weathered Dating: Flavian
G 4: Linear-cut bowl Inv. 2000/96 Context: H2/17 DmR 12 cm, ThW 0.3 cm Colour: yellow brown Dating: Augustan	G 10: Facet-cut bowl Inv. 1996/160/10 Context: H2/SR 8, Sond. 4/96 DmR 16 cm, ThW 0.3 cm Colour: colourless, opaque white weathered Dating: Flavian
G 5: Bead Inv. H2/92/45.1 Context: H2/7, Sond. 1/92 Dm 1 cm, H 1.9 cm Colour: yellow, white, dark blue; weathered Dating: Augustan	G 11: Beaker Inv. 1996/160/9 Context: H2/SR 8, Sond. 4/96 DmR 6 cm, ThW 0.2 cm Colour: colourless, opaque white weathered Dating: Flavian
G 6: Plate Inv. 1996/160/6 Context: H2/SR 8, Sond. 4/96 DmR 30 cm, ThW 0.1 cm Colour: greenish blue Dating: Flavian	G 12: Beaker Inv. 1996/78/14 Context: H2/SR 8, Sond. 4/96 DmB 5 cm, ThW 0.2 cm Colour: colourless, opaque white weathered Dating: Flavian
G 7: Plate Inv. 1996/160/7 Context: H2/SR 8, Sond. 4/96 DmR 22 cm, ThW 0.2 cm Colour: colourless, opaque white weathered Dating: Flavian	G 13: Lid Inv. 1996/131/18 Context: H2/SR 8, Sond. 4/96 DmR 5.4 cm, ThW 0.3 cm, H 1.6 cm Colour: colourless, opaque white weathered Dating: Flavian
G 8: Bowl Inv. 1996/50/18 Context: H2/SR 8, Sond. 4/96 DmR 9.5 cm, ThW 0.2 cm Colour: colourless Dating: Flavian	Abbreviations Used in the Catalogue
G 9: Bowl Inv. 1996/74/32 Context: H2/SR 8, Sond. 4/96	Dm Diameter DmR Diameter Rim DmB Diameter Base ThW Thickness Wall H Height H2 Terrace House 2 Inv. Inventory Number Sond. Sondage SR South Room

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The citation follows guidelines of the German Archaeological Institute <[www.dainst.org](http://www.dainst.org)> (16.01.2009) and those of the Austrian Archaeological Institute <[www.oeai.at/publik/autoren.html](http://www.oeai.at/publik/autoren.html)> (16.01.2009).

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### Sources of Illustrations

Fig. 1–5: photos: N. Gail, © ÖAI; drawings: M. Schätzschock.  
Plan: I. Adenstedt.

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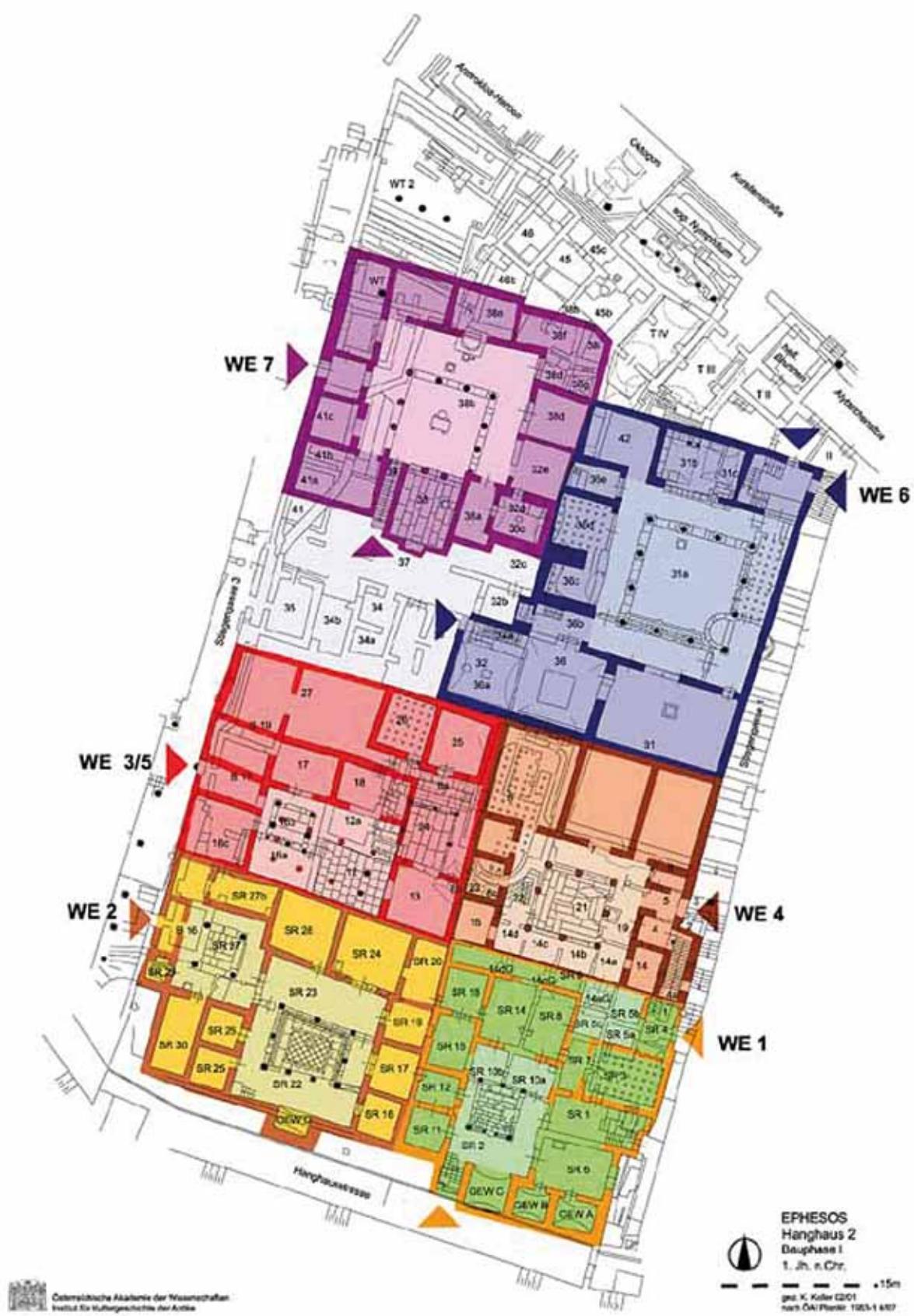


Fig. 1: Terrace House 2



Fig. 2: Ribbed bowl (G 1)

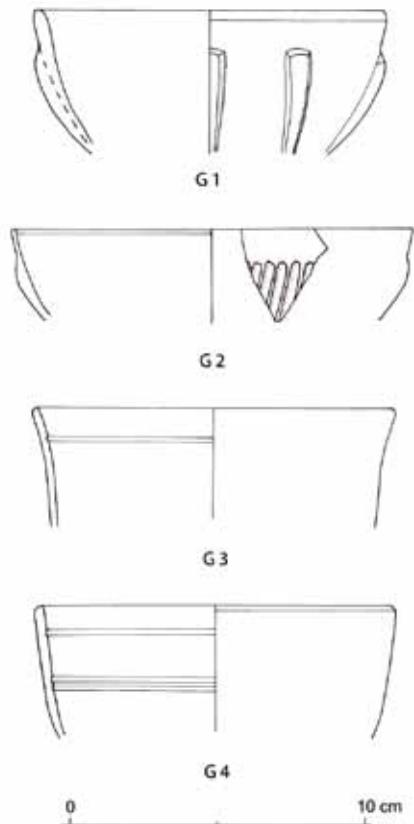


Fig. 3: Early Imperial period: ribbed and linear-cut bowls (G 1–G 4)



Fig. 4: Augustan context:  
marbled bead (G 5)

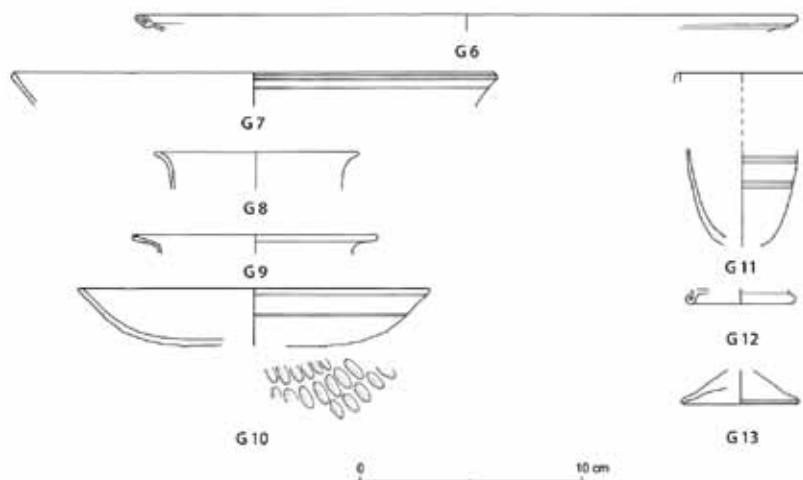


Fig. 5: Flavian period: glass table ware (G 6–G 13)