Dabar turimais duomenimis žinomi 64 kalavijai aptikti 40 archeologijos paminkly (9 pav.). Iš jy 52 kalavijai ar jy dalys yra iš balty teritorijos. Už balty gyventy žemių jie randami retai. Keletas žinoma iš ugrų-suomių teritorijos Latvijoje ir Estijoje, slavu apgyventose žemėse Ukrainoje ir Lenkijoje, taip pat vieno kalavijo skersinis rastas Gotlande, Švedijoje (9 pav.).

Šis kalavijų tipas archeologinėje literatūroje vadinamas įvairiai. E. Šturmas dar 1936 metais juos pavadino kuršių kalavijais. Vokiečių archeologas B. von Miulenas 1975 metais išspausdintame darbe juos skyrė "Kurliandijos" (Kurländische Swertform) tipui. Rusu tyrinėtojas A. Kirpičnikovas tuos pačius kalavijus skiria I tipui. Juo pasekė estų ginklų tyrinėtojas M. Mandelis. R Volkaitė-Kulikauskienė, sekdama A. Nadolskiu, išskyrė a1 vietinį tipą, kuriame taip pat yra ir aptariamieji kalavijai. Mano nuomone juos derėtų vadinti kuršių vardu, nes pagrindinė paplitimo teritorija yra kuršių genčių žemės.

Pagal kapuose rastu ikapiu komplektus (11 pav.), kuršių kalavijai datuotini XI-XIII a. Kuršių kalavijų tipui artimas baltų gamybos T tipas, todėl reikia manyti,

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Scandinavian arrowheads in Lithuania

GINTAUTAS ZABIELA

The territory of present-day Lithuania has never been a closed country. The external influences upon it were different in different periods. During the soviet period they were ignored altogether, and it was only during the Eighties that discussions about closer and remote contacts between the Balts and neighbouring tribes began, including contacts beyond peaceful exchange or trade. Baltic-Scandinavian relations are known least of all.

Until now, only trade relations between Lithuania and Scandinavia have been discussed in archaeological literature (Kunciene O. 1972. p.204-222; Vaitkunskienė L. 1983). Historians have noted early military-political conflicts between Western Lithuania and Southern as well as Eastern Scandinavia (Dundulis B. 1985, p.4-18). More serious historical studies, however, started only recently (Mickevičius A. 1991). The archaeological aspect of these problems remains unexamined. The available data enable us to take a closer look at one of the groups of witnesses of the old battles, namely iron arrowheads.

Among the different arrowheads found in the hillforts of Lithuania, a small group stands out, analogies of which are known in Scandinavia and regions connected with the Viking raids. All these arrowheads were found in a small area of North Western Lithuania, the sole exception being five found in the Kaukai

hillfort (South Western Lithuania) (Fig.1).

Arrowheads uncovered at the Apuole and Impiltis hillforts as well as the settlement at the foot of the hillfort of Birutes Kalnas in Palanga, are attributed to the Vikings. The two hillforts were investigated by E. Volteris and V. Nagevičius in 1928-1934, but material from these was not published. Only photographs of these arrowheads, made during field investigations, were published (Nagevičius V. 1935. p.13) (Fig. 2). At present, finds and manuscript material on the two hillforts are stored at the Vytautas Magnus Museum in Kaunas (inventory Nos.455:1-85 and 453:1-40; reports-those which have not been numbered, and Nr. 68, 69 respectively) The castle settlement of the hillfort of Birutes Kalnas in Palanga was investigated by V. Žulkus in 1983, 1990 and 1993. Investigation material was published (Žulkus V. 1986; 1989. p.37-56).

Special notice should be taken of Scandinavian arrowheads from Kaukai hillfort. The hillfort is situated in southern Lithuania, in a territory once inhabited by Jatwingians, whose contacts with Scandinavians have not yet been documented. In 1967-1969 P. Kulikauskas excavated half of the flat hilltop there and investigated a section of the rampart. He dated the hillfort to some time between

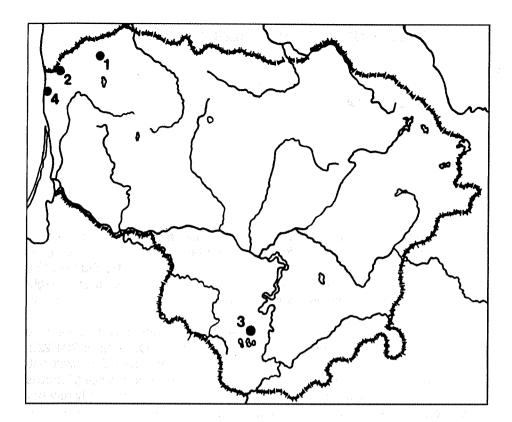


Fig. 1. Finds of Scandinavian arrowheads in Lithuania: 1 – Apuolé, 2 – Impiltis, 3 – Kaukai, 4 – Palanga (drowned A. Zabieliené)

the fifth and fourteenth centuries (Kulikauskas P. 1982. Table on fly leaf). The condensed publication of valuable and interesting material, does not single out Scandinavian examples among the 120 or so arrowheads found in the hillfort. However, the Lithuanian National Museum does hold five arrowheads of indisputable Scandinavian origin among its other finds from Kaukai (AR 500:199, 204, 269, 317, 503). The best preserved of these is arrowhead found in the rampart. In 1969 during the excavations of the hillfort in the rampart at the depth of 10 cm (sq.1C) a 15,6 cm long arrow was found (Fig.3). The length of its plume was 12,4 cm, thickness–9x3 mm, length of the point 3,3 cm (AR 500:503). The top of the arrow is bent at the right angle and is twisted as a drill (two windings), while attempting to plug it out. Other arrowheads were found in different parts of Area 1, excavated near the rampart at the depth of 40-70 cm.

All the Viking arrowheads found in Lithuania are hafted. As finds from the Apuole and Impiltis hillforts were not adequately preserved, the arrowheads fell into decay. Only fragments of some of them survived, which obstructs both typological classification and dating. Sixty four Scandinavian arrows were found in Apuole, eight-in Impiltis, five-in Kaukai and one-in Palanga.

The arrowheads which are in the best state of preservation, are divided into 4 main types (Fig.4).

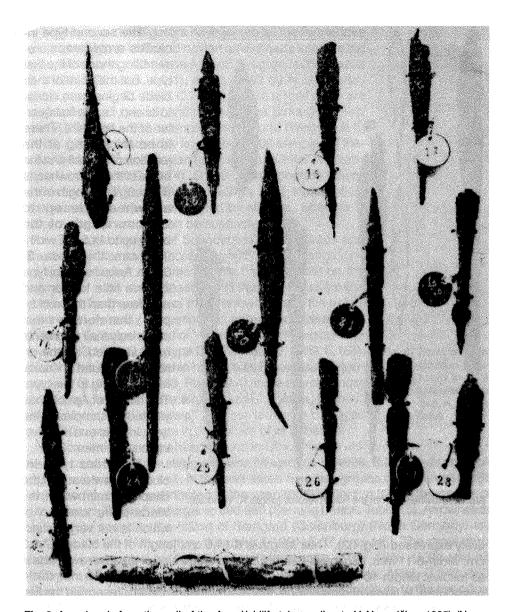


Fig. 2. Arrowheads from the wall of the Apuole hillfort (according to V. Nagevičius. 1935) (Nagevičius V. 1935. p.93).

The first type includes arrowheads, the blade of which has the shape of an oblong leaf and a haft thickened at the mounting (Fig.4:1). Their point begins in the first half of the blade. The length of these arrowheads is 8,7-14,3 cm, length of the blade-7,3-12 cm, width-9-15 mm, thickness-2-5 mm. The average length of the arrowheads of this type is 10-11 cm; the length of the blade is approximately 9 cm, and its thickness, 10x3 mm. The largest number was found in Apuole (18 examples, of which only fragments of 13 samples have survived). Impiltis yielded 3 arrowheads of the type, Palanga-1. The dimensions of the latter are the smallest, but it has a rather narrow and thick blade (thickness-8x6 mm).

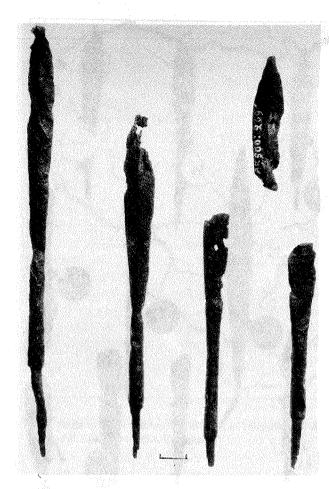


Fig. 3. Arrowheads from the hillfort Kaukai (photo K. Vainoras).

The second type includes arrowheads, resembling those of the first type, but the point of their blade begins even closer to its end, i.e. the first quarter or the first third. There is no thickening at the junction of the haft and the blade of these arrowheads (Fig.4:2). The length of the arrowheads is up to 15,1 cm, length of the blade-up to 14,5 cm, width-9-12 mm, thickness- 2-3 mm. Arrowheads of type 2 are a little longer and narrower than those of type 1, therefore in most cases only their fragments have survived. All the arrowheads found at Kaukai hillfort belong to this type. The hillfort of Apuole has vielded 16 samples of the type, Impiltis-one massive, intact specimen.

The third type includes arrowheads of the shape of a narrow leaf, the blade-point junction of which is not very distinc-

tively expressed (Fig.4:3). Their length is 8-14,6 cm, length of the blade-5,7-9,3 cm, width-8-11 mm, thickness-2-4 mm. The average size of these arrowheads is as follows: length-10-11 cm, length of the blade-9-10 cm, width-9-10 mm, thickness-3 mm. In terms of dimensions, these arrowheads closely resemble the first type, the only one difference being the shape of the blade and the half-blade junction. Apuolé yielded 12 samples of such arrowheads, Impiltis-1.

The fourth type includes arrowheads with a leaf-shaped blade, the point beginning approximately in the middle of the blade and a distinctive neck between the half and the blade (Fig.4:4). The length of the arrowheads is 8-10,7 cm, length of the blade-5,5-8,4 cm, width-11-13 mm, thickness-2-3 mm. The shape of the blade of these arrowheads resembles those of type 1, but they are smaller in size (average length-8-9 cm, length of the blade-6-7 cm). 4 arrowheads of this type were found in Apuolė, 1-in Impiltis.

The remaining fragments of 16 arrowheads (14 from Apuole, 2 from Impiltis) can not be attributed to either of the above mentioned types, but the remnants bear clear evidence of a Scandinavian origin.

Previous investigators have joined all the four above mentioned types of Scandinavian arrowheads into one big type, which was called type A1 by E. Wegraeus (Wegraeus E. 1986. S.22. Abb. 4:2;1), and type 62 by A. Medvedev (Медведев А. Ф. 1966. С.73-74). These arrowheads are widespread all over Scandinavia. In the Birka gravefield alone (Sweden), 292 examples were found (Wegraeus E. 1986. S.25). A. Medvedev knew about 100 samples of these arrowheads from Russian territory before 1966 (Медведев А. Ф. 1966. С.73-74). Some of the concrete places (Gniezdov, Novgorod, Staraia Ladoga, a.o.), indicated by the researcher, had been visited by Vikings, whereas in others, their presence can be suspected.

The total number of Scandinavian arrowheads and the finding sites keeps increasing with new investigations of archaeological monuments. We have no data on the number of such arrowheads found thus far in Eastern Europe. The finding places of these arrowheads in the neighbourhood are really interesting. Six arrowheads were found in the old Volkovysk hillfort of "Muravelnik", Belorussia (Зверуго Я. Г. 1975. С.108 (type 21). Рис. 33:26; 1989. С.165), 13 samples-in the Kulbachin hillfort, also Belorussia (Пивоварчик С. А. 1994. С.193. Рис. 2:2,4). there are references to finding places of these arrowheads in Polotsk, Lukoml', Maskovichi (all in Belorussia). All these territories belonged to the Kievan Rus' or were in the sphere of its influence.

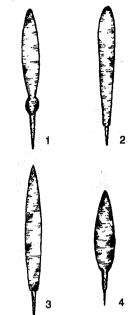


Fig. 4. Types of Scandinavian arrowheads found in Lithuania (drowned A. Zabielienė).

Scandinavian arrowheads found in Lithuania are universal, used both for hunting and war (Wegraeus E. 1986. S.25). Their chronology is rather clear as well. In the well dated Swedish graves of Tuna, Valsgarde and Vendel, they are attributed to the year 800-900 (Ibid. p.32), in the graves of Morastrand, Tunsta, Lindarget-to 890-950 (Serning I. 1966. Tabbel 5). Arrowheads of this type found in the hillfort of Starigard (Oldenburg) (North Germany) are dated to the 9th-11th century (Kempke T. 1991. S.27 (type 16)). The same chronology is presented by A. Medvedev (Медведев А. Ф. 1966. C.73) and his followers (Пивоварчик С. А. 1994. С.193; Археология. 1985. С.348, 350. Puc. 137:8). Lithuanian finds of arrowheads can not contribute to the specification of this chronology, as the material of the two hillforts is mixed up and not associated with separate layers. In the case of Apuole, archaeological data bear no contradiction to historical material (Rimbert's reference to the attack and siege the castle in 853). The lower cultural layer of the Palanga settlement, where a Scandinavian arrowhead was found, is dated to the 2nd half of the 40th centurybeginning of the 11th century (Žulkus V. 1986. p.28). In the light of recent investigations of the settlement, V. Zulkus is inclined to revise this chronology and make it older (the 4th layer is dated to the 10th century) (Žulkus V. 1995. p.48), which has no impact, however, on the general chronology of arrowheads.

The chronology of Kaukai hillfort is a most contentious matter. Apart from Kulikauskas, who proposed a broad date of c. 400-c. 1400, no one has attempted to give a more precise date, except for the archaeologically and historically un-

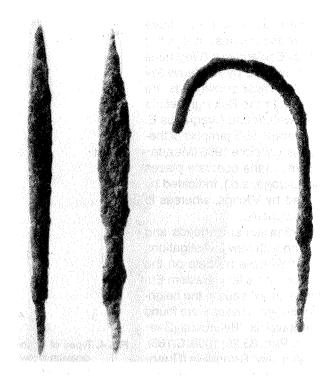


Fig. 5. Scandinavian arrows from the Apuole hillfort (according to B. Nerman. 1958) (Nerman B. 1958. S.193. Textfigur. 281).

founded upper limit. According to the data of latest investigations, the hillfort of Kaukai fell into decay no later than the 13th century (Zabiela G. 1995. p.192-193). Scandinavian arrowheads have been found in a deeper cultural laver of the hillfort (one was found on the top of the rampart), which is earlier than the 13th century. With reference to the general usage period of Scandinavian arrowheads. Kaukai finds cannot be later than the 11th century. A more precise dating cab be established only after a thorough ana-lysis of the overall material of the hillfort.

A comparison of Scandinavian arrowheads from Lithuania and those

found in the neighbouring countries shows that the hillforts of Apuole and, possibly, Impiltis stand out in terms of relatively early and abundant finds (total-72 arrowheads). They can be dated to the mid-nineth century and associated with the Vikings raid on the Curonians, mentioned by Rimbert. This is a legacy of warfare, which is additionally attested by deformed arrows (Nerman B. 1958. S.193. Textfig. 281) (Fig. 5). Arrowheads found in the layer of hillforts of Palanga and the territories of Kievan Rus' are a little bit later (10th century-1st half of the 11th century), and had been lost by Vikings dwelling there. Most often, single samples are found and only in rare cases was more than one uncovered. A characteristic find comes from the hillfort of Kulbachin where Scandinavian arrowheads were found in a pile with arrowheads of other types. The pile contained 20 arrowheads and a spearhead from a thrusting spear. The researcher presumes that these arrowheads were in a quiver, which had been hidden or lost otherwise (Пивоварчик С. А. 1994. C.198). Scandinavian arrowheads uncovered in east European graves usually testify to Vikings buried here.

The few finds of Scandinavian arrowheads made in the territories under the influence of Kievan Rus' indicate, that these were deposited by individual Scandinavian warriors who took part in raids against the Baltic tribes (mostly the Jatwingians) along with Kievan troops, or even by Slavonic warriors who brought these arrowheads back as a Varangian memento. These could have been trophies from old war gear, pieces wrought by individual Scandinavian craftsmen dwelling in Rus', or Slavonic imitations of Scandinavian models. In general, in

the Kaukai case we have the secondary use of such arrows which is in no way directly connected with Vikings.

It should be noted while summarizing this brief presentation of Scandinavian arrowheads to a wider archaeological circle, that, due to their variety of forms and the short period of their existence, arrowheads could stand out as an important ethnic and chronological indicator. Unfortunately, they can be found at every site. The Lithuanian material shows that out of 15 Curonian hillforts which have been studied, only 2 yielded such arrowheads. A considerable possibility exists, however, that Scandinavian arrowheads can be uncovered in the remains of massive hillforts, which have not been studied yet, e.g. Nagarba, Eketė, Puodkaliai. Providing a more precise definition of the chronology of arrowheads from Apuolė and Impiltis on the basis of new investigations is no less important a task.

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Skandinaviški strėlių antgaliai Lietuvoje GINTAUTAS ZABIELA

Santrauka

Dabartinė Lietuvos teritorija niekada nebuvo uždara išorės poveikiams. Iki šiol archeologai mažai nagrinėjo baltų-skandinavų santykius apsiribodami daugiausiai prekybiniais ryšiais. Istorikai visai neseniai pradėjo tyrinėti karinius-politinius kontaktus tarp Vakarų Lietuvos ir Pietų bei Rytų Skandinavijos. Archeologiniai šios problemos aspektai lieka netyrinėti iki dabar. Turima medžiaga leidžia išsa-

miai pažvelgti į vieną importinių dirbinių grupių-strėlių antgalius.

Tarp Lietuvos piliakalniuose rastų įvairių strėlių antgalių išsiskiria nedidelė jų grupė, analogijų kuriai aptinkama Skandinavijoje. Šie strėlių antgaliai siejami su vikingų žygiais, surasti nedidelėje teritorijoje Šiaurės vakarų Lietuvoje: Apuolės, Impilties piliakalniuose bei Birutės Kalno piliakalnio Palangoje papėdės gyvenvietėje (pav.1). Pirmieji du piliakalniai tyrinėti E. Volterio bei V. Nagevičiaus 1928-1934 metais, bet medžiaga iki šiol neskelbta, išskyrus dalies strėlių fotografijas (pav.2). Visa tyrinėjimų medžiaga ir ataskaitos saugomos Vytauto Didžiojo karo muziejuje Kaune (Inv. Nr. 455:1-85 ir 453:1-40). Birutės Kalno piliakalnį bei papėdės gyvenvietę 1983, 1990 bei 1993 metais tyrinėjęs V. Žulkus daugumą medžiagos paskelbė. Atskira skandinaviškų strėlių radimvietė yra Kaukų piliakalnis Pietų Lietuvoje, kurį 1967-1969 metais tyrinėjo P. Kulikauskas. Čia rastos 5 tokios strėlės, kurios saugomos Lietuvos Nacionaliniame muziejuje Vilniuje (AR 500:199, 204, 269, 317, 503) (pav.3).

Visi vikingams skiriamų strėlių antgaliai įtveriamieji. Apuolėje jų rasta 64, Impiltyje-8, Kaukuose-5 bei Birutės Kalno papėdės gyvenvietėje-1. Geriau išlikę strėlių antgaliai skirstomi į 4 tipus (pav.4). Pirmajam tipui skiriami lapo pavidalo plunksna strėlių antgaliai su kotelio sustorėjimu prie įtvaros. Tokių strėlių smaigalys yra arčiau įkotės (pav.4:1). Daugiausia jų rasta Apuolėje-18 vienetų, 3-Impiltyje ir 1 Palangoje. Antrasis tipas panašus į pirmąjį, tik trumpesniu smaigaliu ir be ryškesnio kotelio sustorėjimo ties įtvara (pav.4:2). Apuolėje šio tipo strėlių rasta 16, Kaukuose-5, Impiltyje-viena. Trečiam tipui priklauso siauro lapo formos plunksna strėlės be ryškiau išreikštos kotelio-įkotės sandūros (pav.4:3). Tokių strėlių Apuolėje rasta 12, Impiltyje-viena. Ketvirto tipo strėlės yra ryškiai išreikštu koteliu (pav.4:4). Jų Apuolėje rasta 4, Impiltyje-viena. 14 strėlių liekanos iš Apuolės bei 2 iš Impilties dėl prasto išlikimo prie konkrečių tipų nepriskirtos. Kiti tyrinėtojai visus šiuos strėlių antgalių tipus apjungia į vieną didelę grupę, kurią E. Wegraeus pavadino A1, A. Medvedev'as-62-uoju tipu.

Aptarti strėlių antgaliai plačiai paplitę Skandinavijoje. Vien tik Birkoje (Švedija) jų rasta 292 egzemplioriai. 1966 m. A. Medvedevo duomenimis Rusijos teritorijoje jų rasta apie 100 vienetų. Skandinaviškų strėlių antgalių rasta ir Baltarusijoje: 13-Kulbačino piliakalnyje, 6-Volkovysko piliakalnyje "Muravielnik". Lietuvos piliakalniuose rastus strėlių antgalius reikia siedinti su Rimberto kronikoje minimu 853 metų švedų žygiu į Apuolę ir jos apgultimi (pav.5). Palangos gyvenvietės kultūrinis sluoksnis datuojamas X a. pabaiga-XI a. pirmąja puse. Panašiu laikotarpiu turi būti datuojamos ir Kaukų piliakalnyje surastos strėlės, nes po XI a. jos nebebuvo naudojamos. Šiame piliakalnyje jos greičiausiai yra paliktos

Kijevo Rusios karių, niokojusių jotvingių teritorijas. Apibendrinant turimą medžiagą galima pasakyti, kad strėlių antgaliai gali

būti geru etniniu bei chronologiniu indikatoriumi.

Trade routes and trade centres in Western Lithuania during the early Middle Ages

JONAS GENYS

The retracing of western Lithuanian trade routes is not only a question of relevance to the history of internal Baltic trade. Thus early mediaeval western Baltic internal trade routes cannot be separated from the contemporary international commercial system. Such reconstruction is possible mainly through analysing the spread of imported goods and interpreting finds from merchant graves.

However, Lithuanian routes of the early period have not been studied adequately by Lithuanian historians. We have no one published work which deals in detail with the structure of prehistoric Baltic trade routes as a whole. In studies published thus far, Lithuanian archaeologists have concentrated primarily on establishing the regional origin of imported goods and tracing the most important European trade routes (Volkaitė-Kulikauskienė, 1970:87-119; Kuncienė, 1972:149-254: Kuncienė, 1981: 49-82; Vaitkunskienė, 1985: 82-94). The main feature of these studies is a concentration on the significance of water routes (rivers) and the importance of the dry routes has been neglected. In his work on Latvian trade routes, the Latvian archaeologist E. Mugurēvičs has argued with some credibility that the dry routes were no less significant for commercial contacts than the river networks (Mugurēvičs, 1961:80).

Among Lithuanian studies special attention should be paid to the work of V. Žulkus on Lithuanian maritime prehistory (Žulkus,1989). This defines the Lithuanian maritime trade network in considerable detail and stresses fundamentally the significance of land routes. We should also note that, on the basis of research into the spread of wrought amber in Lithuania, R.V. Sidrys has concluded that amber from coastal districts was distributed mainly along the dry routes (Sidrys, 1994:79-80).

In discussing the early mediaeval commercial network, one cannot ignore articles devoted to the retracing of routes in the later period which are based on written sources. One of the major studies in this field is V. Biržiška's article on the routes of the Teutonic Order in the fourteenth century (Biržiška, 1933:1-54). This study is particularly valuable when read in the context of archaeological evidence.

Scholarship concerning the major commercial centres and seasonal markets is in a similar state of development. The great concentration of early mediaeval archaeological finds in western Lithuania, which illustrate trade patterns, permits speculation, that trade centres from that period should be looked for in the watersheds of the Nemunas or in coastal areas. However, owing to insuffi-