

Glass Beads from Apollonia Pontica: Chronology and Types

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“The main difficulty in studying beads lies in the neglect with which they have been treated by investigators who rarely have figured and described them properly. Description alone cannot make a lasting impression on the mind of the investigator. While figures in black and white might serve the purpose in some cases, these in colour alone can give us a true understanding of their appearance and nature.”¹

In 1963, Y. Mladenova published the glass beads from the excavations in the necropolis of Apollonia in the 1940s.² Since then, some new evidence has accumulated.³ The present paper attempts to offer a general picture of the beads with some dates – most come from burials and the chronology is based on the accompanying inventory.

The 6th–Early 5th Century BC

The earliest glass beads in Apollonia – *trailed eye beads* – were found on the island of St. Kirik, where the Archaic *temenos* and settlement has been located,⁴ in context that could be dated between the early 6th and early 5th century BC (although they are probably earlier). Both examples are fragmentary (fig. 1: 1, 2). One of the beads is of the “triangular” type of *trailed eye-beads* with spiral eye rings, well attested in the Aegean (fig. 1: 1).⁵ Numerous examples from the second half of the 8th and the 7th century BC were found at the Artemision of Ephesos,⁶ as well as in Lindos,⁷ Methone,⁸ and Central Macedonia.⁹ The second one has similar decoration, but most probably belongs to the “rectangular” shape with four spiral eye-rings (fig. 1: 2).¹⁰

Second Half of the 5th Century BC

There is a gap in our knowledge about glass beads in Apollonia in the first half of the 5th century BC, and all later evidence comes from the necropolis. The earliest known grave with glass beads dates from the third quarter of 5th century BC (fig. 1: 15). All examples are rod-formed, and two main categories could be distinguished – monochrome and polychrome. Among monochrome, there are two groups of shapes – simple and compound. The former comprise basic shapes, although one should keep in mind that “ancient hand manufacture only very rarely succeeded in making beads of regular geometrical shape”.¹¹ Most examples are globular or flattened globular, but there is also one ellipsoid opaque orange barrel-shaped bead (fig.1: 9). The compound group com-



Fig. 1: Archaic and Classical glass beads from early 6th to second half of 5th century BC from Apollonia Pontica.

prises more complex shapes or combinations of more than one geometrical figure (e.g. biconical). Two types are attested – the so-called *melon* – beads and *biconical beads* (fig. 1: 10–11).

The polychrome category comprises various *eye-beads*, all with stratified eyes: the matrix is made of opaque orange glass and the eyes consist of four or six alternating layers in white and blue. Several eye-patterns could be seen – three eyes so that the bead looks “triangle” (fig.1: 12), four eyes or four paired eyes for the globular/flattened globular shapes (fig. 1: 13–15). There is one double bead – or two unseparated beads, each one with four pairs of eyes (fig. 1: 15). Another example is a globular bead-pendant of light blue opaque glass with three-colour (blue, black, and white) stratified eyes, wrapped in silver wire to form a hoop (fig. 1: 16). These beads are thought to originate from the Eastern Mediterranean, with parallels from Cyprus.¹²

In terms of colour and the opacity, white, dark blue, and orange beads are opaque, while some lighter blue shades were originally translucent (fig. 1: 8, 10). In the graves, some later 5th century BC beads were found together with other elements forming strings, but more often, only single glass beads were discovered. Generally, these are more or less exceptional finds from graves of children and women.

The 4th Century BC

There is more information for Late Classical times. Most beads are still rod-formed, but there is some evidence for air-forming/drawing technique.¹³ Unlike in the previous period, polychrome beads are more numerous. Most are globular or flattened globular, but there is a new pyramidal type (fig. 2: 3). The opaque colours are white, blue, dark blue, and aquamarine, and there is one blue translucent example (fig. 2: 16). Compound shapes are globular and ellipsoid *melon-beads* (fig. 2: 6, 13), made of light blue translucent or blue opaque glass.

Air-formed monochrome beads are not yet widespread, but there are three flattened rhomboid beads (*grain d'orge* according to M.-D. Nenna¹⁴) that were probably made from premanufactured glass tubes by means of drawing (fig. 2: 6, 9). They are among the earliest known examples from the second quarter of 4th century BC. The type is much more popular in Late Hellenistic times.

There are two main groups of polychrome beads from the 4th century BC – *eye-beads* and *trailed beads*. Depending on the technique of the eyes, they can be simple, stratified, and mosaic.¹⁵ Simple eyes have three technological variants – they are spot and/or trailed or with only two layers or made of bichrome cut canes, while the stratified eyes are multi-layered. Mosaic ones are also made of premanufactured canes but with more than two layers/colours cut in slices. Most beads are globular/flattened globular and only rarely cylindrical, and four main patterns could be distinguished according to the number and placing of the eyes:

1. Three Symmetrically Placed Eyes. The matrix is mainly in various shades of blue. Most often, the eyes are simple with two layers (fig. 2: 1, 3) and rarely stratified with four layers (fig. 2: 23) of white and blue. Two dark blue beads are different – with simple eyes of yellow and brownish glass (fig. 2: 12), or with two yellow relief dots between the white-blue eyes (fig. 2: 3).

2. Four Symmetrically Placed Eyes. Such stratified beads with opaque orange matrix continue from the previous period with four or six layers (fig. 2: 19–22). There is one poorly preserved dark blue example (fig. 2: 13).

3. Four Symmetrically Placed Paired Eyes. The pattern is typical for beads with opaque orange matrix, known already from the 5th century BC (fig. 2: 1, 7, 10, 18).

4. “Two-one-two” or Alternating Paired and Single Eyes. Beads with this pattern always have blue to dark blue matrix with nine simple two-layered white-blue eyes (three pairs and three single). They are very typical of the 4th century BC (fig. 2: 2, 3, 6, 10–13), with the earliest examples from the first quarter.



Fig. 2: Classical glass beads from 4th century BC from Apollonia Pontica.

5. “Three-plus-four” Eye Beads. One example (fig. 2: 8) illustrates this East Mediterranean or Phoenician-Punic type with “three eyes around one perforation and four around the other... [T]he term “three-plus-four” is used for want of a better one”.¹⁶ The bead from Apollonia has the same pattern, but only traces remain from the eyes and the colour of the matrix is probably different from the original. The type dates mainly from the 6th–5th century BC, but there are later versions. The bead was found in a grave from the second quarter of the 4th century BC.

The second group of polychrome rod-formed beads are the *trail-decorated*. There are few from 4th century BC graves, as they are more common for the Hellenistic Period and later. Two subtypes of cylindrical beads are distinguished – with spirally applied white decoration and with the so-called “festoon ornament” (fig 2: 6, 13).

A globular bead with six premanufactured rosettes, dated broadly to the 4th century BC, is also an early example of the so-called *mosaic decoration* (fig. 2: 13).

The 4th century BC glass beads are often found in strings with other elements, including anthropomorphic and zoomorphic glass pendants that are not discussed here (fig. 2: 1, 3, 4, 6). There are also glass scaraboid, pierced coins, animal teeth, seashells, and ceramic beads (fig. 2: 3, 5, 7–9, 11–13). They are found mainly in graves of children¹⁷ and sometimes of women (fig. 2: 17).

The 3rd Century BC

In the Hellenistic Period, glass bead industry flourished in the ancient Mediterranean. The same is true about the West Pontic coast and Apollonia in particular, where all available evidence dates from the 3rd century BC. The strings are less numerous but much richer than in the previous period. Some earlier types of monochrome rod-formed beads continue their existence, e.g. globular and flattened globular, but new translucent colours appear – green and amber-brownish (fig. 3: 6). *Melon-beads* are still very common, though they seem to be of poorer quality and different colours compared to the earlier examples – white and dark blue opaque (fig. 3: 1, 4). New types appear – pinched globular (like *melon-beads* but with two grooves) (fig. 3: 3), conical, elongated conical and flattened conical, tubular and bottle-shaped (fig. 3: 1, 6). The colours could be both opaque and translucent – white, blue, red, brown, green, and amber-yellowish or brownish.

With some exceptions (fig. 3: 2), 3rd century BC *eye-beads* are with mosaic premanufactured cut-cane eyes of two or three colours. There are also eye-beads with simple eyes – small rings of contrasting colours (white or yellow) applied on the matrix (fig. 3: 1, 3–5). The decoration consists of three or four symmetrically placed eyes. The paired eyes, so popular in the 4th century BC, are absent on beads with cut-cane eyes.

Trailed beads are more numerous. The simplest are the globular opaque blue beads with one or two white trails in the centre (fig. 3: 3–5). More complex is the feather



Fig. 3: Hellenistic glass beads from 3rd century BC from Apollonia Pontica.

pattern on the cylindrical or ellipsoid beads (fig. 3: 3). Two new mosaic patterns appear on globular beads: multi-coloured zigzags of longitudinal stripes (fig. 3: 1), or a wider mosaic strip of oblique parallel lines in the centre and two thinner monochrome stripes near the openings (fig. 3: 5). Another new type is the *aryballos-shaped bead* with crumb-decoration (fig. 3: 1) of tiny pieces of multi-coloured crushed glass melted on the matrix.

Conclusion

Glass beads from Apollonia Pontica cover a period from Late Archaic to Middle Hellenistic times. On one hand, when studied in their context, they offer information for the chronology and distribution of the various types. On the other, they could provide some observations regarding the social status of the buried with such ornaments. Based on existing parallels, their appearance in Apollonia is indicative for the trade routes from the Aegean and the coast of Asia Minor in the Archaic Period. There is also evidence for connections with the Eastern Mediterranean, and most probably Rhodian and Cypriot production appear in later periods.

Notes

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¹ Eisen 1916, 1.

² Младенова 1963, 305–312.

³ Lyubomirova et al. 2014; Chacheva 2015a, 2016; Chacheva 2015b.

⁴ Panayotova et al. 2014.

⁵ Spaer 2001, 80.

⁶ Seipel 2008, Kat. Nos 203–206.

⁷ Spaer 2001, 80.

⁸ Ignatiadou 2015, fig. 1.

⁹ Adam-Veleni 2010, 356, nos 386–387.

¹⁰ Kunter 1995, Taf. 3, nos 41–42.

¹¹ Venclova 1990, 46.

¹² Spaer 2001, 84. 91.

¹³ Spaer 2001, 46–48.

¹⁴ Nenna 1999, 134.

¹⁵ Spaer 2001, 52.

¹⁶ Spaer 2001, 84.

¹⁷ Chacheva 2015a; 2016.

Image Credits

Fig.1: Photos and drawings by the author. – Fig.2: 6 after Mladenova 1963, Pl. 164: 998; Pl. 166: 1011; all other elements photographed by the author except for the head pendant in 1 and the glass scaraboid in 3 – by Loïc Damelet, CCJ. – Fig.3: 1 photographed by Daniela Cherneva, NHM, Sofia; 3 after Mladenova 1963, Pl. 164: 1005; 4 after Mladenova 1963, Pl. 166: 1009; all other photographed by the author.

References

Adam-Veleni 2010

P. Adam-Veleni, *Glass Cosmos* (Thessaloniki 2010).

Chacheva 2015a

M. Chacheva, *Trinkets for the Afterlife: Personal Ornaments from Graves of Children in the Necropolis of Apollonia Pontica*, *Archaeologia Bulgarica* XIX, 1, 1–21.

Chacheva 2015b

M. Чачева, Антропоморфни стъклени пандантиви от гръцките колонии по Западния Понт, *Археология* LVI, кн. 1–2, 2015, 49–61.

Chacheva 2016

M. Chacheva, *Adornments or Amulets? Personal Ornaments of Apollonian Children in Pontic Context*, in: M. Manoledakis (ed.), *The Black Sea in the Light of New Archaeological Data and Theoretical Approaches*, *Proceedings of the 2nd International Workshop on the Black Sea in Antiquity held in Thessaloniki 18–20 September 2015* (Oxford 2016) 139–151.

Eisen 1916

G. Eisen, *The Characteristics of Eye Beads from the Earliest Times to the Present*, *AJA* 20, 1, 1916, 1–27.

Ignatiadou 2015

D. Ignatiadou, *Early Glass in Methone*, in: I. Lazar (ed.), *Annales du 19e Congrès de l'Association Internationale pour l'Histoire du Verre. Piran, 17th – 21st September 2012* (Koper 2015) 81–88.

Kunter 1995

K. Kunter, *Glasperlen der vorrömischen Eisenzeit IV nach Unterlagen von Th. E. Haevernick. Schichtaugenperlen*, *Marburger Studien zur Vor- und Frühgeschichte* 18 (Espelkamp 1995).

Lybomirova et al. 2014

V. Lybomirova – Ž. Šmit – H. Fajfar, *Chemical Composition of Glass Beads from the Necropolis of Apollonia Pontica (5th–3rd Century BC)*, *Archaeologia Bulgarica* XVIII, 2, 2014, 1–17.

Mladenova 1963

Я. Младенова, *Предмети от стъкло и алабастр от некропола на Аполония*, in: И. Венедиков – Т. Герасимов – Ц. Дремсизова – Т. Иванов – Я. Младенова – В. Велков (eds.), *Аполония. Разкопките в некропола на Аполония през 1947–1949 г* (София 1963) 305–312.

Nenna 1999

M.-D. Nenna, *Exploration Archéologique de Délos. Fascicule XXXVII. Les Verres*, École française d'Athènes (Athens 1999).

Panayotova et al. 2014

K. Panayotova – M. Damyanov – D. Stoyanova, *Apollonia Pontica: The Archaic Temenos and Settlement on the Island of St. Kirik*, in: J. M. Alvarez – T. Nogales – I. Roda (eds.), *Centre and Periphery in the Ancient World. Proceedings of the XVIIIth International Congress of Classical Archaeology 1* (Merida 2014) 595–598.

Seipel 2008

W. Seipel, *Das Artemision von Ephesos. Heiliger Platz einer Göttin* (Vienna 2008).

Spaer 2001

M. Spaer, *Ancient Glass in the Israel Museum. Beads and Other Small Objects* (Jerusalem 2001).

Venclova 1990

N. Venclova, *Prehistoric Glass in Bohemia* (Praha 1990).