Dabar turimais duomenimis žinomi 64 kalavijų aptikti 40 archeologijos pa-
minkštų (9 pav.). Iš jų 52 kalavijų ar jų dalys yra iš Baltų teritorijos. Už Baltų gyven-
tų žemės jie randami retai. Keletas žinoma iš ugrų-suomų teritorijos Latvijoje ir
Estijoje, slavų 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 iš pradžių nario įvairių kalavijų. Vokiečių archeologas B. von
Muilenas 1975 metais išspaudosintame darbe juos skyrė „Kuriančios“ (Kurändis-
che Sverfform) tipui. Rusų tyrinėtojas A. Kirpičnikovas tuos pačius kalavijus ski-
ria 1 tipui. Juo pasekė estų ginklų tyrinėtojas M. Mandelis. R. Volkalaitė-Kulkus-
kinė, sekdama A. Nadoliskio, išskyrė a1 vietinį tipą, kuriamu taip pat yra ir apta-
riameji kalavijai. Mano nuomone juos derėtų vadinai kuršių vardu, nes pagrindin-
ėje paplitimo teritorija yra kuršių genčių žemes.

Pagal kapuose rastų įkapų komplektus (11 pav.), kuršių kalavijų datuotini
XI-XII a. Kuršių kalavijų tipui artimas baltų gamybos T tipas, todėl reikia manyt,
kad pastaras ir yra T tipo tolesnė raide.

### Scandinavian arrowheads in Lithuania

#### GINTAUTAS ZABIELA

The territory of present-day Lithuania has never been a closed country. The ex-
ternal 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 neigh-
bouring 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 (Kuncienė O. 1972. p.204-222;
Vaitkunskienė L. 1993). Historians have noted early military-political conflicts be-
tween 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 Apuolė and Impiltis hillforts as well as the
settlement at the foot of the hillfort of Birutės Kūnas 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. 1933. 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 Birutės Kūnas 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 Latvians, whose contacts with Scandinavians have not yet been docu-
mented. In 1967-1969 P. Kulkas excavated half of the flat hilltop there and
investigated a section of the rampart. He dated the hilltop to some time between
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 Apuolë and Impilit 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 Apuolë, eight-in Impilits, 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 Apuolë hillfort (according to V. Nagevičius. 1995) (Nagevičius V. 1995. 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 Apuolë (18 examples, of which only fragments of 13 samples have survived). Impilits 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).
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 Apuolė yielded 16 samples of this type, Impilits-one massive, intact specimen.

The third type includes arrowheads of the shape of a narrow leaf, the blade, Lindargest-to 880-950 (Sennin I, 1966, Tab.5). Arrowheads of this type were 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 (Medvedev A. F. 1966. C.73) and his followers (Pyzhovarich, C. A. 1994. C.193; Arheologiya. 1985. C.348, 350. P. 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 Apuolė, 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 4th century-beginning of the 11th century (Žulkius V. 1986. p.26). In the light of recent investigations of the settlement, V. Žulkius is inclined to revise this chronology and make it older (the 4th layer is dated to the 10th century) (Žulkius V. 1986, 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 Kulkauskas, 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-
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 layer 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 can 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 Apulė and, possibly, Impilis stand out in terms of relatively early and abundant finds (total-27 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. p.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 of a thrusting spear. The researcher presumes that these arrowheads were in a quiver, which had been hidden or lost otherwise (Пивоваров-чич 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 Javangrians) 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. Nagara, Ektė, Pudokalai. Providing a more precise definition of the chronology of arrowheads from Apulė and Impilis on the basis of new investigations is no less important a task.

References

Skandinaviški strėlių antgaliai Lietuvoje

GINTAUTAS ZABIELA

Santrauka


Apibendrinant turinį medžiaga galima pasakyti, kad strėlių antgaliai galėtų geru etniniu bei chronologinio indikatoriumi.

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

JONAS GENYS

The tracing 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-Kukauskienė, 1970:87-119; Švética-Kukauskienė, 1972:149-254; Kukauskienė, 1981: 49-82; Švctic-Kukauskienė, 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. Murgrēvičs has argued with some credibility that the dry routes were no less significant for commercial contacts than the river networks (Murgrēvičs, 1961:80).

Among Lithuanian studies special attention should be paid to the work of V. Žukus on Lithuanian maritime prehistory (Žukus, 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. Siidys has concluded that amber from coastal districts was distributed mainly along the dry routes (Siidys, 1979-80).

In discussing the early mediaeval commercial network, one cannot ignore articles devoted to the tracing 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 insufi-