The article deals with North Estonian river landscapes and their prehistoric settlement. Notwithstanding the numerous archaeological investigations that have been carried out around the rivers here, there is still no study discussing the development of human settlement of these areas in general, and in a long-term perspective. It has been suggested that farming in Estonia started first in river valleys. Although traces of both Stone Age and Bronze Age habitation have been discovered in many valleys, the evidence is not sufficient to prove a direct connection between settlement of different periods and of different natural conditions. The present study demonstrates that inhabitants in later settlements were, at least sporadically, conscious of earlier settlements. The article analyses the development of settlement around rivers, and the background that made long-time habitation possible in some places, while others were abandoned after the end of the foraging Stone Age.


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Introduction

“… human existence always involves Being-somewhere”

(Thomas 1996, 83)

All over the world people live in very different conditions, some of which seem more pleasing and some less pleasing to outsiders. Landscapes shape people and have a direct or indirect influence on their understanding of life and their environment, past and present. Differences in landscape and nature emerge most
clearly in a broader geographical perspective, but they can also be distinguished in smaller districts. The river landscapes of North Estonia have been taken under examination as one such small district.

The surroundings of rivers or river valleys are often considered the starting point of the wider spread of a farming economy in Estonia. Although human settlement by the rivers had been discussed to a greater or lesser extent by a number of earlier archaeologists, it was Marta Schmiedehelm who clearly presented problems connected with it. Studying the antiquities of Northeast Estonia, she suggested in 1955 that agricultural settlement in Estonia began in places where there were nearby forestless lands suitable for grazing. She suggested that such places were river valleys, glint plains and shelving slopes. Her main argument was that groups of stone-cist graves of the Bronze and Pre-Roman Iron Ages were frequently concentrated on riverbanks. In earlier archaeological literature especially, the presence of stone-cist graves was linked with the spread of settlement (critique to that Lang 2000a). On that basis a supposition was made that those areas were taken into use at the same time as the erection of stone graves, and later the settlement spread to other areas with less favourable natural preconditions for primitive tillage. This was believed to have been proven by the existence of later graves and lack of earlier ones (Шмидехельм 1955; Tamla 1996, 218–219).

Although traces from the period before stone-cist graves had already been discovered near the rivers of Virumaa, and investigated by Schmiedehelm, she did not consider them as sufficient proof of direct connection between the earlier and later settlement (Шмидехельм 1955, 18, 182). At the time she completed her research, there was no data concerning settlement sites contemporaneous with stone-cist graves, and she drew all her general conclusions about settlement solely on the basis of hill-forts of a later date (Шмидехельм 1955, 179). Thus it was not really possible to determine the connection between the dwelling sites and burial grounds of the same period. Linking the spread of graves with the spread of settlement, investigators of later periods have also seen the simultaneity in the erection of graves and taking riverside areas into use. The fact that some places were, in addition to habitation, used for other purposes, and that the lack of archaeological sites does not necessarily mean that those places were not used or lacked importance and/or a meaning for the people, was disregarded.

In the course of time, several monuments on riverbanks have been archaeologically investigated in Estonia. However, the results obtained have been used mainly in review papers (Jaanits 1994; Kriiska 1995; 1996a; 1997; Тамла 1987; Valk 1989), less frequently in separate studies of certain regions (Kriiska 1996b; Lang 1996) or in a wider context (Янитс 1959; Lang 1996; 2000a). The amount of such works taken together is quite large, and on the basis of their number one could suggest that it is possible to get a good overview of the issues related to human settlement of riverside areas. Nevertheless, it has mostly been an analysis of a single site or cluster of sites; problems concerning the representativeness of these sites were not discussed. In fact, the location of some archaeological sites, that is to say, why people in the past chose one or another place for their activities
People on river landscapes

(e.g. living, burying, farming, ritual performances) seems often so self-evident that there is no need for analyses of settlement traces in different landscapes. Several questions concerning these particular places, may be asked in general about the character of human settlement, in both short and long term perspective. Subsequently, I shall try to find answers to some questions concerning prehistoric human settlement on riverbanks. The basic problem is the actual situation, that is whether settlements on riverbanks differed from settlements in other landscape types? And if they did, in what ways? How has the settlement on riverbanks developed in the course of time? Are the Stone Age settlements linked to those of the Bronze and Iron Ages, and if yes, then how were these different periods manifested through the landscape?

River landscapes as the subject of archaeological research

The present paper is an archaeological research focusing on the landscape, inhabited sites, and the humans who founded these sites. How to define landscape archaeology? There are as many possibilities for that as there are persons who are dealing with it, and researchers prefer different aspects in their definitions. However, it is not possible to say that some of them are more correct than others. Still, researchers agree on one – landscape is no longer considered as just providing a passive background for human activities, but rather as an active component that influenced human behaviour. There are larger trends in landscape archaeology in which more attention is given to one or another aspect and landscape is seen as a bearer of different philosophies. In most studies, the socio-symbolic dimensions of the landscape are emphasised, in which landscape as a unit exists because it is experienced, perceived and conceptualised by humans. The importance of landscape to ancient people is not limited to the evidence provided by archaeologically detectable objects. Landscape can also be discussed as idealistic, conceptualised or constructed. The physiographic characteristics of the local landscape are more often considered as both the source and the subject of symbols, and are connected with ancestors. Also of importance is the concept of landscape that contains more than just a one-dimensional neutral relationship between man and nature. Landscape is often regarded as the materialisation of memory that confirms social and individual histories. Memory emphasises continuity of the landscape, often through re-use, re-interpretation, re-establishment and reconstruction. Consequently, landscape as a memory is connected with the identity of the people living there (Knapp & Ashmore 2000, 1–14 and references).

Landscape as a memory has been a subject for several ethno-archaeological researches. For example, Susanne Küchler has studied the meaning of the landscape among habitants of the island of New Ireland in Melanesia. She opposes the Western understanding of landscape as a soil where several processes are “inscribed” and which can be measured and described, with that of the Melanesian people’s image of landscape as a memory. For the Melanesians, the landscape is
more a memory than a development; it creates mental images, in which visible forms are rather a part of the process of remembering and forgetting than a list of separate remembrances (Küchler 1993, 85–86).

Chris Scarre, like many other researchers, has emphasised the need for trying to understand the symbolic or cosmological meanings of the specific locations studied, and does that despite the misgiving that this approach may be considered more empathic than scientific. He emphasises the location of monuments in specific places which posed different meanings both for the people who created them and for their descendants in later periods (Scarre 2002, 3). This approach can be applied not only to the megalithic buildings that were the topic of Scarre’s research, but also to the whole ancient settlement. Accordingly, the landscape is both the framework of human activities and the creation of it. People live and act in the landscape that existed before them, complement it and contribute new suppositions and ideas about it. Some of these ideas have been linked to conspicuous geographic or topographic features that have always existed and that people had and still have to take into account. Such features are rivers, lakes and mountains, and they have formed core knowledge of people of various eras; cognition of the special landscape forms the mental landscape of people (Bergh 2002, 139). The significance of rivers and waterfalls in traditional cultures, particularly waterfalls, that lent an imaginative impact, has been the subject of several researches. It has been supposed that rivers, or part of them, held significance in the religious world of ancient people. The importance of rivers and waterfalls to humans seems to be universal; this phenomenon is thought to be valid both among the aboriginals of Australia (Taçon 2000) and the Saami (Bradley 2002, 6), as well as the ancient Greeks (Bradley 2002, 23 and references). Considering the British Neolithic Age, it has also been supposed that rivers that formed boundaries or were places where spiritual communication took place posed a position in myths. Rivers were both obstacles to movement and a means of intercourse, providing passage through places and worlds (Edmonds 1999, 21, 99). In addition to the general study of rivers and their surroundings, researches dealing with sacrifices to rivers and other bodies of water have been carried out (Bradley 2002, 51).

Waterfalls are considered as holding a psychic significance for various ethnic groups scattered around the word. According to Mircea Eliade, some researchers have interpreted waterfalls as connecting points to three different worlds – the underworld, the upper world and the middle world or the earth –, as a place where one can experience the centre of the world, where *axis mundi* is located. It is supposed that these places provided strong connection between different levels of existence (Taçon 2000, 37; applying Eliade’s position on Estonian archaeological sites Lang 1999). Accordingly, the waterfall of the Jägala River can be considered of some importance, and its impact on people of the past was bound to be significant as well (Fig. 1). One may assume that this place was considered sacred and the beliefs, myths and memories of predecessors were associated with it. Quite possibly other North Estonian rivers and streams, discussed in this paper, also had a psychic significance for the people inhabiting or using their banks.
North Estonian landscape is mostly flat, conjoined by the edge of glint and bodies of water. Of the latter, a river making the landscape impressive would have possessed certain implications for people. Rivers have been considered as natural borders of landscape, marking different settlement areas (Lang 1996). Therefore riverbanks could be considered as the margins of settlement areas. At the same time, due to the sporadically dense settlement surrounding them, they can be considered as some kind of centre or axis around which settlement concentrated (Lang 1996, Fig. 102, 103, 104).

The term *river* defines bodies of water of different sizes. In the following text it marks both larger “real” rivers like the Pirta, Jägala and Narva Rivers, and those, which, because of their size and water capacity, should rather be called creeks. So there are at least two groups: bodies of water properly referred to as rivers and lesser streams or creeks. Nevertheless, it must be taken into account that the amount of water flow has diminished in the course of time. This is due to the land mass upheaval of North Estonia, but land improvement works of a later period have also changed both the riverbeds and their water systems. Thus, several present-day creeks may have been navigable or partly navigable rivers in prehistoric times.

North Estonian rivers flow mainly in the North Estonian plain, their lower courses on the coastal lowland. The Jägala River forms a waterfall of about 8 m
at the transition from the limestone plateau to the coastal lowland; the other rivers discussed possess less conspicuous transitions. On the plain the rivers are surrounded by sporadic marshy areas, on the middle reaches, mainly by cultural landscape and forests. On the lower reaches, before the transition to the coastal plain, the landscape consists of alvar and moraine areas, which were already inhabited in prehistoric times. In the estuaries the soils are quite young and relatively unproductive.

The natural surrounding of rivers varies. Some of them were surrounded by large forests, which in prehistoric times were more extensive than today. At present, only the Valgejõgi River and Jägala River run through forests, but it is likely that in the past the number of such rivers was greater. Most of the rivers discussed flow through open landscape. The open landscape is apparently both a reason as well as a consequence – the naturally sparse alvar forests were more adaptable to habitation and in the course of time they disappeared as a result of human activities.

Another problem is the definition of river valley in archaeology. In the natural sciences, it means a long and quite narrow negative form of surface or depression surrounding the river which is encircled by slopes. The river, flowing in the bottom of the valley is surrounded by valley flat with sheet and banks; slopes and terraces surround it in turn. In the archaeological context, it is probably not so simple, and for that reason sites situated not only immediately on riverbanks but located at a distance of a hundred metres are discussed below. As the rivers may have changed their course through time, the sites, now further from rivers, may have originally been located closer to them. Nevertheless, this was not the case in North Estonia, where some rivers have been only partially ditched (Valkla, Kuusalu). Sites (e. g. graves) that were clearly orientated to the river and possessing a view of it, can be also considered as riverside monuments, not dependent on their exact location. Such sites mark the hinterland of the riverside settlement. The opposite situation, where the riverside areas formed a hinterland for a settlement between rivers, is possible (more details in the discussion).

The oldest settlement sites, dated to the foraging Stone Age, are located around several big rivers. In Estonia, the best examples are the Pärnu River, Narva River and Emajõgi River. In the vicinity of these rivers several well-known and thoroughly investigated settlement sites are known. However, there has been no detailed study of settlements around those rivers in later periods of prehistory, nor the connections, or lack of them, between the settlements of different periods.

The present paper is an attempt to analyse the formation of riverbank settlements, their changes through time, disappearance, re-formation and continuity. As the data concerning Estonia is divided too unevenly and there are some specific features in every natural region, I have chosen to discuss only areas in the vicinity of North Estonian rivers. In this, I had to make a further choice, too; archaeological investigations have been carried out in the vicinity of some rivers only,
while others have received no attention. As most such fieldwork has been carried out in the surroundings of the lower reaches of North Estonian rivers, I shall focus on those areas. The choice I made was partly prompted by an existing situation, and by existing studies, but it is also partially subjective. I have chosen for more detailed analysis the areas of those North Estonian rivers in Harju county where I have carried out various archaeological research projects, and whose surrounding landscapes have become familiar to me in the course of time. Those are Jägala, Kaberla, Valka, Kuusalu, Loo, Pudisoo and Valgejõgi Rivers with their surroundings. Additionally, the Piritu River in the west, and the Loobu, Pada, Purts and Narva Rivers in the east will come under discussion. As a parallel I shall use, to some extent, the archaeological data known from the vicinity of other North Estonian rivers and compare the development of the settlement of those areas with areas further away from rivers. For a better survey of the archaeological sites located in the vicinity of the rivers, I shall first describe them by river, moving from west to east. Although attention is focused on agricultural settlement, earlier sites will be also discussed to show the connections (or lack of them) between settlements of different time periods.

My objective before starting this research was the possibility of proving the connection between agricultural settlement and earlier generations that subsisted mostly by foraging. It is evident that such a connection between the settlements of different times is tenuous since only in a few cases, if any, is it possible to prove an unbreakable succession in the continuous use of one and the same place. In the course of time a particular settlement can move to another place, sometimes at a significant distance from its original location.

Settlement traces around North Estonian rivers

Traces of Stone Age settlement are known on the banks of almost every river in North Estonia. However, Bronze Age sites have not been found everywhere. In the neighbourhood of several of the rivers under discussion, both Stone Age dwelling sites and stray finds are known. Their connection to the settlement traces of the following periods will be described below. To give an overview of settlement development in riverbank areas during a longer time, archaeological sites of later periods will be discussed.

Pirita is the westernmost of the rivers under discussion. The oldest settlement sites date back to the Neolithic; one of them was situated on the site of a later hillfort on a river bend; the other was further inland in Lagedi (Lang 1996, Fig. 101). A stone axe found in a medieval settlement site at Proosa can date back either to the Late Stone Age or to the Bronze Age (Lang 1996, 380). Settlement continued in the same places into the Bronze Age, as is proven by dwelling sites at Iru and Lagedi, as well as by the numerous groups of stone-cist graves and cup-marked stones (Lang 1996, Fig. 102). The Roman Iron Age is represented by single graves
only; in the second half of the first millennium, the Iru hill-fort and settlement site were inhabited, and people also lived in Lagedi. In addition to Lagedi, a burial place and some stray finds have been found at Proosa. In the Viking Age, a dwelling site was established at Väo on the left bank of the Pirita River. In the end of the prehistoric period, the number of settlement sites in the surroundings of the lower reaches of the Pirita River was higher; however, in some of them no archaeological finds have been discovered (Lang 1996, Figs. 104–106).

Near the Jägala River a Mesolithic settlement site with quartz tools has been found on the higher terrace of a triangular-shaped promontory at the confluence of the Jõelähtme and Jägala Rivers, near the waterfall (Fig. 2). Another Mesolithic settlement site is known less than 1 km downstream, on the high right bank of the river. In the Neolithic Age, in the period of the Typical and Late Comb-Marked Ceramics, a dwelling site was located near the mouth of the river of that time, about 0.7 km downstream from the earlier habitation site. Here people had lived on top of a big and quite high sand drift situated at the river bend. Two boat-shaped battle-axes, found in the territory of the present Koogi village (AI 3198; AM 293), and an

![Image](image_url)

**Fig. 2.** Settlement traces of the Mesolithic and Neolithic periods. 1 settlement sites, 2 stray finds.

**Joon 2.** Mesoliitilised ja neoliitilised asustusjäljed. 1 asulakohad, 2 juhuleiud.
antler axe, found on the right bank of the Jägala River (Lang 1996, 397; AI 4415) date to a somewhat later time. The settlement remained near the Jägala River in the Bronze Age (Fig. 3). The dwelling site of that time was located near the waterfall, not far from the glint edge on the high right bank of the river. The Bronze Age settlement site was small and of low density, probably only a single farmstead. In its neighbourhood, less than 100 m away near the river there is a cup-marked stone (Vedru 2002a, 41; in press). A dozen cup-marked stones are located on the left bank of the Jägala River and near the Jõelähtme River which flows into the Jägala River. In the vicinity, there are some groups of stone-cist graves that seem to be connected with both the glint edge and the Jõelähtme and Jägala Rivers. The finds from three local stone graves give evidence that two of the cist-graves date back to the later Bronze Age and one to the 3rd–4th centuries (Lang 1996, 401–402). That was followed by a gap in settlement that lasted for several centuries.

Fig. 3. Settlement traces of the Bronze and Pre-Roman Iron Ages. 1 settlement sites, 2 stone graves, 3 cup-marked stones, 4 hill-fort.

Joon 3. Pronksi- ja eelrooma rauaja asustusjäljed. 1 asulakohad, 2 kivikalmed, 3 lohukivid, 4 linnamägi.
The same places were re-inhabited only in the Middle Iron Age and the Viking Age (Fig. 4). In the estuary, at the place of the Neolithic dwelling site, a hill-fort was erected probably in the 6th century, and it was used until the second half of the first millennium (Lang 1996, 327). A village, founded in the Viking Age, was located in the same place where the Bronze Age farmstead had been, but it was several times larger (Vedru 2002a, 41–43). In the river valley, about 100 m downstream, some bracelets and rings were found in the course of earthworks carried out in the beginning of the 20th century. The finds were made on the left bank of the river on low-lying land between the river and the limestone bank (Laul 1956). As this is a low place regularly flooded, it could be a place where sacrifices were made.

The oldest finds collected in the surroundings of the Kaberla River belong to the Neolithic Age (Fig. 2), followed by thousands of years without archaeological finds. The settlement reappeared in the Viking Age, when a settlement site, located

Fig. 4. Settlement traces of the final period of Estonian prehistory. 1 hill-forts, 2 pit grave cemeteries, 3 probable pit grave cemeteries, 4 settlement sites, 5 hoard.

Joon 4. Muinasaja lõpu asustusjäljed. 1 linnamäed, 2 maa-alused kalmistud, 3 arvatavad maa-alused kalmistud, 4 asulakohad, 5 aardeleid.
ca 200 m from the river, got its start. The same settlement was in use in later centuries (Fig. 4; Vedru 2003, 329–330). A stone grave situated about 300–400 m away from the settlement site was probably also built in the Viking Age. In the last centuries of the prehistoric period and in the Middle Ages, people buried their dead in a pit-grave cemetery located about 400 m from the dwelling site.

The oldest traces of settlement on the banks of the Valkla River date to the Mesolithic (Fig. 2). A small settlement site with quartz tools, about 20 m west from the river, was probably once larger and reached the river, but buildings of a later period preclude a definite conclusion (Vedru 2002b). The only find from the Neolithic is a boat-shaped battle-axe (AM 384), found on the right bank of the river. From the habitation of the Bronze and Pre-Roman Iron Ages, a number of stone-cist graves and dozens of cup-marked stones were left to the landscape, but, as in most other cases, dwelling sites of the same period are missing (Fig. 3). The oldest settlement site of the Metal Age belongs to the Roman Iron Age and is located on the left bank, further away from the groups of earlier stone graves. Roughly the same areas were re-used in the Viking Age when a large settlement was founded and used during the following centuries (Fig. 4).

A similar scheme of development can be observed in the vicinity of the Kuusalu River. The earliest of the settlement sites here probably belongs to the Mesolithic Age (Fig. 2); it is situated about 20 m east of the river in the vicinity of the edge of the glint. Fragments of stone tools found around the river as stray finds are dated to the Stone Age. A settlement site from the Neolithic Age is located a little farther from the river (Vedru 1998, 57). Stone-cist graves and cup-marked stones are found at some distance from the river; however, they can still be seen from the riverbank (Fig. 3). After a gap, the area around the Kuusalu River was re-inhabited in the Viking Age, as indicated by a hill-fort, a large settlement site, and a pit-grave cemetery (Fig. 4). The settlement site was also in use in the end of the Prehistoric Period and in the Middle Ages.

There is only one settlement site known near the Loo River; it was founded in the Viking Age and lasted through the Middle Ages (Fig. 4). Near the Pudisoo River only some Stone Age stray finds have been detected (Fig. 2).

A Mesolithic settlement site is known at Vanaküla on the left bank of the Valkla River, about 20 m west from it (Fig. 2). About 10 km downstream, there is a Neolithic dwelling site on the high left bank of the river. It seems though, that that settlement disappeared by the end of the Stone Age; later known archaeological sites date only to the Middle Ages, when a settlement was located in the same Vanaküla.

Four Mesolithic and Early Neolithic dwelling sites are located on the right bank of the Loo River (Fig. 2). Traces of later settlement near the river are missing; the only exception is a mediaeval rural cemetery (Kriiska 1996b; Lang 2000a, Fig. 5).

Several archaeological sites can be found in the area around the Pada River. Several cup-marked stones and stone-cist graves are situated near the river (Fig. 3). A number of tarand-graves are also known in the area (Шмидехельм 1955, 111–127). The Koila hill-fort, located on the left bank of the river was first used
at the end of the first millennium BC, then abandoned, and taken into use again in the middle of the first millennium AD (Шмидехельм 1955, 172). Moving a little upstream, two hill-forts located about 300 m apart, together with a large settlement site, are situated just beside the river (Fig. 4; Тамла 1978, Fig. 1; 1998, Fig. 2). The larger hill-fort (Pada I) dates to the 12th–13th centuries (Tamla 1998, 291), the smaller hill-fort (Pada II) was used several times during the first millennium. The last phase is dated to the second half of the first millennium (Тамла 1978, 357). The settlement site near the larger hill-fort was used at the same time with the smaller hill-fort; its finds belong to the 8th–10th centuries (Тамла 1983, 306). A pit-grave cemetery with inhumation burials, in the area of the earlier settlement site, was contemporary with the larger hill-fort; the burials belonged to the 12th–13th centuries (Tamla 1998, 291–293, Fig. 2).

Several groups of stone-cist graves and a number of tarand-graves are located on the banks of the Purtse River. Near the graves, on the right bank of the river, the Purtse hill-fort, which was used since the Viking Age is situated (Tarakallas) (Fig. 4). Schmiedehelm, who excavated the site, suggested the possibility of even earlier occupation, contemporary with the stone-cist graves (Шмидехельм 1955, 176, 178). According to data gathered from later archaeological excavations, the earliest fortifications of the hill-fort were erected in the 8th century, the later ones in the 13th century (Мяэсалу & Тамла 1983). It is also possible that a place called Taramägi, situated on the left bank of the Purtse River, was used as a hill-fort in late prehistory (Jaanits et al 1982, 200, Fig. 165). A number of stone graves, a probable hill-fort and a large settlement site of the Viking Age and Late Iron Age are also known in Lüganuse (Tamla 1996).

Since the Stone Age, there was also settlement in the vicinity of the Narva River, where the earliest dwelling sites and stray finds belong to the Mesolithic Age (Fig. 2). Several settlement sites and single burial places are also known from the Neolithic (Kriiska 1996a, Fig. 1, Table 1). In the Neolithic and Early Metal Age, there was a settlement site at Narva Joaoru, where later a probable hill-fort was located (Fig. 3). The place was surrounded by a wall in the 3rd–1st century BC (Jaanits 1994; Никитюк 1997); some finds belonging to the end of the Iron Age were also gathered there (Fig. 4; Kriiska to the author, January 2004).

This was a brief overview of the traces of human activity around some North Estonian rivers. However our knowledge of prehistoric settlement is far from perfect. The gaps in the development of habitation in the surroundings of the rivers of Virumaa (with the exception of the Loobu River) are conspicuous, and are probably due to our too-limited knowledge of Iron Age settlement there.

How were the areas between the rivers used, according to archaeological evidence? The best overview can be gained from Figures 2 and 3 of this article. They show that only a few sites from the foraging Stone Age are known from the areas between the rivers, and even these were connected with other bodies of water (Lang 1996, 120, Fig. 113; Vedru 1999). In these areas, the number of stray finds dated to the Late Stone Age and Bronze Age is quite large. The spread of
them indicates that settlement had moved to areas suitable for agriculture by that time (Lang 2000b). Nevertheless, mainly cup-marked stones and stone graves dated to the Bronze and Pre-Roman Iron Ages are known from the areas between the rivers. It indubitably proves the importance of those areas for the people of that time. On the other hand, cult-stones and graves are not directly connected with dwelling sites, and the number of settlement sites found to date is rather small.

Discussion: riverside as an environment for living

Although traces of both Mesolithic and Neolithic settlements have been discovered in the vicinity of most of the rivers discussed, traces from inhabitation in later periods have not been found everywhere. There are also some rivers whose banks were probably only inhabited in the later centuries of prehistory. In some cases, it seems that people left the riverbank areas when the foraging economy of the Stone Age had come into end, to find new places for living further afield. Was it really so, or is our research still insufficient to explain the development of prehistoric settlement? Especially in earlier times, the research of archaeological sites has mostly been confined to detecting objects clearly standing out from the surrounding landscape. All prehistoric settlement of the area was then connected with the latter. At the same time, it can hardly be true for the surroundings of these rivers where a recent modern surface survey for finding new settlement sites has been carried out.

The contact areas of forests and bodies of water, offering different resources, had been important for a foraging society; in the changed conditions, forests and the lack of necessary agricultural hinterlands stopped human settlement in several places. Arable lands are missing along the forested banks of the Valgejõgi River; consequently, people moved from there to other areas. The pattern of settlement shift was similar in other places, for example on the banks of the Loobu River, where settlement sites are not known after the Early Neolithic Age (Lang 2000a). The move of settlement towards new areas further from bodies of water can be interpreted as the first colonization, a process that took place during the Corded Ware Culture in III millennium BC. In the course of this process, lands suitable for farming, which had been uninhabited previously, were occupied (Lang 1996, 439–440; 2000a, 61–87; 2000b, 342).

However, settlement persisted around several rivers. In most of the cases when the vicinity of rivers was used in the Metal Age, one can also find traces from earlier settlement sites. Another question is whether stone-cist graves located near rivers indicate earlier settlement in the vicinity. It is likely that graves were rather built at places of ritual importance than close to the dwelling sites (Mägi 2002, 173–175). The evidence that landscape functioned in different ways has been gleaned from many eras and from many parts of the world. Graves were often built at places which were considered sacred, for example on mountains or on the
banks of bodies of water. These places were believed to hold a significant place in people’s beliefs. Even more, graves were erected and sacrifices carried out only in such places (e.g. Calado 2002, Figs. 2.2–2.4; Tilley 1993), while dwelling sites of the same period were built elsewhere. This pattern may not be true for all times and places; still, it seems to be correct for most North Estonian stone-cist graves.

Bronze Age settlement sites in the research area are known only in the vicinity of the Jägala, Pürita and Narva Rivers. They were all located on alvar areas near the glint edge, on a riverbank. Next to the Jägala River settlement, there was a ford with a flat limestone bottom. The settlements were surrounded by fertile soils favourable for early farmers. The problem is, can continuity of settlement since the Stone Age be observed in these places? To answer this question, I shall use the Jägala River settlement as an example. The Neolithic settlement there was located a few kilometres downstream, and thus we cannot speak of direct continuity of settlement since the Mesolithic Age; still, the later period people lived not far away, on the other bank of the river. The settlement of this district had moved according to the general pattern of settlement history; one Mesolithic settlement site was located at the confluence of two rivers, the other further downstream. In the Neolithic Age, settlement had moved into the estuary of the Jägala River. When farming became the dominant branch of the economy, people moved upstream again and settled on the alvar area. The last location was used by the Viking Age people several centuries afterwards, as well as their descendants.

Reaching even further back continuity has been discovered in other places. For example, long-term settlement is evident in the vicinity of the Valkla River. On the banks of the Kuusalu River, a connection between the settlements of the Mesolithic and Neolithic Ages and the Metal Age can be observed, but they are indicated by monuments of different character. Places where earlier people lived were later used only as burial grounds. Drawing conclusions is once again complicated by the disproportion of graves and settlement sites; traces of dwellings of the people who left stone graves and cup-marked stones on the landscape are not found at the Kuusalu settlement. Erecting graves on top of the dwelling sites of earlier periods was a way of expressing mental continuity between generations.

Settlements disappeared from the banks of several North Estonian rivers after the end of the Stone Age. The Valgejõgi River and the Loobu River east of it may serve as examples. They both run strongly, with rapids on their lower courses. Together with the surrounding forests they offered favourable living conditions for Stone Age settlers. Owing to heavier soils and the absence of lands suitable for early tillage, later settlements moved away from the rivers and these areas were re-colonized only in the Middle Ages. Such shifting of settlement to land more suitable for farming explains why settlement around some North Estonian rivers was relatively continuous since the Stone Age while in other places it was interrupted at various intervals. East of the Loobu River, several settlement sites
are also known from the Corded Ware Culture, proving that new areas were developed (Lang & Konsa 1998; Lang 2000a, 62–75). It is clear that continuity in the use of a particular settlement was primarily defined by environmental conditions. For example the areas near the Pīrīta, Jāgala and Valkla Rivers, where alvar areas offered good conditions for people engaged in agriculture. Continuity of riverside settlement depended directly on suitable hinterlands. The nature and extent of soils were relevant additional factors, as well as the presence or absence of forests. If these conditions were fulfilled, settlement always stayed in the same places. The surroundings of the Valkla River may be cited as the best example. First inhabited in the Mesolithic Period, the site was never abandoned, and the settlement is still in use in the present day.

Settlement concentrated near bodies of water if possible. Therefore, North Estonian river valleys can be considered as cradles of agricultural settlement, since the alvars surrounding them were favourable for early farming. Nevertheless, the drift of settlement took place much earlier than the Bronze and Pre-Roman Iron Ages, in the time of Corded Ware Culture. The development of local settlement was defined by a combination of several factors. Rivers, at least some of them, were important communication routes both in summer and winter. The presence of a navigable river was probably one of the reasons why Kuusalu developed into an important centre in the Viking Age. The Kuusalu River, once certainly with more water, might have been suitable for water transport to the dwelling sites.

Nevertheless, environment conditions seem not to have been the only ones considered important when choosing the place for a settlement. Continuity of settlement was possibly taken into consideration as well. Connection with an earlier settlement could be ascertained by visible traces of earlier habitation, or by oral tradition. The latter could also explain gaps in habitation, and thus establish mental continuity. Cognitive sides in continuity may have been prevailing at the riverside places where the Stone Age people had lived, and which had been used as burial grounds by later generations.

Conclusions

Several sites around North Estonian rivers, which were colonized as early as the Mesolithic Age, were later inhabited through millennia. Although several areas further from the river valleys were also used for a long time, permanent settlement in these areas began primarily in the Neolithic Age. During the colonization of new lands in the Neolithic Age, settlers of the riversides moved to areas further from the rivers, where alvar soils permitted early tillage. Settlement stayed in the same place only when environmental conditions were suitable for agriculture. On the other hand, some sort of human activity continued in several places on the riverside, even if there were no arable lands in the vicinity. Changes took place in the function of these particular sites – earlier dwelling sites were later often replaced by graves or cult-places.
For a predominantly agricultural society, the banks of some rivers lost their importance as an immediate living environment but they were still used for other purposes. Some rivers and their surroundings might hold a place in religious systems and in the beliefs and traditions of the settlers of the area. Ritual communication could also use rivers and especially waterfalls as mediums between this and The Other World.

Finally, I return to the beginning and to different concepts of landscape. The settlers of the island of Malaita believe the land owns the people who live on it. Landscape connects people directly with their predecessors, because their forefathers created the land and its present inhabitants live on it; land that is connected with predecessors at the same time belongs to the living (Van Dommelen 2000, 278–279, 283 and references). Undoubtedly, the connection between different generations was also manifested through the landscape of North Estonia.

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INIMESED JÕEMAASTIKEL

Resümee


Eestis on arheoloogiliselt uuritud mitmeid jõe-, jõekallaste-, pronksi- ja rauaaegse asustuse vaheliste otseste seoste olemasolu kohta. Ajal, mil ta oma uurimuse koostas, puudusid andmed sealsete kivikirstkalmetega samaaegsetest asulakohadest ning kõik üldisemad asustuse kohta käivad järelused tegi ta üksnes hilisemasse aega kuuluvate linnamägede andmistule toetudes.

Põhja-Eesti maastik on valdavalt ühetasane, seda liigendavad klindiserv ja veekogud. Maastikku ilmestaval jõel võis olla inimeste jaoks mitmesuguseid tähtsusi, olles üheaegselt nii piiriks asustusalade vahel kui ka keskuseks, mille ümber asustus koondus.

Põhja-Eesti jõed voolavad peamiselt lavamaal, alamjooksul aga rannikumadalikul. Jägala jõgi moodustab üleminekul paepalese alalt rannikumadalikul 8 meetri kõrguse joa, teistel käsitletavatel jõekalsetel pole üleminek nil silmatorkav. Lavamaal ümbritsevad jõgeesid kohati soine maastik, keskjooksul aga peamiselt kultuurmaastik ja metsad. Jõede alamjooksul leidub inimeste poolt suhteliselt varakult asustatud loopealseid ning moreenialaseid, suudmealadel ja rannikumadalikul noori ja suhteliselt väheviljakaid muldasid. Terminiga “jõgi” tähistatakse siinkohal Eesti mõistes nii suuri tõelisi jõgesid (Pirita, Jägala, Narva) kui ka selliseid, mis laiuse ja veehulga poolest on pigem ojad (Kaberla, Valkla, Loo). Mõningaid jõgesid (Valgejõgi, Jägala) ümbritsevad praegu suured metsamassiidid, mis olid muinasajal tõenäoliselt veelgi ulatuslikumad. Suurem osa vaatlus-
alustest jõgedest voolab aga avatud maastikul. Viimane on arvatavasti nii põhjus kui tagajärg – looduslikult hõredamaid loomet ei olamiseks lihtsam kohandada, aegade jooksul kadusid need inimtegevuse käigus aga lõplikult.


