

LATVIAN HILLFORTS:
THE ORIGINALITY OF THE
ARCHAEOLOGICAL REALITY

ZESTIENDE KROON-VOORDRACHT

GEHOUDEN VOOR DE

STICHTING NEDERLANDS MUSEUM

VOOR ANTHROPOLOGIE EN PRAEHISTORIE

TE AMSTERDAM OP 22 APRIL 1994

DOOR

J. T. URTĀNS

RIGA, LETLAND



GERRIT HEINRICH KROON
(1868-1945)

The geographical position of Latvia, on the shores of the Baltic Sea and on the cross-roads between Eastern and Western Europe, has, from prehistoric times onward, meant that this territory has become involved or has been forcibly involved in many dramatic political and military events. Latvia has a great number of military works of various periods: fortifications from the First and Second World Wars, fortresses from previous centuries, Medieval earthworks or redoubts, and stone castles. Hillforts are the witnesses to the military might and defences of the earliest times. For Latvia and the Latvians, these are particularly important, since they represent the period up to the 12th/13th centuries, when the ancestors of the Latvians – the local Baltic tribes and tribes belonging to the Baltic branch of the Finno-Ugric language group – lived more or less independently, outside of political and economic domination by their powerful neighbours.

In Latvian, the term 'hillfort' ('pilskalns') has a twofold meaning. It includes both hills on which the stone and brick castles of the German crusaders and later the manor-houses of the landowners were built, as well as earthworks that are characteristic of the way of life of the local peoples (fig. 1), who built wooden castles in the period before the invasion by German crusaders. This lecture will deal only with those hillforts that were used by the local peoples and which ceased to function when the invaders established their authority.

The earliest of the hillforts in Latvia date from the Early Metal Age (see fig. 2 for a chronological outline of Latvian prehistory). At that time Latvia was populated by tribes of Baltic, as well as Finno-Ugric, origin. Interaction between the various ethnic groups was of a very diverse nature, and included assimilation, but it is possible that this contact was also of a military nature. The main forms of economic activity of the inhabitants were animal husbandry and agriculture, although hunting and fish-

ing also maintained an important role in the economy. Local traditions in crafts and trade were also developing.

It is around the time of Christ that the various tribes that inhabited present-day Latvia begin to be archaeologically distinguishable. The northern part of Latvia was populated by Finno-Ugric tribes, and the southern part by people of the Baltic tribes. During the whole of the 1st millennium AD there took place a northward movement of the Baltic tribes, and the Finno-Ugric tribes were gradually pushed back. At the same time the development of the local Baltic tribes was influenced by the immigration of related Baltic tribes from the south-east.

It is at the time of Christ that the Iron Age begins in Latvia, and this is sub-divided into three periods (fig. 2). It is at this time that a hierarchical social structure begins to form, and local military conflicts began to play a more important role, and this made it necessary to improve the construction of hillforts and determined the way they were designed. Local iron- and bronze-working traditions developed and attained what was for that time a high standard. By obtaining iron from local bog-ores, the inhabitants of Latvia could satisfy their demand for iron using local raw materials. The territory of present-day Latvia became involved in the economic, military and cultural processes of north-eastern and northern Europe. In the final part of the Iron Age the earliest state structures evolved in Latvia. People belonging to the Baltic tribe of the Curonians, who inhabited the region of Kurzeme (see fig. 3 for a map of the culture-historical regions of Latvia: Kurzeme, Zemgale, Vidzeme, Latgale and Augšzeme) were skilled seamen (Latvijas PSR arheoloģija, 1974).

With the 12th century, the eastern part of Latvia became politically dependent of the Rus principality of Polotsk, and at the end of the 12th century began a period of aggression by German crusaders, a process which continued throughout almost the

whole of the 13th century. As a result, the whole of the territory of present-day Latvia was subjugated and several small states, ruled by German feudal lords, were formed. All these historical processes influenced and determined the creation and continued existence of the hillforts of Latvia.

The hillfort can be regarded as the fortified habitation of an organized society of ancient times. The construction of the earthworks and wooden defences of the hillforts required large-scale collective work, which could not have been carried out without social organisation.

The above-ground defences of the hillforts have not survived up to the present day, but the man-made modifications of the hills and the occupation layer allows us to identify them as ancient monuments. Similarly designed hillforts are characteristic of all of the neighbouring countries: Lithuania (Lietuvos TSR archeologijos atlasas, 1975), Byelorussia (Duchich, 1991; Schmidt, 1992, 20-54), Russia (Stankevich, 1960) and Estonia (Jaaniits, Laul, Lõugas, Tõnisson, 1982), and such monuments are found also in other countries of north-eastern Europe. Thus, the hillforts of Latvia can be viewed as the local expression of a tradition that was widespread in north-eastern Europe.

In the course of the hillfort survey and research, a group of features has been isolated, which allows us to distinguish hillforts from other types of raised relief and from late Medieval earthworks – redoubts (Graudonis, Urtāns, 1961, 27-38; Urtāns, 1991a, 4-5). There are four main features that serve to distinguish a hillfort:

1. The hill has a flattened plateau: a flat area that was necessary for the arrangement of the defences of the hillfort and for the construction of living quarters, structures associated with economic activity and other buildings. The plateau may be sloping.

2. The hill-slopes are modified and strengthened in specific ways. The slopes of the hill were made steeper, and in order to make them proof against attack and to make possible the construction of additional lines of defence, one or more terraces may be present on the slopes.

3. A man-made system of ramparts and ditches, which either surrounded the whole hillfort, or else that part of the hill that was least well protected against enemy attack. The system of ramparts and ditches was usually combined with defensive structures around the gate and entrance; it is linked to the terraces on the slope of the hillfort and also to the weaker defences of the outer fort, if the hillfort had such a separate outer fort.

4. A characteristic feature of all ancient habitations, including hillforts, is the occupation layer.

Just one of the above features observed on a hill is sufficient to show that it is an ancient monument: a hillfort. Usually, genuine hillforts possess all or most of these four characteristic features.

There are other features that can also indicate a hillfort, but these cannot on their own be regarded as definitive. One of these is the characteristic location of hillforts in naturally advantageous places: on hills cut off by dissected relief, at the confluences of rivers or streams, next to the steep banks of rivers or lakes or on hills surrounded by bogs. The inhabitants of the ancient defences needed drinking water, so wells were dug in the hillforts or else they were sited in places with a natural spring. Such water sources and reservoirs may survive until today. Natural water-bodies could be used as barriers in the defences of hillforts. In a few cases it has been found that dams were built specially in order to raise the level of streams and rivers, forming barriers that provided an additional defence for the inhabitants of the

hillfort against enemy attack. Very important signs of a hillfort are its name and the legends that usually surround hillforts. The names of hillforts are still in popular use today, whereas the legends have for the most part been recorded in earlier times.

The Latvian landscape has no great mountains or deeply dissected relief, and so the hillforts themselves are not of large dimensions. The plateaux of the largest hillforts are up to 1 ha in area, but more commonly they are 2000-4000 sq.m. The slopes of hillforts do not have any standard height. The main requirement was for the natural slope of the hill to be as high and as steep as possible. The lowest slopes of the hillforts of Latvia are 4-5m high, and the highest reach a height of several tens of metres. The highest defensive ramparts of hillforts reach almost 10m in height; usually they are 2-5m high. The defensive ditches of hillforts are of similar dimensions. Usually hillforts are fortified with one or two ramparts and the same number of ditches, but there may be up to four or five parallel ditches and ramparts.

Two different approaches can be distinguished in the historical development of hillfort research, and although these two approaches are closely interwoven, there are at the same time distinct traditions of research associated with each of them. The first of these are traditional archaeological excavations, the data and artefacts from which are then used in various research projects and more general works. The second approach entails hillfort survey and the discussion of related questions of hillfort typology, historical geography, location and other issues. In resolving these questions, the results of archaeological excavations should also be made use of.

The first large-scale excavations of Latvian hillforts were carried out at the end of the 19th and the beginning of the 20th century at Pekas kalns at Kauguri (Ballod, 1911, 1-24) and Mūku kalns

at Koknese (Buchholtz, 1899; Ebert, 1913, 520-522). Although the conclusion that Mūku kalns was used as a hillfort as early as the Neolithic (Hausmann, 1909) was later found to be wrong, the excavations proved beyond doubt that the hillforts were fortified habitations of the local inhabitants and were inhabited for a considerable length of time. Previously the view had been expressed that Latvian hillforts were used only as places of short-term refuge in wartime (Transehe, 1897).

Excavations on a much broader scale were undertaken during the time of the independent Republic of Latvia in the 1920s and 1930s, and the results of almost all of these excavations have been published (Balodis, Teikmanis, Kundziņš, 1928; Ģinters, 1936a; 1936b; 1939a; 1939b; Karnups, 1936, 1938; Šnore, 1936, 1939; Balodis, 1940). These excavations were on a much smaller scale than archaeological excavation work done on hillforts in the 1950s and 1960s. This is explained by the immense economic projects (principally the construction of the hydroelectric power stations of the River Daugava), which involved the complete or partial destruction of archaeological monuments. Because of this considerable funds were made available for the excavation of ancient monuments including hillforts. A proportion of these many excavations have already been published in separate monographs (Šnore, 1961; Stubavs, 1976; Muguŗeviŗs, 1977; Šnore, Zariŗa, 1980; Graudonis, 1989), however there is still a very large amount of data from excavations of these years that remains unpublished (Koknese, Daugmale, Aizkraukle and other hillforts) and so is not available for study by a wider circle of researchers. The construction of the three hydro-electric power stations of the Daugava cascade meant that the hillforts on the banks of the River Daugava were the most thoroughly investigated, while archaeological excavations in other regions of Latvia took place much less often.

Archaeological research has allowed us to date hillforts and to

refine the dating of others that had been only approximately dated. It has been established that the first hillforts were created at the beginning of the 1st millennium BC or even earlier (Latvijas PSR arheoloģija, 1974, 71). The local traditions of hillfort building are usually taken to end with the invasion by German crusaders in the 12th/13th centuries, although research has shown that a few hillforts continued in use by the local inhabitants in the 13th and 14th centuries, after the invasion by the crusaders. Evidence of this appears in historical sources (Mugurēvičs, 1983, 5-7).

A separate question is whether the local inhabitants were capable of building stone fortifications using stone and mortar. Although such claims have been made, archaeological research has not confirmed such a possibility. Aizkraukle hillfort and Rieks-tu kalns in Cēsis, where mortar has been used in constructing the fortifications around the perimeter of the plateau (Urtāns, 1983; Apals, 1982, 12-21) seem in fact to be the sites of the original stone castles of the German crusaders, though they may have been built in close cooperation with the local inhabitants (Mugurēvičs, 1983, 10).

Altogether, systematic archaeological excavations have been carried out at almost 50 hillforts, which represent about 1/9 of all known hillforts in Latvia (fig. 4).

The second approach to the study of hillforts originated as early as the 18th century, when the hillforts of Latvia first began to arouse scientific interest among the local Baltic German antiquarians. This was a time when archaeological artefacts and monuments were viewed as curiosities. The first descriptions and surveys of hillforts appeared (Börger, 1778; Mellin, 1794). The discovery and identification of hillforts as historical monuments gained pace in the first half of the 19th century (Hueck, 1840; Kruse, 1842; Hagemester, 1843 and others), but it was

only in the mid and late 19th century, when new generations of Baltic German researchers became involved in studying hillforts, that hillfort survey in Latvia entered the next phase of development. Hillforts, being important and visually impressive historical monuments, were the subject of a series of publications. Among these researchers, the name of A. Bielenstein stands out. Having started with hillfort surveys in particular culture-historical regions of Latvia (Bielenstein, 1869; 1873; 1882), he published in 1899 an overview of all the hillforts of Latvia (Bielenstein, 1899), in which he put forward the first typological scheme of Latvian hillforts.

With the First World War and the foundation of the independent Republic of Latvia, the work of hillfort survey was taken over by researchers of the newly-formed Latvian state. The Baltic German tradition of hillfort survey was concluded with the hillfort register of Livonia (including Latvia), published by K. Löwis of Menar, which contained information about 303 hillforts in Latvia (Löwis of Menar, 1922). The author had not seen all of the hillforts himself and often relied on information supplied by his informants, so that this register of hillforts contains quite a few inaccuracies.

The hillforts of Latvia were surveyed on a new, more sophisticated level in the 1920s by E. Brastiņš. In the four books he published (Brastiņš, 1923; 1926; 1928; 1930) he compiled information (description, topographical survey, map, photograph) about 282 undoubtedly genuine hillforts. In addition, he briefly described 63 sites which he called 'fort-like monuments' ('pilenes'). Also, E. Brastiņš gave brief descriptions of 6 hillforts which had already been destroyed, mainly by ploughing, and registered another 36 places that had been described as hillforts, but turned out on inspection not to be genuine. E. Brastiņš was the first to use features showing artificial modification of the hill as a guide in distinguishing genuine hillforts from other hills

that were also associated with the hillfort tradition. Although E. Brastiņš himself did not produce a typology of hillforts, his publications formed the basis for the Latvian hillfort typology produced at the same time by F. Balodis (1928).

Even after the publication of Brastiņš' very thorough register of hillforts, new sites were found, particularly at the end of the 1930s and the beginning of the 1940s, though the number of newly-discovered hillforts was smaller than in the 1920s and earlier. The discovery of hillforts still continued after the Second World War, but, because of the excessive secrecy imposed by the Soviet military, descriptions and topographical surveys of the newly-discovered hillforts were not allowed to be published. Only in the 1990s did it become possible to publish more precise descriptions and location maps for hillforts. Such information about hillforts has, however, only been published for particular regions (Urtāns, 1991a; 1991b; 1993b). An overview of the hillforts of Zemgale was published in the Latvian community that lived in exile from Soviet occupied Latvia (Ozols, 1971).

An important place in the study of Latvian hillforts belongs to the hillfort typology worked out by A. Stubavs (1974). By using the information compiled in hillfort surveys and making use of the hillfort typologies previously devised by A. Bielenstein, F. Balodis and V. Urtāns, he produced a typology of the hillforts of Latvia that used the outer morphology of hillforts, particularly the ramparts, ditches, terraces and their arrangement, as the main criterion for distinguishing hillfort types. A. Stubavs divided the Latvian hillforts into 5 types, along with sub-types (fig. 5). Only in 18 cases could archaeological excavations contribute some additional information to supplement the typology:

Hillfort, type A: an isolated round or sub-rounded hill with an encircling system of defences (4 sub-types) (fig. 6).

Ridge hillfort, type B: with one or more ramparts at each end (3 sub-types) (fig. 7).

Hillfort, type C: isolated, elongated hills with a main rampart on the plateau and an entrance at one end of the rampart or along a path leading up the slope (3 sub-types) (fig. 8).

Precipice-edge hillfort, type D: with a semi-circular or horse-shoe shaped line of defences and well protected from the rear (2 sub-types) (fig. 9).

Hillfort, type E: fortification on a promontory of an area of raised relief (5 sub-types) (fig. 10).

Within each type, the sub-types are ordered in a sequence beginning with the simplest form of defences and ending with the most complex form. Hillforts of type A and D are the most numerous in Latvia: type A includes around $\frac{1}{3}$ of all the hillforts that have an identifiable form and type D makes up around $\frac{2}{3}$ (Stubavs, 1974, 77, 80). Some regions of Latvia have a concentration of hillforts of a particular type. For example, A and B type hillforts are most often found in Augšzeme and Latgale, whereas type E hillforts, although found throughout the territory of Latvia, are most numerous in Kurzeme.

Hillforts are found in all the regions of Latvia, but there are districts where they are noticeably concentrated, and others where hillforts are absent or more sparsely distributed than elsewhere (fig. 4). Areas with an abundance of hillforts include the south-western part of Kurzeme and the central parts of Zemgale and Vidzeme. Hillforts are less densely distributed in Zemgale and northern Vidzeme. It seems that the small number of hillforts in Zemgale is explained by the fact that the Zemgale plain provides few places of raised relief. In some other districts of Latvia, boggy or forested terrain and other circumstances prevail

which made agriculture and animal husbandry difficult, and this resulted in a sparse distribution of hillforts.

At present 370 hillforts in Latvia can be regarded as genuine (fig. 4), and around 100 other sites can be considered as 'fort-like monuments' ('pilenes') or hillforts ploughed out or destroyed in earlier times. Also included in this number are hillforts destroyed in the 20th century.

Unique among the hillforts of Latvia are hills in Kurzeme that are defended by several concentric ramparts and ditches, included in type A of A. Stubavs' hillfort typology. Several entrances lead through the ramparts and ditches of these hillforts (fig. 11). From a military point of view, more than one entrance was unnecessary, so that these hills cannot be regarded as true hillforts built as military defences. By analogy, these hills, modified in a particular fashion, are taken to be fortified religious sites, which were used for popular assemblies, for concluding public legal acts, for worshipping gods and other similar purposes (Šturms, 1936; 1938). Since monuments of this type have been found with an occupation layer (Stepiņš, 1938), it is possible that these sites that resembled hillforts were inhabited on a permanent basis by religious devotees.

Archaeological excavations of Latvian hillforts have shown the existence of other types of religious sites as well. At Asote hillfort, for example, two sites were found where offerings were placed. The earliest of these, from the 1st millennium BC, had the form of a clayey raised area, in the area around which pottery and animal bones were found. The later one, dated to the 12th century, consisted of a shallow pit in which various sorts of offerings were found (Snore, 1961, 126-128). It is possible that the hillforts of eastern Latgale, like those of the Eastern Baltic tribes in present-day Byelorussia (fig. 12), had places of worship (Tretjakov, Schmidt, 1963, 57-60, 96-99, 102-103). There is

indirect evidence of this in the names of the hillforts (associated with the Latvian word for 'church' – 'baznīca'), as well as topographical and dating evidence (Urtāns, 1992). There is a considerable proportion of Latvian hillforts with other hills in the vicinity which have preserved to this day names that indicate religious sites. Although these religious sites on hills have as yet been very little investigated archaeologically, research throughout Latvia has revealed a definite pattern: complexes of monuments consisting of a hillfort in association with such a religious site.

The earliest defensive works, which are found at the hillforts of the 1st half of the 1st millennium BC, consist simply of a wall of stakes or several, parallel walls (Mūku kalns at Koknese, Asote, Vīnakaļns at Ikšķīle). The construction of such works did not yet require any major modifications to be made to the form of the hill that was to serve as a hillfort. From the middle of the 1st millennium BC onwards more substantial palisade-type walls were built, in combination with ditches. At the same time defensive ramparts were constructed, consisting of horizontal logs laid between stakes. Also at that time earthen ramparts were thrown up and ditches were dug, together forming quite a complicated defensive structure. This included scarping the slopes of hillforts and reinforcing them against collapse with heaps of stones, wooden structures and covering layers of clay. Parallel rows or heaps of stones or frameworks consisting of horizontal logs (Graudonis, 1985, 133-138) made possible the creation of defensive ramparts with a continuous face of up to 3m in height. The system of defences of Brikuļi hillfort, dating from this period, also included a round tower-shaped construction of diameter 2.4m (Vasks, 1979, 90). In this period enclosed systems of defences were built around the perimeter of the plateau, adjoining living quarters on the inside, while the central part of the plateau was not built over. This area was presumably used for economic activities that were difficult to carry out in the narrow

confines of the living quarters. In the event of enemy attack the animals, which were the most important possession of the inhabitants, were placed in this central area. During this period the builders of the hillforts had mastered all the main techniques of fortifying hillforts (ramparts with internal structures, various forms of defensive walls, ditches, scarped and reinforced slopes and terraces). Further development involved various improvements and an increasing degree of complexity. In the Early Metal Age the economic system dictated the siting of hillforts in the immediate vicinity of water-meadows and light soils, which provided optimal conditions for agriculture and animal husbandry.

With the beginning of the 1st millennium AD buildings of horizontal logs began to dominate, judging by the archaeological evidence (Latvijas PSR arheoloģija, 1974, 126). This was also reflected in the construction of hillforts, where stake walls began to be replaced by fortifications of horizontally laid logs, which completely surrounded the hillfort plateau (fig. 13) and were strengthened with perpendicular walls (fig. 14). In the Late Iron Age hillforts were additionally fortified with complicated systems of ramparts, ditches, escarpments and terraces, with particular attention being paid to the security of the entrance (fig. 15). Ramparts were made more stable by providing them with a central framework consisting of various wooden, stone and clay structures. The spaces within these frameworks of the defences were on occasion also used for economic activities or even as living quarters. In individual cases the circumstances dictated that the main line of defence be built not on the perimeter of the plateau, but on a terrace on the slope, as at the hillfort of Kaupra kalns at Piziči (fig. 16). The line of defence was formed of a row of cell structures of horizontal logs (fig. 17). Two excavated cells are 3.4 and 4.6m in length, and 1.2-1.8m in width. These cells, like the normal buildings on the plateau of the hillfort, were inhabited on a permanent basis, as evidenced by the remains of

clay daub ovens and of supplies of food that had been stored in clay vessels. The defensive wall of Kaupra kalns at Piziči, formed of such cells, was 2.3m in height (Ūrtans, 1987, 145-147). It seems that fortifications based around cells were the most widespread type of defensive structure in the Latvian hillforts of this period.

The siting of hillforts of the end of the 1st millennium AD and the beginning of the 2nd millennium still showed their association with land suitable for farming, the area of which had increased, but the location of hillforts also began to reflect their political importance. Many hillforts have been found together with outer forts, settlements and ancient town sites. Characteristic of the Early Metal Age are hillforts of Type A of A. Stubav's typology, that could not be further extended, while later periods saw an increasing number of hillforts which offered the possibility of qualitatively improving or extending the defences, adding outer forts and forming settlements and towns. The strong, fortress-type hillforts of the Late Iron Age, with their complex defensive works (fig. 18) could have been built only with the labour of an organized body of people. The defensive works of the hillforts of this period in Latvia are also described in written sources (Indriķa hronika, 1993; Atskaņu hronika, 1936). These mention wooden fortifications surrounding the hillfort plateau and ramparts with towers and entrances, and deal with the methods of warfare by which the wooden castles of the hillforts were taken by the enemy.

The hillforts of the Eastern Baltic have also been classified according to stages of social development and hillfort chronology by H. Moora (1952; 1967). This classification was largely based on the accepted fundamental tenets of Soviet history about stages of social development and the formation of social classes. H. Moora divided the hillforts of the Eastern Baltic into four groups. The first group included the so-called *fortified settlements*

of the 1st millennium BC. The second group included *refuge-hillforts*, which were created at the time of the collapse of primitive society, the first half of the first millennium AD. These hillforts were not permanently inhabited, their defences are relatively weak and the occupation layer is very thin. H. Moora considered that these hillforts were used for short periods in situations of military threat. The third group contains the *hillforts with a relatively more complex construction and defences*, dating from the middle of the 1st millennium AD, which were permanently inhabited and are associated with the formative period of class society. The fourth group includes the *well-fortified hillforts with complicated defences* which are regarded as the castles and centres of authority of feudal lords. Hillforts of this group have their origin at the end of the 1st millennium AD and existed until hillforts of the local inhabitants ceased to be used.

This scheme had a noticeable influence on Soviet Latvian archaeologists because they had to try to tailor their ideas on the forms and dating of Latvian hillforts to fit the opinions expressed by H. Moora (Latvijas PSR arheoloģija, 1974). At the same time it was impossible to overlook the fact that these opinions could not always be squared with the actual data obtained in archaeological excavations. For example H. Moora's idea that the hillforts of the 1st millennium BC should be termed 'fortified settlements', which was reflected in a series of works by Latvian archaeologists (Mugurēvičs, 1966; 1967; Graudonis, 1967, 10-24; 1989; Zariņa, 1982; Latvijas PSR vēsture, 1986, 12 and others) is the cause of a certain amount of confusion. Thus, for example, the Brikuļi settlement, investigated by A. Vasks, has no defences visible above ground, but does have defensive ramparts and ditches that can no longer be detected in the external morphology (Vasks, 1979, 89-92). The term 'fortified settlement' would be particularly appropriate to such a monument. Also, use of this classification raises the question of when a 'fortified settlement' becomes a hillfort, because several Latvian hillforts show contin-

ued occupation beginning with the 1st millennium BC and extending into the first half of the 1st millennium AD. This is supposedly the period of the briefly occupied refuge-hillforts, but archaeological excavations have shown that many hillforts of the first half of the 1st millennium AD were intensively occupied (Madalāni and Stupeži hillforts, Dievu kalns at Lielvārde, Upursalas Upurkalns at Aglona and Gūtiņi hillfort). The terms 'hillfort' and 'fortified settlement' are in fact synonyms, which differ only in their chronological application. If a hillfort is not securely dated, as is the case for the majority of the hillforts of Latvia, or if its period of use continues beyond the 1st millennium BC, then the use of the term 'fortified settlement' becomes highly problematic. Similarly, caution should be exercised in the use of the term 'refuge-hillfort'. Such hillforts did exist, but this was not the only form of hillfort in use in the first half of the 1st millennium AD, for there were also hillforts at this time that were inhabited on a permanent basis.

The present state of hillfort survey and archaeological research allows us also to discuss several other problems related to hillforts.

Because the study of hillforts in Latvia has been much more intensive in some districts than in others, and because many hillforts are not securely dated, attempts have been made to draw conclusions about the dating of hillforts based on the visible features of the structure of the hillfort. There is a general tendency for the earlier hillforts to be simplest in construction, but this rule cannot be applied in all cases, because some early hillforts are also provided with complex defensive works, and later hillforts of simple construction also occur.

In the initial period of Latvian hillfort study there was a desire to use the outer morphology of hillforts not only for dating purposes, but also to establish their association with a particular ethnic

group (Balodis, 1928). However, as shown by a thorough analysis of hillfort types (Stubavs, 1974), it is very difficult to attribute a hillfort to a particular ethnic group on the basis of the outer morphology. It is possible to establish general trends and of hillfort development which are reflected in the greater or lesser concentration of particular types of hillfort in a particular area, but it has not been shown whether the predominance of one type of hillfort in this area has been determined by the ethnic identity of the builders or whether the main factor in the choice of hillfort type was in fact the physical geography of the area.

Many Latvian hillforts possess an outer fort ('priekšpils') which is integrated into the defensive system of the hillfort. In A. Stubav's typology, outer forts are found with all types of hillforts except the simplest type A forts. Judging by hillforts which have been subject to systematic archaeological excavation, outer forts began to develop at the hillforts of Latvia in the middle of the 1st millennium AD, but it is possible that further research will produce a revised date, and the formation of outer forts may turn out to have begun earlier. Outer forts, like the hillforts themselves, are fortified with ramparts and ditches. In a few cases (Aizkraukle hillfort) the outer fort forms what seems to be a separate hillfort (fig. 18). Larger and better defended outer forts occur at those hillforts of the latest period which functioned as regional centres.

The first open settlements associated with hillforts appear as early as the first period of development of hillforts. In later periods there is an increase both in the number of hillforts with associated settlements and in the area covered by these settlements. In contrast to the hillforts, the settlements were inhabited more by craftsmen. Data from hillfort survey in Kurzeme show that of 116 hillforts at least 25 had associated settlements (Asaris, 1987, 32). There is a similar relationship between hillforts and settlements in other districts of Latvia.

The question of what features of settlements associated with hillforts allow them to be given the status of town sites has not been resolved. It may be appropriate to follow Stubavs, who considered that a settlement is to be distinguished from a town by its area. Settlements with an area of 10-15 ha would be designated as town sites. Other criteria also serve to distinguish settlements from towns. There is a general pattern whereby towns formed alongside the most prominent hillforts of the final period of development. Archaeological research has shown that almost all Late Iron Age hillforts have associated settlements (Stubavs, 1974, 83).

The hillfort can also be regarded as the economic, administrative, political and cultural centre of the ancient society. At these places, where there was a greater concentration of people, economic and cultural innovations, and particularly military ones, were soon applied. That there were certain differences in the way of life of people living in hillforts and those in the open settlements is shown by bone remains. It turns out that the inhabitants of hillforts of the Late Iron Age consumed more pork than the inhabitants of the settlements, which perhaps also reflects differences in property ownership. In the bone material of Koknese hillfort, for example, the number of pig bones is almost double that found in the outer fort and shows that the inhabitants of the hillfort consumed much more relatively valuable, and probably comparatively expensive, pork than did the inhabitants of the outer fort (Latvijas PSR arheoloģija, 1974, 248).

The development of the economy and other aspects of the lives of the inhabitants was also influenced by the location of the hillfort. For example, whereas the potter's wheel was being used in the hillforts situated along the banks of the River Daugava from the 10th century onwards (Snore, 1961, 116; Muguŗēviŗs, 1977, 41), non-wheel formed pottery was still being used in the 12th century at Madalāni hillfort, which is located further away from

the most important centres and routeways (Urtāns, 1984, 103). The Daugava can be regarded as an important route of international communication between east and west, which, judging by the finds of Arabian dirhems from hoards and from ancient monuments on the banks of the river, was used most intensively from the 10th century onwards (Berga, 1988, 30, 31). Thus the inhabitants of hillforts on the banks of the Daugava were the first to become acquainted with this more progressive method of making vessels, as well as with other cultural innovations.

Cemeteries are also found in the immediate vicinity of hillforts and if the hillfort was occupied for an extended period or if it can be regarded as the centre of a district, then there may be cemeteries in several places nearby. The central hillforts usually also have hills used as religious sites nearby.

Quite often at ancient district centres there are pairs of hillforts. Clearly, with an increase in the number of inhabitants, the original hillfort could no longer fulfil the functions of the central hillfort of a district and so a new hillfort was established. At the same time smaller and less well fortified hillforts existed away from the district centres.

Not all of the hillforts of the native inhabitants of Latvia mentioned in historical sources have been identified. While in some cases discussion of the location of historically attested castles has ceased and their identification with particular hillforts is regarded as more or less proven, other notable 13th century castles have still not been positively located and discussion still continues about their identification with one hillfort or another. A typical example is the castle of Beverina, the location of which has occupied the minds of researchers for more than 200 years. Recently the discussion about which hillfort was the real site of Beverina castle has begun again with renewed vigour and of the earlier expressed hypotheses, of which there are at least seven,

three have been put forward again – the hillfort of Tanīsa kalns in Rauna, Vaidava hillfort and Trikāta hillfort (Skutāns, 1992; Graudonis, 1992; Stepīņš, 1993; Mugurēvičs, 1993, 376-377).

The large total number of hillforts in present-day Latvia is no indication that they were contemporary. At present the limited amount of research done on hillforts only allows a rough estimate of the number that were in use at any one time. It seems that the overall number of hillforts in the Late Iron Age is smaller than that of previous periods (Stubavs, 1974, 84), although it is considered that in Kurzeme most of the hillforts were in use in the Late Iron Age (Latvijas PSR arheoloģija, 1974, 180). In Latgale and Augšzeme, though, less than half of all hillforts were inhabited in the Late Iron Age (Latvijas PSR arheoloģija, 1974, 217). It seems that the hillforts of this area are in the main attributable to the Early Metal Age and Early Iron Age. These conclusions have been drawn based on individual surface finds and outer morphology, which, as shown above, cannot always provide secure evidence for dating hillforts. Nevertheless, it is possible to get an idea of the relative number of hillforts occupied in the various periods. Based on the data available at present, it is possible to highlight two phases of heightened activity, when hillforts were built and used particularly intensively. One of these phases is the Early Metal Age and Early Iron Age. There is less information about hillforts of the Middle Iron Age, though there is no doubt that they did exist in this period. At the end of this period there appeared a previously unknown type of fortification: the lake fortresses and lake settlements. Surfaces of logs were laid out on the shallows or small islands of lakes, and on these fortified settlements were built. The best known and most thoroughly investigated example is the lake fortress of Āraiši (Apals, 1993). The second period of intensive establishment and use of hillforts is the Late Iron Age.

The mapping of hillforts is a method which has been used for a

very long time and with good results. In the first major work of this type A. Bielenstein established, by means of mapping hillforts, the area inhabited by the Latvians in the Late Iron Age (Bielenstein, 1892a; 1892b). Based on the information gathered by E. Brastiņš in his hillfort survey expeditions (Brastiņš, 1923; 1926; 1928; 1930) distribution maps of the hillforts of Latvia were constructed. On the basis of data from hillfort surveys and from survey expeditions led by himself, F. Balodis put forward the theory that in the Late Iron Age there was a double line of defence, made up of hillforts, in eastern Latvia, which faced towards the east and defended the Latgals against attack by the Slavs (Latviešu vēsture, 1938, 165-166). F. Balodis' theory was vehemently attacked in the years of the Soviet occupation because historians who submitted to political pressure and to official dogmas had to show that in the Late Iron Age relations between the inhabitants of Latvia and their eastern neighbours, the Slavs, were always particularly friendly, which, of course is not in accordance with the historical facts.

None of the hillforts that were considered by F. Balodis to form the eastward-facing double line of defence have been excavated, either in his day or in recent years, except for Kausa hillfort at Pasiēna, and they are generally undated, so that there is no firm basis for regarding them as Late Iron Age. On the contrary, it seems that a large proportion of the hillforts of the eastern part of Latgale are attributable to earlier periods. At the same time it cannot be denied that the boundary between the Slav states to the east (to the east of Latvia in the Late Iron Age lay the lands of the Slav Tribe of the Krivichi. East Baltic tribes assimilated by the Slavs had an important role in the ethnic origin of the Krivichi (Sedov, 1982, 158)) and the Latgal states to the west was marked by some sort of border. The idea that such a border existed is supported by research conducted by Byelorussian archaeologists. They regard the Late Iron Age hillforts of present-day Byelorussia near the borders of Latvia and Lithuania as bor-

der defences facing the west (Duchich, 1991, 86-87; Tkachou, Semjanchuk, 1993 and others), in other words, directed against the lands inhabited by the Balts. If so, then there ought to be border defences in south-eastern and eastern Latvia as well, faced by the fortresses of present-day Byelorussia.

While the boundary between the Slavs and the Balts has been fairly precisely established for the first centuries of the 2nd millennium BC, partly on the evidence of hillforts, but mainly based on data from cemeteries, the hillforts of the 1st millennium BC and the beginning of the 1st millennium AD in eastern Latvia, where hillforts of this period are more common, have a strong similarity with hillforts that definitely belonged to the Baltic Dnieper-Daugava culture to the east and southeast of present-day Latvia (Schadiro, 1985, 11-30; Schmidt, 1992, 20-54). Likewise the hillforts of the Baltic Scratched Ware Culture, whose main area of distribution is to the southeast (Mitrofanov, 1978), resemble the hillforts of Latvia (Graudonis, 1985, 131-139).

The mapping of the hillforts of Latvia has allowed other patterns to be detected as well. For example those hillforts along the banks of the main watercourse in Latvia, the River Daugava, which are dated to the Late Iron Age, are arranged approximately at such distances from one another as could in those times have been covered in a day by a ship travelling upstream. At such centres the traders could find shelter for the night, opportunities for trade and possibly also military protection. On stretches where the River Daugava had more rapids and where travel against the current was therefore slower and more difficult, these hillforts were located at closer intervals, and they were further apart where the current was slower.

The modern-day border between Latvia and Lithuania began to be formed in the 13th century and divided the lands conquered

by the German crusaders on one side from the territory of the state of Lithuania on the other. Because of this, the border was an artificial creation that did not correspond to the ethnic divisions of that time: it so happened that the Baltic tribes of the Sellonians, Semigallians and Curonians were divided between two political powers. As a result hillforts of one Baltic tribe are today found in the territories of two states – Latvia and Lithuania. Those districts of Latvia that border with Estonia were originally inhabited by Finno-Ugric tribes and it was only in later times, when the local tradition of hillfort building had ceased to exist, that the inhabitants of these districts were assimilated by the Baltic tribe of Latgals. Thus the hillforts of the northern part of Latvia are to be regarded as monuments associated with the Finno-Ugric tribes and as border defences between the territories occupied by the Balts and the Finno-Ugric people (Urtāns 1993a; Mugurēvičs, 1993, 388).

The typological schemes of Latvian hillforts do not include the so-called 'fort-like monuments' ('pilenes'). These are hills that are popularly known as hillforts, but which do not have the features that denote genuine hillforts. Up to the present day, no archaeological excavations have been conducted at 'pilenes' and so it is not possible to describe these monuments in archaeological terms. Usually 'pilenes' are hills isolated by the natural relief, which however do not have artificial ramparts, ditches or terraces. Possibly such hills fulfilled the functions of real hillforts for a short time and so still possess a popular association with the hillfort tradition (Brastiņš, 1923, 131). Written sources of the 13th century also confirm the existence of temporary fortifications of the native inhabitants (Indriķa hronika, 1993, 253). In the course of archaeological surveys, no occupation layers have been found at 'pilenes', and so they are difficult to date. To clarify the place and role of the 'pilenes' in the ancient history of Latvia is one of the future tasks of Latvian archaeology.

In some cases it is difficult to decide whether a hill is to be regarded as a 'pilene' or as a hillfort that has been destroyed. Particularly in Latgale, where in quite recent times overpopulation in country districts forced peasants to plough even steep hills, many hillforts have been ploughed out over a period of many years (fig. 19). Thus they have lost their characteristic ramparts, ditches and terraces, and the occupation layer, if there was one, has been ploughed out and washed down onto the hill-slopes and to the foot of the hill. When archaeological excavations are carried out on the plateaux of such hillforts, natural subsoil is found immediately below the turf layer. Only features cut into the subsoil have any archaeological value (fig. 20). Such partially destroyed hillforts have also not been archaeologically investigated in Latvia, and so they can usually be evaluated only visually, and by external morphology alone they are indistinguishable from 'pilenes'.

The process of destruction of hillforts has continued even into the recent past, and during the 20th century 20 genuine hillforts have been destroyed. Of these, only 9 have been investigated archaeologically, and only in 5 cases was most of the area of the hillfort excavated before its destruction. The greatest number of hillforts were destroyed in the digging of sand and gravel pits in the 1960s when the protection of archaeological monuments in Latvia was not properly organised and when local officials sanctioned the destruction of hillforts simply on the basis of economic needs. Some hillforts can be considered as having been destroyed in the sense that cemeteries have been established at these sites in earlier centuries and continue to function in the present day, or because churches have been built on them. Of course the archaeological protection of these hillforts is problematic because it is impossible to carry out archaeological excavation there.

Hitherto unknown hillforts are still being discovered in Latvia.

Though it appeared in the 1960s and 1970s that new hillforts would be hard to find, the 1980s saw the discovery of a whole series of previously unknown hillforts. There was a certain pattern in the discovery of new hillforts: the new hillforts were found not in forests or other inaccessible and little frequented places but in the immediate vicinity of the largest towns and centres of population. It seems that these cases were brought about by the alienation of most of the population from the local traditions that usually allow archaeologists in Latvia to find previously unknown hillforts.

The existence of hillforts in Latvia has left a definite impression on the mentality of the Latvian people. This is evidenced by more than 5000 recorded items of folklore – legends and stories – about hillforts and also by the fact that the ancient fortifications have preserved their popular names for centuries. This means that the ordinary Latvian peasants knew which hills had been artificially modified. Legends also testify to the former importance of hillforts. For example one of the most widely distributed legends in Latvia concerns a castle that has sunk into the hill of the hillfort and has left a pit at the top of the hill, which is supposedly the castle chimney. If a duck is let into the castle through the pit, then it will emerge at a nearby lake. It seems that this group of legends has preserved in a figurative way knowledge about wells and water reservoirs which had a significant role in the lives of the inhabitants of the hillfort. It seems that the legends that surround hillforts in Latvia may preserve other historical evidence as well. Preliminary research has shown that certain types of legends may be associated with hillforts of certain periods and types.

The hillfort as the symbol of former freedom and glory, and literary versions of the legend – where the sunken castle and princess will once again rise up when the moment for regaining freedom has arrived, have taken on an archetypal role in the

mentality of the Latvian people. The symbolic significance of hillforts in Latvia still survives today. It has been strengthened by the reality that has been revealed in excavations and surveys of hillforts. From this point of view the study of Latvian hillforts will be of lasting significance not only in scientific circles, but also among a very wide section of our people.

The preparation of this lecture would have been very difficult without the help of the Latvian State Inspection of Cultural Monuments. I am also grateful to Valdis Bērziņš, who translated the text into English, to Anda Pjatkovska, who drew several of the illustrations, and Marika Vanaga, who provided photographs. The preparation of this lecture would not have been possible without the research done on hillforts by several generations of Latvian archaeologists, the results and conclusions of whose work formed the basis of this lecture.

REFERENCES

Apals, J. 1982. Izrakumi Cēsu Riekstu kalnā. 12-21. *Zinātniskās atskaites sesijas materiāli par arheologu un etnogrāfu 1980/81. gada pētījumu rezultātiem. Arheoloģija*. Rīga: Zinātne.

Apals, J. 1993. *Die Wohninsel Āraiši*. Cēsis.

Asaris, J. 1987. Gorodischa s selischami v Zapadnoj Latvii i problemi ih ohrani. 32-33. *Latvijas PSR vēstures problēmas* 6. Rīga.

Atskaņu hronika, 1936. Rīga: Valters un Rapa.

Ballod, F. 1911. *Otchot o komandirovke v Pribaltiiskij kraj (Beverinskije raskopki)*. Moskva.

Balodis, F. 1928. Mūsu pilskalni. 5-17. Balodis, F., Teikmanis, A., Kundziņš, P., Kundziņš, L. *Izrakumi Raunas Tanīsa kalnā 1927. gadā. Arhaioloģijas raksti IV, I*. Rīga: Pieminekļu valde.

Balodis, F., Teikmanis, A., Kundziņš, P., Kundziņš, L. 1928. *Izrakumi Raunas Tanīsa kalnā 1927. gadā. Arhaioloģijas raksti IV, I*. Rīga: Pieminekļu valde.

Balodis, F. 1940. *Jersika un tai 1939. gadā izdarītie izrakumi*. Rīga: Pieminekļu valde.

Berga, T. 1988. *Moneti v arheologičeskijh pamjatnikah Latvii IX-XII vv*. Rīga: Zinātne.

Bielenstein, A. 1869. Die altlettische Burgberge Kurlands. *Magazin der lettisch-literärischen Gesellschaft XIV, 2*: 12-142.

Bielenstein, A. 1873. Bericht über die Heidenburgen an der livländischen Aa. *Magazin der lettisch-literarischen Gesellschaft XV*, 2: 26-53.

Bielenstein, A. Reisseskizzen aus der Oberlande. *Baltische Monatschrift* 29: 569-590, 611-644, 707-743.

Bielenstein, A. 1892a. *Die Grenzen des lettischen Volkstammes und der lettische Sprache in der Gegenwart und im 13. Jahrhundert*. St. Petersburg.

Bielenstein, A. 1892b. *Atlas der ethnologischen Geographie des heutigen und des praehistorischen Lettlands*. St. Petersburg.

Bielenstein, A. 1899. Die lettischen Burgberge. 20-35. *Trudi X arheologičeskogo sjezda II*. Riga.

Börger, J.L. 1778. *Versuch über die Alterthümer Lieflands und seiner Volker besonders der Letten*. Riga.

Brastiņš, E. 1923. *Latvijas pilskalni I. Kuršu zeme*. Rīga: Vālodze.

Brastiņš, E. 1926. *Latvijas pilskalni. Zemgale un Augšzeme*. Rīga: Pieminēkļu valde.

Brastiņš, E. 1928. *Latvijas pilskalni. Latgale*. Rīga: Pieminēkļu valde.

Brastiņš, E. 1930. *Latvijas pilskalni. Vidzeme*. Rīga: Pieminēkļu valde.

Brīvkalne, E. 1960. Rakstītās ziņas un arheoloģiskās liecības par 9.-13.gs. Mežotni. 61-78. *Arheoloģija un etnogrāfija II*. Rīga: Latvijas PSR Zinātņu akadēmijas izdevniecība.

Buchholtz, A. 1899. Der Muhkukalns im Kokenhusenschen Kirchspiel. 180-189. *Sitzungsberichte der Gesellschaft für Geschichte und Altertumskunde der Ostseeprovinzen Russlands aus dem Jahre 1898*. Riga.

Duchich, L.U. 1991. *Braslauskaje Paazerje u IX-XIV stst*. Minsk: Navuka i tehnika.

Ebert, M. 1913. Die baltischen Provinzen Kurland, Livland, Estland. *Præhistorische Zeitschrift* V, 3/4: 498-559.

Ģinters, V. 1936a. Daugmales pilskalna 1935.g. izrakumi. *Senatne un Māksla I*: 33-56.

Ģinters, V. 1936b. Daugmales pilskalna 1936.g. izrakumi. *Senatne un Māksla IV*: 87-105.

Ģinters, V. 1939a. Senā Mežotne. 1938. gada archeoloģiskie izrakumi pilskalnā un kapulaukā. *Senatne un Māksla I*: 64-98.

Ģinters, V. 1939b. Senā Mežotne. 1939. gada izrakumi. *Senatne un Māksla IV*: 15-45.

Graudonis, J., Urtāns, V. 1961. *Senatnes pēdās*. Rīga: Latvijas PSR Zinātņu akadēmijas izdevniecība.

Graudonis, J.J. 1967. *Latvija v epohu pozdnej bronzi i rannego zeleza*. Riga: Zinatne.

Graudonis, J. 1985. Stroitelstvo na territorii kulturi schtriho-vannoj keramiki. 131-143. *Problemi etnogeneza i etniceskoj istorii baltov*. Vilnius: Mokslas.

Graudonis, J. 1989. *Nocietinātās apmetnes Daugavas lejtecē*. Rīga: Zinātne.

Graudonis, J. 1992. Vēsturnieku minēta bet neatminēta mīkla. 5-16. Brastiņš, E. *Beverīnas pilsvieta*. Rīga: Zinātne.

Hagemester, H. 1844. /Über die Pilskalni oder sogenannten Batterien in Livland/. 362-363. *Sitzungsberichte der Gesellschaft für Geschichte und Altertumskunde der Ostseeprovinzen Russlands aus dem Jahre 1843*. Riga.

Hausmann, R. 1909. Übersicht über die archäologische Forschung in den Ostseeprovinzen im letzten Jahrzehnt. 1-52. *Arbeiten des Ersten Baltischen Historikertages zu Riga 1908*. Riga: Kommissionsverlag von G. Löfler.

Hueck, A. 1840. Notizen über einige Burgwälle der Ureinwohner Liv- und Esthlands. *Verhandlungen der Gelehrten Estnischen Gesellschaft in Dorpat* 1,1: 48-67.

Indriķa bronika, 1993. Rīga: Zinātne.

Jaanits, L., Laul, S., Lõugas, V., Tõnisson, E., 1982. *Eesti esiajalugu*. Tallinn: Eesti Raamat.

Karnups, A. 1936. Izrakumi Talsu pilskalnā 1936.g. *Senatne un Māksla* IV: 67-86.

Karnups, A. 1938. Izrakumi Talsu pilskalnā 1937.g. *Senatne un Māksla* II: 74-93.

Kruse, Fr. 1842. *Necrolivonica oder Alterthümer Liv-, Esth- und Curlands bis zur Einführung der Christlichen Religion in dem Kaiserlich Russischen Ostsee-Gouvernements*. Dorpat-Leipzig.

Latviešu vēsture, 1938. F. Balodis, A. Tentelis (ed.) I.1. Rīga: Valters un Rapa.

Latvijas PSR arheoloģija, 1974. Rīga: Zinātne.

Latvijas PSR vēsture, 1986. Rīga: Zinātne.

Lietuvos TSR archeologijos atlasas, 1975. II. Piliakalniai. Vilnius: Mintis.

Löwis of Menar, K. 1922. *Burgenlexikon für Alt-Livland*. Riga: Valters un Rapa.

Mitrofanov, A.G. 1978. *Zelezniy vek srednej Belorussii (VIII-VI vv. do n.e.-VIII v. n.e.)*. Minsk.

/Mellin, L.A./ 1794. Nachricht von der alten lettischen Burg Pilliskaln... *Neu Nordische Miscelaneen IX/X*: 519-545.

Moor, H. 1952. *Pirmatnējā kopienas iekārta un agrā feodālā sabiedrība Latvijas PSR teritorijā*. Rīga: Latvijas valsts izdevniecība.

Moor, H. 1967. Einige Ergebnisse der Burgbergforschung im Ostbaltikum. *Suomen Museo*: 64-96.

Mugurevics, E. 1966. Ukreplennoje poselenij nachala nachsej eri v zapadnoj Latvii (Kurzeme). 139-149. *Pronksiajast varase feodalismiini*. Tallinn: Eesti Raamat.

Mugurevics, E. 1967. Issledovaniye poseleniye, gorodisch i zamkov na territorii Latvijskoj SSR. 159-201. *Acta Baltico-Slavica* 5. Białystok. [Poland].

Mugurēvičs, Ē. 1977. *Oliņkalna un Lokstenes pilsnovadi*. 3.-15. gs. *arheoloģiskie pieminekļi*. Rīga: Zinātne.

Mugurēvičs, Ē. 1983. Latvijas viduslaiku piļu klasifikācijas un arheoloģiskās izpētes jautājumi. 3-13. *Arheoloģija un etnogrāfija*

XIV. Rīga: Zinātne.

Mugurēvičs, Ē. 1993. Komentāri. 333-450. In: *Indriķa bronika*. Rīga: Zinātne.

Ozols, J. 1971. Die vor- und frühgeschichtlichen Burgen Semgallens. 107-213. *Comentationes Balticae XIV/XV*, 3. Bonn: Baltisches Forschungsinstitut.

Schadiro, V.I. 1985. *Rannij železnij vek Severnoj Belorussii*. Minsk: Nauka i tehnika.

Schmidt, E.A. 1992. *Plemena verhovjev Dnepra do obrazovanja drevnerusskogo gosudarstva*. Moskva: Prometej.

Sedov, V.V. 1982. *Vostochnije slavjane v VI-XIII vv.* Moskva: Nauka.

Skutāns, G. 1992. Ceļš uz Beverīnu? *Latvijas Vēsture* 4(7): 61-67.

Šnore, R. 1936. Izrakumi Doles pag. Kļauģu pilskalnā. *Senatne un Māksla I*: 57-69.

Šnore, E. 1939. Dignājas pilskalns (īss pārskats par 1939.g. izrakumiem). *Senatne un Māksla IV*: 46-64.

Snore, E.D. 1961. *Asotskoje gorodische*. Rīga: Izdatelstvo Akademii nauk Latvijas SSR.

Šnore, E., Zariņa, A. 1980. *Senā Sēlpils*. Rīga: Zinātne.

Stankevich, J.V. 1960. K istorii naselenija verhnego Podvinja v I i nachale II tisjacheletija n.e. 3-327. *Materiali i issledovanie po arheologii SSSR* 76. Moskva-Leningrad: Izdatelstvo Akademii nauk SSSR.

Stepiņš, P. 1938. Izrakumi 'Elkas kalnā' vai 'Pilskalnā' Durbes pagasta Šilderos. *Senatne un Māksla II*: 122-130.

Stepiņš, P. 1993. *Beverīna*. Valmiera.

Stubavs, A. 1974. Par Latvijas pilskalnu tipoloģiju un klasifikāciju. 74-88. *Arheoloģija un etnogrāfija XI*. Rīga: Zinātne.

Stubavs, A. 1976. *Ķentes pilskalns un apmetne*. Rīga: Zinātne.

Šturms, E. 1936. Elka kalni un pilskalni Kursā. 82-102. *Pagātne un tagadne. Vēstures skolotāju biedrības rakstu krājums 1*. Rīga.

Šturms, E. 1938. Baltische Alkhügel. 116-132. *Conventus primus historicorum Balticorum Rigae*, 16.-20. VIII 1937. *Acta et relata. Rigae*.

Tkachou, M., Semjanchuk, G. 1993. Parubeznija krepasci Polackaj zjamli XI-XIII stst. (po materijalah Braslava i Drisvjatau). 126-129. *Čas, pomniki, ljudzi. Pamjaci reprasavanib arheologaj*. Minsk.

Transehe, A. 1897. Waren die sog. Bauernburgen oder Burgberge Livlands ständig bewohnt oder nicht? *Baltische Monatschrift 44*: 288-294.

Tretjakov, P.N., Schmidt, E.A. 1963. *Drevnije gorodischa Smolenshini*. Moskva-Leningrad: Izdatelstvo Akademii nauk SSSR.

Urtāns, V. 1983. Aizkraukles pilskalna mūra aizsargsiena. *Latvijas PSR Zinātņu akadēmijas vēstis 4*: 34-39.

Urtāns, V. 1984. Arheoloģiskie izrakumi Madalānu pilskalnā un kapulaukos. 99-103. *Zinātniskās atskaites sesijas materiāli par arheologu un etnogrāfu 1982. un 1983. gada pētījumu rezultātiem*. Ar-

beoloģija. Rīga: Zinātne.

Urtāns, J.V. 1987. Bitovije uslovija zitelej gorodischa Pizichu 'Kaupra-kalns'. 144-153. *Iz istorii medicini XVIII*. Rīga: RMI.

Urtāns, J. 1991a. *Ziemeļvidzemes pilskalni*. Rīga: Avots.

Urtāns, J. 1991b. *Arheoloģijas pieminekļi Valmieras rajonā*. Rīga: Avots.

Urtāns, J. 1992. Par Latgales pilskalniem-Baznīckalniem. *Labietis* 84: 2919-2924.

Urtāns, J. 1993a. Ērģemes un Omuļu pilskalni. *Labietis* 86: 3036-3039.

Urtāns, J. 1993b. *Daugavas pilskalni*. Rīga. Latvijas kultūras fonds.

Vasks, A. 1979. Brikuļu nocietinātā apmetne. 89-92. *Zinātniskās atskaites sesijas materiāli par arheologu un etnogrāfu 1978. gada pētījumu rezultātiem*. Rīga: Zinātne.

Zariņa, A. 1982. Celtniecība nocietinātajā apmetnē Lielvārdes Dievukalnā. *Latvijas PSR Zinātņu akadēmijas vēstis* 7: 46-64.

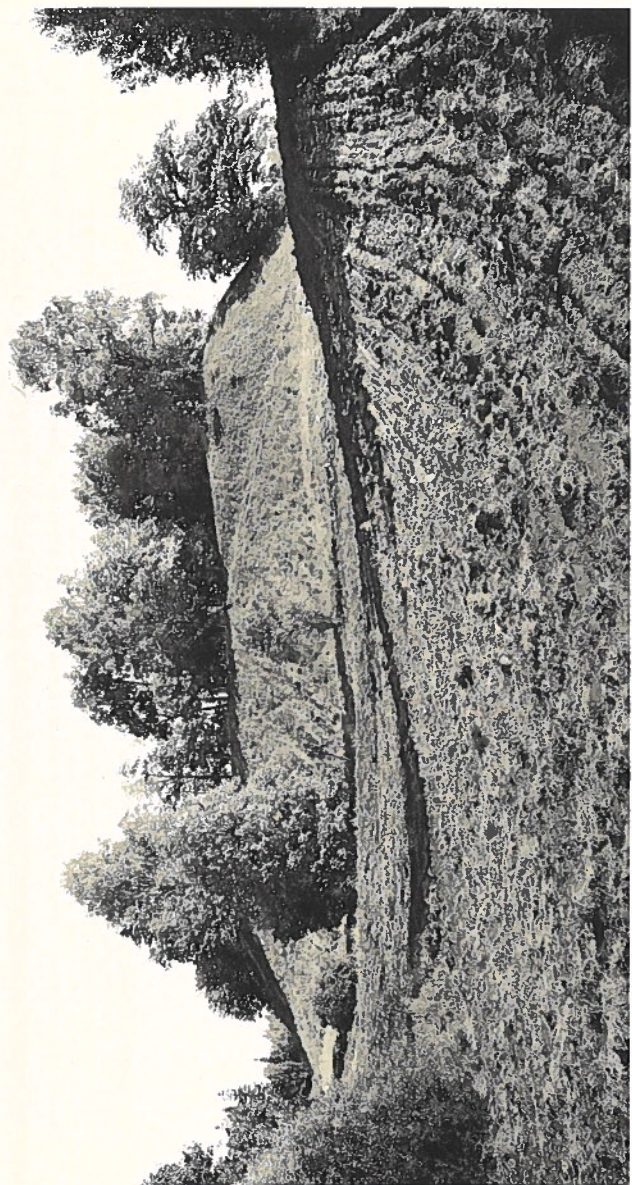


Figure 1
Mežuru hillfort

Chronological division of the prehistory of Latvia:

Late Iron Age:

10th – 12th century AD

Middle Iron Age:

5th – 9th century AD

Early Iron Age:

1st – 4th century AD

Early Metal Age:

middle of 2nd mill. BC – 0 AD

Neolithic:

middle of 4th mill. BC – middle of 2nd mill. BC

Mesolithic:

10th/9th mill. BC – middle of 4th mill. BC

Figure 2

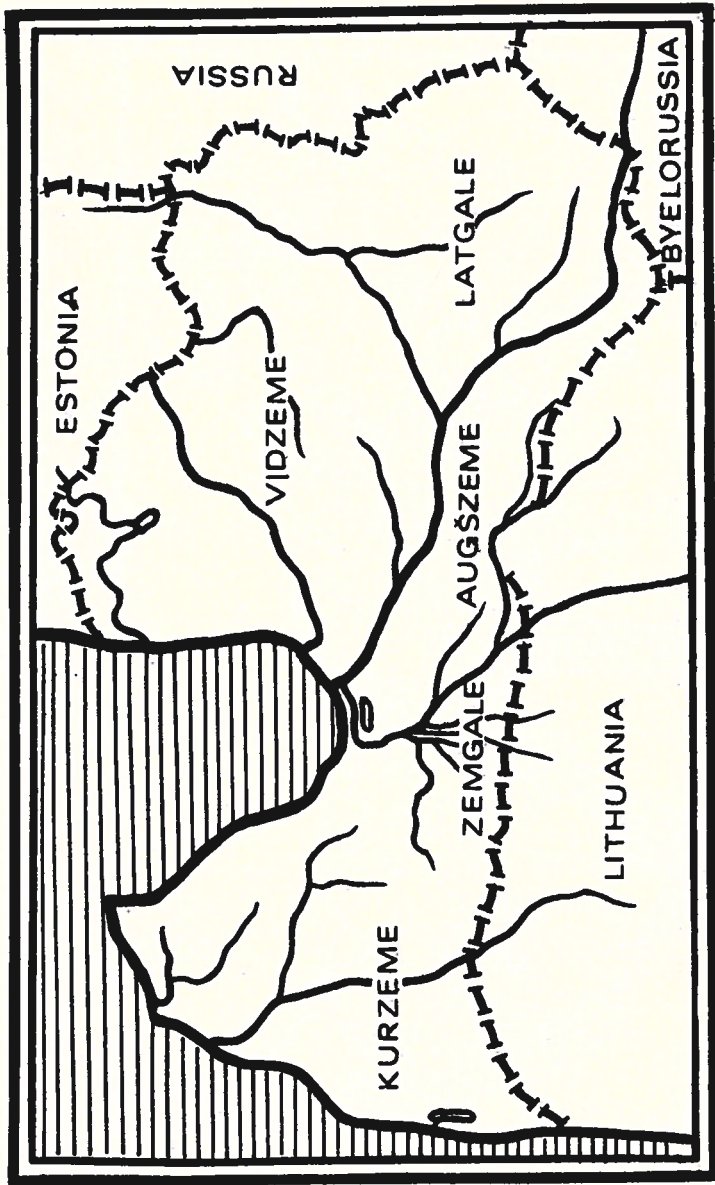


Figure 3
Culture-historical regions of Latvia and neighbouring states

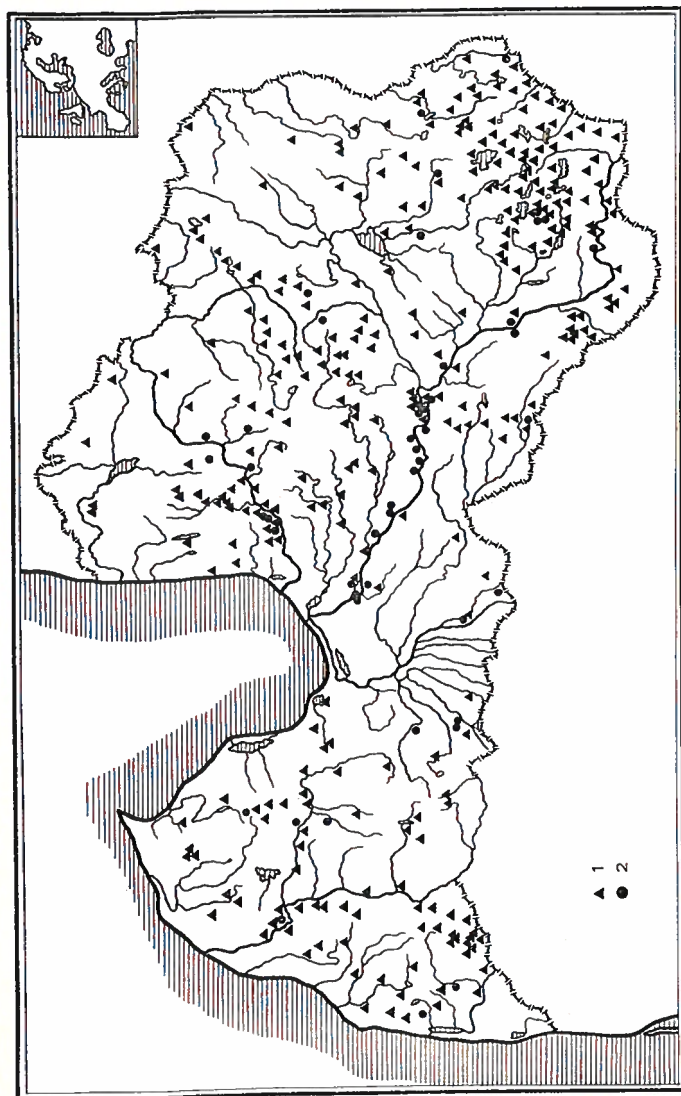


Figure 4

The hillforts of Latvia: 1. archaeologically excavated hillfort 2. unexcavated hillfort

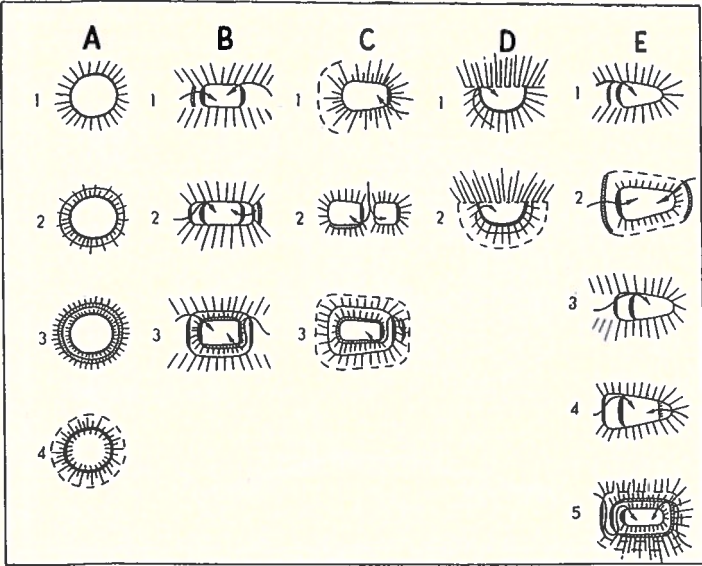


Figure 5
 Typology of hillforts of Latvia (Stubavs, 1974)

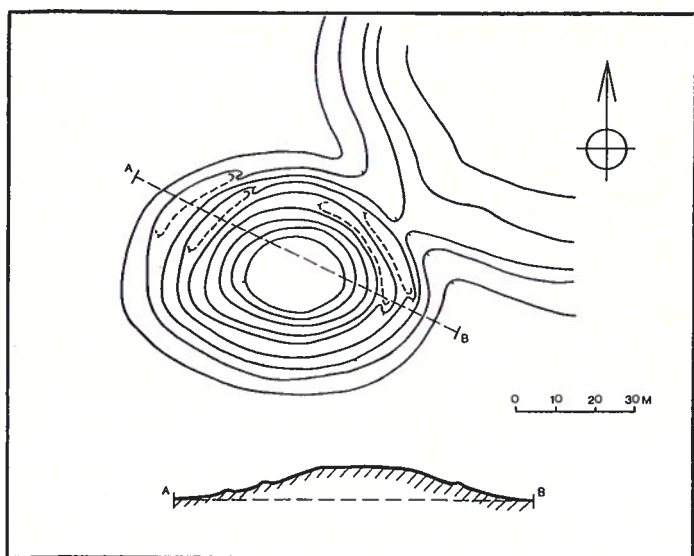


Figure 6
Stalidzānu hillfort (Type A)

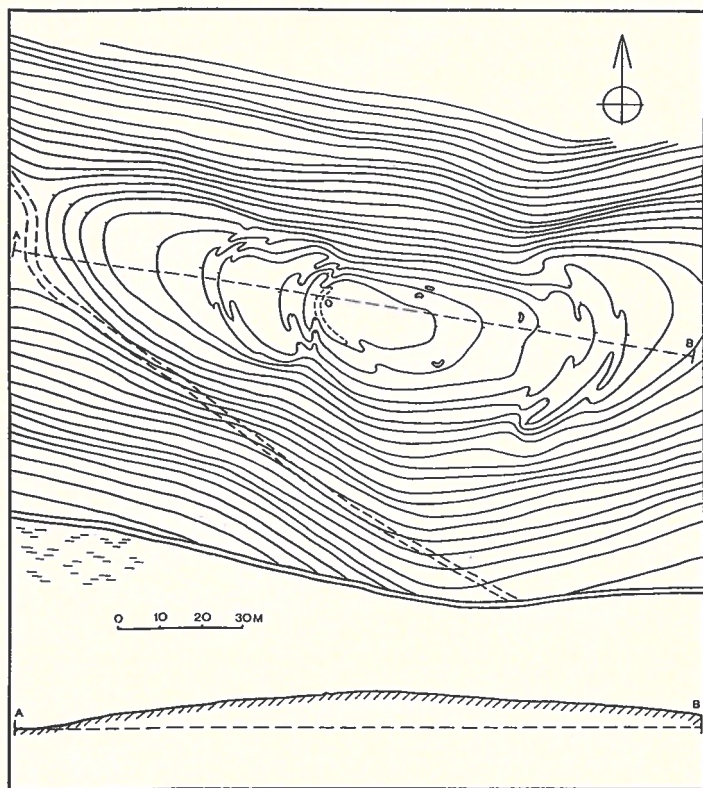


Figure 7
Jukumu I hillfort (Type B)

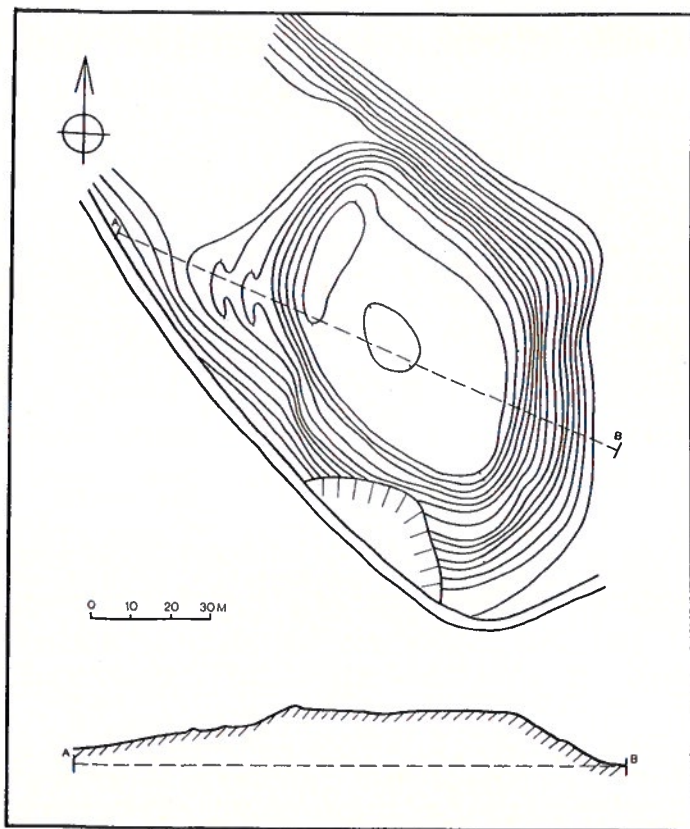


Figure 8
Çē hillfort (Type C)

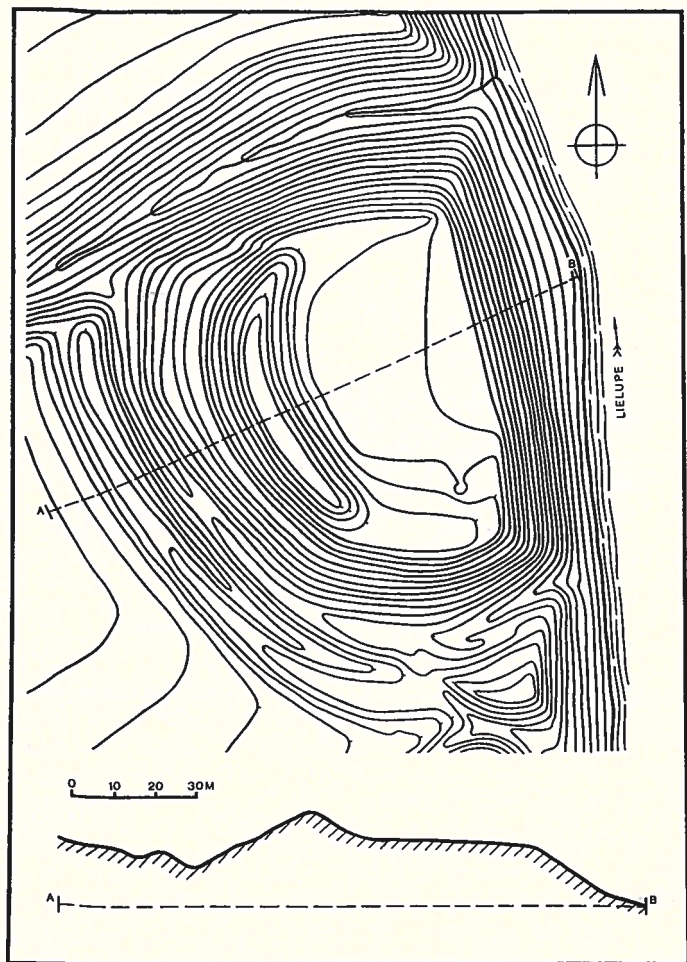


Figure 9
Mežotnes hillfort (Type D)

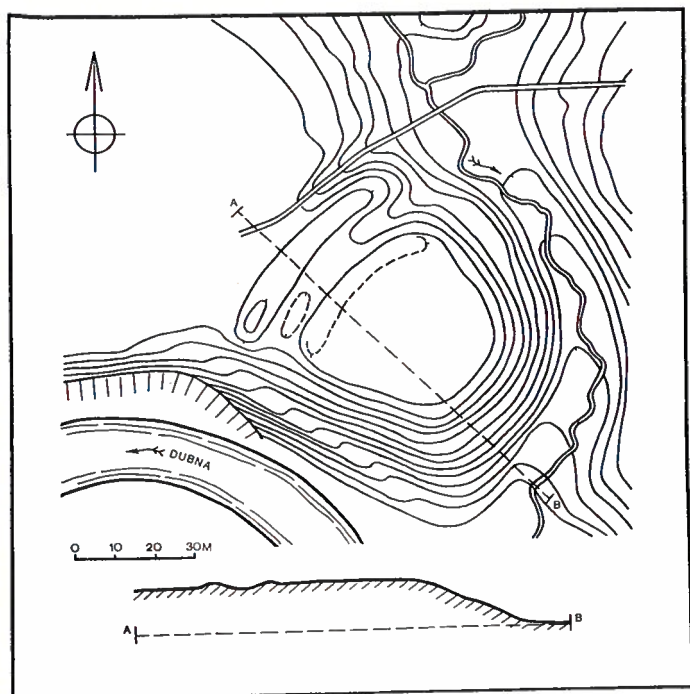


Figure 10
Briveru hillfort (Type E)

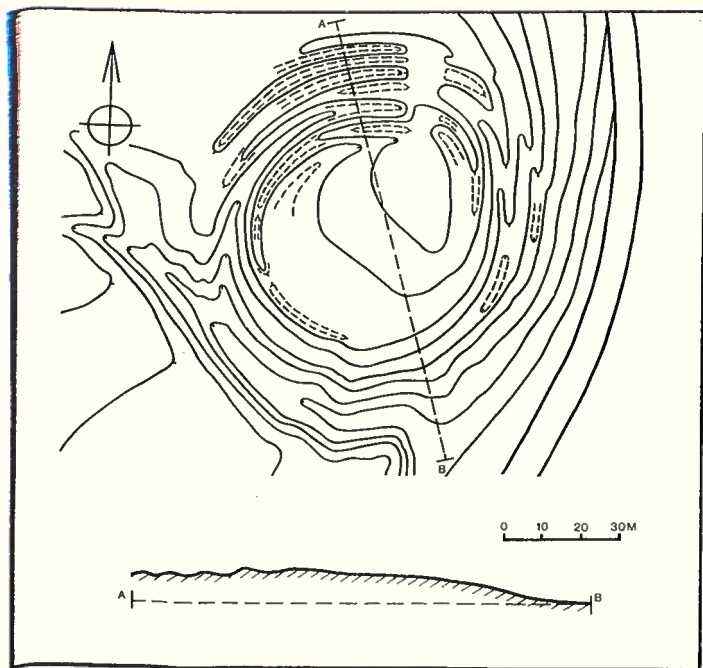


Figure 11
Dunalkas 'hillfort': a religious site

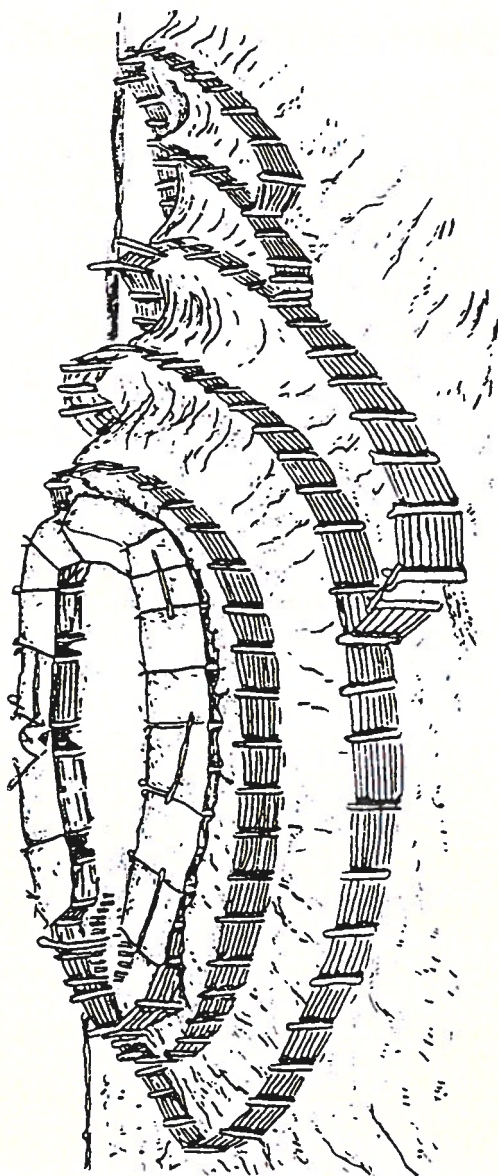


Figure 12

Reconstruction of the defences, temple and other buildings of an Eastern Baltic hillfort: Tusemla hillfort
(Tretjakov, Schmidt, 1963) (mid 1st mill. AD)



Figure 13
Kertes hillfort: reconstruction of buildings and defences (Strubavs, 1976) (Middle Iron Age)

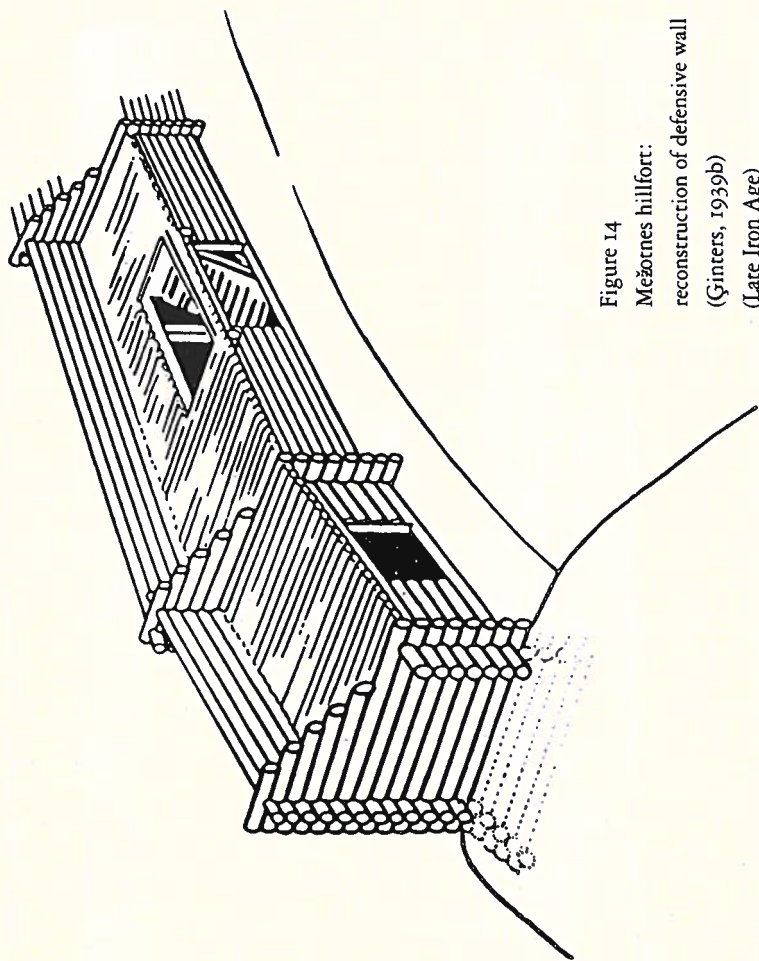


Figure 14
Mežornes hillfort:
reconstruction of defensive wall
(Ģinters, 1939b)
(Late Iron Age)

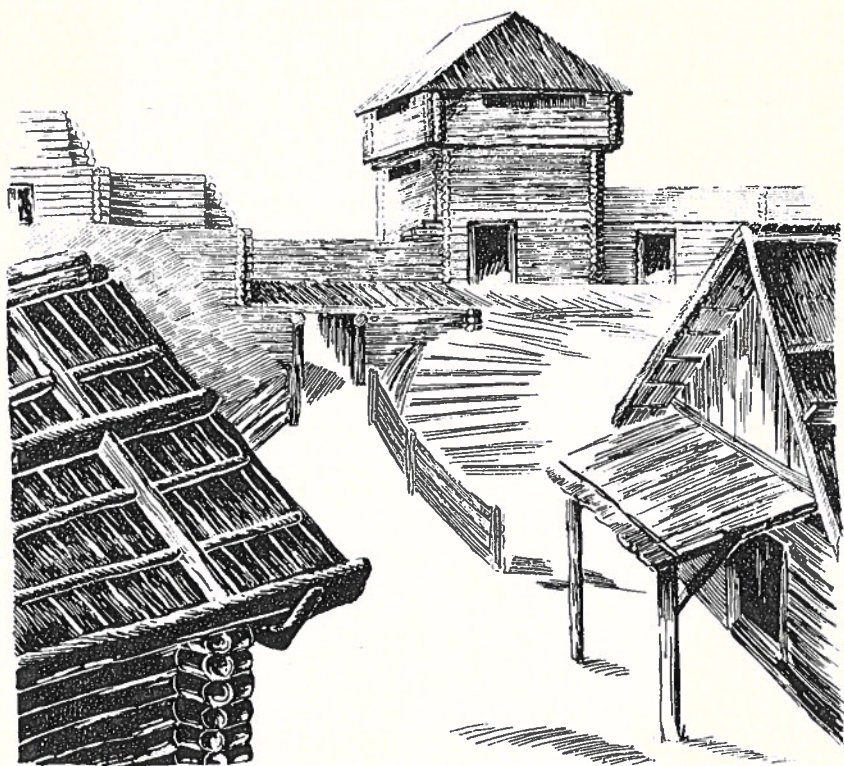


Figure 15

Mežotnes hillfort: reconstruction of gate (Brivkalne, 1960) (Late Iron Age)

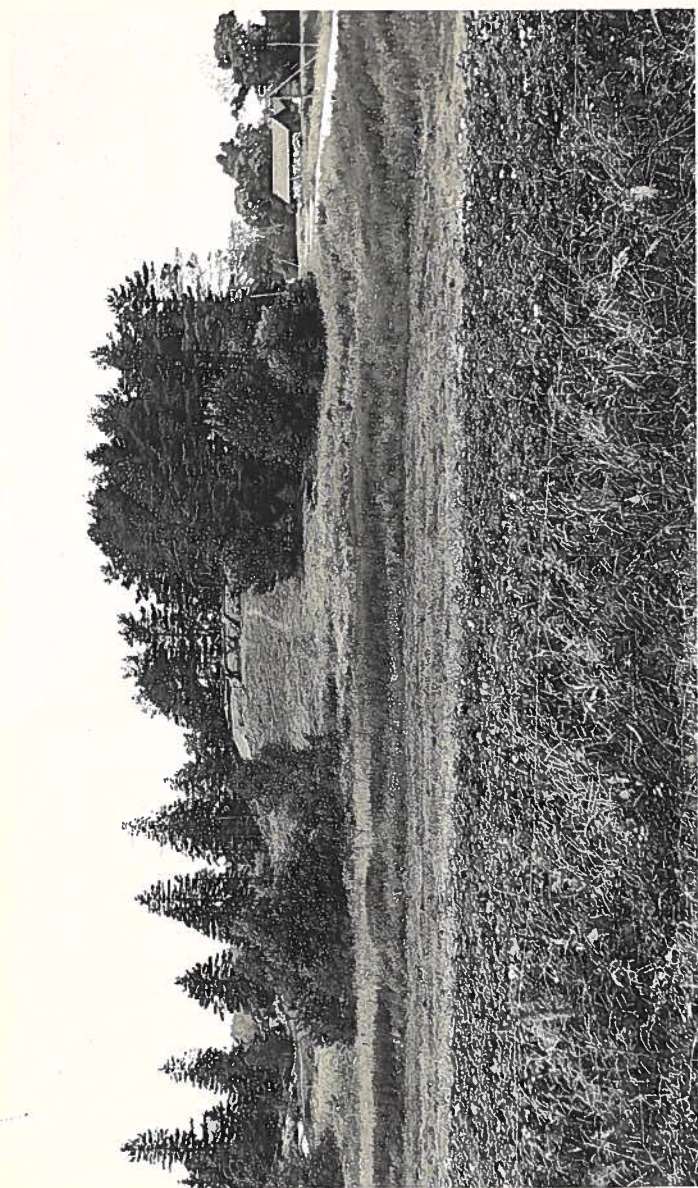


Figure 16
Kaupra kalns hillfort at Piziči: archaeological excavations on the hillfort

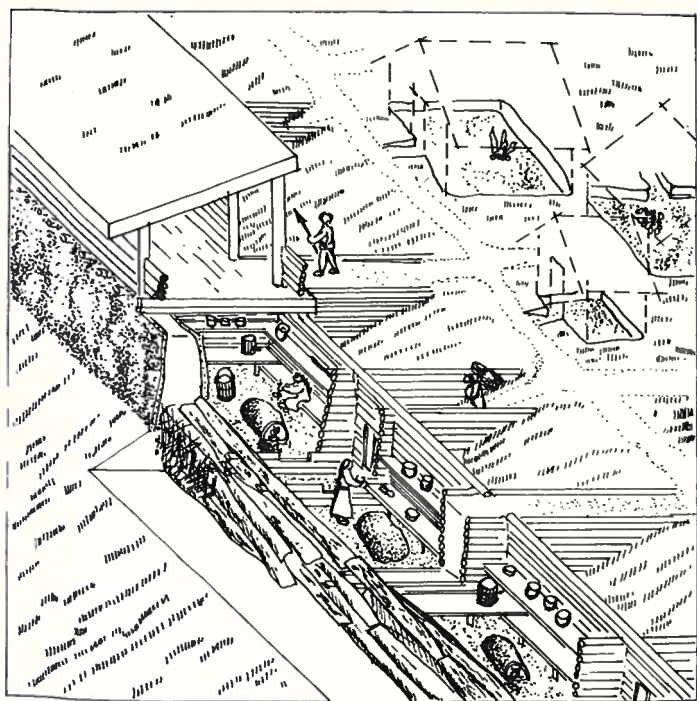


Figure 17

Kaupra kalns hillfort at Piziči: reconstruction of the defences of the terrace
(12th/13th century)

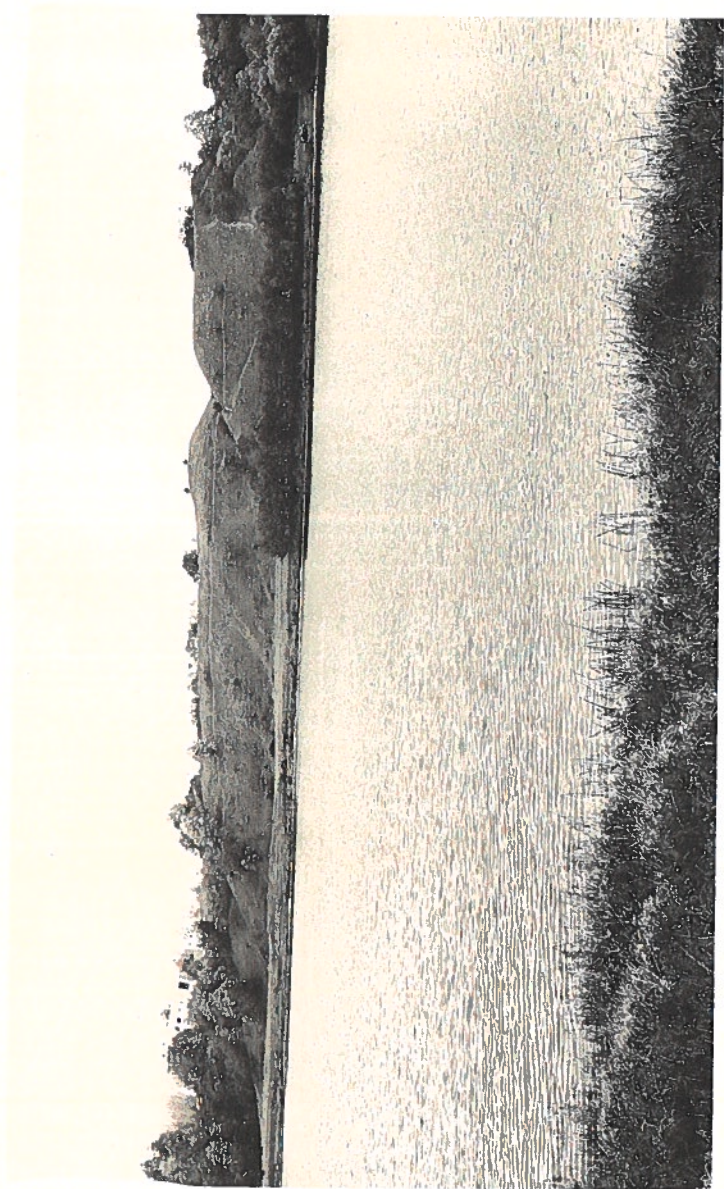


Figure 18
Aizkraukles hillfort

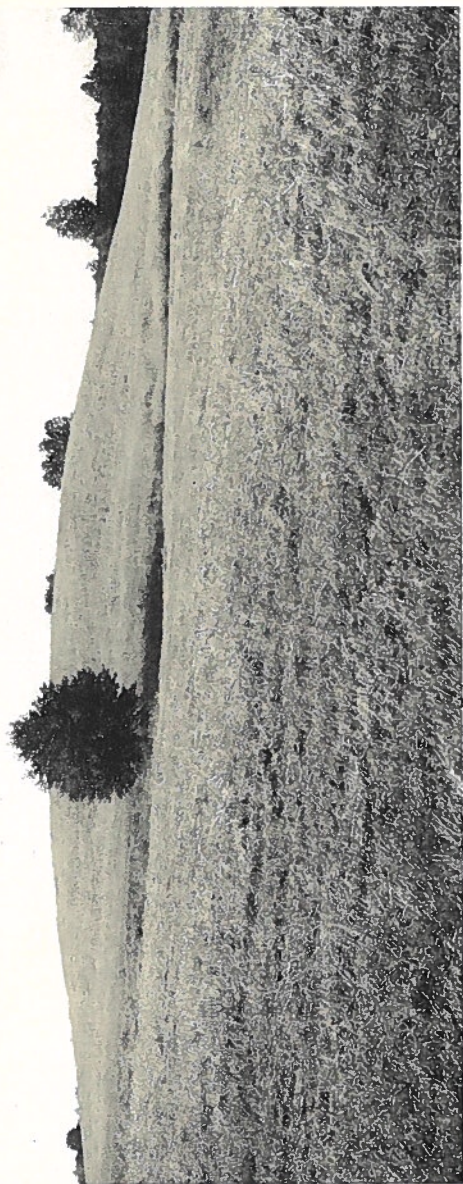


Figure 19
Ploughed out hillfort of Kurtoša

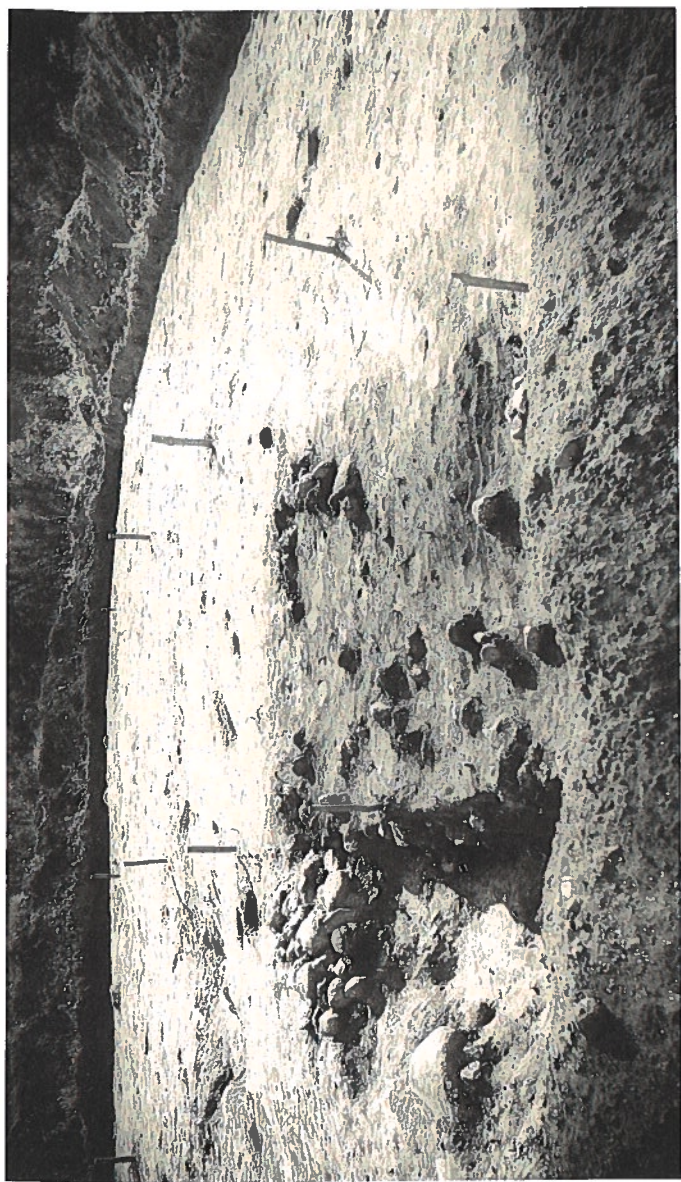


Figure 20
Gūriqū hillfort: site of building dug into the natural subsoil (Early Metal Age)

KROONVOORDRACHTEN

REDACTIE: W. H. DE VRIES-METZ
*Instituut voor Pre- en Protobistorische
Archeologie Albert Egges van Giffen
van de Universiteit van Amsterdam*

Printed by

JOH. ENSCHEDÉ AMSTERDAM BV