13 Epilogue

Mika Lavento[1], Christian Carpelan[1], Dmitrij V. Gerasimov[2], Petri Halinen[1], Sergej N. Lisicyn[3], Kerkko Nordqvist[1], Oula Seitsonen[1], Sanna Seitsonen[1] & Pirjo Uino[4]

[1] Department of Archaeology, P.O. Box 59, FIN-00014 University of Helsinki, Finland
[2] Peter the Great Museum of Anthropology and Ethnography (Kunstkamera), Universitetskaja Nab. d. 3, RU-199034, St. Petersburg, Russia
[3] Institute for the History of Material Culture, Russian Academy of Sciences, Dvorcovaja Nab. 18, RU-191186, St. Petersburg, Russia
[4] National Board of Antiquities, P.O. Box 913, FIN-00101 Helsinki, Finland

13.1 Archaeological puzzle in the Saimaa-Ladoga area

After the detailed descriptions of different research tasks of the Saimaa-Ladoga project in the articles of this volume, it is time to view the results of the project from a wider perspective. This epilogue discusses the different effects of the methods applied in the project and the results of the work on the future in the geographical research area. This epilogue also discusses and presents the general results of the project.

The Saimaa-Ladoga project was a series of separate field excursions, surveys, and excavations. Each of these has deserved a presentation in this book. The main focus of the project has been in the fieldwork on the shores of Lake Ladoga and the Gulf of Finland. Furthermore, find material and other archaeological information collected prior to our project have been taken under reconsideration.

The puzzle-like organizing of the project enabled us to work in a flexible and versatile manner. It allowed all the researchers working space for different goals. Already at the outset, the project suffered from continuous financial insecurity. Each field season could barely be planned in time.

The field of research of the project has been geographically restricted to only some parts of the Karelian Isthmus. In addition, the municipality of Kurkijoki in the Karelian Republic was included in the project. This restriction has been applied because the Isthmus as a whole is large. With regard to the available resources for field periods, it would not have been reasonable to aim at the research of any larger areas in the Isthmus. On the other hand, it was only natural to continue to the southernmost part of the Karelian Republic in Kurkijoki. This area was selected because it is both geographically and archaeologically more connected to the environment of the north-eastern part of the Karelian Isthmus than the environment in the southwestern or northern part of Lake Ladoga.

13.2 Methodological solutions

At the beginning of the survey, nobody had a concrete vision of the most fruitful way to uncover Stone Age and Early Metal Period sites in the Karelian Isthmus, their state of preservation, or whether locating them would be easy or difficult. The surveys were started by the selection and development of suitable methods for actual purposes. The possibilities to estimate the real number and present condition of previously discovered sites were very restricted because of the lengthy break in active archaeological work on

Stone Age sites in the Karelian Isthmus after the 1930s. During the first field excursion in 1998, it became obvious that the locations of sites and find contexts of antiquities could be identified only quite roughly in the field.

The field diary of 1998 (article 1 in this volume) is an illustrative description of the first impressions in the field. It reflects the changes in the environment in the course of the last six decades. It is also very interesting to compare the methodological approaches to Stone Age landscapes by Finnish archaeologists before the World War II and today. As a consequence, we did not find it reasonable to pay any detailed attention to the sites described in the old documents or in their close vicinity. Instead, working time was devoted to the search for previously unknown sites.

The articles (nos. 2 and 3) regarding the Ancient Lake Saimaa project and the Saimaa project provide a background for the presentation of research results in other articles of this volume. During the Early Neolithic, a considerable change took place in the conditions of the environment connecting the two large lake systems, Saimaa and Ladoga, because of the formation of the Vuoksi water connection. Despite the missing water route before the Early Neolithic, these two water complexes had not been totally separated from each other before the opening of the main water route.

From the viewpoint of archaeological field surveys, it is natural to apply similar methods in the research of the upper part of the water system. In other words, methodological experience in the Lake Saimaa project in 1992–1994, as well as in North Karelia and the Kerimäki area in the late 1990s, proved to be useful in the Isthmus. Topographical development, shore displacement, and the formation of eskers, deltas, drumlins, etc. have followed the retreating and melting of the ice cap in all the research areas. Thus a large number of archaeological sites were found on the slopes of glacial formations in the Saimaa area by using methods that were applied in the Karelian Isthmus later.

One of the aims of the 1998 excursion was to visit the place were Sakari Pälsi in 1914 uncovered the 'Antrea Net' and settle the exact location of the find spot and take a sample series for a fresh evaluation of the position of the find in the local environmental history. The sampling was done under the direction of Professor Matti Eronen of the Division of Geology and Palaeontology, Department of Geology, University of Helsinki. Even Pälsi took a sample series from the profile of his excavation, which was analysed for pollen and diatoms at three occasions (1915, 1933 and 1947). Each time the result was the same: the find had landed on the bottom of the Ancylus lake around the culmination of the transgression which took place during the transition from a birch dominated to pine dominated forest and this was confirmed by the radiocarbon dates of two bark floats. The re-investigation of the 'Antrea Net Find' with the help of modern physical and palaeoecological techniques (including AMS datings) confirmed earlier results. (Article 4: Miettinen *et al.*, in this volume.)

The 'Antrea Net Find' (including tools of stone, bone and antler, in addition to the remains of a net) immediately triggered an animated and, at times, passionate discussion about the typology, cultural relationship and chronological position of the artefacts and the context as a whole. After more than 90 years, this discussion is still going on. However, the ethnographic reconstruction of the find presented by Pälsi right after his excavation at the find spot appears to have found continuous acceptance. Carpelan's contribution in the present book (article 5) describes the definition of the find spot, the fieldwork and interpretations of Pälsi, the long and twisting history of discussion and opinions,

and, in conclusion, gives a reassessment of the 'Antrea Net Find' from the point of view of history of environment and archaeology.

Matti Saarnisto, who has investigated the shoreline displacement of Lake Saimaa and Lake Ladoga on several occasions since 1970, has written a review article (6) on the emergence history of the Karelian Isthmus, which sets the boundary conditions for prehistoric and historic settlement and movement of people. The article emphasizes the possibilities and limitations of the shoreline dating method in the dating of prehistoric, especially Mesolithic dwelling places. The ancient Lake Vuoksenlaakso is also introduced in the article. This lake occupied the Vuoksi river valley for 3000 years and influenced the distribution of settlement from the Early Metal Period to the 19th century AD.

13.3 Flow of previously unknown sites

In the municipalities of Kaukola and Räisälä, the selection of survey areas was based on the archaeological data gathered before the War. The dwelling site complexes around Lake Riukjärvi and Piiskunsalmi Inlet are the richest Stone Age sites in Kaukola and on the whole Karelian Isthmus. Several key sites for Karelian archaeology were known in Räisälä, too. For instance, the old observations by Lake Pitkäjärvi and in the Kalmistomäki hill close to the centre of the municipality encouraged surveyors to look for new sites there. In addition, the remarkable number of stray finds was a key indicator of possible site locations (see Kerkko Nordqvist's contribution in the volume, article 7). The results of the first survey in 1999 were more positive than had been expected: altogether 35 new sites were found. Among them are five sites with dwelling depressions – until then an unknown category of ancient monuments in the Karelian Isthmus.

It is significant that sites have not been found primarily in already known dwelling site areas, but mostly in geographical environments where dwelling sites were not known before. The reason for this was that the hypotheses based on which the survey was planned were different than in the first half of the 1900s. Whereas the pre-World War II sites were mostly located on cultivated fields, in recent surveys sites were sought on eskers or on sand and gravel formations in general.

Although the first writer of the article, Kerkko Nordqvist, did not participate in the field expedition in 1999, his master's thesis concentrates on separating sites on the basis of stray find concentrations in the municipalities of Kaukola and Räisälä. The number of stray finds was abnormally high just in these two municipalities in the Karelian Isthmus. The second writer of the article, Mika Lavento, led another survey group in the field. The most important results presented in the article are connected with environmental factors in relation to different types of sites.

The municipality of Kurkijoki was also proved to contain a large number of Stone Age sites. During an eight-day field survey in 2001, altogether 51 new Stone Age sites were found. According to shore displacement, at least one of them dates to the Mesolithic. Some of the Neolithic sites also have dwelling depressions.

Oula Seitsonen, who participated in the survey in 2001 as a young student, has continued the research, and in the present volume he casts light on relevant environmental factors with relation to the changing water levels of Lake Ladoga (article 8). Essential in the survey, as also in the article, is to understand the sites on the shores of the fjords or on the islands of the large lake. The slopes of the shores are often steep and long fjords with a large amount of open bedrock are a part of the relief in the southernmost part of Ladoga Karelia. This phenomenon

is visible already in Kaukola and Räisälä and is much more obvious in Kurkijoki. In contrast to Kaukola and Räisälä, in Kurkijoki it is striking that a large number of smaller sites are situated on farming fields, not on eskers or delta formations. This may be due to the fact that the area of such formations in the Kurkijoki region is small in relation to areas where soils are fine sands or silts favourable for cultivation.

In 2003, two of the dwelling sites located in the 2001 Kurkijoki survey were test excavated and are briefly described here. Excavations revealed the multi-period use of both of the studied sites. Both sites seem to have been used from the Mesolithic through the Neolithic period. The 2003 excavations were carried out under the field licence of Dmitrij V. Gerasimov, the second writer of the article dealing with the Kurkijoki study area.

13.4 First excavation of a dwelling depression in the Karelian Isthmus

After the Kurkijoki survey, the project proceeded in Räisälä with an excavation on the shore of Lake Juoksemajärvi in 2002. The site was found during the 1999 survey. It was selected for excavation on the grounds of the survey carried out close to the area where Pälsi had collected stray finds. Several small-scale dwelling depressions were threatened by total destruction because of sand hauling. This was the first excavation ever of a dwelling depression in the Karelian Isthmus. The site was also chosen for the field school excavation of the Department of Archaeology, University of Helsinki, conducted under the leadership of Petri Halinen and Vladimir I. Timofeev.

The collective article by Petri Halinen, Oula Seitsonen, Sanna Seitsonen, and Kerkko Nordqvist is an overview of the excavation and its results (article 11). Analyses of the osteological material and artefacts are relevant to the interpretation of the site and its dating. The excavated dwelling depression had been dug through an earlier Mesolithic cultural layer, and already the first ^{14}C-datings showed surprising results indicating early settlement going back to almost 8000 BP. Ceramics belonging to the Early Combed Ware (style 1:1) were found, indicating a second settlement period at the beginning of the Neolithic. On the basis of the spatial distribution of the finds, the excavated dwelling depression might date to the Early Combed Ware Period. However, it can also belong to a later settlement phase, which dates back to the Late Neolithic on the basis of some of the artefacts and radiocarbon dates.

13.5 From lake areas to the sea

In 2002, the project took a decisive step to a different environment. The municipality of Johannes was chosen as the survey area because of its interesting location by the Viipurinlahti Bay. Seven sites were already known along the River Rokkalanjoki area.

The article (no. 9) written by Christian Carpelan, Pirjo Uino, and Dmitrij V. Gerasimov summarizes the studies conducted during the four days of fieldwork. In the study area, 10 new Early Mesolithic and Neolithic dwelling sites as well as two Iron Age or Medieval cup-marked stones were found. The shores of the lagoon that filled the Rokkalanjoki river valley were the most densely populated. The population reached its peak in the Middle Neolithic. Three categories of functionally different dwelling sites could be distinguished: long-term extended activity sites with heavy fixed dwellings in high locations, long-term extended activity sites at low islands and capes, and short-term

Municipality	Stone Age / Early Metal Period sites	Iron Age / Historical Period sites	Total
Kaukola and Räisälä (1999)	35	-	35
Kurkijoki (2001)	44	6	50
Johannes (2002)	10	2	12
Koivisto & Kuolemajärvi (2003)	14	-	14
Total	103	8	111

Table 13.1 The number of new sites found during the project.

limited activity sites by the open sea.

The last surveys of the project were carried out in 2003 in parts of the municipalities of Koivisto and Kuolemajärvi under the leadership of Dmitrij V. Gerasimov. Sites were sought in the environment of Lakes Kipinolanjärvi and Kuolemajärvi, but above all by the former coast of the Gulf of Finland. The article (no. 10) written by Kerkko Nordqvist and Oula Seitsonen summarizes the studies conducted during the 14 days of fieldwork. The short working time in the field was effectively used, and in addition to the surveys, three trial excavations were conducted. Altogether 14 new sites were found in the area, in particular on the sandy wind-blown ridges by the coast. In addition to sites found during the field trip, one site found before World War II was inspected by Lake Kipinolanjärvi.

It is worth remembering that most sites are situated on elevations following the shore displacement chronology of the Baltic Sea. Most of them date to the Neolithic or Early Metal Period. The survey indicated that the seashore was not uninhabited, but has actually been intensely inhabited; furthermore, it is evident that sites can also be found by the seashore. It is also evident that archaeological work on the shores of the Gulf of Finland in the Karelian Isthmus is only beginning and that future surveys will very probably uncover a large number of new sites in the area.

13.6 Key results triggering new research questions

In the late 1800s and early 1900s, the Karelian Isthmus was the area where the methodology of Finnish archaeology was largely developed. Already in the early 1900s, Stone Age excavations in particular were progressive. Julius Ailio's shore displacement studies by Lake Ladoga and Sakari Pälsi's excavation at the find location of the 'Antrea Net' in Korpilahti were visionary from the geological point of view. Also the manner of collecting material, for instance, at least some of the burnt bones at the excavations, was pioneering. Thanks to this practice, it is now possible to analyse the bone material of early 1900s excavations in many sites of the Karelian Isthmus. The analyses of this material have been carried out almost a hundred years after the excavations by Sanna Seitsonen, who started in the project as a student also in 2001. She has written an article (no. 12) including most of the bone material collected in the Karelian Isthmus before World War II. Only large bones were collected, but they still reflect hunting and fishing strategies used in the area.

What can finally be said about the results of the surveys and excavations carried out during the project? The striking result was the considerable number of new sites, 111 in total, which have not been known in the municipalities before (Table 13.1). It has now become obvious that during the Stone Age, the Karelian Isthmus has been an area of rich and versatile settlement.

Both the shores of the Ancient Lake Ladoga and the Gulf of Finland were inhabited about one millenium after the thawing of ice. The same is likely to hold true for the rest of the Karelian Isthmus, too. The areas have been in continuous use since the Stone Age.

Early settlement seems to be well represented, but several questions still remain with regard to the Late Mesolithic. The Neolithic period with its characteristic ceramic types is apparent in the archaeological record. Nevertheless, when approaching the Late Neolithic, the number of sites seems to decrease. It is also interesting that the amount of different subtypes of Neolithic Asbestos ceramics is small both in the material found before the War and at the sites discovered in our project. Another impression is that the old excavated material in Kaukola, Räisälä, and Viipuri contains more objects from the earlier part of the Neolithic and that the use of asbestos has not been as abundant here as in eastern Finland. Evidently, more accurate research is needed here.

Large dwelling sites with several dwelling depressions were discovered already from the beginning of the surveys in Kaukola and Räisälä. Most of them date to the Combed Ware culture and reflect the semi-sedentary settlement in this period. The Late Neolithic period with large sites containing dwelling depressions, such as those known for example from the Lake Saimaa area, were not found as a result of the surveys of the project. This may have been due to statistical bias, the possibility that such sites are situated in different areas than those surveyed, or some other reasons not yet realised during the fieldwork done so far. Regrettably, models *par excellence* depicting the changing of the settlement pattern during the Neolithic could not be presented yet because of the lack of Late Neolithic sites. Thus, the material is still insufficient for comparisons between different phases.

There also remain several questions regarding the discussion of the nature of the habitation during the Bronze Age / Early Metal Period. Dwelling sites dating to the period have been found, but so far only a few locations are known. Still, the comparison with Stone Age sites, Neolithic sites in particular, provides a clear vision of the decrease in settlement. Furthermore, sites with Textile-impressed Ware dating to the Bronze Age / Early Metal Period or sites with indications of ceramic types following Textile-impressed Ware are very few in number. This means that no sites belonging to the Säräisniemi 2 ceramic types were found in surveys. However, Säräisniemi 2 ceramics are included in the material excavated earlier by Finnish archaeologists in Riukjärvi and Piiskunsalmi in Kaukola, Kalmistomäki in Räisälä, and Kurkijoki. Despite this, the area appears to remain distant from the development of the Early Iron Age or the processes taking place during the later part of the Early Metal Period.

One of the basic results of the project has been becoming familiar with areas not very well known by either Finnish or Russian archaeologists today. This is due to the recent research history of the 1970s and 1980s in Karelia. During the Soviet period, the focus of research was in the Late Iron Age, as well as in the Iron Age / Early Medieval castle islands of Käkisalmi and Viipuri. Earlier periods remained in a secondary position, although some excavations were conducted primarily close to the sites already investigated by Finnish archaeologists before the War.

Several methodological tools were proved useful as a result of the project. The Finnish experience gained in the Lake Saimaa project and the versatile learning in different geological contexts during the Saimaa-Ladoga project together form a rich package of examples of how to familiarize oneself with maps when plan-

Figure 13.1 Cats in the basement of Institute for the History of Material Culture in St. Petersburg. (Photo: P. Uino 2002)

ning a survey. Knowing how to interpret shore displacement, geological formations, and soil types is the basis for successful fieldwork.

The Saimaa-Ladoga project was a starting point for more intensive research. The Karelian Isthmus is a rich, promising area and surely worthy of fieldwork. The fairly unknown area has become a field of challenges for both Russian and Finnish archaeologists in continuing fruitful cooperation.