PREHISTORIC HUMAN SETTLEMENT IN THE LOWER REACHES OF THE RIVER JÄGALA

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Abstract

This paper describes traces of human activities in the lower reaches of the River Jägala (North Estonia) from the Mesolithic till the Middle Ages. Attention is paid to the conditions essential to life and how people adjusted to them in the Prehistoric period and the Middle Ages. Also, the topic of the ritual landscape is discussed and the possible religious and ritual significance of the landscape analysed. This paper also tries to find an answer to the question whether people in Prehistoric times were only guided by economic considerations, or if there were also other aspects that attracted them near the banks of the River Jägala.

Key words: landscape, environment, Estonia, Prehistoric period, settlement, grave, economy.

Introduction

The River Jägala is one of the longest rivers in north Estonia. It starts in central Estonia and runs into the Gulf of Finland 77 kilometres away. The upper and middle reaches of the river flow on the Central Estonian Plateau where it is surrounded by marshy terrain, and the middle reaches flow across a cultural landscape and through forests. On the lower reaches there are alvar1 and morainal areas which were inhabited by people relatively early. The mouth of the river lies on new and relatively unproductive soil. At the transition from the glint to the coastal lowland the river forms a waterfall with a height of about eight metres, which is one of the highest in north Estonia. It flows into the Gulf of Finland at a distance of two kilometres from the waterfall (Fig. 1). The aim of this paper is to study human settlement in the neighbourhood of the estuary, ancient relics on the terrain which are directly or indirectly connected with the river. While investigating the formation and development of the settlement of the region, several questions arise. It is not possible to find answers to all of them. However, some can be answered. What were the main factors in the colonisation of this area? Was it just the alvars, which were easy to cultivate, or were there also other reasons, spiritual rather than economic ones? Why were some places colonised, then abandoned and then recolonised? What kind of changes took place in human settlement in the different phases of the Prehistoric Period?

The first archaeological excavations in the lower reaches of the River Jägala took place in the 1920s, when Arthur Spreckelsen, a Baltic-German amateur archaeologist, excavated the hill-fort of Jägala Jõesuu2. Several plots were opened in different parts of the hill-fort, and a Stone Age settlement layer was unearthed beneath the fortifications of a later period (Spreckelsen 1925). Another Baltic-German researcher, Adolf Friedenthal, excavated one of the stone graves located on the left bank of the River Jägala, at the end of the 1920s (Friedenthal 1929). The next archaeological investigations took place in 2001, when the author of this paper excavated a settlement site of the Prehistoric Period (Vedru 2001). Although some sites in the region have been excavated and the results published, or local antiquities have been used in more extensive studies, either independently or as comparative material (Jaanits 1959; Lang 1996, Vedru 2001), a study encompassing all the known antiquities as well as the general background has still not been made.

Human settlement cannot be analysed just by marking findspots and settlement sites on a map; it requires a thorough locality analysis, starting from the peculiarities of any specific place (Tilley 1994). The present paper will discuss the relations between man and nature, the possible significance of the river for people at different times, and, through this, the settlement in different phases of the Prehistoric Period. The subject of human settlement on the lower reaches of the River Jägala is part of an extensive project analysing prehistoric settlement in the area between the Jägala and Valgejõe rivers. The financial support for the archaeological investigations in the framework of the project, and

1 Alvar soils are located in the coastal area of northern and western Estonia. In north Estonia alvars are located near the glint, ie on the north Estonian limestone plateau. They are thin (10–30 cm) and humus-rich and could be cultivated easily with primitive tools. Thus, alvars were the first areas to be cultivated in Estonia.

2 Jõesuu means the mouth of a river in Estonian.
North Estonian landscapes are predominantly flat, articulated only by the glint edge and water bodies. Of the latter, a river that made the landscape impressive could have possessed various meanings for the people living there, being at the same time both a natural border between settlement areas and a centre or an axis around which the settlement concentrated (Lang 1996: fig. 102, 103, 104).

Fig. 1. Stone Age archaeological sites in the region of the lower reaches of the River Jägala: 1 glint; 2 waterfall; 3 stray find; 4 settlement site

Archaeological sites on river landscapes have been studied in various places in the world (Buikstra, Charles 2000; Lehtonen 2000; Snead, Preucel 2000, etc). Several studies have pointed out that both rivers and especially waterfalls possessed a great psychological significance for the surrounding landscape. North Estonian Glint is a part of the Baltic Glint. It divides North Estonia into two landscape regions: the North Estonian coastal plain in the north and the north Estonian limestone plateau in the south. Glint or the North Estonian limestone bluff is in some places visible as a high and steep terrace; in other places it is completely buried. The height of the bank sporadically rises to 25–35 metres.
The significance of rivers and waterfalls seems to be quite universal, and is regarded as true, for example, for the Australian Aboriginals (Taçon 2000), the Saami (Bradley 2002, 6) and the ancient Greeks (Bradley 2002, 23). It is also thought that in the Neolithic Period in Britain some rivers that were borders and/or places where ritual communication was carried out had a significance in myths (Edmonds 1999: 21, 99). Sacrifices were made to some rivers, as well as to other bodies of water (Bradley 2002: 51). Waterfalls are considered places of mental importance, where different worlds – the upper world, the lower world and the earth plain – made contact and where an intense connection existed between different levels of existence (Taçon 2000: 37–40). Taking all this into consideration, we might suppose that the waterfall on the River Jägala also had at least some significance for ancient people living in the vicinity, and that their beliefs and memories of their ancestors were connected with it.

The present article about the Prehistoric human settlement in the region of the lower reaches of the River Jägala is based mainly on known archaeological monuments and on the results of fieldwork carried out on them. For a long time, the only monuments known in the region were groups of stone cist graves and cup-marked stones on the left bank of the river, the hill-fort near the mouth of the river, and some stray finds. Only in recent years have settlement sites been sought and found during archaeological survey trips (Vedru 1999, 2000, 2001b). Although it is possible that more settlements will be found as a result of future investigations, it cannot alter the overall picture to a great extent, because most of the prehistoric periods are already represented by archaeological sites. Most likely there might be some Stone Age settlement sites in the vicinity of the river that have yet not been discovered, and also the present knowledge about the settlement of some periods might be updated with sites of a different nature. For example, we may discover additional Bronze Age settlement sites or additional Late Iron Age burial sites.

In addition to archaeological data, information about villages at the end of the Prehistoric Period and the beginning of the Middle Ages can be obtained from a written source, *Liber Census Daniae*. This account book was compiled in about 1240 by monks who had arrived to baptise the Estonians. The list of villages also shows their size in ploughlands (Johansen 1933). Two villages in the lower reaches of the River Jägala are mentioned in this list, both of which are also represented by archaeological finds.

**Monuments**

**The Stone Age**

The oldest settlement in the region dates back to the Mesolithic Period and is located on the highest terrace of a small triangular cape at the confluence of the Jõelähtme and Jägala rivers (Fig. 1). The finds gathered from the surface were quartz and flint flakes with working traces (AI 6458). Traces of human activities from the Neolithic Period are more numerous and are found in a larger area. Only one settlement site is

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**Fig. 2. Bronze Age and pre-Roman Iron Age archaeological sites in the region of the lower reaches of the River Jägala: 1 settlement site; 2 stone-cist grave; 3 cup-marked stone**
known from this period, and is located near the estuary of that time, in a meander of the river on the high right bank. In 1920–1923 archaeological excavations were carried out here under the supervision of Arthur Spreckelsen (Spreckelsen 1925). The finds dated the settlement to the Middle Neolithic Period (Jaanits 1959; Lang 1996: 397). In addition, two Neolithic boat axes have been found from the village of Koogi (AI 3198; AM 293), and an antler axe (AI 4415) on the right bank of the River Jägala.

Settlement sites and stray finds from the Neolithic Period are also known in the neighbouring areas. In the west they are located at a distance of about four kilometres from the River Jägala on alvar areas suitable for early farming (Lang 1996: 397–399, Fig 112). In the east the distance to the next settlements, situated by the River Kaberla, is almost the same. There we can find a fragment of a boat-shaped axe from a Neolithic settlement (Vedru 2003: 329).

From the Bronze Age to the Roman Iron Age

In spring 2001 a settlement site, first used in the Bronze Age, was discovered in the immediate vicinity of the Jägala waterfall (Fig. 2; Vedru 2001b). The settlement is located on a high bank at about 30 or 40 metres from the water. Besides the waterfall, there is a ford in the river with a smooth limestone bed and shallow water. The Bronze Age settlement was relatively small and not very dense. On the basis of the finds recovered during a survey and archaeological excavations, we may presume that a single farm, the predominant settlement form of that period, was located here. Nearby, at about 100 metres from the site, at the former location of the waterfall, there is a stone with 15 cup marks. The stone is relatively large and clearly visible. In the vicinity about ten more cup-marked stones are known, around the village of Koila on the left bank of the river, and by the side of the River Jõelähtme (Fig. 2). On the left bank there are also some groups of stone cist graves, which on the terrain are related to the edge of the glint and the Jõelähtme and Jägala rivers. Two finds recovered from the three stone graves date from the Late Bronze Age, and one from the third or fourth centuries (Lang 1996: 401–402). In the village of Koila some graves from the Roman Iron Age were also found (Fig. 3).

In this region, the stone cist graves and cup-marked stones are remarkably numerous in the western alvar areas but absent in the Kaberla area (Lang 1996: Fig. 113, 121).

From the Middle Iron Age to the end of the Prehistoric Period

From this period, only a few monuments are known, in the lower reaches of the River Jägala. The hill-fort of Jägala Jõesuu and the settlement nearby belong to the Middle Iron Age. The hill-fort was most likely built in the sixth century, and was used until the second half of the first millennium (Lang 1996: 327). The concentrated settlement site from the Viking Age was situated about one kilometre upstream from the hill-fort, in the immediate vicinity of the waterfall, on the right bank of the river. The place had been inhabited already in the Bronze Age, but in the following centu-
lies the settlement shifted downstream to a presumed harbour site. Another settlement, established in the Viking Age, is located in the village of Koila, about 0.5 kilometres south of the Joa settlement, around 200 metres from the River Jõelähtme (Fig 4). It is possible to assume on the basis of finds that these sites were also inhabited at the end of the Prehistoric Period and in the Middle Ages. Both villages are also mentioned in Liber Census Daniae: the size of the village of Joa was eight ploughlands, and that of the village of Koila ten ploughlands (Johansen 1934: 437–438). Thus both these ancient villages were founded in the Viking Age and, possibly with some intervals, have been inhabited up to the present day.

In the west, in the Rebala settlement centre, there may be some graves dating back to the Roman Iron Age; in the east there are none. Changes in settlement patterns took place in the Viking Age, when villages appeared in Estonia. In both neighbouring settlement clusters, villages are known that stayed there all through the end of the Prehistoric Period and the Middle Ages.

Discussion: the formation of settlements, development and the reasons for development

It has been shown above that the lower reaches of the River Jägala were inhabited, to a greater or lesser extent, all through the Prehistoric Period. However, it is possible to distinguish some periods of more intensive settlement. The oldest inhabited site in this region is the high terrace of a small triangular cape at the confluence of the Jägala and Jõelähtme rivers. By its natural conditions, the place was, no doubt, attractive for Stone Age man: besides the river there were forests, and the sea was not far, so that different sources of subsistence were available, which was very important. There was a waterfall nearby, which, being a remarkable natural object, evidently possessed an equal spiritual significance. In addition to surface finds, the age of the settlement can be deduced indirectly from its relative distance from the sea, because Mesolithic settlements were located mainly near inland water bodies.

The next settlement by age was closer to the sea, near the estuary. This was relatively well protected by a meander of the river (Fig. 1); the distance to the previous settlement site is about 1.5 kilometres. Whether the settlement at the confluence was also used at that time remains a question, since no pottery has been found there. Moreover, no archaeological excavations have been carried out; thus, we cannot say for sure that the site was uninhabited in that period. Even if it were, that would not mean that the waterfall was forgotten by the people or had lost its significance. It is possible that the tenets of that time demanded some distance, or at least did not preclude it. The journey to the falls might have possessed a significance of its own, and how it was performed, either on foot or by water.

But coming back to the economic factors, the choice of habitation on the seashore may indicate that, besides being a source of food, the sea might have been a vital communication link with distant places (Vedru 2001a), ie it may have been to some extent already “domesticated” at that time. The Neolithic population was also more settled and attached to one place; thus, a strategically vital living place may have been of greater importance than the possible spiritual support expected from the immediate neighbourhood of the waterfall. The Jõesuu settlement by the estuary was abandoned at the end of the Stone Age. Since several stray finds have been recovered from the region (Fig. 1), there may be some hitherto undiscovered settlement sites.

In the Bronze Age a new shift occurred in settlement patterns: people moved back upstream, to the alvar areas. It has been repeatedly accentuated that alvars, with their thin layer of soil, were the earliest tilled areas in Estonia (Lõugas 1970: 28, 29, 44), and this is the type of soil where the Bronze Age and the pre-Roman Iron Age monuments of the discussed area come from. Since the tenets were transformed together with the increasing significance of cultivation, the newly inhabited areas may be connected with a new religion. Still, it need not mean that places of significance for the previous generations forfeited their importance.

The stone cist graves typical of the period are clustered on the left bank of the River Jägala, and none can be found on the right bank (Fig. 2). Excavation results suggest that these grave groups date back to the Late Bronze Age and were probably also used at the beginning of the Roman Iron Age. The graves are situated in two groups. Most of them, nearly 30 graves, are located at the edge of the glint and have a view of the sea and partly of the estuary of the River Jägala; there is also a single cup-marked stone nearby. The other group, consisting of only five graves, is located on the left bank of the River Jõelähtme, not far from the place where it runs into the River Jägala. Though graves are few in this location, there are a dozen cup-marked stones in the area, situated roughly parallel to the riverbank, mostly in view of each other and the riverbank. Thus it seems that where many graves were sited, the cup-marked stones were few, and vice versa (Vedru 2002). All the graves and stones in the locality are situated high on the glint and have a view of the river and/or the sea from above. This location limited access to them from these sides, which, considering the steep edge of
the glint, made approaching them from the water bodies difficult, if not impossible. This choice of location may have had a certain meaning, and, furthermore, a similar location pattern for monuments is also characteristic of other regions of north Estonia (Vedru, 2002).

Only one cup-marked stone is known from the right bank of the River Jägala, about 50 metres from it. The river can be seen from this stone, and in the past the waterfall lay roughly in line with it. Nearby, at about 100 metres from the stone and 30 to 40 metres from the river, there is a Bronze Age settlement site. Cup-marked stones near settlement sites are also known from elsewhere. It seems that some rule existed, according to which graves were located further from settlements, while cup-marked stones could be (but not necessarily) near the settlements (Vedru 2002). The habitation by the waterfall was by the ford near the edge of the glint. This may have been a cult site rather than a settlement, since the waterfall, which may have had an important part in religious activities, may also have served as a sacrificial place, the more so that sacrifices are known to have taken place by the waterfall in later times. On the other hand, it could just have been a single farm among fertile soil, located in that place only because of the favourable natural conditions.

It is possible that, to some extent, the site of the later hill-fort near the estuary was also used. Excavations there have revealed a few potsherds belonging to the second half of the first millennium BC (Lang 1996: 326). Possibly, it was a habitation near the harbour or some other place connected with marine activities.

The monuments known to date from the Roman Iron Age are scarce, not only in the vicinity of the River Jägala but also in the wider region. The settlement on the right bank of the River Jägala had been abandoned by that time, and the monuments from the Roman Iron Age are concentrated on the left bank of the river. In the whole region, a few tarand graves are known, only one of which has been excavated; the others have been identified by their shape. Presumably, a change occurred in that period in settlement patterns as well as in ideology (Lang 1996: 358). This assumption is based on the fact that there are everywhere more stone cist graves than tarand graves. Perhaps the Joo settlement was also abandoned due to the disappearance of the old ideology expressed by cup-marked stones and stone cist graves. However, we also have to take into account that with primitive tillage the fertile land was soon exhausted, and new areas were put under cultivation, and so the settlement shifted. Thus, farms stayed in a place for only a short time and left no easily perceivable marks on the ground.

The settlement pattern changed once again in the Middle Iron Age, when the monument complex by the estuary of the River Jägala appeared. The hill-fort was founded on a well-protected site in a meander of the river where people had already lived in the Stone Age, and it was still being used in the Viking Age. Potsherds from the second half of the first millennium found there confirm the latter belief. Finds have also been recovered from the vicinity of the hill-fort, where presumably a settlement from that period existed (Lang 1996: Fig. 115). This complex is probably connected with the harbour site nearby, that may have been much used.

Fig. 4. Viking Age archaeological sites in the region of the lower reaches of the River Jägala: 1 hill-fort; 2 settlement site; 3 harbour site.
during this period. Possibly only a trading site, and not a habitation, was located near the harbour at that time. Two more settlement sites from the same period are known in the lower reaches of the River Jägala. The first of these is located on the right bank of the river by the waterfall where a Bronze Age settlement had been. The Iron Age settlement was located on the same site, but was considerably larger. The finds and the intensive cultural layer indicate that it must have been a village consisting of several farms. Considering the short distance to the Jõesuu hill-fort, it seems possible that this village owned the hill-fort, and by this also controlled the harbour.

The other Viking Age settlement site is known on the right bank of the river, in the present village of Koila, by the side of the road to the River Jägala. Considering the nature of the cultural layer identified, and by the finds collected from the surface, we may presume that this settlement was much less intensive than the Joa settlement. Both settlement sites were still occupied at the end of the Prehistoric Period and in the Middle Ages. In the neighbourhood of the village of Koila some stray finds have come to light, some of which are believed to come from a grave (Lang 1996: 404). Though the grave mentioned was situated on the left bank of the River Jõelähtme, it may have belonged to the people living in the village of Koila on the other bank.

Both settlement sites are also mentioned in the list of villages of Liber Census Daniae, compiled in the 1240s. Thus, these are the oldest villages with permanent settlements in the lower reaches of the River Jägala that have been preserved to the present day.

As regards the periods of more intensive settlement, we may observe that in the lower reaches of the River Jägala the Stone Age stands out, with traces of human activity found in several places, as do the Bronze and pre-Roman Iron ages. The next intensive period was the Viking Age, and only the Roman Iron Age and the following Middle Iron Age are poorly represented. How can this absence of finds be explained? It cannot have been due to the population leaving. The few known monuments and the fact that the period is also relatively poor in finds in other regions of Estonia refute this hypothesis (Lang 1996: Fig. 109, 127; Vedru 1999). The small number of graves might be the result of a change in ideology, due to which fewer stone graves were built. Settlements may have been located in different places where they have not yet been discovered.

In conclusion, it might be said that the settlement of the region has been concentrated around the river since the Stone Age. Alongside the economic advantages, the waterfall could have been an additional attraction. The waterfall is remarkable in Estonia for its size, and people could have associated their tenets and (mythical) antecedents with it. It could also have been a place where communication with spirits took place. Moreover, the area in the lower reaches offered suitable conditions for people who lived there in different periods of the Prehistoric Period. In the Stone Age the river and the forests in the vicinity, and later also the fertile soil, offered what people needed. Throughout the ages, the river has probably also been an important route for traffic. Thus, the location and changes in settlement patterns can be explained by the suitability of the natural conditions for the main activities of the period. However, I have also tried to bring in another viewpoint, by stressing the psychological importance of the waterfall. It is possible that this is the place where both economic and psychological reasons intertwined.

In the course of time, some sites were abandoned and others inhabited, and the relations between people and their surroundings changed. Still, the area never completely lost its significance as a suitable living environment.

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Jegalos (Jägala) žemupyste

Santrauka

Jegala (Jägala) yra viena ilgiausių upių šiaurinėje Estijoje. Tekėdama link pajūrio žemumos, ji suformuoja maždaug 8 m aukščio vandens krioklį, kuris yra vienas didžiausių šiaurinėje Estijoje. Dar už 2 km nuo krioklio upė įsilieja į Suomių įlanką. Šio tyrimo tikslas yra išstirti upės žiočių kaimynystėje esančias žmonių gyvenvietes bei senovės reliktus toje vietoje, kurios šioje vietovėje yra susijusios su upė. Jegalos žemupyste yra priskiriami viduriniam geležies amžiui. Jie greičiausiai atsirado VI amžiuje ir gyvavo iki antrojo tūkstantmečio pabaigos. Vikingų laikotarpio gyvenvietė buvo maždaug 1 km atstumu aukštyne upe nuo piliakalnio, greta vandens krioklio, dešiniajame krante. Kita gyvenvietė, įkurta Vikingų laikotarpio, yra Koilos kaime, apie 500 m į pietus nuo Jegalos gyvenvietės ir apie 200 m nuo Jegalos piliakalnio (4 pav.).

Remiantis radiniais, galima daryti išvadą, kad šios vietos irgi buvo apgyvendintos priešistorinio laikotarpio pabagoje ir viduramžiais. Abi senovinės gyvenvietės atsirado vikingų laikotarpio ir su tam tikrais intervalais išliko ilgą laiką.