The birds of ancient Armenia

Nina MANASERYAN and Luba BALYAN

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Abstract. More than 45 archaeological sites, belonging to different historic periods yielded skeletal remains of birds. The prevailing amounts of material come from the excavations at the medieval town of Dvin originating from AD 7-12 C. 200 bones were identified and are attributable to 34 wild and 1 domestic species of bird. Bird remains have been recorded among the assemblages from Lchashen, Loriberd and the Urartian town of Argishtichinili. In pellets that accumulated in the caves of the Saray-Boulagh Mountains 11 bird species have been identified. Bird depictions are the most favoured theme in the Armenian arts. Bowls and jugs originating from AD 11-13 C. show images of eagles, storks, doves, peacocks, wild ducks and other bird species. Despite their stylistic form, they are concise in their expression and are thought to serve as the prototypes for the bronze statuettes of waterfowl typical of the Late Bronze Age. Throughout the millennia the Lchashen statuettes retained their faunal diversity. Human impact, direct or indirect, has posed a threat to the many bird species which are in need of urgent attention.

Key words: ancient Armenia, birds, stelae, pottery.

Nina MANASERYAN, Luba BALYAN, Institute of Zoology, NAS Armenia, P. Sevak 7, 375014, Armenia.

I. INTRODUCTION

Birds are truly miraculous creatures. Their ability to fly, their rare beauty and rich plumage colouration have attracted human attention since time immemorial. The best evidence for this are the bird pictures occurring on cliffs, painted pottery, bronze belts, stamps, coins and mosaic art. However, the identification of the species diversity and the evidence of how humans specifically used birds in the prehistoric past is perhaps only possible from the archaeological remains. Among early references dealing primarily with the analysis of bird remains, the work of DAL (1952) based on the archaeological materials from one year's excavation at the Medieval town of Dvin is especially noteworthy. A more detailed osteological analysis of six bird species from the Urartian town of Argishtichinili and an overview of the fossil and subfossil bird remains, including an osteometric study of the skeletal remains appeared in writings by MEJLUMIAN & MARTIROSIAN (1972) and BURCHAK-ABRAMOVICH & MEJLUMIAN (1986).

II. THE BIRD REMAINS OF ANCIENT ARMENIA

Bird remains rarely occur in the faunal collections obtained from archaeological sites in Armenia. Out of 45 settlements, tombs and towns investigated from various periods, bird bones appeared in only ten. To get a better understanding of the avian fauna of ancient Armenia, several (but not all) species and their find locations are listed below.

Podicipedidae:

- 1. Great Crested Grebe *Podiceps cristatus* (LINNAEUS, 1758), Lchashen, 2nd millennium BC.
- 2. Black-necked Grebe *Podiceps nigricollis* BREHM, 1831, Lchashen, 2nd millennium BC.

Phalacrocoracidae:

Pygmy Cormorant Phalacrocorax pygmaeus (PALLAS, 1773), Argishtihinili, 1st millennium BC.

Pandionidae:

4. Osprey Pandion haliaetus (LINNAEUS, 1758), Dvin, 7-12 C. AD.

Accipitridae:

5. Golden Eagle Aquila chrysaetos (LINNAEUS, 1758), Dvin, 7-12 C. AD.

Falconidae:

6. Kestrel Falco tinnunculus LINNAEUS, 1758, Argishtihinili, 1st millennium BC.

Anatidae:

- 7. Mute Swan Cygnus olor (GMELIN, 1789), Dvin, 7-12 C. AD.
- 8. Greylag Goose *Anser anser* (LINNAEUS, 1758), Argishtihinili, 1st millennium BC and Dvin, 7-12 C. AD.
- 9. Shelduck Tadorna tadorna (LINNAEUS, 1758), Argishtihinili 1st millennium BC.
- 10. Wigeon *Anas penelope* LINNAEUS, 1758, Ashtarak area, 3rd millennium BC.
- 11. Gadwall *Anas strepera* LINNAEUS, 1758, Argishtihinili, 1st millennium BC.
- 12. Teal Anas crecca LINNAEUS, 1758, Dvin, 7-12 C. AD.
- 13. Mallard *Anas platyrhynchos* LINNAEUS, 1758, Ararat, 3rd millennium BC; Dvin, 7-12 C. AD.
- 14. Pintail *Anas acuta* LINNAEUS, 1758, Ashtarak region, 3rd millennium BC; Noyemberian, mid 2nd millennium BC; Dvin, 7-12 C. AD.
- 15. Pochard Aythya ferina (LINNAEUS, 1758), Lchashen, 2nd millennium BC.
- 16. Tufted Duck Aythya fuligula (LINNAEUS, 1758), Argishtihinili, 1st millennium BC.

Phasianidae:

- 17. Chukar Alectoris chukar (GRAY, 1830), Saray Boulagh Mountain chain, Dvin, 7-12 C. AD.
- 18. Partridge Perdix perdix (LINNAEUS, 1758), Saray Boulagh Mountain chain, Dvin, 7-12 C. AD.
- 19. Quail Coturnix coturnix (LINNAEUS, 1758), Dvin, 7-12 C. AD.
- 20. Domestic Hen *Gallus gallus* forma *domestica* (LINNAEUS, 1758), Noyemberian, mid 2nd millennium BC; Argishtihinili, 1st millennium BC; Dvin, 7-12 C. AD.

Gruidae:

21. Crane Grus grus (LINNAEUS, 1758), Dvin, 7-12 C. AD.

Otididae:

22. Great Bustard Otis tarda LINNAEUS, 1758, Argishtihinili, 1st millennium BC.

Burhinidae:

23. Stone Curlew *Burhinus oedicnemus* (LINNAEUS, 1758), Noyemberian, mid 2nd millennium BC.

Scolopacidae:

24. Green Sandpiper Tringa ochropus LINNAEUS, 1758, Dvin, 7-12 C. AD.

Columbidae:

- 25. Rock Dove Columba livia GMELIN, 1789, Saray Boulagh Mountain chain.
- 26. Turtle Dove Streptopelia turtur (LINNAEUS, 1758), Saray Boulagh Mountain chain.

Strigidae:

- 27. Eagle Owl Bubo bubo (LINNAEUS, 1758), Saray Boulagh Mountain chain.
- 28. Little Owl Athene noctua (SCOPOLI, 1769), Saray Boulagh Mountain chain.

Alaudidae:

- 29. Bimaculated Lark *Melanocorypha bimaculata* (MÉNÉTRIÉS, 1832), Saray Boulagh Mountain chain.
- 30. Crested Lark *Galerida cristata* (LINNAEUS, 1758), Saray Boulagh Mountain chain, Dvin, 7-12 C. AD.

Hirundinidae:

31. Swallow Hirundo rustica LINNAEUS, 1758, Dvin, 7-12 C. AD.

Fringillidae:

32. Crimson-winged Finch Rhodopechys sanguinea (GOULD, 1838), Dvin, 7-12 C. AD.

Sturnidae:

33. Starling Sturnus vulgaris LINNAEUS, 1758, Dvin, 7-12 C. AD.

Corvidae:

- 34. Chough *Pyrrhocorax pyrrhocorax* (LINNAEUS, 1758), Saray Boulagh Mountain chain.
- 35. Raven Corvus corax LINNAEUS, 1758, Argishtihinili, 1st millennium BC.

In describing the ancient Armenian avifauna, it is firstly noteworthy that collections rich in species diversity (gallinaceous, rails, ducks, larks and corvids – a total of 16) were discovered in wells, inside the ancient habitations in Dvin, the capital of medieval Armenia (DAL 1952; BURCHAK-ABRAMOVICH, verbal comm.). Gallinaceous birds (Partridge and Chukar), larks (Bimaculated Lark and Crested Lark), owls (Little Owl and Eagle Owl), doves and pigeons, and corvids

making a total of 9 species have been collected by DAL (1952) during the study of pellets accumulated in the northern caves of the Saray Boulagh Mountain chain.

Materials collected by BURCHAK-ABRAMOVICH (1958) include: Pygmy Cormorant, Bustard, Kestrel, Greylag Goose, Gadwall, Tufted Duck, Shelduck, Raven and Domestic Hen (9 species) excavated at the Urartian town of Argishtihinili (6th C. AD). Pintail, Mallard and Wigeon were found in Ararat (4th millennium BC), Ashtarak (3rd millennium BC) and Noyemberian (2nd millennium BC), while Great Crested and Black-necked Grebes, Pochard were discovered during investigations of the Bronze Age tombs at Lchashen (Burchak-Abramovich & Mejlumian 1986).

In general, the majority of the bone fragments belong to waterfowl (28%) (swans, geese, ducks) and passerines (20%) (crow, starlings, finches, larks, martins and swallows). More rare are gallinaceous birds (11%) (Quail, Partridge and Chukar) and birds of prey (8%) (Kestrel, Golden Eagle and Osprey). Species from other orders occur as single finds (grebes, Charadriiformes sp. and cormorants).

The data above suggest that the ancient Armenian population relied on game species (48%). This included such rare and valuable birds as Mute Swan, Greylag Goose (easily tamed; valued for feather, meat and down); Great Crested Grebe (has shiny silvery white on underparts, skin used for rug-making and trimmings to various clothes; meat edible but poor quality); Mallard (among all game birds the most economically important) and Bustard (the largest game bird in Armenia). There is no doubt as regards the use of Crane and Charadriiformes sp in the past. Both are used for food even today and their meat is recognized as an important resource. It may well be that small passerines (Starlings and larks) were also used for food during extended food shortages, such as during town sieges. The remains of Golden Eagle in the collection prompt us to suggest that the species was trained for hunting (Golden Eagle, falcons and hawks were specifically trained to hunt gazelles, hares, foxes and wolves). Their ability to hunt resulted in birds of prey being persecuted extensively leading to a decline in numbers (Golden Eagle is presently protected by the Red Data Book of Armenia).

III. BIRDS IN ANCIENT ART

Various archaeological publications have reported on the numerous bird figures occuring as rock carvings in the mountains of Gegham, Syunik and Vardenis as well as other extensive ridges and on prehistoric vishaps, temples, ornamental-cultural or ritual-totem ceramics, bronze pottery and other objects from archaeological excavations. This subject matter has therefore received much attention.

Many hundreds of years ago, before the rise of a Christian Armenia, the prehistoric (Middle Bronze, 19-15 C. BC) humans that inhabited the area worshipped stone sculptures widely known as vishaps (Fig. 1). These vishaps are huge stelae, 5.06 m long and 0.6 m wide, the shape of fish or rectangular monuments with carved images of birds resembling cranes, bull or sheep heads and skins.

Among the various compositions there is one of particular interest (Fig. 1: 4th and 5th from left): its broadest part shows a bull's head bordered by two serpents on either side and birds in the center that resemble storks perched on a horizontal branch.

Similar motifs, notions of the firmament, sun, moon and other heavenly bodies that are inseparably linked with an image of a bird are also evident in rock carvings in the Gegham Mountains and generally in monuments throughout Armenian prehistoric art. One of the rock compositions representing a whole constellation (Fig. 2) depicts a sun disc in the center and a large bird perched on it with its bill facing the 'fire ball'.

Some of the rock images of birds are fascinating with dangling legs and characteristic webfooted structures, similar to the magnificent elongated figures that often occur as vishaps (Fig. 3).

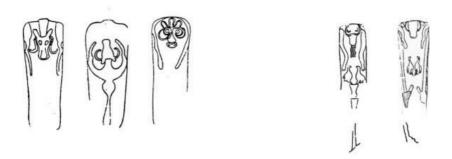


Fig. 1. Vishaps. Source: YESAYAN (1980).



Fig. 2. Rock carving of bird and sun disk, Gegham Mountains (5th – 1st millenium BC). Source: MARTIROSIAN (1981).

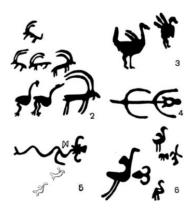


Fig. 3. Bird and mammal carvings, Gegham Mountains. Source: MARTIROSIAN (1981).

Figures of birds are poorly stylized and even completely lack style. As regards their anthropomorphic traits, they have their head and neck connected to the body, their legs folded beneath the belly or sometimes dangling in the air (MARTIROSIAN 1981). The figures bear a resemblance with waterbirds (ducks or geese) that are well represented on painted pottery of the Middle Bronze Age. As with the rock carvings, painted pottery also has bird images appearing on the firmament alongside geometrical representations of heavenly bodies.

One of the oldest bird representations is an interesting clay statuette from Mokhrabloor (the Early Bronze Age) of a perched bird with a rounded body, short lowered tail and a sinuous neck showing conspicuous bulge on the crop (YESAYAN 1980) (Fig. 4).



Fig. 4. Bird clay statuette, Mokhrabloor. Source: YESAYAN (1980).

Among the materials from the Middle Bronze Age (17-16 C. BC) the clay statuettes of birds excavated from the Lchashen tumulus are especially noteworthy. Despite their stylized representation, they are realized with simplicity and grace. The Lchashen statuettes always show a small rounded body with flat underparts, a long extended neck crowned with a compact head. All birds have pink and red necks and heads (Fig. 5).

Statuettes of birds from the Late Bronze Age (Lchashen) are anchored to a thin patterned base by a ball-hinge which helps them revolve around an axle (Fig. 6). These statuettes of large birds have long broad tails, rounded bodies, long necks, compact heads and massive (sometimes short and kinked) bills. Some of them have notched eyes that were perhaps once set with glittering gems. The wings are often shown as hemispheres in raised relief. The same is true of the two large hollow statuettes (a goose and a duck) from the village of Hatsarat (Fig. 6) and the four bird statuettes from the Loriberd burials of the Late Bronze Age. Typically they have an extended body decorated by a cuneiform lines and long broad tails, round bulging eyes with obscure pupils and massive, curved bills. The other, most numerous group of statuettes includes pendant-shaped images of birds from Lchashen and Arteek (Fig. 6). They have slightly rounded or elongated body, decorated with hemispherical or cuneiform notched lines, long rounded tails and necks, small heads with elongated or blunt-pointed bills and distinctly patterned eyes. The three bronze statuettes (all of them probably stood horizontally) from the Lchashen burials have characteristically large bodies, short docked tails, short necks, large heads and long blunt-pointed bills (YESAYAN 1980).

There is no doubt that these statuettes of birds have both ornamental and totemic significance. The diversity of shapes indicates that these statuettes were used in a variety of ancient rites. Some of them were used to decorate the connecting rods in carts, others could have been used to decorate altars and sanctuaries. Some of the bird-shaped pendants (statuettes) served as amulets intended to dispel evil spirits. Almost all sculptures have a hole through them, and hollow statuettes had metallic balls which emit a melodic sound when shaken, to scare away "evil spirits".

Birds are the most prevalent "wandering" motif in the painted pottery of medieval Armenian art (Fig. 7) (BABAYAN 1981). Bowls, dishes and vessels (particularly those from the excavations of the ancient Armenian capitals – Dvin and Ani, 11-13 C.) portray images of majestic eagles – that are believed to be a bird from heaven and the rising power of the sun, fire (energy, vision) and immortal-

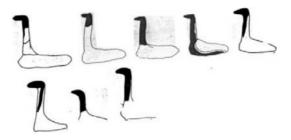


Fig. 5. Statuettes of birds, Lchashen. Source: YESAYAN (1980).

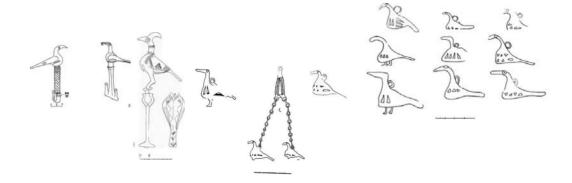


Fig. 6. Bronze statuettes of birds. Source: YESAYAN (1980).



Fig. 7. Dish portraying stork with a snake in bill. Dvin, 13 C. Source: STEPANYAN & CHAKMAKCHIAN (1971).

ity; storks – that are painted yellow, green and brown, often encircled by plant ornaments and render special coloration to beauty and power of nature; crane – thought to be an envoy of fertility and imminent rain; roosters – thought to be harbingers of the rising sun and light, also represents fertility, vigilance and alertness and swans – that a symbolise rebirth, innocence and chastity.

The Dvin artistic reliefs reveals an array of bird images and especially those of peafowl (a worldwide motif in early Christian monuments) in the Armenian decorative and pictorial art. The peacock, an introduced bird of fertility associated with sun, good fortune and the notion of immortality was extremely cherished and revered in Armenia (Fig. 8).

The showy peacock also occurs in the decorative relief of the St. Christ Akhtamar Temple (10 C.) and that of the Temple in Ptghnee (STEPANYAN & CHAKMAKCHIAN 1971).



Fig. 8. Peacock relief. Dvin, 5-6 C. Source: STEPANYAN & CHAKMAKCHIAN (1971).

Equally picturesque is the ornamental sculpture design of the Hyravank Monastery in Geghard, with its portals, cornices and domes showing a representation of animals and birds. Especially attractive is a well designed tympanum decorated by doves – a beloved theme in portals of Armenian monuments of the 13 C. Its northern wall has a high relief showing a bull that holds two chained lions tied up around their neck and an eagle in their midst with slightly outstretched wings and a lamb in their talons. It is believed that the relief represents a coat of arms of the Proshian princes (Fig. 9).

The carved images of stork and snake on the north side of the Astvatsatseen Church and those of doves over the central façade of the Makaravank and Khoranashat Temples are unique. Of particular interest are the capitals of the pillars of the Zvartnots Temple which are ornamented with images of eagles with outstretched wings that seem to support the symbolic firmament - the dome of the edifice (Fig. 10).



Fig. 9. Coat of arms of the Proshian princes. Source: KHALPAKHCHIAN (1980).



Fig. 10. The capital of a column with a representation of an eagle. Zvartnots Temple. Source: KHALPAKHCHIAN (1980).

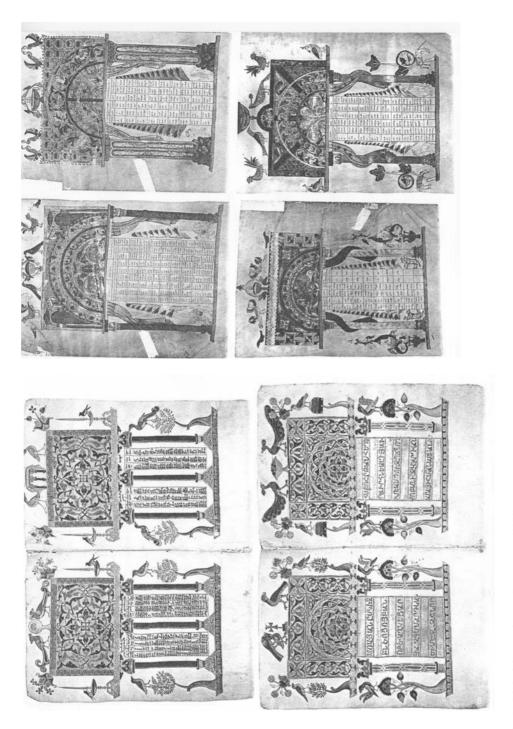


Fig. 11. Bird miniatures. Source: IZMAYLOVA (1979).

It would have been incomplete to leave out of this review the many bird images in Armenian miniature art (i.e. collections of Armenian illuminated manuscripts of an ecclesiastical nature). The academic style of the animal and bird figures, located mostly at the top of khorans (the introductory canon tables), are far from academic accuracy which is why even the frequently recurring patterns look different and render a peculiar vividness to the various compositions (Fig. 11).

In one of the most revered Armenian relics, the Evangeliary of Echmiadzin dated to 989, the miniature scenes of christenings shows a uniquely ornamented frame filled up with holy vessels and within them are pelicans (a symbol of Christ stressing the sacrifice of his mission on Earth) that are illustrated tearing their breast apart and shedding blood for giving their life to the young (STE-PANYAN & CHALPAKHCHIAN 1971). The evangeliary of Queen Mlke contains a great profusion of bird figures remarkably and often asymmetrically positioned on top of the illuminated khorans (canon tables) that display an exquisite plumage coloration where yellow, green, red and blue alternate. The introductory part shows two birds on either side of the holy tree and reflects the symbolism of the prehistoric cult. The lively images of the surroundings with flowers, birds and polychrome colours received various interpretations in accordance with the ecclesiastical dogmas.

Contrary to a generally accepted tradition (11 C.) of the positioning birds on the eight canons, the Evangeliary 3033 shows birds occupying seven khorans that are carried over two pages and characteristic of the archaic style. The archaic kinship of the twin khoran illustrations is also evident. The sole distinction is different kinds of birds – large ones, positioned asymmetrically on top of khorans – rendering a peculiar vivacity to decorative compositions. Birds that are larger in size are placed by the artist asymmetrically on the margins, outside the adjoining khorans. Smaller bird images emphasize the level of individuality in each of them. Despite the stylized representation, the species of birds are easily discerned. These include peafowl, pheasants, guineafowl, turkey, pigeon amongst others; although with all the bird diversity, the absence of Quail and ducks characteristic of the Evangeliary of Echmiadzin, is very apparent (IZMAYLOVA 1979).

In our reference to the Evangeliary of Kars, not only the margins of pages but also the space between the canon tables are filled up by an abundance of stylized bird figures of different kinds executed in limitless positions and movements.

In this report just few of the miraculous illustrations are mentioned to illustrate the human fascination with birds – a marvelous creation of nature.

REFERENCES

BABAYAN F. 1981. The decorative motifs of Artistic ceramics in the Medieval Armenia. National Academy of Sciences of the Armenian SSR, Yerevan. (In Armenian with English summary).

BURCHAK-ABRAMOVICH N. I. 1958. Materialy k izucheniyu fauni drewney Armenii. [Materials furthering the study of the ancient Armenian fauna]. *Newsletter of the National Academy of Sciences of the Armenian SSR, Biological and Agricultural Sciences*, 11(11): 26-30. (In Russian).

BURCHAK-ABRAMOVICH N. I., MEJLUMIAN S. K. 1986. On the species composition, distribution and use of birds in Holocene. *Zoological Papers, Academy of Sciences of Armenian SSR*, **20**: 128-148. (In Russian with English summary).

DAL S. K. 1952. Ptici iz raskopok Dwina (VII-XII w.n.e.). [Birds from the excavations of Dvin (AD VII-XII C.)]. Proceedings of the Natural History Museum, National Academy of the USSR, vol. 4. (In Russian).

IZMAYLOVA T. A. 1979. Armyanskaya miniatyura XI weka. [Armenian miniatures XI C.]. Iskusstvo Publishers, Moscow. (In Russian).

KHALPAKHCHIAN O. K. 1980. Architectural ensembles of Armenia 8 C. BC – 19 C. AD. Iskusstvo Publishers, Moscow. (In Russian with English summary).

MARTIROSIAN A. A. 1981. The Rock-carvings of the Gegham mountain range. National Academy of Sciences of the Armenian SSR, Yerevan. (In Russian with English summary).

MEJLUMIAN S. K, MARTIROSIAN A. A. 1972. Nekotorye archeologicheskie dannye ob Urartskoj medicine. [Select archaeological data on the Urartian medicine]. *Istoriko-filologicheskij Jurnal*, 1(56): 235-252. (In Russian).

STEPANYAN N., CHALPAKHCHIAN A. 1971. Skulptura drewnej Armenii. [Ornamental art of medieval Armenia]. Avrora Publishers, Leningrad. (In Russian).

YESAYAN S. C. A. 1980. The sculpture of ancient Armenia. National Academy of Sciences of the Armenian SSR, Yerevan. (In Russian with English summary).