

# Stray Ground Stone Axes from Užnemunė

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## Introduction

The great part of the historical-cultural heritage consists of the stray archaeological finds. It is from the announcement of the stray material and experimenting to interpret it when we start dating the beginning of the archaeology science in Lithuania. That was in the 19th century. Now, during the 21st century, the stray material is being evaluated differently. In general there could be found two different attitudes towards this issue: stray finds have not been regarded as useful in any interpretation or stray finds could be regarded as a serious source for dealing with various matters, including the matters of culture and chronology. The use of stray material is restricted by the methods used in order to amend it, and by unreliable or unsuitable use of it. I think it's not worth while denying the interpreting possibilities of the stray material basically, but it's worth while searching of ways of interpreting it in a reliable way. After all, the search of new ways stimulates to escape from definite boundaries and is useful in terms of idea progress. The history of archaeology knows several cases when on the basis of stray finds data new cultures were marked out (e.g. Swiderian culture), the existence of which was confirmed by later research. Careful and differential use of data based on stray finds, statistical analysis in detail, thorough research of finding circumstances may give positive results, while checking the earlier established theories, or be a basis for new hypotheses. As a good example could serve T. K. Lødøen study of Mesolithic stray finds in Western Norway (Lødøen 1998).

This paper deals with one of the longest known and popular archaeological stray finds group – ground stone axes and the specific features of their distribution in southwestern Lithuania.

## Approach

There is a number of different classifications of ground stone tools, but it probably would be worthless while searching for one general scheme of all Europe, because in different regions ground stone tools developed in a different way. The most important source about ground stone tools in Lithuania is the article

published in the Atlas of Lithuanian Archaeology (further – LAA) (Bagušienė, Rimantienė 1974). There are 2560 stone tools from the 1420 finding places registered in it, there is brief information about the circumstances of the finding presented, there is cultural and chronological interpretation and there are typical features of types of tools distribution on Lithuanian and European scale. It is especially important that the typological scheme of the discovered ground stone tools was prepared. In this paper by no means I do not discuss the qualities or the faults of this scheme, because it is not the aim of this article. In addition, if we changed the typological scheme in essence, we would lose a chance to use this abundant corpus of data which is presented in the LAA. Here it will be used as a tool for a statistical analysis of ground stone axes in Užnemunė. While analysing the features of ground stone axes distribution in southwestern Lithuania I did not use the finds, which had been piled up during the archaeological excavations, because we would have obtained a distorted view which is dependent on the diverse research of separate parts of Lithuania. For example, only in the settlement of Nida, which had been excavated in 1973–1977, there were over 100 ground stone and flint axes found (Rimantienė 1989). So, the data of one Stone Age settlement basically changes stone axes statistics not only in the separate part of Lithuania (in this case – western Lithuania) but in all Lithuania as well.

## **Distribution of Ground Stone Axes in Užnemunė**

Specific historical and geopolitical circumstances made it possible for a few names of southwestern Lithuanian part to appear. The terms of Sūduva, Suvalkija, Užnemunė are used in everyday Lithuanian and in literature as well. In archaeological literature the recent term has been widely used. The literal translation of this compound word is “Beyond Nemunas”. From the east and the north Užnemunė is separated from the rest part of Lithuania by the biggest river in Lithuania Nemunas. In the west Užnemunė borders on former East Prussia – recently the district of Kaliningrad, Russia. In the South it borders on Poland and Belorussia. The territory of Užnemunė makes up 12.6% of the area of Lithuania. Šešupė – the main water artery in Užnemunė. Its basin (4899 km<sup>2</sup> in Lithuania) covers 7.5% of the area of Lithuania and 60% of the area of Užnemunė (Jablonskis, Gaigalas, Simniškaitė 1975). From the point of view of orography Užnemunė is not homogeneous. There are hills, plains and lowlands found there. Northwestern part of Užnemunė belongs to the lowland of the Lower Nemunas.

Its surface is varied by the crests (98–148 m above sea-level) – the watersheds of Nemunas tributaries. The middle part belongs to the compound part of the Baltic hills – the hills of Sūduva, which is divided by the valley of Šešupė to the western (284 m above sea-level) and eastern (202 m above sea-level) hills. The southern part of Užnemunė itself belongs to southwestern part of the lowest southeastern Lowland (Basalykas 1958).

It's hard to say when exactly the first stone age artefacts from Užnemunė got into the collections of the museums – till the mid – 19th century the archaeologists – amateurs took very little into consideration the metrics of the finds and the circumstances of their finding. We can only guess that in the collections of E. Tyszkiewicz, A. Kirkor, F. Dobrianski and others from the Museum of Antiquities

Type	Lithuania		Užnemunė	
	N	%	N	%
Ground flint axes	198	9.42	47	17.15
Stone axes without shaft-hole	207	9.85	23	8.40
Axes with quadrangular end	850	40.44	98	35.77
Axes with rounded end	216	10.27	20	7.30
European-type boat axes	132	6.28	22	8.03
Fatyanovo-type boat axes	18	0.85	2	0.73
Baltic-type boat axes	381	18.13	41	14.96
Double-edged axes	100	4.76	21	7.66
Total	2102	100.00	274	100.00

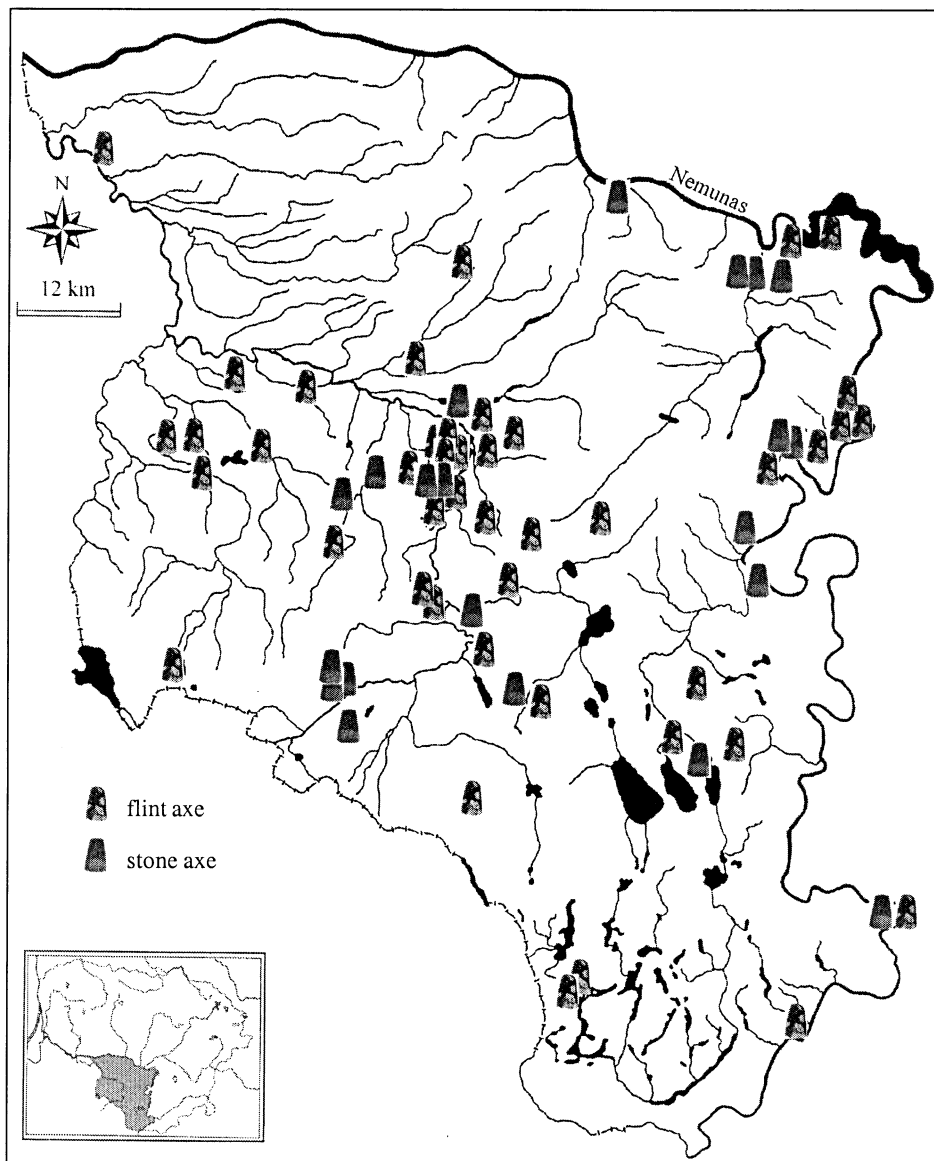
**Table 1.** Distribution of ground stone axes in Lithuania and Užnemunė

and of Vilnius Provisional Archaeological Commission members there had been finds from Užnemunė. In 1881 in Moscow a work of count A. Uvarov was published, which was devoted to the Stone Age in Russia. Besides other finds of the Stone Age, there are six ground stone axes mentioned which had come from Užnemunė together with finding places indicated in the map. The finds had been from the private collection of Podczasinski (Uvarov 1881). Most probably it is the first reference to the ground stone axes from Užnemunė in the archaeological literature.

From the typological point of view Užnemunė does not differ from the general sight of Lithuania. There are all main ground stone axes types found except for boat-axes with clutch round shaft-hole (so-called Karlova type). There are very few of these finds found in other parts of Lithuania as well. Evidently this scheme (Table 1) is different from that which is presented in LAA (Bagušienė, Rimantienė 1974: 104, fig. 17). Table 1 is a little contracted because the expression of the percentage of some extremely small numbers of types can form a presumption for erroneous conclusions. Nevertheless a few of types of one finds group are important in terms of culture and chronology and, to my mind, it is purposeful to single them out. Here we deal with the boat-battle axes.

Mostly the ground flint axes are found in the central part of Užnemunė (Fig. 1). In Lithuania the flint in most cases is found in Chalk period substances. Chalk system substances are diffused in a large area which covers all southeastern and southwestern Lithuania (Gudelis 1958). Užnemunė falls under the diffusion zone of chalk substance, but the flint is found diversely in its different parts. Good quality and rather big nodules of flint are found in the lower terraces of the Nemunas, especially below water level. In the southern part of Užnemunė the flint is found rather frequently, but it does not correspond in its quality to the flint found in Nemunas. It is smaller, often porous with chalk admixture.

In the northwestern part of Užnemunė the flint is sometimes found in the exposures of the riversides of Šešupė on the second terrace level. The flint which is found there is of good quality but it's very small, usually hardly 3–4 cm. Generally the situation can be characterised in the following way: in the places where there is more raw material, there are less ground flint axes found.



**Fig. 1.** Distribution of axes without shaft-hole.

The axes of other kinds of stone without the shaft-hole are found in small groups, which are spread along Užnemunė (Fig. 1). No regularities in their distribution were found out, we can only ascertain that they were not found in the western part of Užnemunė.

Shaft-hole axes with rounded end are found in small numbers. In Užnemunė these common working tools are spread with no appreciable order, about 30% of them are found on the riversides of the Nemunas (Fig. 2).

Double-edged axes make up a considerably large group of finds. The places of their findings are arranged in a rather wide but clearly defined belt, which crosses Užnemunė in the direction of southwest – northeast (Fig. 2).

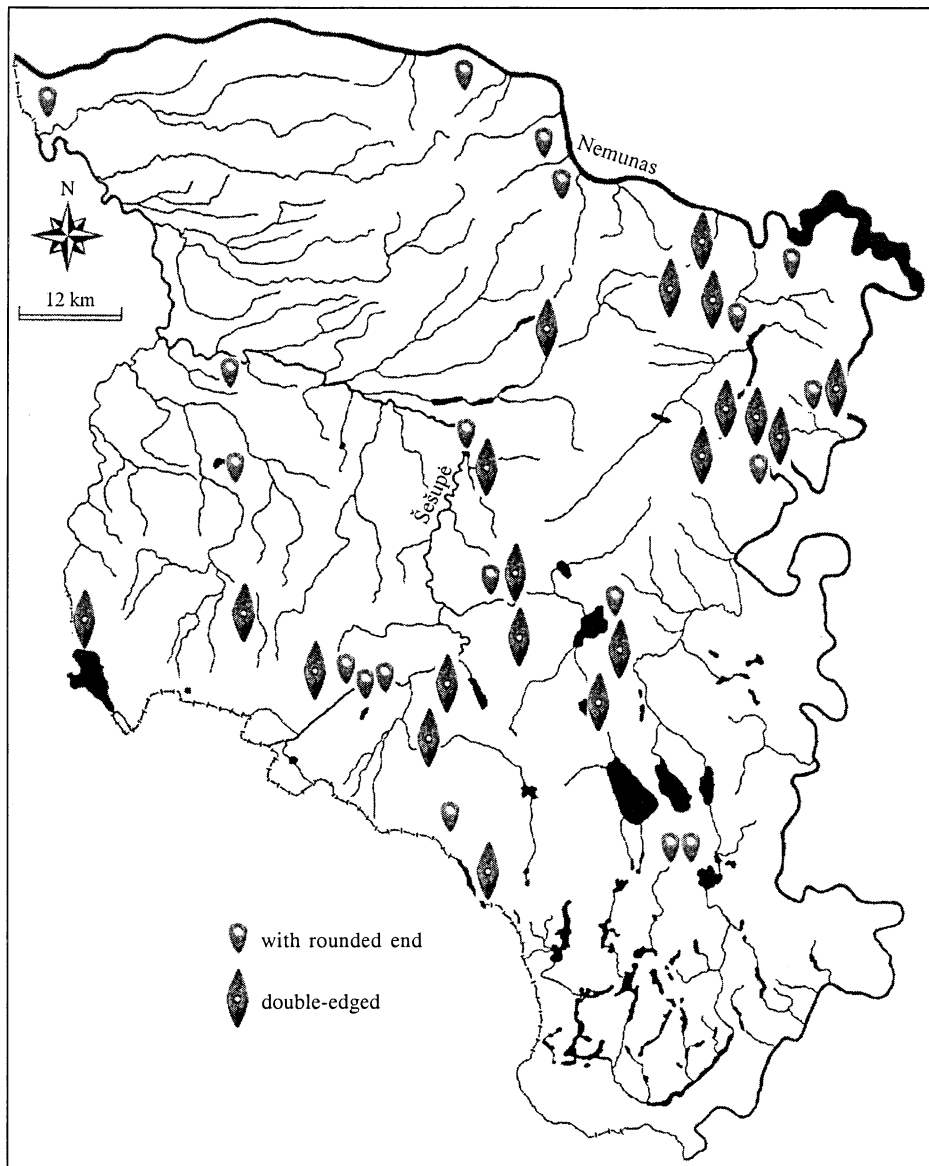


Fig. 2. Distribution of double-edged axes and axes with rounded end.

The most abundant group are axes with quadrangular end, the so-called Baltic axes (Fig. 3). Basically their distribution coincides with that of flint axes. The greatest concentration is noticeable in the central part of Užnemunė.

Boat axes are spread slightly wider (Fig. 4). There are two larger concentrations of the finding places pointed out: in the central part of Užnemunė near the river Šešupė and in the southeastern part between the Nemunas and the great lakes of Užnemunė.

While examining the distribution geography of the ground stone axes we must pay special attention to the subjective factors. In comparison with general quantity of ground stone axes we may come to conclusion of high level of using ground stone technique in Užnemunė. But if we take a look at the collections of

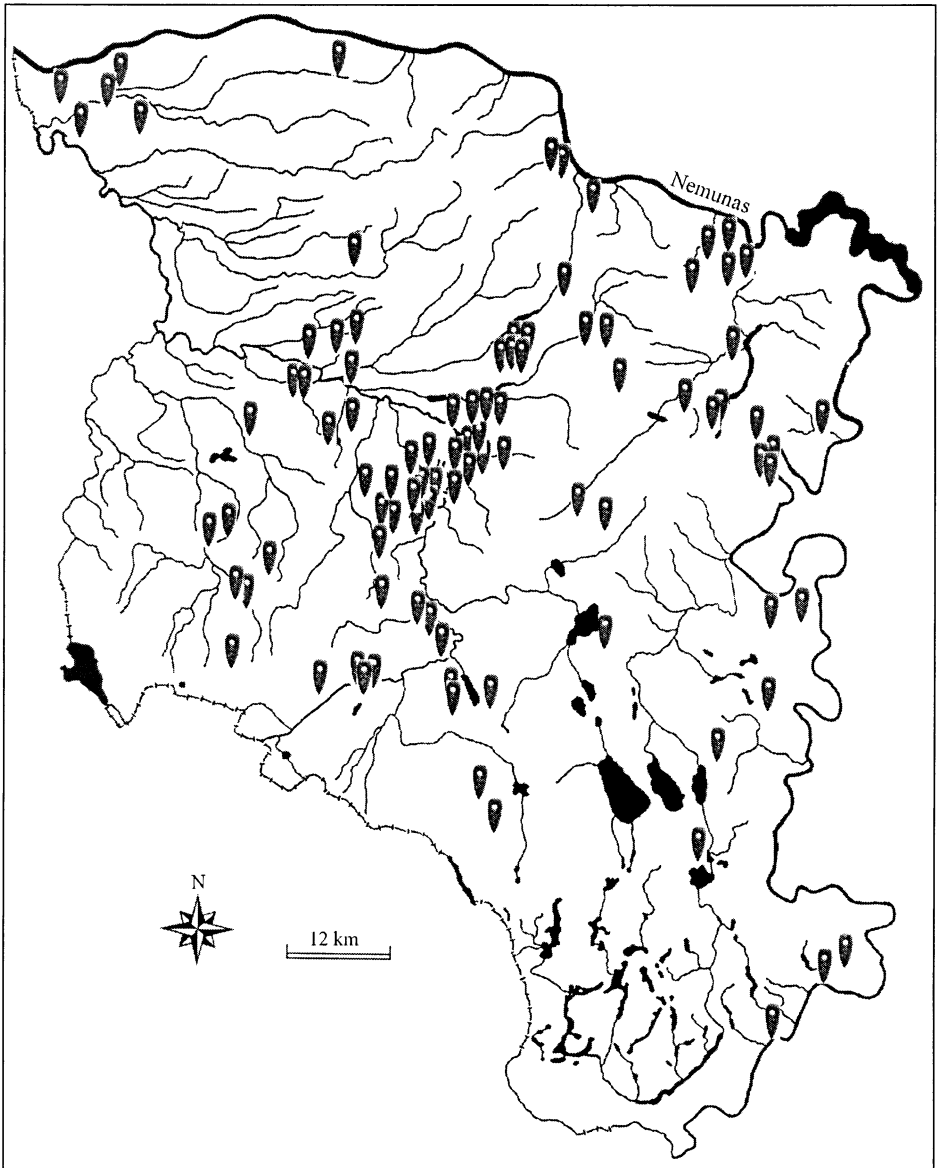


Fig. 3. Distribution of axes with quadrangular end.

finds from excavated Stone and Bronze Age sites at Užnemunė we will get another view. Striking instance could be Kubilėliai site that has been entirely excavated. There were found out about 40000 flint artefacts without any evidence of ground flint technique. Only one waste bore-plug testifies the presence of ground stone tools (Juodagalvis 1992). Rather similar situation was observed at Bronze Age settlement Dusia 8 where three ground stone axes were found and none ground flint artefact (Juodagalvis 1999). There is no data of ground stone axes from hill-forts at Užnemunė (Kulikauskas 1982; Tarasenska 1997), while they are rather numerous in the hill-forts of east Lithuania (Grigalavičienė 1995). It seems convincing that relative abundance

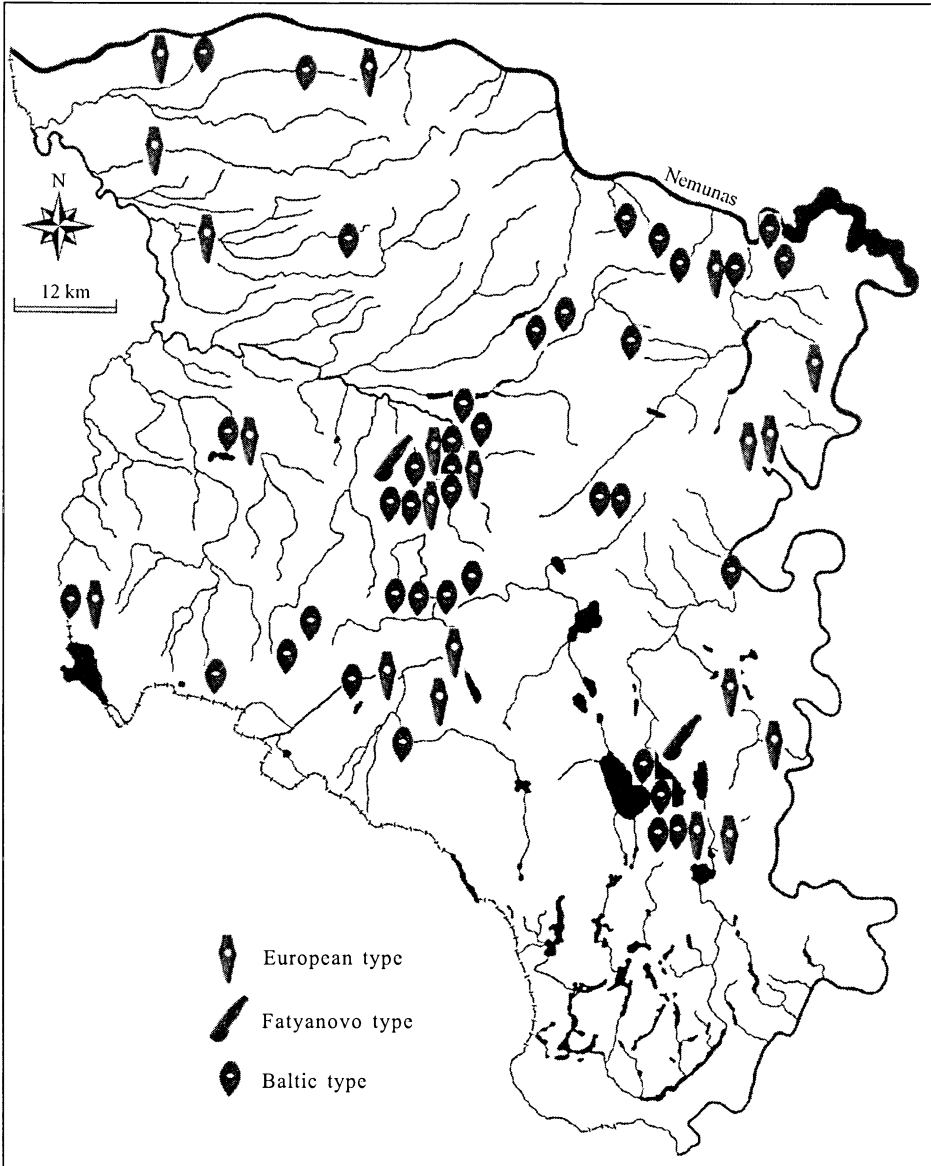


Fig. 4. Distribution of battle-axes.

of ground stone axes is stipulated by specific features of economical development of Užnemunė in the second part of 19th and the first part of 20th century. Development of agriculture, peat industry and land-reclamation was more intense than it was in the other parts of Lithuania. It created more favourable situation for finding of artefacts. It is worth while remembering stray bone and antler artefacts from Užnemunė that were the first mentioned in archaeological literature (Grewingk 1882) and long time represented the Stone Age of whole Lithuania.

There are noticeable several groups of finding places of ground stone axes. It is particularly distinct concentration almost of all types of axes in the central part of

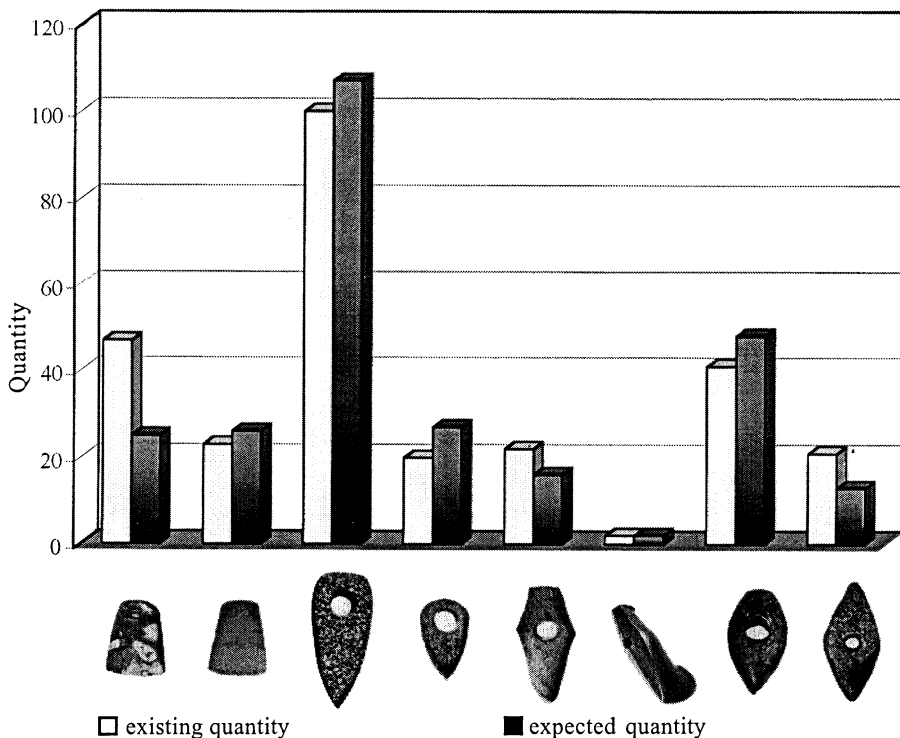


Fig. 5. Difference between existing and expected quantities of ground stone axes from Užnemunė

Užnemunė. Here we also have to pay attention to attendant circumstances – Marijampolė town, which is cultural and economical centre of Užnemunė. Economical activity (building houses, digging foundation pits, opening trenches for subterranean lines of communication, etc.) is stronger and it increases opportunity to find more artefacts. In addition, some of artefacts which came from the environs to various cultural institutions of Marijampolė in due course get an inexact metrics.

Comparing the relation of the ground stone axes type in Lithuania to that in Užnemunė, we can easily notice some differences. For analysing this I suggest “a statistical-geographical” method. The main point of it is comparison of quantity and area. The territory of Užnemunė makes up 12.6% of the area of Lithuania. There is theoretically probable to expect that the number of every type of axes should make up 12.6% of the total number of that type found in whole Lithuania (Fig. 5). The differences between existing and expected quantities indicate the specific features of distribution of ground stone axes in Užnemunė.

In Užnemunė there are the flint axes without the shaft-hole mostly found. Užnemunė belongs to the areas rich in flint, so the abundance of the flint axes is clear. The axes without a shaft-hole of other kinds of stone most probably were made in imitation of the flint ones, which were widely spread in Užnemunė. Their rather small amount is compensated by a rather high frequency of the flint axes. The larger quantity of the European boat-axes than in other parts of Lithuania testifies that Užnemunė had been under strong influence of the Early Corded Ware culture. In Užnemunė there were fewer axes of the local development found than in any other part of Lithuania.



## Conclusion

There are two aspects which I stressed in this paper: a) studies of the archaeological heritage in southwestern Lithuania; b) the use of the stray material as a source. Another important point is to impel the archaeologists who are interested in the distribution of the ground stone tools in different regions and to try to take part in the extension of the methods which are being used in order to amend the stray material and finally to draw attention to the material which is concentrated in the funds of the museums. It's worth mentioning that since publishing LAA there hasn't been any special articles about the ground stone tools in Lithuania. To my mind, the ground stone tools deserve more attention. The stray material which is piled up in the funds of Lithuanian museums is like a thick book. The question is if we know how to read it and if we understand what we have read? We need to start studying the funds over again. Moreover, while taking into consideration the material which has been filled up during the last years, time has come to think of the creation of the new Atlas of Lithuanian Archaeology.

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# Atsitiktiniai gludinti akmeniniai kirviai iš Užnemunės

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## Santrauka

Atsitiktiniai archeologiniai radiniai sudaro didelę istorinio-kultūrinio palikimo dalį. Būtent nuo atsitiktinės medžiagos skelbimo ir bandymo ją interpretuoti mes pradame fiksuoti archeologijos mokslo pradžią Lietuvoje. Dabar atsitiktinė medžiaga vertinama skirtingai. Jos panaudojimą riboja metodų, kuriais ji apdorojama, nepatikimumas ar netinkamas jų panaudojimas. Autoriaus nuomone, nederėtų neigti atsitiktinės medžiagos aiškinimo galimybių iš principo, o vertėtų ieškoti naujų būdų ją patikimai interpretuoti.

Šiame straipsnyje nagrinėjamos vienos seniausiai žinomos ir populiaros archeologinių radinių grupės – akmeninių gludintų kirvių – paplitimo ypatybės Užnemunėje. Autorius siūlo „statistinį-geografinį“ metodą – Užnemunė apima 12,6% Lietuvos ploto, tad kiekvieno radinių tipo skaičius taip pat turėtų sudaryti 12,6% bendro to tipo radinių kiekio. Skirtumas tarp realaus ir teoriškai išvesto radinių skaičiaus (5 pav.) ir sudaro prielaidas interpretacijai. Pavyzdžiui, didesnis europinių laivinių kovos kirvių kiekis liudija, jog Užnemunė patyrė stiprią senujų virvelininkų įtaką. Apžvelgus bendrą gludintų kirvių paplitimo vaizdą, galima teigti, jog Užnemunėje vyravo tarpkultūrinės formos (dviašmeniai, europiniai kovos kirviai), tuo tarpu vietinės raidos tipai (kirviai ilga kvadratine pentimi, baltiški laiviniai kovos kirviai) aptinkami rečiau nei kitose Lietuvos dalyse.

Šiuo straipsniu tikimasi paskatinti kolegų domėjimąsi akmeninių gludintų dirbinių tipologija, chronologija, paplitimo ypatybėmis atskiruose Lietuvos regionuose.

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