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GLASS FRAGMENTS FROM TELL HESBÂN

A Preliminary Report

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Quantities of glass fragments were sent to The Corning Museum of Glass from the 1968-74 seasons at Tell Hesbân.¹ This note is a preliminary report on the initial sorting of the material and is simply meant to alert colleagues in the field to an interesting body of glass that can be documented from the site of Hesbon. A more thorough report with a proper catalogue and glass profiles will appear in the future. The largest body of material was excavated in 1968 but little of this was recorded with respect to its locus or pail number. It is this material, unsorted and unstratified, which gives an impression of the quantity of glass at the site.

Preliminary study suggests that glass vessels were used at Hesbon during the Hellenistic period from the first century B.C. through the Ayyûbid/Mamlûk period of the 14th century. Thus utilitarian vessels are represented in virtually every major period of habitation. The 1968 material consisted of characteristic fragments such as rims, bases, and handles along with quantities of vessel walls, usually without decoration. A small amount of cullet or chunks of non-vessel glass was also excavated. This was a curious addition as there seems to be no evidence that glass was made at Hesbon. The amount of cullet was small, less than a pound of glass, and there were virtually no characteristic droplets or drippings which are associated with hot glass. Nor were there any of the glassblowing wastes which accumulate around a workshop and are usually remelted periodically along with the cullet.

¹ I should like to thank Drs. Siegfried H. Horn and Lawrence T. Geraty for making this material available to me and for discussing the Hesbon site on several occasions; they have been most helpful in matters archaeological and editorial.

Most of the unstratified glass fragments from the 1968 excavation were found in Area C. Some material was kept separate, coming from Cistern C.4:7 and a limited amount of glass was recovered from Areas B and D.

As of the writing of this report, the stratified glass excavated during 1971 had not been seen by this author. A small amount of unstratified material from this season is now at Corning; some of the Islamic trail decorated fragments (Pl. XII:C) are illustrated.

During the 1973 and 1974 seasons, a concerted effort was made to carefully record the glass fragments excavated. During the summer of 1975, Mr. Wesley Scott, an undergraduate working in our Museum program, cleaned and numbered almost 500 fragments and noted the excavation data on catalogue cards. A simple numbering system (i.e. 1-73a or 24-74b) was instituted for ease of identification. This consists of a running catalogue number which is followed by -73 or -74 indicating the year of excavation. When the locus was known, this was added and underlined if additional information could be found on the card. This system allows easy handling of the fragments; the underscored locus simply alerts the researcher that a particular fragment has a stratigraphic context.

Hellenistic Glass. The Hellenistic period at Heshbon is represented by over twenty fragments of typical shallow bowls. They are decorated with interior wheels-cut grooves or exterior molded ribs or both (Pl. XI:A). Bowls were made of colorless, amethyst, light green, green, and amber glass. Vessels of this type have been studied recently by Dr. Gladys Weinberg at two sites in Upper Galilee—Tel Anafa² and the area around Kibbutz Hagosh-rim.³ Each site has yielded a large series of subconical bowls with ribs and wheel-cut grooves. It is interesting to note that there is

²Gladys D. Weinberg, "Hellenistic Glass from Tel Anafa in Upper Galilee," *Journal of Glass Studies* 12 (Corning, New York, 1970): 17-27.

³Gladys D. Weinberg, "Notes on Glass from Upper Galilee," *Journal of Glass Studies* 15 (Corning, New York, 1973): 35-51.

a paucity of first and second century glass among the fragments except for these bowls.

The vessels fall into three groups with virtually ninety-five percent of the material belonging to the Roman/Byzantine and Islamic periods. This large group can be equally divided between Roman/Byzantine glass of the late third through the late sixth century and Islamic glass of the eighth through the fourteenth century. The balance of material, less than five percent, may be attributed to the shallow bowls of the late Hellenistic period.

Roman/Byzantine Glass. The later Roman/Byzantine glass is almost entirely utilitarian in nature and there is no indication of window glass. Two tesserae, one of gold glass and one of blue (Pl. XI:B, top row), imply the existence of wall mosaics. More interesting and worthy of intensive analysis are two fragments of an ingot or cake (Pl. XI:B, bottom row) fashioned of yellow green glass with a thin layer of gold foil sandwiched between two layers. Such units were scored and broken up into gold glass tesserae. The presence of this material provides interesting documentation for the technique of mosaic gold glass installation at Heshbon.

The vessel material indicates a wide range of bottles, cups, bowls, and lamps utilized by the inhabitants. For the most part, vessels were undecorated but there is some limited evidence for mold-blown and applied decorative elements. The report of the second Heshbon campaign⁴ illustrates eight complete vessels from Area C.1 and Tombs F.6 and F.8. Most of these vessels are represented among the fragment material with the exception of the "sprinkler" bottle from Tomb F.6. This type of ledge or collar rim and the characteristic constriction at the neck has not been noted.

There is no single form which may be selected and presented as a popular or characteristic late Roman/Byzantine glass from Heshbon. Rather, the fragments illustrated in Pls. XI:C and XI:D

⁴"Heshbon 1971," *AUSS* 11 (1973): Pl. XIII:A.

indicate only some of the many vessel types preserved. Plate XI:C illustrates a series of rims—the upper left, a large bowl with an out-folded rib and collar rim of the late 4th century; below are two out-folded rims of the 3d-4th centuries A.D., the smaller cup retaining part of a vertically ribbed handle applied along the rim. To the right is a simple rounded rim of a shallow bowl, perhaps late 3d century. On the bottom row are two bottle fragments—at the left a storage bottle with rounded rim and wide cylindrical neck of the 4th century and on the right, a globular bottle with infolded rim and cylindrical neck of the late 3d-4th century. The three remaining fragments are of Islamic date.

Plate XI:D illustrates bases of Roman date—the pushed-in goblet base on the upper left is a standard 3d-4th century form; the thickened base and lower portion of a beaker with pattern molded ribs on the bottom row may be a slightly earlier form. The rounded base of an unguent bottle, top row, second from the left, is a simple tubular form which can be attributed to the late 2d to 4th century.

Although the remaining fragments are primarily Islamic, the small wick tube, top row, third from left, probably represents a form which spans the period from Byzantine to Islamic. These wick tubes are found in beaker-shaped lamps with high kicked bases. These in turn developed from 5th to 6th century lamps of simple bowl shape with multiple handles and a central thick wick tube.⁵ Examples of such vessels at Heshbon must be post-7th century and should be grouped with a series of shallow bowl-shaped lamps with long solid beaded stems. Fragments of these units can be found in the Heshbon material and are documented at Gerasa.⁶ These lamps were usually suspended in groups of three or more from circular bronze polycaedron holders and the solid

⁵ Grace M. Crowfoot and Donald B. Harden, "Early Byzantine and Later Glass Lamps," *Journal of Egyptian Archaeology* 17 (1932): 201; pl. XXVIII, 7-9.

⁶ P. V. C. Bauer, "Glassware," in C. H. Kraeling (ed.), *Gerasa, City of the Decapolis* (New Haven, 1938), pp. 519-520, pl. CXL1, fig. 17, where they are dated fifth and sixth century.

stem provided anchoring and stabilization for the otherwise top heavy form.

Islamic Glass. The later glass from Heshbon appears to be more evenly distributed between Islamic chronological boundaries. The rims and bottle necks (Pl. XI:C, bottom row, second and third from the left as well as top row, right side) are to be associated with simple containers probably produced before the 8th century. These vessels are still easily associated with eastern Roman products of the late period and have not been transformed into the characteristic shapes associated with Islamic forms. The well preserved bowl of yellow green glass (Pl. XII:A) should probably be dated to the transitional period of the 8-9th centuries. The general shape of the shallow, footed bowl (rim diameter, 19 cm.) has been embellished by pattern molded vertical ribbing and a deeper green trail of glass applied to the rim. Between the 10th and 12th centuries, the two techniques employed on this bowl were perfected and utilized separately.

Plate XII:B illustrates the range of mold-blown patterns found at Heshbon. Ribs are blown vertically, horizontally and in zigzag patterns. The network pattern has many variations in cup, dish, and bottle fragments. Pincer decorated fragments with concentric circles and central bosses are also illustrated in the top row, third from the left. Small cups and occasional bowls and bottles with this decoration are assigned to the 8-9th centuries.

Trailing on threads of contrasting colors, usually opaque white on amethyst, deep green, or blue background, was a favorite decorative technique of the later period. A simple contrasting trail of white applied at the rim of a deep green bowl (Pl. XII:C, top row center) soon became an elaborate system of zigzags, checkerboards or diamond shape dashes on beakers, bottles, and bowls as documented by the remaining fragments on Pl. XII:C. Additional fragments with variation in the technique were illustrated in the report on the 1968 season at Heshbon.⁷

Plate XI:D illustrates two utilitarian vessels which should be

⁷ "Heshbon 1968," *AUSS* 7 (1969): pl. XXI:B.

considered as post-10th century—the characteristic “spearhead” flask, top right, and the flared rim beaker with applied trail at the foot, bottom row, center and right.

Finally, it should be mentioned that a large number of bracelet fragments were excavated. Perhaps the material at Heshbon will shed some light on the chronology of these simple objects. Even bracelet manufacture utilizes spiral twisting and trailing on contrasting colors in order to achieve elaborate surfaces. Plate XII:D provides a representative sample of the excavated types, and a few complete bracelets were discovered in some of the tombs. It is clear that these tombs were often early Roman in construction but were reused over long periods.⁸ It would be most useful if these bracelets could be more precisely dated within the Roman/Byzantine and Islamic context. Heshbon may prove to be one of the sites where this will be possible.

⁸“Heshbon 1971,” pp. 115, 123-25, Pl. XV:B, Tombs F.1 and F.4.