

EAGLE-SHAPED BROOCH FROM SZŐLŐSGYÖRÖK

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In September 2020, a volunteer cooperating with the Rippl-Rónai Museum drew our attention to an archeological site located south of the Lake Balaton, in the surroundings of Szőlősgyörök. We have carried out several metal detector-aided field survey campaigns in the area: we spent three days in 2020, and another four in 2021 on the site, and we hope to spend a few more this year. Among the several hundreds of recovered metal artefacts, there is an outstanding piece found by Gábor Jancsekity on 30 October 2021 (Fig. 1). We suspected in the moment of discovery the bird-shaped brooch to be special, and further research confirmed that. The brooch from Szőlősgyörök only has a few known analogies in Hungary, and only one of those is part of a museum's collection. Since no Hungarian summary of this brooch type has been published so far; we present not only the eagle-shaped brooch from Szőlősgyörök but also its analogies in this paper.



Fig. 1. The eagle-shaped plate brooch in the moment of discovery (photo by Gábor Jancsekity)

Keywords: Roman Period, plate brooch, bird-shaped brooch, Szőlősgyörök, Somogy County, Pannonia

DESCRIPTION OF THE FINDING

The plate brooch in the focus of the present paper resembles a bird of prey, more specifically, an eagle. It was cast of a copper alloy; both its pin and pin mechanism have persisted in good condition. The pin mechanism has an internal chord, an axis, and a spring with 4+3 coils. The brooch was made in two pieces, that is, the brooch body was cast separately, and only became joined with the pin mechanism in the final stage of production. The pierced chord lug was cast with the brooch body. The flat bow plate depicts an eagle with stretched wings, its head turned toward the right wing. The surface is decorated with a simple pattern, small triangular notches along the back of the neck; furthermore, an engraved wolf's teeth-like curve (*Tremolierstich*) connects the neck and tail feathers and a perpendicular one the wing tips. The brooch has a hooked perpendicular catchplate. Dimensions: length: 33.26 mm, width: 23.71 mm, thickness: 2.1–3.4 mm, spring width: 17.70 mm, pin length: 31.72 mm (Fig. 2).



Fig. 2. Eagle-shaped plate brooch from Szőlősgyörök (photo by Bálint Csernák)

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THE SITE

Our site is located in the northernmost part of Szőlősgyőrök (administratively, the settlement belongs to Balatonboglár), bordering Szőlőskislak, immediately east of the road between the two settlements and west of the Jamai Creek. The valley of the Jamai Creek has been densely populated in historical times, as proven by finds from various historical periods between the Neolithic and the Early Modern Age. Several other small springs and watercourses flow into the Jamai Stream in the area, originating at Gyugy, and discharging into the Lake Balaton. The close area has at least five smaller and larger parallel watercourses running northward; the site is positioned on top of a very slightly emerging bank of one and the plateaus behind that. It has not been registered yet, but we have already started the process and proposed the name “*Szőlősgyőrök-Tömör-pusztától keletre*” for it.

The site is relatively abundant in Roman Period pottery fragments, as well as various slags and melts, indicating some metalworking activity in the area. Most recovered metal objects (around 150) were small bronze Roman coins dating back to the 4th century AD. Beside small coins, some bronze *folles* (large Roman coins) and a few silver coins were also found in the site, with a heavily worn 1st-century BC *legionary denarius* amongst them. Besides coins, we have also recovered other Roman Period artefacts: more than ten intact or fragmented brooches, including a swastika-shaped one, bronze belt mounts, belt clasps, bracelet fragments, earring/pendant fragments, and some objects made of iron. While the most prominent record of the site clearly belongs to the Roman Period occupation, we have also found a horse harness mount dated to the Hungarian Conquest Period and some medieval artefacts (the latter belonging presumably to the medieval *Tömör[d]* village).

SZŐLŐSGYÖRÖK AND ITS SURROUNDINGS IN THE ROMAN PERIOD

The nearby Roman sites are relatively well-known as several targeted field surveys have been carried out in the area. The settlement monographs of Szőlősgyőrök, Balatonboglár, Balatonlelle, and Szőlőskislak have been published earlier, and several sites were unearthed during the excavations preceding the construction of the motorway M7. That the southern shore of Lake Balaton is rich in Roman Period sites has been proven, beside others, by the site where the eagle-shaped brooch was discovered. The area came under the rule of the Roman Empire in the 1st century AD, and the road running along the southern shore of Lake Balaton may have been created at that time. The road did not run in the line of the present main road and the motorway but bypassed some marshes and bays. A section of this ancient road was unearthed between Balatonlelle and Szőlőskislak; as far as we know, it also passed through our site. The road has remained important after the Roman Period, and its path has not changed until today. Early Roman settlements in the area are known at Balatonlelle-Rádpusztá and by a former sand quarry in the southern part of Szőlősgyőrök. Two further settlements existed in the outskirts of Ordacsehi in the 2nd and 3rd centuries AD (Ordacsehi-Bugaszeg and -Major), one at Balatonszemes, and a major one, incorporating a Late Roman horizon, at Balatonlelle-Kenderföldek. A bone workshop in Ordacsehi has also been associated with the Late Roman Period. We know of only a single *villa* in the vicinity, in Fonyód (NÉMETH 2007; NÉMETH 1991, 43–48). Roman settlements were established in the territory of Balatonboglár-Berekre-dűlő, -Kokashegy, and several ones at Balatonlelle-Rádpusztá (HONTI ET AL. 1988, 23–24). A 3rd-century AD hoard comprising 40 silver coins was found at Balatonlelle-Szenyvíz-telep (HONTI ET AL. 1988, 23). Furthermore, it is worth mentioning a grave found at Szőlősgyőrök, in the sand quarry mentioned above, that was dated to the turn of the 1st and 2nd centuries AD and contained nine bronze pots, bronze scissors, a bronze pin, and glass vessels (NÉMETH 1991, 43–44; NÉMETH 2007, 43).

Despite the high number of settlements, only a few cemeteries are known in the area. In addition to the grave in Szőlősgyőrök mentioned above, burials have been found at Balatonlelle-Rádpusztá (3rd–4th century AD), Gyugy, and Ordacsehi-Bugaszeg (5th century AD; NÉMETH 2018, 95, 101, 106–107).

Based on the related record, the Early Roman settlement at Szőlősgyőrök may have been still in use as late as the 4th century AD. Péter Németh wrote in 1991 that he knew of no Late Roman Period settlement around Szőlősgyőrök but only stray finds. For example, he only mentioned stray finds from the Gombosalja

II and III sites, and was of the opinion that no major settlement could have existed in the area. In the 1980s, pottery fragments indicating a settlement were found only 200 m away to the east of the present site, also in the outskirts of Szőlőskislak, at Jamai-patak II (NÉMETH 1991, 46). A survey of the site in 2022 yielded 4th-century AD Roman coins. The stray finds discovered in the area outline an about 1 km-long and 5–600 m-wide settlement that flourished in the Late Roman Period in the territory north of Szőlősgyörök and south of Szőlőskislak.

ROMAN PERIOD BIRD-SHAPED BROOCHES

Brooches in the shape of different animals were popular throughout the Roman Period. Countless design and decoration types are known; the depicted animal, the brooch type, and the applied decoration may have depended on the place and time of production, the skill of the craftsman and the time spent, as well as the expectations and taste of the customer.

Bird-shaped brooches were made as plate bows with a plain, low-relief, or fully-modelled bow plate, where the bird is depicted on its own or as part of a composition comprising another bird, animal, or even object. Although the species cannot be determined in many cases, sometimes the maker put effort in portraying some characteristics in detail, thus it can be determined more precisely. Pannonian brooches depict, e.g., roosters, geese, ducks, pigeons, peacocks, eagles, and owls (PATEK 1942, 220–222; MATOUSCHEK & NOWAK 1985–1986, 130–142; WINTER 1985–1986, 338–340, 342–359; BEREZ 2008, 151–153, 159).

Sometimes the brooches' decoration is quite simple; besides, there are some specimens with incised lines emphasizing the body's outline or independent of that, zigzag or wolf's teeth-like patterns (*Tremolierstich*), or punched ring dot motifs. Higher-quality pieces are often *niello*-decorated: the brooch plate's surface is interrupted by or even divided into shallow, sometimes narrow cells that became filled with a black, shiny substance containing copper- or silver sulphide (BAYLEY & BUTCHER 2004, 46). Bird-shaped brooches with *niello* decoration – depicting birds or scenes with birds and hares (Feugère 29a15–19, 29b7 types; FEUGÈRE 1985, 383–384, Figs. 59, 61) – are known in larger number from sites and collections in the territory of the former *Gallia Provincia*. The other often-applied high-quality decorative technique is *enamelling*. Enamel is glass coloured with metal oxides; its main ingredient is silica (SiO₂), liquefied by adding alkali metal carbonates, -nitrates and -sulphates (B. BÓNIS & SELLYE 1988, 17; BEREZ 2008, 88). The size and shape of the cells varies, emphasizing the body, the wings, and the tail feather on some bird-shaped brooches, but round cells also occur (e.g., Feugère 29a21–22, 24–30 and Berecz IIC/1a–e types; FEUGÈRE 1985, 383–384, Fig. 60; BEREZ 2008, 151–153).

In the case of Roman Period brooches, to localise the places of production and survey all types manufactured at a certain site is a challenging task, but casting moulds, semi-finished products, and failed castings in the related record provide direct evidence. Production of bird-shaped brooches could only be proven for a few sites so far. A reject pigeon-shaped brooch was found at Schützen am Gebirge in *Pannonia* (MATOUSCHEK & NOWAK 1985–1986, 328; COCIŞ 2019, 55, Pl. 125. 40), the lead model of a pigeon-shaped brooch and a reject piece have been recovered from *Virunum* in *Noricum* (GUGL 1995, 94, Taf. 19. 149–150; COCIŞ 2019, 63, Pl. 147. 145, 148), and the lead model of a pigeon-shaped brooch is known from an unknown site in Southern *Pannonia* (COCIŞ 2019, 56, Pl. 128. 55). It is possible that a clay mould discovered in Komárom–Szöny/*Brigetio* was used to make a bird-shaped brooch (SÁRÓ 2020, 122–125, Cat. 3, Fig. 3, Fig. 6). As will be presented below, there is clear evidence of the production of eagle-shaped brooches in *Pannonia*.

ANALOGIES AND DATING OF THE EAGLE-SHAPED BROOCH

The shape of the brooch from Szőlősgyörök is unique, with only a few analogies in the related literature. Unfortunately, only the find spot but not the find context of most is known.

Several plate brooches, similar in form to the specimen from Szőlősgyörök but undecorated (Fig. 4.1–6) have been recovered from Bad Deutsch-Altenburg–Petronell/*Carnuntum* (MATOUSCHEK & NOWAK 1985–1986, 132–134, 210–211, Nr. 4–9). Another piece from Loretum in *Pannonia* (Fig. 4.7) has small trian-

gular notches on the neck of the bird, akin to the brooch from Szőlősgyörök (MATOUSCHEK & NOWAK 1985–1986, 134–135, 211, Nr. 10). Besides, two further specimens are known from unspecified sites in the territory of Hungary; currently, both are part of private collections. The tail feather on both is wide and the bow plate undecorated (Fig. 3, right and left). Another eagle-shaped plate brooch was found in Wagna-Leibnitz/*Flavia Solva* in *Noricum* (Fig. 4.8). The piece found in *Insula XLI* is similar to the previous undecorated ones (PUHM 1992, 73, 76, Nr. 25). Besides *Noricum*, another related find proves the type's presence in the *Barbaricum*: the plate brooch discovered in Paltendorf, Austria, north of the Danube (Fig. 4.9) is also closely similar to the undecorated specimens described above (ADLER & SCHUPPLER 1990, 246, Abb. 1066).

The remaining available analogies more or less differ from the brooch from Szőlősgyörök in either form and/or decoration. Although a piece in a private collection, found near Tarján, shows close similarity to the finds presented above in many respects (same head orientation, similar body and wing shapes, pin mechanism below the tail), the tail feathers are clearly bifurcated (Fig. 3, middle). A fragmented brooch found at Enns-Lorch/*Lauriacum* (Fig. 4.10) has the same design (KNEIFEL 1981, 539, Abb. 729). Another undecorated one from the territory of a 3rd–4th century AD *villa rustica* at Vranj-Hrtkovci in *Pannonia Inferior* (Fig. 4.11; ILIĆ 2020, 79–80, Fig. 6, Tab. 1–2) also has a similar shape, but the pin mechanism is different: it has a “*Backenscharnier*” structure, a hinged pin between two pierced lugs instead of a spring (PETKOVIĆ 2010, 206, 214, Nr. 1069, T. XXXVII. 9), just like another specimen found at Belgrade-Ušće/*Singidunum* in *Moesia Superior* (Fig. 4.12; BOJOVIĆ 1983, 140, Cat. 300, T. XXX. 300= PETKOVIĆ 2010, 206, 214, Nr. 1071).

Erzsébet Patek mentions a brooch with a somewhat more simple design from Sisak/*Siscia* in *Pannonia* (PATEK 1942, 221, T. XX. 7). The head orientation, the shape of the stretched wings and the bifurcated tail feathers match the former ones, but the bow plate is decorated with punched ring dots: one at the eye, another one on the body, and one on each wing (Fig. 5.1). Its closest analogy in this respect is a brooch from Novi Banovci/*Burgenae*, also decorated with punched ring dots in similar positions (Fig. 5.2; KOVAČEVIĆ 1960, Sl. 57). Several other ring dot-decorated brooches are known from *Moesia Superior*. The number and position of ring dots differs on these examples but the eye is always marked. For example, a piece from Belgrade-Ušće/*Singidunum* features three ring dots on the neck, five on the wings, and one on the tail (Fig. 5.3; PETKOVIĆ 2010, 206, Sl. 62). Another plate brooch from Belgrade/*Singidunum*, 30 Knez Mihailova Street (Fig. 5.4) depicts an eagle with stretched wings, covered with 24 (originally, perhaps 29) punched ring dots (PETKOVIĆ 2010, 206, 214, Nr. 1073, T. XXXVII. 10). A piece from an unknown site in the Belgrade City Museum's collection only has a ring dot on each wing and one marking the eye, while the tail feathers are emphasized with small incisions (Fig. 5.5; JANKOVIĆ 1997, 329, Cat. 560). A further piece was published from *Dura-Europos* (RIECKHOFF 1975, 65; PETKOVIĆ 2010, 206).

An analogy from Mediana-Niš/*Naissus* may also be mentioned. According to the available description, this piece has no ring dot decoration but the bird's claws are marked by incisions in the centre of the surface (PETKOVIĆ 2010, 214, Nr. 1075).



Fig. 3. Roman-period eagle-shaped brooches from private collections in Hungary

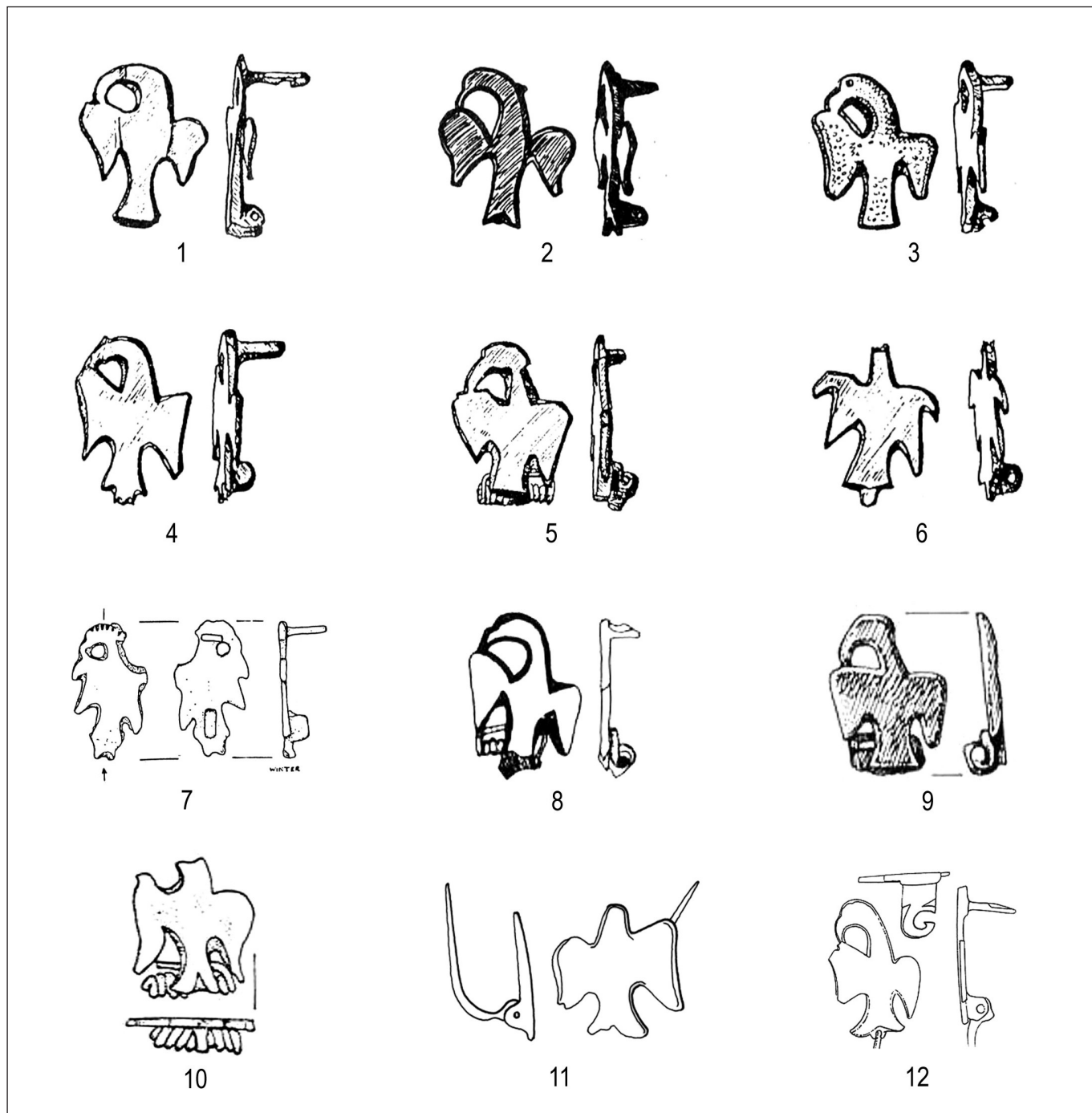


Fig. 4. Roman Period eagle-shaped brooches. Diverse sizes (length: 26–39 mm; width: 21–39 mm). 1–6: Bad Deutsch-Altenburg–Petronell (MATOUSCHEK & NOWAK 1985–1986, Nr. 4–9), 7: Loretom (MATOUSCHEK & NOWAK 1985–1986, Nr. 10), 8: Wagna–Leibnitz (PUHM 1992, 78, Nr. 25), 9: Paltendorf (ADLER & SCHUPPLER 1990, 246, Abb. 1066), 10: Enns-Lorch (KNEIFEL 1981, 539, Abb. 729), 11: Vranj-Hrtkovci (PETKOVIĆ 2010, T. XXXVII. 9), 12: Belgrade-Ušće (BOJOVIĆ 1983, T. XXX. 300) (by Péter Horváth)

It is also worth mentioning eagle-shaped brooches that represent a looser analogy, like a less elaborate piece from Komárom–Szöny/Brigetio (Fig. 5.6) with the head of the eagle with stretched wings akin to the pieces mentioned above but a different wing design (PATEK 1942, 221, T. XX. 8).

Furthermore, there are plate brooches where the head looks left, unlike the bird on the brooch from Szőlősgyőrök, or is perpendicular to the body, and the body is more realistic; a low-relief piece from Belgrade-Ušće/Singidunum (Fig. 5.7; PETKOVIĆ 2010, 205, 214, Nr. 1068, Sl. 61) is a good example to the latter.

Variant 29a16 in Michel Feugère's typology has a number of analogies (FEUGÈRE 1985, 387, Fig. 59). Feugère identified the bird as pigeon (FEUGÈRE 1985, 383), but several publications describe it as eagle (ARTEFACTS FIB-4569). For example, the collection of brooches from Neusiedl am See and Bad Deutsch-Altenburg–Petronell/*Carnuntum* by Johann Matouschek and Heinz Nowak comprises two same-size low-relief pieces in the shape of an eagle looking left, with a pin hinged between two lugs (MATOUSCHEK & NOWAK 1985–1986, 131–132, 210, Nr. 2–3). One is coated with a light white metal (tin or lead) alloy layer, while the eyes are accentuated with *niello* decoration. It has a very close analogy from Windisch/*Vindonissa* (Fig. 5.8; ETTLINGER 1973, 125, 197, Taf. 28. 7); the legs on that piece are openwork, making the representation even

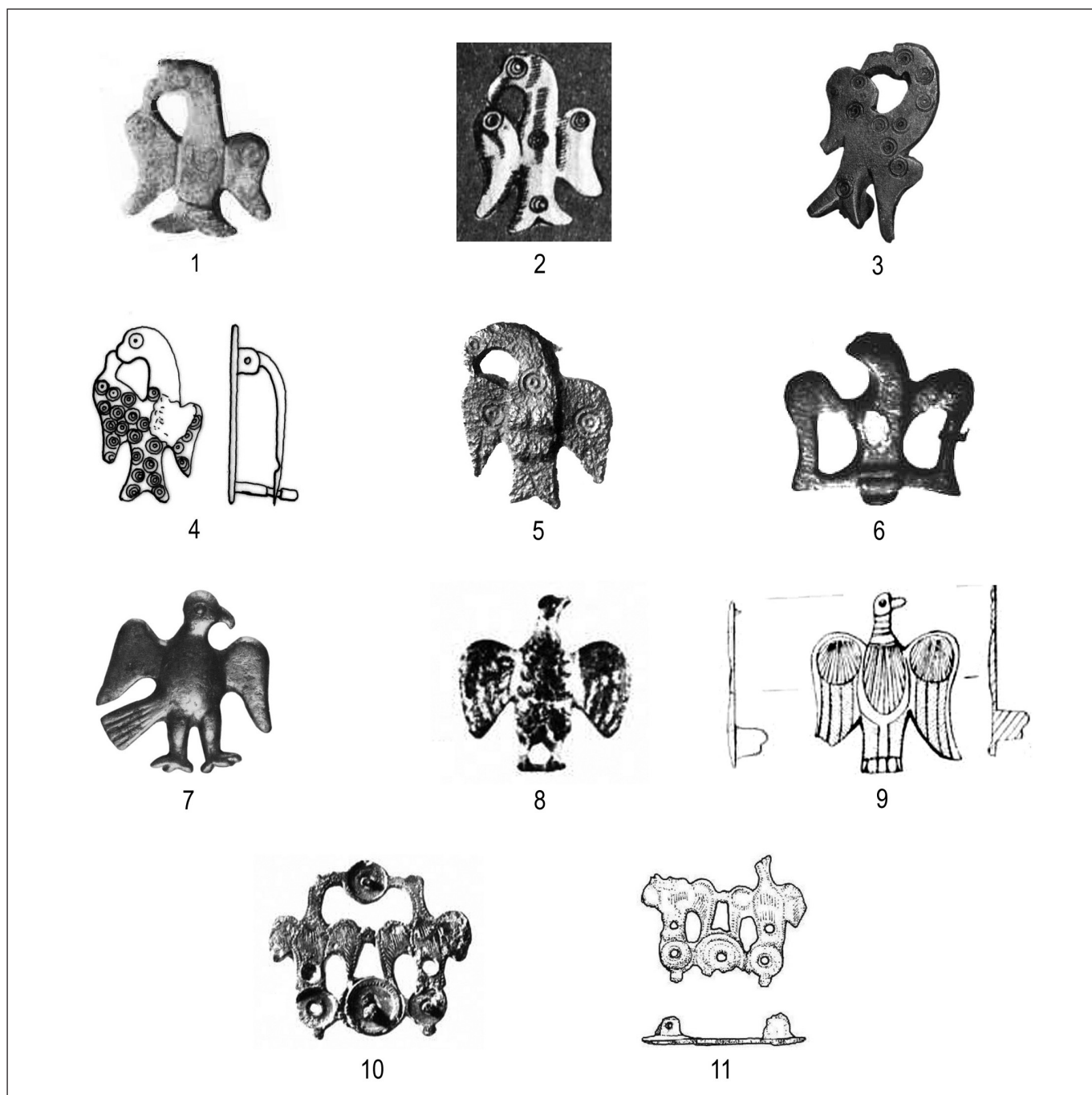


Fig. 5. Roman Period eagle-shaped brooches. Diverse sizes (length: 25–41 mm; width: 25–41 mm). 1: Sisak (PATEK 1942, T. XX. 7), 2: Novi Banovci (KOVAČEVIĆ 1960, Sl. 57), 3: Belgrade-Ušće (PETKOVIĆ 2010, Sl. 62), 4: Belgrade (PETKOVIĆ 2010, XXXVII. t. 10), 5: Belgrade City Museum's collection (JANKOVIĆ 1997, 329, Cat. 560), 6: Komárom-Szőny (PATEK 1942, T. XX. 8), 7: Belgrade-Ušće (PETKOVIĆ 2010, Sl. 61), 8: Windisch (ETTLINGER 1973, Taf. 28. 7), 9: Hüfingen, vicus (RIECKHOFF 1975, Taf. 9. 144), 10: Bern-Enge (ETTLINGER 1973, Taf. 27. 6), 11: Avenches (MAZUR 2010, Fig. 27. 727) (by Péter Horváth)

more realistic. Astrid Böhme, Elisabeth Ettlinger and Michel Feugère have published similar brooches from Belgium, France, Luxemburg, Germany, Switzerland and Syria (BÖHME 1972, 67, 107, Fundliste 35, Kat. Nr. 1043–1044; ETTLINGER 1973, 115; FEUGÈRE 1985, 409, *Liste des fibules de 29a16*). Based on the database *Artefacts – Encyclopédie collaborative en ligne des objets archéologiques* [*Artefacts – Online Collaborative Encyclopedia of Archeological Objects*], our series may be completed with pieces from Amiens, Augsburg, Augst, Champigny-sur-Veude, Cricklade, Ivoševci, and Wickham Skeith (ARTEFACTS FIB-4569).

The eagle of the plate brooch published from the *vicus* of Hüfingen (*Fig. 5.9*) also looks to the left. The plate of this piece was also covered with a white metal alloy layer and has a pin hinged between two lugs. The makers aspired for a lifelike representation, accentuating the bird figurine with punched lines along the body (RIECKHOFF 1975, 65, 93, Taf. 9. 144). Enamelled left-looking-eagle-shaped plate brooches have also been found in sites in Great Britain (MATOUSCHEK & NOWAK 1985–1986, 132; ARTEFACTS FIB-41276).

Another eagle-shaped object was published from Bad Deutsch-Altenburg–Petronell/*Carnuntum*. Both the pin construction and the catchplate are missing, so this piece can only hypothetically be defined as a brooch; according to the author of the related publication, it could also be a mount. The head of the bird is perpendicular to the body, the eyes are marked with punched points, and fishbone pattern makes the feathers lifelike (MATOUSCHEK & NOWAK 1985–1986, 131, 210, Nr. 1).

The brooch from Bern-Enge has a very unique shape (*Fig. 5.10*). Elisabeth Ettlinger classified it as “Type 42 Unicum” (ETTlinger 1973, 115, 196, Taf. 27. 6). The flat plate has a shape of two facing eagles; their feathers are portrayed with incisions, while the plate edge is lined with a point row. The composition is completed with a large, three medium-sized, and two small disc-shaped depressions; the perhaps bone applications have not persisted. The brooch from Avenches/*Aventicum* is a close analogy to the piece from Bern-Enge (*Fig. 5.11*; MAZUR 2010, 67, Fig. 27. 727). The composition is almost identical regarding the number and relative position of the birds and discs, but the eagles look outwards, away from each other. The applied bone disc is still visible in the left-side depression. Another eagle-shaped brooch featuring a similar complex composition is known from a cemetery at Mechel/*Meclo* (ETTlinger 1973, 115).

The eagle figurine also appears as central motif on openwork brooches (ARTEFACTS FIB-41024), or as auxiliary motif, for example as relief application on other plate brooch types (see e.g., GASPAR 2007, 203, Taf. 87. 1925).

The survey presented above reveals that eagle-shaped brooches were produced in several types, while the distribution of the related variants (*Fig. 6*) indicates production by diverse centres. To determine the related workshops is a challenging task. For example, the Feugère 29a16 type, *niello* decorated brooches with a relatively lifelike design, were perhaps a product of the so-called “workshop C”, possibly located in Alise-Sainte-Reine–Mont Auxois/*Alesia* (FEUGÈRE 1985, 388–389). Erzsébet Patek commented earlier on the possible manufacturing of simplified eagle-shaped brooches in *Pannonia*, considering them local products (PATEK 1942, 52). We have to agree with Sofija Petković, in whose opinion lifelike pieces served as models for ones with a simplified design (PETKOVIĆ 2010, 206) that were certainly produced in *Pannonia*. Two previously mentioned findings from Burgenland, Austria prove the local production of eagle-shaped brooches similar to the one from Szőlősgyörök: the brooches from *Carnuntum* and Loretom (MATOUSCHEK & NOWAK 1985–1986, 108, 134–135, 211, Nr. 7, Nr. 10; COCIŞ 2019, 52, Pl. 122. 26, Pl. 122. 30) can be identified as brooch models, semi-finished products, or failed castings (*Fig. 4. 4, 7*). Both were made of copper alloy, and the catchplate and pin mechanism are unfinished as the lugs have remained unpierced. The authors interpreted the piece on *Fig. 4.4* as a brooch model and the one on *Fig. 4.7* as a reject (MATOUSCHEK & NOWAK 1985–1986, 134–135). Sorin Cociş presented both pieces with the same descriptions in his monograph (COCIŞ 2019, 52). Based on the distribution of punched ring dot decorated brooches in Southern *Pannonia* and *Moesia Superior*, another workshop may be presumed in this region.

Most attempts to date the diverse animal-shaped brooch types consider only on morphological characteristics. Currently, the emergence of *niello*-decorated animal-shaped brooches is dated to the mid-1st century AD, while that of enamelled ones to the turn of the 1st and 2nd centuries AD (RIHA 1994, 171–172; ORTISI 2002, 44; GASPAR 2007, 50). Werner Jobst dated the low-relief and fully modelled types without enamel decoration to the 3rd–4th centuries AD in general (JOBST 1975, 113), while others put the emergence of

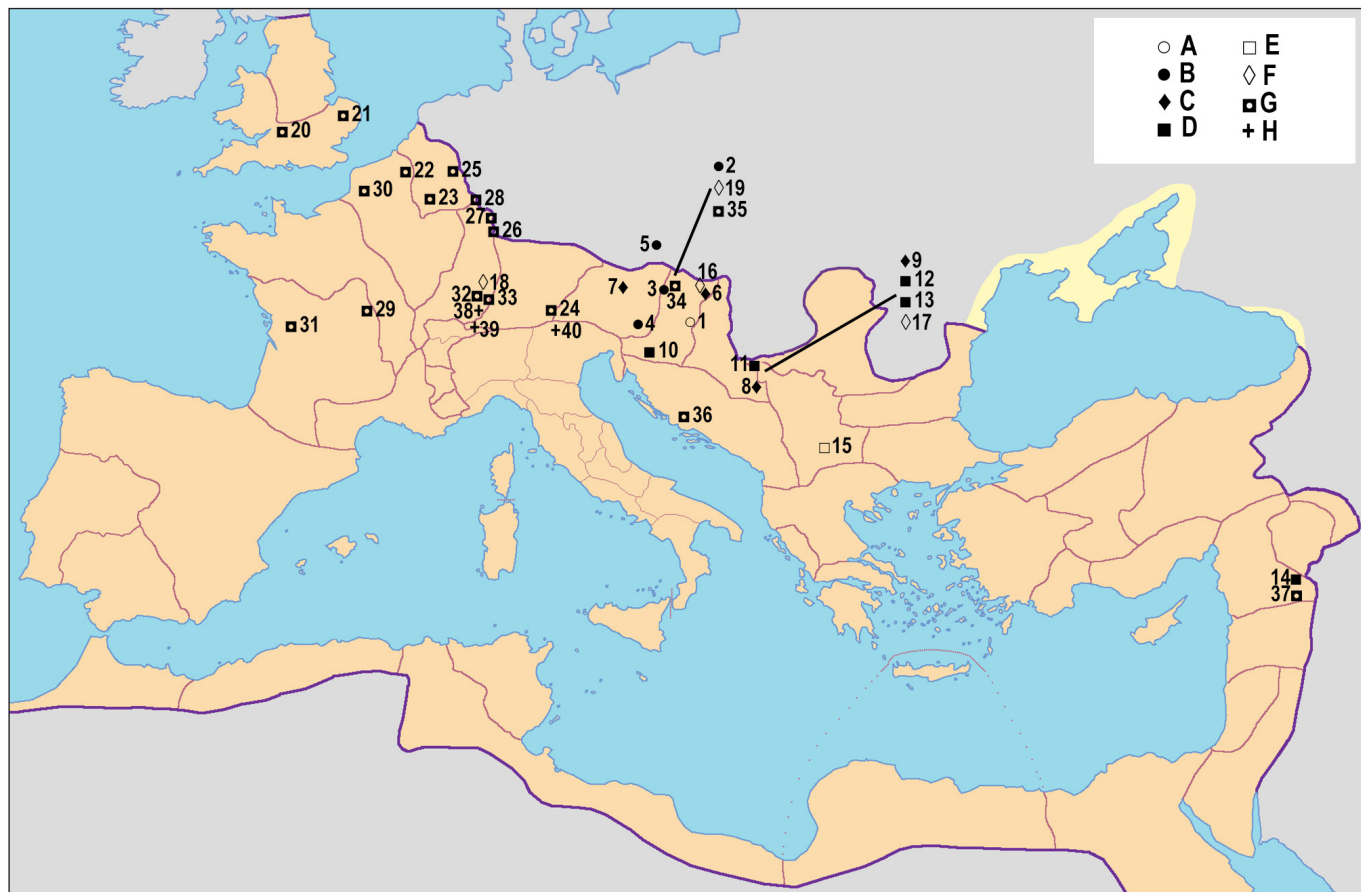


Fig. 6. Survey map of the find spots of the brooches mentioned in the study. A. Stretched wings, broad tail feathers, engraved wolf's teeth-like pattern (*Tremolierstich*) – 1: Szőlősgyőrök; B. Stretched wings, broad tail feathers, undecorated – 2: Bad Deutsch-Altenburg–Petronell, 3: Loretom, 4: Wagna–Leibnitz, 5: Palterndorf; C. Stretched wings, bifurcated tail feathers, undecorated – 6: Tarján, 7: Enns-Lorch, 8: Vranj-Hrtkovci, 9: Belgrade-Ušće; D. Stretched wings, bifurcated tail feathers, punched ring dots – 10: Sisak, 11: Novi Banovci, 12: Belgrade-Ušće, 13: Belgrade, 14: Dura-Europos; E. Stretched wings, bifurcated tail feathers, claws depicted – 15: Mediana-Niš; F. Other eagle-shaped brooches – 16: Komárom–Szöny, 17: Belgrade-Ušće, 18: Hüfingen, 19: Bad Deutsch-Altenburg–Petronell; G. Feugère 29a16 variant – 20: Cricklade, 21: Wickham Skeith, 22: Velzeke-Ruddershove, 23: Titelberg, 24: Augsburg, 25: Köln, 26: Osterburken, 27: Saalburg, 28: Zugmantel, 29: Alise-Sainte-Reine–Mont Auxois, 30: Amiens, 31: Champigny-sur-Veude, 32. Augst (2 pcs), 33: Windisch, 34: Neusiedl am See, 35: Bad Deutsch-Altenburg–Petronell, 36: Ivoševci, 37: Dura-Europos; H. Brooches with eagle compositions – 38: Bern-Enge, 39: Avenches, 40: Mechel (by Péter Horváth)

these to as early as the 2nd century AD (PATEK 1942, 124; RIHA 1979, 89–90). The production and use of brooches without *niello* or enamel decoration may also have started in the 2nd century AD (JOBST 1975, 113–114; MATOUSCHEK & NOWAK 1985–1986, 333; PETKOVIĆ 2010, 204–206).

The brooch from Szőlősgyőrök could be dated by its close analogies; however, most are stray finds or dated only to a relatively long period. The brooch from Wagna–Leibnitz/*Flavia Solva* was dated to between the second half of the 2nd and the end of the 3rd centuries AD (PUHM 1992, 76), while the piece from Vranj-Hrtkovci to the 3rd or the early 4th century AD (PETKOVIĆ 2010, 206, 214). In this respect, the brooch discovered at 30 Knez Mihailova Street in Belgrade might be the most useful: its context dated it to the second half of the 2nd–early 3rd century AD (PETKOVIĆ 2010, 206, 214).

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APPENDIX

A. Stretched wings, broad tail feathers, engraved wolf's teeth-like pattern (*Tremolierstich*):

1. Szőlősgyőrök

B. Stretched wings, broad tail feathers, undecorated:

2. Bad Deutsch-Altenburg–Petronell
3. Lorettom
4. Wagna–Leibnitz
5. Palterndorf
- + unknown site, Hungary (2 pieces)

C. Stretched wings, bifurcated tail feathers, undecorated:

6. Tarján
7. Enns-Lorch
8. Vranj-Hrtkovci
9. Belgrade-Ušće

D. Stretched wings, bifurcated tail feathers, punched ring dots:

10. Sisak
11. Novi Banovci
12. Belgrade-Ušće
13. Belgrade
14. Dura-Europos
- + unknown site, Belgrade City Museum

E. Stretched wings, bifurcated tail feathers, claws depicted:

15. Mediana-Niš

F. Other eagle-shaped brooches:

16. Komárom–Szöny
17. Belgrade-Ušće
18. Hüfingen
19. Bad Deutsch-Altenburg–Petronell

G. Feugère 29a16 variant:

20. Cricklade
21. Wickham Skeith
22. Velzeke-Ruddershove
23. Titelberg
24. Augsburg
25. Köln
26. Osterburken
27. Saalburg
28. Zugmantel
29. Alise-Sainte-Reine–Mont Auxois
30. Amiens
31. Champigny-sur-Veude
32. Augst (2 pieces)

- 33. Windisch
- 34. Neusiedl am See
- 35. Bad Deutsch-Altenburg–Petronell
- 36. Ivoševci
- 37. Dura-Europos
- + unknown site, Germany (2 pieces)
- + unknown site, France (4 pieces: Musée de Nancy, Musée de Péronne (Somme), Musée de Rouen (Seine-Marne), Musée de St. German-en-Laye)
- + unknown site, Syria

H. Brooches with eagle compositions:

- 38. Bern-Enge
- 39. Avenches
- 40. Mechel