

## GLASS FINDS FROM THE ROMAN-PERIOD MAUSOLEUM IN 'AKKO

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Seven glass vessels and a few other body shards were retrieved from the excavation of the mausoleum in Lily Sharon Park, 'Akko (see Gosker, this volume).<sup>1</sup> Three of the vessels (Fig. 1:1, 4, 5) were found together inside a clay coffin (L116); they are rare types, dating from the end of the first to the beginning of the third century CE. The finds from outside the coffin (L108) comprise fragments of candlestick bottles (Fig. 1:2) similar in date to the finds from the coffin, a rim of a beaker or bottle (Fig. 1:6) dating to the Late Roman–Byzantine period, and glass-industry debris (1:7–10).

### GLASS VESSELS

*Shallow Decorated Bowl* (Fig. 1:1; L116, B1025).— The vessel is made of high-quality colorless glass, covered with a layer of milky white weathering and a sandy encrustation. The bowl has a cut-off polished rim, exhibiting two bands of grooved lines beneath it. Another single, horizontal groove is further down the wall, and below it was preserved a beveled faceted pattern of circles or ovals arranged in a row. The vessel's wall is somewhat thick. This bowl is of high quality, belonging to a group of colorless vessels known from the Roman period. It may have been imported from a remote production center, e.g., in Egypt (see below), as vessels of such high-quality fabric and decoration are not known to have been produced in local workshops.

Bowls engraved with horizontal stripes below the rim, and beneath them cut and polished rounded or oval facets, were found in excavations at Dura Europus, where they were dated to the Middle Imperial Roman period, i.e., between 70/100 and 256 CE (Clairmont 1963:31, Pl. 7:240, 241, 248, 249). Similar vessels were found in excavations in Israel, mainly in the Negev, along caravan cities, for example, 'Avedat (Jackson-Tal 2016:82–83), and in forts along the Incense Road (unpublished excavations by Rudolf Cohen).

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Fig. 1. Glass vessels (1–6) and production debris (7–10).

A wide, shallow colorless bowl of this type was found with a group of vessels at Hegra, Saudi Arabia, the southern capital of the Nabataean kingdom, dated to the mid-second century CE (Nenna 2021:133, 136–137, Fig. 3:8). The decoration consists of horizontal rice-grain facets framed by thin engraved horizontal lines, just below the rim. The vessels found at Hegra were imported from the Syro-Palestine region and from Egypt; the group of colorless tableware is probably of Egyptian origin (Nenna 2021:138).

*Candlestick Bottle* (Fig. 1:2; L108, B1016).— This bottle, with a sloping in-folded rim, is made of bluish-green glass with a yellowish vein covered with silvery and black weathering. The wall is thin. Another rim of the same bottle type was found in the same basket. These bottles are very common in burial complexes from the end of the first to the beginning of the third century CE. Bottles of this type were found in burials excavated at 'Akko, e.g., two candlestick bottles in previous excavations at Lily Sharon Park (Abu 'Uqsa 2009: Fig. 2:9, 10), and in the northern cemetery (Tzaferis 1986: Photographs 8, 9), and in various sites in Galilee, such as Ḥurfeish, Nahariyya, Yeḥi'am, Loḥame Ha-Geṭa'ot and Kabri (Gorin-Rosen 2002:160\*, Fig. 12:52, 53, and see further references therein), as well as in other regions.

*Bottle* (Fig. 1:3; L101, B1011).— A bottle with a flaring, in-folded rim and a cylindrical neck. It is made of light bluish glass covered by silvery weathering, iridescence and a sandy layer. This fragment belongs to a medium-sized bottle, whose body may have been spherical. Similar bottles first appeared in the second century CE and became common in the third century CE. Such bottles were found in burial assemblages in the Galilee dating to the third century CE, for example at Tell Shubeib, near Akhziv (Abu-'Uqsa and Katsnelson 1999:177–178, Fig. 4:7) and in a burial cave at Ḥanita, dating to the third–early fourth centuries CE (Barag 1978:26–27, Fig. 13:53).

*Kidney-Like Vessel* (Fig. 1:4; L116, B1028).— The vessel has a sloping neck ending in a funnel rim. It is made of light bluish glass covered with silvery weathering, shiny iridescence, patches of sand deposits and pitting. The vessel has a roughly cut funnel rim, a long curving neck and an asymmetrical oval body, ending in a thick button base and lacking a pontil scar. The vessel wall is extremely thin. It was found broken in two parts, which were separated by an earthen fill that preserved the shape of the vessel body. The middle part of the vessel had smashed into many fragments and therefore, the vessel could not be restored from top to bottom.

This vessel is very rare. Similar vessels with a spherical body and a horn-like neck that ends in a funnel appear in collections, e.g., in the Israel Museum, where it was defined as a medical vessel and dated to the Islamic period (Brosh 2003:347, No. 458); however, I suggested an earlier, Roman-period date for this vessel, based on its characteristics and various parallels (Gorin-Rosen 2009b:124). Another similar vessel is part of the Louvre Museum collection, and is said to have originated in Tiberias; it is dated to the end of the

first–second centuries CE (Arveiller-Dulong and Nenna 2005:184, 197, Cat. No. 549, Pl. 41:549). The geographical distribution of the spherical-body vessels is said to have been wide, as attested by five such examples retrieved from the west of the Roman Empire and four such examples from the east of the Empire (Arveiller-Dulong and Nenna 2005:184, 188, n. 76). Another example with a spherical body is in the Meduza Collection in Gaziantep, south Turkey, said to have originated from the region of Yozgat-Çorum-Çankiri, central Anatolia (Höpken and Çakmakli 2015:79, Cat. Nos. 140, and see further references therein to Germany, Italy, Turkey and Crete). Höpken and Çakmakli suggested that this type might have served medical or chemical purposes up to the Medieval period. They also mentioned previous suggestions that this vessel was used as a milk pump, or as a distilleries utensil.

Two vessels in the Hermitage collection identified as “guttus” have an ovoid body with an additional solid nob at the far end identified as a tail. Both vessels have a flattened part and could be laid on their side (Kunina 1997:208, 327–329, Cat. Nos. 377, 378). They were found in Pantikapaion Necropolis and in a grave in the environs of Kertch, where they were dated to the second half of the first century CE and assigned tentatively to the Eastern Mediterranean.

Although similar vessel parts are known from other vessels, e.g., the rim, the neck and the thick button base, as a whole, it is a special and rare specimen. The curved neck and its angle in relation to the body, as well as the body shape, seem to have been pre-planned, indicating that the vessel had a special function.

*Bird-Like Vessel/Funnel* (Fig. 1:5; L116, B1027).—The vessel is made of bluish-green glass. It is free blown, with an out-turned rounded rim carelessly executed. This vessel belongs to a group of bird-like vessels with an open and rounded rim. The bird’s tail is broken at the tip; it probably had an opening to allow pouring. An identical vessel, which was defined as an “askos-shaped bottle” was found in a burial cave at Iqrit, on a shelf outside *Kokh* 4, alongside a coin from the days of Septimius Severus (197–198 CE), a candlestick-like bottle and another vessel (Vitto 2010:75, Fig. 13:2). The burial complex at Iqrit was dated to the end of the second–beginning of the fourth century CE, and it was explicitly stated that this vessel was one of the earliest vessels in the assemblage, dating to the second century CE (Vitto 2010:89). Vessels of this type are known mainly from collections, with only a few examples from excavations, e.g., from tombs at Tyre, Kourion and Cambi Vasa in Cyprus, and in the island of Samothrace (see Vitto 2010:73–74, and further references therein), as well as in Thessaly in Greece, Aquila in the North Adriatic, in the Balkans and Sardinia (for further discussion and references, see Whitehouse 1997:122).

Similar vessels are also present in the Israel Museum collection, dating to the first and second centuries CE; their origin seems to be from the Eastern Mediterranean (Israeli 2003:285, 289–290, Nos. 382, 383). Four similar vessels are on display in the Beiteddine Museum southeast of Beirut (originally from the Walid Joumblatt Collection). It is presumed that they originated in tombs in the Lebanese coast (Atallah and Gawlikowska 2007:177–178, 234, 266, Nos. 12–15, Pl. 2, Fig. 5, and see references therein). Several

vessels of this type, albeit with some differences, defined as “guttus-dropping vessels,” are among the glass vessels in the Meduza Collection in Gaziantep, south Turkey, said to have originated from the region of Adana-Osmaniya-Antakya (Höpken and Çakmakli 2015:80–81, Cat. Nos. 141–145). Two other vessels from this group, in which the ratio between the neck, body and tail are slightly different, are in the Princeton Museum collection and are said to have originated near Nazareth, or near Damascus (Antonaras 2012:165, Nos. 234, 235).

Regarding the use of these vessels, it has been previously suggested that they had served as oil-lamp feeders, infant feeding instruments, a urinal, or as a vessel for pouring small amounts of wine for tasting (Vitto 2010:75, with further discussion and references). However, these suggestions were considered implausible by several scholars. Israeli defined them as funnels and suggested that these vessels served for pouring from two sides and that their shape adheres to the description of such vessels in the Jewish sources, where the funnel would hold some of the liquid and allow it to be smelled and tasted before purchase (Israeli 2003:289, and see further references therein). Vitto suggested that this vessel may have served as a funnel for peddlers who would tilt the vessel on its side to allow the contents to be smelled (Vitto 2010:73, 75). Höpken and Çakmakli (2015:80) suggested, based on the fragility of the glass, that the vessels were used to measure and dose liquids, such as oil, perfumes, or medicine, or used to fill oil lamps. We can summarize that this vessel might have served as a mediator aiding in the pouring of liquids from a large vessel to a smaller one, for different purposes, like measuring medication or for trade.

Vitto assembled the dates previously offered for this type (Vitto 2010:77): the second–third centuries CE, proposed by Barag; 150–250 CE, by Hayes; end of the second–end of the third century CE, by Chéhab; and the first–second centuries CE, by Israeli. The 'Akko vessel corresponds to this timeframe.

The presence of the two unique vessels together—the vessel with the horn-like funnel neck and the bird-like vessel/funnel—are an indication of their special use. It is noteworthy that in most of the collection catalogues these vessels are discussed together, or one after the other (see, for example, Kunina 1997:327–329; Höpken and Çakmakli 2015:79–82). There is no way of determining whether they served medical purposes, measuring facilities, or for trade, nor if they were part of the personal belongings of the interred, a physician or a paddler; however, their presence together in a burial is definitely unique and calls for an explanation. Noteworthy is also the fact that these vessels were found together with a fragment of a colorless glass bowl (Fig. 1:1), indicating that luxury vessels were offered as burial gifts.

*Beaker or Bottle* (Fig. 1:6; L108, B1015).— The vessel is made of greenish glass with black impurities and bubbles. The rim is straight and rounded by fire. A thin glass trail of the same hue as the vessel surrounds the body/neck twice beneath the rim. Based on the fabric quality, color and workmanship, it should be dated to the Late Roman–beginning of the Byzantine period. This rim might belong to a beaker with a solid base, the most

common beaker type during the fourth century CE that is also characterized by the thin trail below the rim. This type is widely distributed, for example at Ḥorbat 'Uza, a few kilometers to the east of 'Akko (Gorin-Rosen 2009:88–89, Fig. 2.53:1, 3, with further discussion and references therein). This rim might also belong to a bottle adorned with one or several trails, a very common type during the Byzantine period, for example, in the Shave Ziyon church, where some of the bottles are not decorated, while others exhibit multiple trails (Barag 1967: Fig. 16:1–5).

### GLASS PRODUCTION DEBRIS

The glass-industry waste from the site comprises lumps of raw glass that were found in L100 and L108, and a furnace fragment with a layer of glass still adhering to it.

*Raw Glass* (Fig. 1:7–9).— Three raw glass chunks are illustrated: a small bluish-green chunk (Fig. 1:7); a larger chunk of yellowish-brown glass (Fig. 1:8), covered with silver weathering, iridescence, typical of the Early Roman period; and three additional fragments, including a small chunk of raw glass and two fragments of furnace debris that were found together (Fig. 1:9).

*Furnace Floor Fragment* (Fig. 1:10).— A furnace floor fragment with glass attached to it. The glass is greenish in color, similar to that of the raw glass fragment in Fig. 1:7. The furnace floor fragment is too small to be clearly assigned to the primary glass production stage. It may have originated in a furnace where raw glass was melted to produce vessels; however, there is no evidence that vessels were produced at the site.

Glass production waste was unearthed in many excavations in and around 'Akko, such as in the bathhouse excavated on Derekh Ha-Nof C (Gorin-Rosen 2013:114–115, and see further discussion therein). Remains of glass production were also found on Remez Street, some with Early Roman glass vessels (Gorin-Rosen 2021: Fig. 15:11–13), and on Ha-Ḥaroshet Street, including raw glass chunks and debris from furnaces with some glass in them (Gorin-Rosen 2012: Fig. 8:9–12), and in many other salvage excavations in 'Akko and its surroundings.

It is probable that a glass workshop operated in the vicinity, the waste of which had entered the mausoleum, or alternatively, that the mausoleum was built in an area that had previously been an industrial area. In any case, this type of waste indicates that a glass workshop operated in the immediate vicinity.

### SUMMARY AND CONCLUSIONS

The glass finds from the burial structure date to the Roman period, mainly from the second and early third centuries CE, although one fragment may be of a later date.

The two special vessels (Fig. 1:4, 5) were found together in the clay coffin in the mausoleum. They were used for a specific purpose and might point to the profession of the interred. The vessels are associated with medication and chemistry, or measuring and trading of specific liquids. Thus, this mausoleum might have been used to commemorate a physician or an affluent merchant buried with his belongings in a clay coffin. The colorless decorated bowl (Fig. 1:1), found alongside these two vessels, is a luxury item traded from a distance, and as such, might support the identification of the interred as a rich merchant. The relatively young age of the individual (15–25 years; see Gosker, this volume), whose sex is unclear, is somewhat puzzling, as it seems too young for gaining professional identity and honor. Therefore, it might point to the last days of the deceased, who might have received some medical treatment before his death, and the instruments used by the physician were interred by his side.

Noteworthy is the appearance of these two vessels together in a Roman-period burial, as they are mainly known from collections worldwide, and are frequently discussed together by scholars.

The glass production debris attests to the existence of a glass workshop in the vicinity, prior to or after the construction of the mausoleum.

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